

## ACRONYMS AND ABBREVIATIONS

---

<b>A.P.E.S.</b>	Apes, Populations, Environment, Surveys
<b>ACCFOLU</b>	Community Association for the Conservation of Forests in Lubutu
<b>AFADA</b>	Association of Officials and Attorneys for the Rights of Animals <i>(Asociación de Funcionarios y Abogados por los Derechos de los Animales)</i>
<b>AIDS</b>	acquired immune deficiency syndrome
<b>ANPN</b>	Agence Nationale des Parcs Nationaux
<b>AOO</b>	Area of occupancy
<b>API</b>	Animal Protection Index
<b>ARU</b>	Autonomous Recording Unit
<b>ASEAN</b>	Association of Southeast Asian Nations
<b>ASEAN-WEN</b>	Association of Southeast Asian Nations Wildlife Law Enforcement Network
<b>asl</b>	above sea level
<b>AZA</b>	Association of Zoos and Aquariums
<b>BKSDA</b>	Natural Resources Conservation Agency of the Ministry of Environment and Forestry of Indonesia ( <i>Balai Konservasi Sumber Daya Alam</i> )
<b>CAP</b>	conservation action plan
<b>CAR</b>	Central African Republic
<b>CBD</b>	United Nations Convention on Biological Diversity
<b>CFA</b>	Central African franc
<b>CFCL</b>	Local Community Forestry Concession <i>(Concessions Forestières des Communautés Locales)</i>
<b>CGI</b>	computer-generated imagery
<b>CITES</b>	Convention on International Trade in Endangered Species of Wild Fauna and Flora
<b>cm</b>	centimeter
<b>CMBNR</b>	Chuxiong Management Bureau of Nature Reserves
<b>CMP</b>	The Conservation Measures Partnership
<b>CMS</b>	Convention on the Conservation of Migratory Species of Wild Animals
<b>CoCoLuWa</b>	community conservation zone of Lubutu and Walikale Territories
<b>Congo</b>	Republic of Congo
<b>CoP</b>	Conference of the Parties
<b>CPUE</b>	catch per unit effort
<b>DRC</b>	Democratic Republic of Congo
<b>EAGLE</b>	Eco Activists for Governance and Law Enforcement
<b>EAZA</b>	European Association of Zoos and Aquaria
<b>EOO</b>	extent of occurrence
<b>EVD</b>	Ebola virus disease
<b>FFI</b>	Fauna & Flora International
<b>FMU</b>	forest management unit
<b>FODI</b>	Forest for Integral Development, DRC

<b>FR</b>	forest reserve
<b>FSC</b>	Forest Stewardship Council
<b>GDANCP</b>	General Department of Administration for Nature Conservation and Protection, Cambodia
<b>GFAS</b>	Global Federation of Animal Sanctuaries
<b>GPS</b>	Global Positioning System
<b>GRACE</b>	Gorilla Rehabilitation and Conservation Education Center
<b>GRASP</b>	Great Apes Survival Partnership
<b>ha</b>	hectare
<b>HIV</b>	human immunodeficiency virus
<b>HuGo</b>	Human–Gorilla (Conflict Resolution)
<b>IAR</b>	International Animal Rescue
<b>ICCN</b>	Congolese Institute for the Conservation of Nature, DRC ( <i>Institut Congolais pour la Conservation de la Nature</i> )
<b>ICCWC</b>	International Consortium on Combating Wildlife Crime
<b>ICD</b>	integrated conservation and development
<b>ICDP</b>	integrated conservation and development project
<b>IDR</b>	Indonesian rupiah
<b>IFAW</b>	International Fund for Animal Welfare
<b>INTERPOL</b>	International Criminal Police Organization
<b>IUCN</b>	International Union for Conservation of Nature (also UICN: <i>Union Internationale pour la Conservation de la Nature</i> )
<b>IWT</b>	illegal wildlife trade
<b>JGI</b>	Jane Goodall Institute
<b>kg</b>	kilogram
<b>km</b>	kilometer
<b>LAGA</b>	Last Great Ape Organization
<b>Lao PDR</b>	Lao People's Democratic Republic
<b>LCRP</b>	Liberia Chimpanzee Rescue and Protection
<b>m</b>	meter
<b>MEA</b>	multilateral environmental agreement
<b>MGMC</b>	My Gorilla–My Community
<b>MINFOF</b>	Ministry of Forestry and Wildlife, Cameroon ( <i>Ministère des Forêts et de la Faune</i> )
<b>MIST</b>	Management Information System
<b>MPF</b>	Missouri Primate Foundation
<b>NGO</b>	non-governmental organization
<b>NhRP</b>	Nonhuman Rights Project
<b>NP</b>	national park
<b>PAM</b>	passive acoustic monitoring
<b>PETA</b>	People for the Ethical Treatment of Animals
<b>PHVA</b>	population and habitat viability assessment
<b>PIDEP</b>	Integrated Program for Endogenous Development of Pygmies
<b>POV</b>	point of vulnerability
<b>PSA</b>	public service announcement
<b>PSG</b>	Primate Specialist Group

<b>PVA</b>	population viability analysis
<b>RCO</b>	Oku Community Reserve, DRC
<b>RFID</b>	radio frequency identification
<b>RILO</b>	Regional Intelligence Liaison Office
<b>SES</b>	socio-ecological systems
<b>SHCA</b>	Species and Habitat Conservation Area
<b>SMART</b>	Spatial Monitoring and Reporting Tool
<b>SODEPE</b>	Solidarity for the Development and Protection of the Environment, DRC
<b>sp.</b>	species (singular)
<b>spp.</b>	species (plural)
<b>SSA</b>	Section on Small Apes
<b>SSC</b>	Species Survival Commission
<b>ssp</b>	sub-species
<b>SSP</b>	Species Survival Plan
<b>TOC</b>	transnational organized crime
<b>TV</b>	television
<b>UAE</b>	United Arab Emirates
<b>UAV</b>	unmanned aerial vehicle
<b>UCOFOBI</b>	Community Union for the Conservation of Forests of Bitule, DRC
<b>UGADEC</b>	Union of Associations for Gorilla Conservation and Community Development, DRC
<b>UN</b>	United Nations
<b>UN Comtrade</b>	United Nations International Trade Statistics Database
<b>UNEP</b>	United Nations Environment Programme
<b>UNEP-WCMC</b>	United Nations Environment Programme World Conservation Monitoring Centre
<b>UNODC</b>	United Nations Office on Drugs and Crime
<b>UNTOC</b>	United Nations Convention against Transnational Organized Crime
<b>US</b>	United States of America
<b>UTDPE</b>	Union of Landowners for the Development and Protection of the Environment, DRC
<b>UWA</b>	Uganda Wildlife Authority
<b>VGT</b>	Association Against Animal Factories ( <i>Verein gegen Tierfabriken</i> )
<b>WAZA</b>	World Association of Zoos and Aquariums
<b>WCF</b>	Wild Chimpanzee Foundation
<b>WCO</b>	World Customs Organization
<b>WCS</b>	Wildlife Conservation Society
<b>WEN</b>	Wildlife Law Enforcement Network
<b>WWF</b>	World Wide Fund for Nature/World Wildlife Fund
<b>ZSL</b>	Zoological Society of London

# GLOSSARY

---

**Abundance:** The number of individuals of a species in an area or in a population.

**Acoustic monitoring:** The recording of animal vocalization or threatening activities, such as gunshots, to inform on the state of a species in the area of interest.

**Adaptive management:** An iterative process of decision-making that is continuously informed by ecological and project monitoring and thus improved over time to meet the management objectives in the most effective way.

**Administrative penalty:** A sanction that limits an offender's rights or position held in government, whether applied by an administrative or a criminal law.

**Advertising:** The act of producing, paying for, or otherwise being engaged in announcing the sale of wildlife or wildlife products in any media or form, including online, in print, on television or on the radio.

**Agency:** The capacity of individuals to act independently and to make their own free choices.

**Aggravating circumstances:** Aspects of a crime that can be used to increase fines and penalties, such as repeat offenses (recidivism).

**Agropastoralism:** A way of life or a form of social organization based on the growing of crops and the raising of livestock as the primary means of economic activity.

**Alternative livelihoods:** An approach to conservation which seeks to reduce conservation threats to particular species or sites by providing alternatives – including alternative food options if the conservation threat is hunting for food; alternative income sources if the conservation threat is caused as a result of trying to generate income; and alternative (lower impact) methods for harvesting wildlife if the conservation threat is over-exploitation.

**Anthropocene:** A buzzword used to refer to the current geological epoch in view of humankind's profound impact on the Earth. The term was popularized by atmospheric chemist Paul Crutzen in 2000 and recommended for adoption by a dedicated working group of the International Union of Geological Sciences in 2016. Scholars disagree about the start date of the Anthropocene, with suggestions ranging from 8,000 years ago to about 1950.

**Aquaculture (or aquafarming):** The farming of animals and plants in all types of water environments.

**Autonomy:** One's liberty to freely choose, within wide parameters, how one wishes to live one's life.

**Backend:** The part of a computer application or system that stores and manipulates data to fulfill user requests and actions, but that is not visible to or accessed directly by the user.

**Bimaturism:** Development characterized by differing stages or timings within a species or within a sex; among orangutans, mature males are flanged or unflanged (see **flanged**).

**Biodiversity:** The variety of plant and animal life on Earth or in a particular habitat.

**Biodiversity hotspot:** A significant reservoir of biodiversity that is threatened with destruction.

**Biomonitoring:** Repeated surveying of the distribution and abundance of species, and of the threats they face.

**Blackback:** An adolescent male chimpanzee or gorilla between the ages of 8 and 12 years old. As opposed to **silverback**, as the silver on the back develops when males reach sexual maturity.

**Bovid:** A hooved mammal in the family *Bovidae*, such as antelopes, sheep and bison, whose horns do not branch and are never shed.

**Brachiation:** Arboreal locomotion that relies exclusively on the arms to propel the body forward. Related term: brachiate.

**Branhamism:** The teachings of the US preacher William M. Branham (1909–65), including anti-denominationalism, the denial of eternal hell and the Serpent's Seed doctrine.

**Camera trapping:** The use of cameras triggered by motion or infrared sensors in animal surveys.

**Capture-recapture:** An analytical approach to estimating animal abundance by repeated identification and re-identification of individuals.

**Catch per unit effort (CPUE):** In relation to law enforcement action for conservation, it is a measure of effectiveness arrived at by calculating, for example, the number of illegal activities or items, such as snares, detected per given area or time patrolled.

**Civil law:** A system that dates back to Roman times and relies predominantly on comprehensive legal codes/statutes that are updated frequently. In civil law, the judge's task is to establish the facts and decide on the appropriate action based on the laws in place. Civil law systems vary widely in procedure and substantive law.

**Co-use:** The intended use of an area by humans and animals. Instead of separating areas for human activity and species protection, co-use areas are meant to harmonize the co-existence of humans and other species, including great apes.

**Colobine:** Members of a subfamily of arboreal, leaf-eating monkeys found in forests in Africa and Asia.

**Common law:** A system that relies predominantly on precedent, i.e., prior decisions. It is adversarial, as opposed to investigatory, with the judge moderating between two parties, and may be influenced by the judge's values.

**Community engagement:** A way of developing a working relationship between public bodies and community groups.

**Conditionalities:** Conditions attached to the provision of benefits such as a loan, debt relief or bilateral aid.

**Conservation framework:** A formal concept that describes approaches to the conservation of species in a standardized and reproducible way.

**Conspecific:** An individual of the same species as another.

**Core area:** The most heavily used portion of the home range of a group or individual.

**Corridor:** Restricted areas of wildlife habitat that link larger patches of habitat, thereby enabling wildlife movement and supporting the viability of populations. These corridors can occur naturally, such as riparian forests, or be created through management practices.

**Coupled (or linked):** Characteristic of integrated conservation and development interventions that seek to link development outcomes to positive conservation outcomes, such as by making continued income from ecotourism dependent on the maintenance of the conservation status of a species or site such that tourists continue to be attracted.

**Critically endangered:** Facing an extremely high risk of extinction in the wild.

**Deciduous:** Pertaining to trees that lose their leaves for part of the year.

**Decoupled:** Characteristic of integrated conservation and development interventions that seek to reduce the dependence of local people on species or sites of conservation value, such as by investing in agricultural development outside of a protected area to ensure that people have sufficient food and no longer enter the protected area to secure wild meat.

**Defaunation:** The global, local or functional extinction of animal populations or species from ecological communities.

**Devolution:** The transfer or delegation of power to a lower level, especially by central government to local or regional administration.

**Dichromatic:** Exhibiting two color variations independent of sex and age.

**Die-off:** A sudden and significant decline in a population or community of organisms due to natural causes.

**Differential liability:** A step beyond the more traditional approaches that treat wildlife criminals solely as individuals, tailoring liability to the type of criminal by imposing different or higher penalties on legal persons and civil servants.

**Dimorphic:** Having two distinct forms.

**Dipterocarp:** A tall hardwood tree of the family *Dipterocarpaceae* that grows primarily in Asian rainforests and that is the source of valuable timber, aromatic oils and resins.

**Dispersing sex:** Either male or female apes who, upon reaching sexual maturity, depart from their birth area to establish their own range.

**Distance sampling:** A transect survey technique that calculates the distance between an observer and an animal being sampled, calculating the probability of detection.

**Diurnal:** Daily, or active during the day.

**Driver:** A factor that causes or contributes to an activity or phenomenon.

**Ecosystem function:** All ecological processes that occur in an ecosystem.

**Elusive species:** A taxon that is difficult to observe due to inconspicuous behavior and avoidance of humans.

**Endangered:** Facing a very high risk of extinction in the wild.

**Endemic:** Native to or only found in a certain place; indigenous.

**Endemism:** The state of being unique to a particular geographic area.

**Entertainment education:** A communication strategy that uses custom-tailored entertainment to alleviate a social issue or educate the public.

**Exhibition:** An end use component of trade, such as the display of illegally sourced apes in a circus.

**Exotic:** Neither domestic nor farmed.

**Extinct:** A species becomes ‘extinct’ following the death of the last individual, although the species’ ability to recover/reproduce will have been lost before reaching this point. A species may become ‘extinct in the wild’ before being considered actually extinct, if there is one or more individual in captivity.

**Extirpated:** Completely destroyed/eradicated from an area.

**Extraction-to-production ratio:** An indicator used in wildlife studies to denote the relationship between the numbers or biomass of hunted species that can be produced (essentially through reproduction) in a particular population, to contrast against the number of animals or biomass extracted in that population based on hunter or market studies.

**Extractive industry:** Any operations that remove metals, minerals or aggregates from the earth for use by consumers.

**Facebook:** The world’s largest social media platform.

**Fission–fusion:** Pertaining to communities whose size and composition are dynamic due to the coming together (fusion) and moving away (fission) of individuals.

**Flagship species:** A charismatic species that is selected to serve as ambassador for the protection of an ecosystem or an area inhabited by many species that are less well known.

**Flanged:** Pertaining to one of two morphs of adult male orangutan, the other being “unflanged”; characterized by large cheek pads, greater size, a long coat of dark hair on the back and a throat sac used for “long calls.” See also: **unflanged**.

**Flora:** Plant life.

**Folivore:** Any chiefly leaf-eating animal. Related terms: folivorous, folivory.

**Frugivore:** Any chiefly fruit-eating animal. Related terms: frugivorous, frugivory.

**Gazetttement:** The designation of an area of land for protection by the state or other public authorities according to relevant legislation.

**Gill plate/raker** (peng yu sai): bony or cartilaginous sieving pads in fish or other water creatures, used for feeding, by filtering zooplankton from sea water.

**Gray literature:** Reports that have not undergone a peer-review process and that have not been published in scientific journals.

**Guenon:** A long-tailed African monkey of the genus *Cercopithecus* found mainly in forests and also in savannah habitats.

**Habeas corpus:** Latin for “you have the body” and referred to as the “great writ.” A written legal command that protects persons from being unjustly imprisoned by requiring the detainer to appear in court and provide evidence of justifiable grounds for their imprisonment.

**Habitat:** The natural and required environment of an animal, plant or other organism.

**Habituated:** Accustomed to the presence of humans. Related term: habituation.

**Herbivore:** Any plant-eating animal. Related terms: herbivorous, herbivory.

**Holocene:** The current geological epoch, which began about 10,000 years ago, at the end of the most recent ice age, when humans started to develop agriculture. Some scholars hold that the Holocene ended when the Anthropocene began, but opinion remains divided on the date. See also: **Anthropocene**.

**Hominid:** A member of the group that comprises all modern and extinct humans and great apes, as well as their immediate ancestors.

**Hominin:** A member of the group that comprises all modern human beings—*Homo sapiens*—and their extinct ancestors, including *Homo neanderthalensis* (the Neanderthals), *Homo erectus* and *Homo habilis*.

**Horizon scanning:** A strategic process for the early detection of developments that may have a strong impact on the environment, an ecosystem or a species.

**Hunting:** The pursuit, targeting, capture or killing of wildlife.

**Husbandry:** The care, cultivation and breeding of crops and animals.

**Hybrid:** The offspring of two different species or varieties of plant or animal; something that is formed by combining different elements. See also: **hybridization**.

**Hybridization:** Interbreeding of distinct taxa or species. See also: **hybrid**.

**Immunocompetence:** The ability of the body to recognize and respond to exposure to bacteria, viruses, toxins and other harmful substances.

**Inbreeding:** Reproduction of closely related individuals, which can cause inbreeding depression, characterized by reduced fitness and fertility in offspring.

**Incidental offtake:** Any capture of a species that is not the intended purpose of a hunting activity. Or, as in some legal documents, any prohibited capture of an endangered or threatened species that is not the intended purpose of an otherwise lawful activity.

**Indigenous:** Originating from or occurring naturally in a certain place.

**Infanticide:** The act of killing an infant.

**Instagram:** A photograph and video-sharing social networking website owned by Facebook.

**Integrated conservation and development:** An approach to the management of natural resources that aims to achieve lasting reconciliation between biodiversity conservation and socioeconomic development interests of different stakeholders.

**Interbirth interval:** The biologically determined period of time between consecutive births.

**Intergroup conflict:** Discord and potentially physical violence among different groups of individuals of the same species.

**Internet scam:** Online fraud.

**Intraspecific killing:** The killing of a member of the same species by one or more individuals.

**Keystone species:** A species that plays a crucial role in the way an ecosystem functions, and whose presence and role has a disproportionately large effect on other organisms within the ecosystem.

**Life history:** The length and stages of development that species pass through during their lives. Nonhuman primates grow more slowly, have their first reproduction at a later age, have lower fertility, provide extensive parental care and have longer life spans than most other mammals.

**Lithic technology:** The manufacture and use of stone tools.

**Long call:** A series of sounds made by adult male orangutans, from barking to roaring to groaning, to attract females and/or alert other orangutans to their presence and establish their personal space. Cheek flanges aid directionality of the call and the throat sac makes the sound resonate and carry further.

**Macronutrients:** Substances in food that are required in large amounts for growth, metabolism and other essential bodily functions.

**Management unit:** A well-defined area for which a management plan has been developed. In the context of the FSC this refers to a spatial area or areas submitted for certification with clearly defined boundaries and managed to a set of explicit long-term management objectives, which are expressed in a management plan.

**Mantrap:** A trap to catch people, usually aimed at trespassers and poachers.

**Mast fruiting:** The simultaneous production of fruit by a large numbers of trees every 2–10 years, without any seasonal change in temperature or rainfall.

**Mean body mass indicator:** A measure of defaunation, often estimated based on wild meat offtake; the value drops as the proportion of small-bodied animals in a community increases and hunters rely on ever-smaller species.

**Megafauna:** Extant and extinct big animals, such as elephants, giraffes, whales, cows, deer and tigers.

**Micronutrients:** Substances in food that are required in minuscule amounts to enable the body to produce enzymes, hormones and other substances essential for proper growth and development.

**Militarized conservation:** The use of military tactics, equipment and sometimes military staff to help protect flora and fauna.

**Monogamy:** The practice of having a single mate over a period of time. Gibbons are considered socially monogamous, having a single mate or companion over a period of time.

**Morph:** A distinct form of an organism or species.

**Multi-male group:** This refers to groups that include more than one mature (silverback) male gorilla.

**Night lighting:** A hunting method that is commonly criminalized and that involves the use of lights at night to help hunters see and to attract targeted animals or cause them to freeze momentarily, which assists the hunter.

**Non-native species:** A species that lives outside its native distributional range, having arrived there through human activity.

**Occupancy:** The proportion of sites at which the presence of a species has been confirmed.

**Occurrence:** The distribution of presence and absence of a species.

**Offtake:** A scientific term used to refer to the number of individuals removed from the wild through hunting, especially in the context of population trends. See also: **take**.

**Offtake pressure indicator:** A measure of wildlife hunting/harvest levels, estimated based on the number of individuals of a species removed from their habitat over a specific amount of time.

**Optimal foraging theory:** A theoretical framework that links foraging variations within and across populations to characteristics of the local ecology.

**Organized crime:** Criminal offenses committed by three or more persons working together over a period of time, or criminal activities planned and coordinated within a hierarchical network of people on a continuing basis.

**Paleotropics:** A floristic kingdom comprising tropical areas of Africa, Asia and parts of Oceania, but not Australia or New Zealand.

**Parturition:** The process of giving birth to offspring.

**Passive acoustic monitoring:** The deployment of autonomous recording devices to survey an area based on animal vocalizations and subsequent analyses to assess the state of species.

**Pelage:** Fur; coat.

**Personhood:** Is being given the legal status of a person. A “person” is a legal entity that has one or more rights, as opposed to a “thing”, which has no legal rights. Historically, some humans were identified as legal “things”, and you do not have to be a human being to be classified as a person, in law.

**Phytosanitary:** Relating to plant health and, more specifically, to rules and regulations for the control of plant diseases.

**Pith:** The spongy tissue in the stems and branches of many plants.

**Pleistocene:** The geological epoch that lasted from about 2.6 million to 10,000 years ago, when the most recent ice age ended and the Holocene began.

**Poaching:** Illegal hunting, killing, capturing or taking of wildlife in violation of local or international wildlife conservation laws.

**Point transect:** A circular area that is used as a sampling unit during a survey with a human observer, camera trap or acoustic recording device at its center to record animal observations.

**Polyandrous:** Pertaining to a mating system that involves one female and two or more males.

**Polygynandrous:** Pertaining to an exclusive mating system that involves two or more males and two or more females. The numbers of males and females are not necessarily equal.

**Polygynous:** Pertaining to a mating system that involves one male and two or more females.

**Population and habitat viability assessment:** A tool to develop population targets and a framework of conservation recommendations for a specific species.

**Population viability analysis:** A method of assessing the risk of extinction for a specific species.

**Possession:** In criminal law, the offense of being in physical control of protected wildlife or wildlife products, regardless of involvement in trafficking or related criminal activity. The criminalization of possession fills an evidentiary gap by allowing law enforcement to pursue individuals who are in control of protected species even in the absence of evidence that they are engaged in trafficking of the same. In countries where the law fails to criminalize possession, law enforcement officials are limited to arresting traffickers in the act of selling, or pursuing them based on receipts or other evidence that proves they are engaged in trafficking.

**Precedent:** A judgment or ruling from a previous case that is cited in a similar subsequent dispute as the justification for ruling in a specific way.

**Predicate crime (or offense):** A crime, or offense, that forms a part of a larger criminal activity, such as forgery, smuggling and money laundering in the context of the illegal wildlife trade.

**Preputial:** Relating to the foreskin or clitoral hood.

**Prestige pet:** An animal who is perceived as conferring status on the owner, or who reflects the owner's wealth or power.

**Primary law:** Various forms of legislation, statutes, regulations and decisions that are binding on the courts, government and individuals, as distinguished from commentary and other types of secondary law, which are not legally binding.

**Processing:** Any activity that involves the transformation of wildlife from one state or product to another.

**Radio frequency identification:** Technology that uses electromagnetic fields to identify and track tags attached to objects.

**Range:** The geographical extent of occurrence of all known populations of a species, including any unsuitable and unoccupied areas.

**Reintroduction:** The planned release of an organism into its natural habitat after life in captivity.

**Riparian (or riverine) forest:** A forest that grows alongside riverbanks.

**Sanctuary:** A non-profit facility dedicated to providing care for orphaned, confiscated or injured wildlife.

**Shifting agriculture (or cultivation):** A type of agricultural management by which farmers cultivate fields only for some time before abandoning them and creating new fields, principally to avoid decreasing harvest rates and to prevent soils from becoming increasingly impoverished.

**Silverback:** A mature male gorilla with silver hair on the saddle of his back.

**Social first strategy:** A campaign or marketing strategy that focuses on social media platforms, e.g., Facebook and Instagram, to reach and influence the target audience.

**Social marketing:** The application of commercial techniques to achieve social good.

**Species listing:** The legal mechanism by which species are added to a national or international list and provided stricter protection.

**Storage:** The act of keeping wildlife or wildlife products in a physical space of any kind for later use.

**Strategic framework:** A detailed, structured outline that spells out an overarching strategy, activities for achieving associated objectives and, in some cases, indicators for measuring progress against stated goals.

**Subsistence consumption:** Production of food—either grown or harvested from natural resources—at a level that is sufficient only for use or consumption by the producer and their direct family, without any surplus for trade.

**Sympatric:** Pertaining to species or populations that occupy the same geographic ranges.

**Take:** A legal term used to refer to an act that directly or indirectly results in the killing or capture of an animal. See also: **offtake** and **take method**.

**Take method:** A legal term used to refer to the means by which an animal is killed or captured, including the use of traps, guns, night lighting and vehicles. See also: **offtake** and **take**.

**Taxon:** Any unit used in the science of biological classification or taxonomy (plural: taxa).

**Terrestriality:** Adaptation to living on the ground.

**Theory of change:** A methodology that defines long-term goals and identifies strategies and activities needed to achieve the desired results.

**Transect:** A straight line or point used as a sampling unit in surveys to collect data on animal presence.

**Transport:** Any act involving the physical movement of wildlife or wildlife products, including shipping by air, sea, rail or road.

**Trigger (or predicate):** A circumstance or action that results in the application of additional rules and regulations. Species listing, for instance, may act as a trigger for the application of a hunting prohibition and other legal instruments.

**Trophy hunting:** The legal shooting of animals—frequently big game such as rhinos, elephants, lions, pumas and bears—under official government license, for pleasure. The trophy is the animal (or its head, skin or any other body part) that the hunter keeps as a souvenir.

**Umbrella species:** A species whose conservation leads to the protection of many other species in the same ecosystem or landscape.

**Unarmed:** Not having any hard and sharp projections, such as hooks, prickles, spines, thorns or other sharply pointed structures.

**Ungulate:** A hooved animal.

**Vulnerable:** A species that has been categorized as at risk of becoming endangered if the threats to its survival are not addressed.

**Wean:** To accustom a young animal to nourishment other than the mother's milk.

**Welfare:** The state of a [nonhuman] animal's body and mind, including in terms of biological, emotional and behavioral well-being.

**WhatsApp:** A free messaging, voice and video call service owned by Facebook.

**Wild meat:** Meat from wild animals.

**Wildlife trafficking:** The illegal sourcing, transfer and sale or disposal of live or dead animals and plants or their parts or products, usually for commercial purposes.

**Zooarcheology:** The study of animal remains from archeological sites.

## REFERENCES

---

- Abernethy, K.A., Coad, L., Taylor, G., Lee, M.E. and Maisels, F. (2013). Extent and ecological consequences of hunting in Central African rainforests in the twenty-first century. *Philosophical Transactions of the Royal Society of London, Series B: Biological Sciences*, **368**(1625), 20120303. DOI: 10.1098/rstb.2012.0303.
- Abram, N.K., Meijaard, E., Wells, J.A., *et al.* (2015). Mapping perceptions of species' threats and population trends to inform conservation efforts: the Bornean orangutan case study. *Diversity and Distributions*, **21**(5), 487–99. DOI: 10.1111/ddi.12286.
- Abugiche, A.S., Egute, T.O. and Cybelle, A. (2017). The role of traditional taboos and custom as complementary tools in wildlife conservation within Mount Cameroon National Park Buea. *International Journal of Natural Resource Ecology and Management*, **2**(3), 60–8.
- Ad Age (2012). PETA: chimp casting call. *Ad Age*, May 10, 2012. Available at: <https://adage.com/creativity/work/chimp/27597>.
- ADI (2007). European Parliament sets historic target to end experiments on primates. *ADI: Animal Defenders International*, December 6, 2007. Available at: [http://www.ad-international.org/animal\\_rescues/go.php?id=1135&ssi=0](http://www.ad-international.org/animal_rescues/go.php?id=1135&ssi=0).
- ADI (2019). Worldwide circus bans. *ADI: Animal Defenders International*. Available at: [http://www.ad-international.org/animals\\_in\\_entertainment/go.php?id=281](http://www.ad-international.org/animals_in_entertainment/go.php?id=281). Accessed May 9, 2019.
- ADI (n.d.). Federal Circus Bill: worldwide summary. *ADI: Animal Defenders International*. Available at: <http://www.federalcircusbill.org/briefings/worldwide-summary/>. Accessed January 4, 2019.
- Aebischer, T., Siguindo, G., Rochat, E., *et al.* (2017). First quantitative survey delineates the distribution of chimpanzees in the Eastern Central African Republic. *Biological Conservation*, **213**, 84–94. DOI: 10.1016/j.biocon.2017.06.031.
- AFADA (*Asociacion de Funcionarios y Abogados por los Derechos de los Animales y Otros*) v. *The Government of the City of Buenos Aires (GCBA) sobre Amparo*. EXPTE A2174-2015/o (2015). Available at: [https://www.animallaw.info/sites/default/files/Sandra\\_%E2%80%99CASOCIACION%20DE%20FUNCIONARIOS%20Y%20ABOGADOS%20POR%20LOS%20DERECHOS%20DE%20LOS%20ANIMALES%20Y%20OTROS%20CONTRA%20GCBA%20SOBRE%20AMPARO%E2%80%99D.pdf](https://www.animallaw.info/sites/default/files/Sandra_%E2%80%99CASOCIACION%20DE%20FUNCIONARIOS%20Y%20ABOGADOS%20POR%20LOS%20DERECHOS%20DE%20LOS%20ANIMALES%20Y%20OTROS%20CONTRA%20GCBA%20SOBRE%20AMPARO%E2%80%99D.pdf).
- AFADA (*Asociacion de Funcionarios y Abogados por los Derechos de los Animales y Otros*) v. *The Government of the City of Buenos Aires (GCBA)* (2016) Re: Constitutional Protection Case File No. A2174-2015/o.
- AFADA (*Asociacion de Funcionarios y Abogados por los Derechos de los Animales y Otros*) v. *Mendoza Zoo and City*. EXPTE NRO. P-72.254/15 (2016). Available at: <https://www.projetogap.org.br/wp-content/uploads/2016/11/329931683-habeas-corpus-cecilia.pdf>.
- Agence France-Presse (2018). Chinese circus defends using rare animals in its acts despite poor crowds at shows and constant criticism of its methods. *South China Morning Post*, July 11, 2018. Available at: <https://www.scmp.com/lifestyle/travel-leisure/article/2154754/chinese-circus-defends-using-rare-animals-its-acts-despite>.
- Ahebwa, W.M., van der Duim, R. and Sandbrook, C. (2012). Tourism revenue sharing policy at Bwindi Impenetrable National Park, Uganda: a policy arrangements approach. *Journal of Sustainable Tourism*, **20**(3), 377–94. DOI: 10.1080/09669582.2011.622768.
- Aini, J. and West, P. (2018). *Communities matter: decolonizing conservation management*. Keynote lecture presented at the International Marine Conservation Congress, Kuching, Malaysia, June 24–29. Available at: <https://paige-west.com/2018/07/28/decolonizing-conservation/>. Accessed October, 2018.
- Akatia (n.d.). *The Sanctuary*. Abidjan, Ivory Coast: Akatia. Available at: <http://www.akatia.org/the-sanctuary>. Accessed October 3, 2018.
- ALDF (2018). Federal appeals court to hear arguments in lawsuit concerning USDA's secrecy on animal welfare records. *Animal League Defense Fund (ALDF) Press Release*, December 13, 2018. Available at: <https://aldf.org/article/federal-appeals-court-to-hear-arguments-in-lawsuit-concerning-usdas-secrecy-on-animal-welfare-records/>.

- Aldrich, B.C. (2018). The use of primate 'actors' in feature films 1990–2013. *Anthrozoös*, *31*(1), 5–21. DOI: 10.1080/08927936.2018.1406197.
- Alexander, C., Korstjens, A.H., Hankinson, E., et al. (2018). Locating emergent trees in a tropical rainforest using data from an unmanned aerial vehicle (UAV). *International Journal of Applied Earth Observation and Geoinformation*, *72*, 86–90. DOI: 10.1016/j.jag.2018.05.024.
- Alfano, N., Michaux, J., Morand, S., et al. (2016). Endogenous gibbon ape leukemia virus identified in a rodent (*Melomys burtoni* subsp.) from Wallacea (Indonesia). *Journal of Virology*, *90*(18), 8169–80. DOI: 10.1128/jvi.00723-16.
- Alves, R.R.N. and van Vliet, N. (2018). Wild fauna on the menu. In *Ethnozoology*, ed. R.R. Nóbrega Alves and U.P. Albuquerque. London, UK: Academic Press, pp. 167–94. <https://doi.org/10.1016/B978-0-12-809913-1.00010-7>.
- Ammann, K. (2014). *China and gorillas*. Unpublished report. Available at: <https://www.karlammann.com/pdf/china-gorilla.pdf>.
- Amooti, N. (1995). Four gorillas killed in Bwindi. *Gorilla Journal*, *10*, 7. Available at: [https://www.berggorilla.org/fileadmin/user\\_upload/pdf/journal/journal\\_en/gorilla-journal-10-english.pdf](https://www.berggorilla.org/fileadmin/user_upload/pdf/journal/journal_en/gorilla-journal-10-english.pdf).
- Ancrenaz, M. (2019). The HUTAN–Kinabatangan Orangutan Conservation Programme. Available at: <https://www.peoplenotpoaching.org/hutan-kinabatangan-orang-utan-conservation-programme>. Accessed February 20, 2019.
- Ancrenaz, M., Ambu, L., Sunjoto, I., et al. (2010). Recent surveys in the forests of Ulu Segama Malua, Sabah, Malaysia, show that orang-utans (*P. p. morio*) can be maintained in slightly logged forests. *PLoS ONE*, *5*(7), e11510. DOI: 10.1371/journal.pone.0011510.
- Ancrenaz, M., Cheyne, S.M., Humle, T. and Robbins, M.M. (2015a). Impacts of industrial agriculture on ape ecology. In *State of the Apes: Industrial Agriculture and Ape Conservation*, ed. Arcus Foundation. Cambridge, UK: Cambridge University Press, pp. 165–92. Available at: <https://www.stateoftheapes.com/volume-2-industrial-agriculture/>.
- Ancrenaz, M., Dabek, L. and O’Neil, S. (2007). The costs of exclusion: recognizing a role for local communities in biodiversity conservation. *PLoS Biology*, *5*(11), e289. DOI: 10.1371/journal.pbio.0050289.
- Ancrenaz, M., Gimenez, O., Ambu, L., et al. (2005). Aerial surveys give new estimates for orangutans in Sabah, Malaysia. *PLoS Biology*, *3*(1), e3. DOI: 10.1371/journal.pbio.0030003.
- Ancrenaz, M., Gumal, M., Marshall, A.J., et al. (2016a). *Pongo pygmaeus* (errata version published in 2018). *The IUCN Red List of Threatened Species*. 2016: e.T17975A123809220. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <http://dx.doi.org/10.2305/IUCN.UK.2016-1.RLTS.T17975A17966347.en>.
- Ancrenaz, M., Lackman-Ancrenaz, I. and Elahan, H. (2006). Seed spitting and seed swallowing by wild orang-utans (*Pongo pygmaeus morio*) in Sabah, Malaysia. *Journal of Tropical Biology and Conservation*, *2*(1), 65–70.
- Ancrenaz, M., Oram, F., Ambu, L., et al. (2015b). Of *Pongo*, palms and perceptions: a multidisciplinary assessment of Bornean orang-utans *Pongo pygmaeus* in an oil palm context. *Oryx*, *49*(3), 465–72. DOI: 10.1017/S0030605313001270.
- Ancrenaz, M., Sollmann, R., Meijaard, E., et al. (2014). Coming down from the trees: is terrestrial activity in Bornean orangutans natural or disturbance driven? *Scientific Reports*, *4*, 4024. DOI: 10.1038/srep04024.
- Ancrenaz, M., Wich, S., Meijaard, E. and Simery, J. (2016b). *Palm Oil Paradox: Sustainable Solutions to Save the Great Apes*. Nairobi, Kenya: United Nations Environment Programme (UNEP)/Great Apes Survival Partnership (GRASP). Available at: <https://www.unenvironment.org/resources/report/palm-oil-paradox-sustainable-sustainable-solutions-save-great-apes>.
- Anderson, D.P., Nordheim, E.V. and Boesch, C. (2006). Environmental factors influencing the seasonality of estrus in chimpanzees. *Primates*, *47*(1), 43–50. DOI: 10.1007/s10329-005-0143-y.
- Anderson, J.R. (2013). *Affidavit of James R. Anderson In the Matter of a Proceeding under Article 70 of the CPLR for a Writ of Habeas Corpus. The Nonhuman Rights Project, Inc., on behalf of Tommy, Petitioners, v. Patrick C. Lavery, individually and as an officer of Circle L Trailer Sales, Inc., Diane Lavery, and Circle L Trailer Sales, Inc.* November 20, 2013. Available at: <https://www.nonhumanrights.org/content/uploads/Ex-4-Anderson-Affidavit-Tommy-Case.pdf>. Accessed December, 2019.
- Anderson, J.R. (2015). *Affidavit of James R. Anderson In the Matter of a Proceeding under Article 70 of the CPLR for a Writ of Habeas Corpus. The Nonhuman Rights Project, Inc., on behalf of Kiko, Petitioner, v. Carmen Presti, individually and as an officer and director of The Primate Sanctuary, Inc., Christie E. Presti, individually and as an officer and director of The Primate Sanctuary, Inc., and the Primate Sanctuary, Inc.* November 18, 2015. Available at: <https://www.nonhumanrights.org/client-kiko/>. Accessed December, 2019.

- Annecke, W. and Masubelele, M. (2016). A review of the impact of militarisation: the case of rhino poaching in Kruger National Park, South Africa. *Conservation and Society*, **14**(3), 195–204. DOI: 10.4103/0972-4923.191158.
- Anonymous (2009). Chimpanzees, Louie and Mikey on Kendall Project, Judie Harrison. *Chimpanzee Information Blogspot*, May 5, 2009. Available at: <http://chimpanzeeinformation.blogspot.com/2009/05/mikey-and-louie-chimp-story-on-kendall.html>.
- ANTARA News (2017). Orangutan Dari Kuwait Kembali ke Kalteng. *ANTARA News*, September 15, 2017. Available at: <https://www.antaranews.com/berita/652848/orangutan-dari-kuwait-kembali-ke-kalteng>.
- AP (2007). How to protect ape's rights? Make him a person. *AP: Associated Press*, May 4, 2007. Available at: [http://www.nbcnews.com/id/18498435/ns/technology\\_and\\_science-science/t/how-protect-apes-rights-make-him-person/#.XTbpT\\_ZFyzk](http://www.nbcnews.com/id/18498435/ns/technology_and_science-science/t/how-protect-apes-rights-make-him-person/#.XTbpT_ZFyzk).
- AP (2008). It's official: in Austria, a chimp is not a person. *AP: Associated Press*, January 15, 2008.
- Arandjelovic, M., Head, J., Rabanal, L.I., et al. (2011). Non-invasive genetic monitoring of wild central chimpanzees. *PLoS ONE*, **6**(3), e14761. DOI: 10.1371/journal.pone.0014761.
- Arandjelovic, M. and Vigilant, L. (2018). Non-invasive genetic censusing and monitoring of primate populations. *American Journal of Primatology*, **80**(3), e22743. DOI: 10.1002/ajp.22743.
- Arcus Foundation (2014). *State of the Apes: Extractive Industries and Ape Conservation*. Cambridge, UK: Cambridge University Press. Available at: <https://www.stateoftheapes.com/volume-1-extractive-industries/>.
- Arcus Foundation (2015). *State of the Apes: Industrial Agriculture and Ape Conservation*. Cambridge, UK: Cambridge University Press. Available at: <https://www.stateoftheapes.com/volume-2-industrial-agriculture/>.
- Arcus Foundation (2018). *State of the Apes: Infrastructure Development and Ape Conservation*. Cambridge, UK: Cambridge University Press. Available at: <https://www.stateoftheapes.com/volume-3-infrastructure-development/>.
- Ariffin, M. (2018). Recent challenges for the enforcement of wildlife laws in East Malaysia. *Pertanika Journal of Social Sciences and Humanities*, **26**, 167–80. Available at: [http://www.pertanika.upm.edu.my/regular\\_issues.php?jtype=3&journal=JSSH-26-1-3](http://www.pertanika.upm.edu.my/regular_issues.php?jtype=3&journal=JSSH-26-1-3).
- ASEAN (2005). *ASEAN Statement on Launching of the ASEAN Wildlife Law Enforcement Network (ASEAN-WEN)*. Bangkok, Thailand: Association of Southeast Asian Nations (ASEAN). Available at: [https://asean.org/?static\\_post=asean-statement-on-launching-of-the-asean-wildlife-law-enforcement-network-asean-wen-2](https://asean.org/?static_post=asean-statement-on-launching-of-the-asean-wildlife-law-enforcement-network-asean-wen-2).
- ASEAN-WEN (2016). *ASEAN Handbook on Legal Cooperation to Combat Wildlife Crime*. Bangkok, Thailand: Freeland Foundation/Association of Southeast Asian Nations Wildlife Enforcement Network (ASEAN-WEN).
- Askue, L., Heimlich, J., Yu, J.P., Wang, X. and Lakly, S. (2009). Measuring a professional conservation education training program for zoos and wildlife parks in China. *Zoo Biology*, **28**(5), 447–61. DOI: 10.1002/zoo.202010.
- Astaras, C., Linder, J.M., Wrege, P., Orume, R.D. and Macdonald, D.W. (2017). Passive acoustic monitoring as a law enforcement tool for Afrotropical rainforests. *Frontiers in Ecology and the Environment*, **15**(5), 233–4. DOI: 10.1002/fee.1495.
- Atsmon, Y., Magni, M., Li, L. and Liao, W. (2012). *Meet the 2020 Chinese Consumer*. McKinsey Consumer & Shopper Insights. Shanghai, China: McKinsey Insights China. Available at: <https://www.mckinsey.com/~/media/mckinsey/featured%20insights/asia%20pacific/meet%20the%20chinese%20consumer%20of%202020/mckinseyinsights/china%20meetthe2020chineseconsumer.ashx>.
- Atuo, F.A., O'Connell, T.J. and Abanyam, P.U. (2015). An assessment of socio-economic drivers of avian body parts trade in West African rainforests. *Biological Conservation*, **191**, 614–22. DOI: 10.1016/j.biocon.2015.08.013.
- Australian Government (2011). *Australian Animal Welfare Strategy (AAWS) and National Implementation Plan 2010–14*. Canberra, Australia: Department of Agriculture. Available at: <http://www.agriculture.gov.au/animal-welfare/aaws/australian-animal-welfare-strategy-aaws-and-national-implementation-plan-2010-14>.
- AWG CITES and WE (n.d.). *ASEAN Working Group on Convention on International Trade in Endangered Species of Wild Fauna and Flora and Wildlife Enforcement*. Bangkok, Thailand: Association of Southeast Asian Nations (ASEAN) Working Group on Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and Wildlife Enforcement (WE). Available at: <http://www.awgciteswe.org>. Accessed February, 2019.
- Ayari, I. and Counsell, S. (2017). *The Human Cost of Conservation in Republic of Congo: Conkouati-Douli and Nouabalé-Ndoki National Parks and their Impact on the Rights and Livelihoods of Forest Communities*. London, UK: The Rainforest Foundation UK. Available at: <https://www.rainforestfoundationuk.org/media.ashx/the-human-impact-of-conservation-republic-of-congo-2017-english.pdf>.

- AZA (2008). *Apes in Media and Commercial Performances. AZA White Paper*. Silver Spring, MD: Association of Zoos & Aquariums (AZA). Available at: [https://assets.speakcdn.com/assets/2332/ape\\_white\\_paper\\_approved\\_2\\_sept\\_08.pdf](https://assets.speakcdn.com/assets/2332/ape_white_paper_approved_2_sept_08.pdf).
- AZA Ape TAG (2010). *Chimpanzee (Pan troglodytes) Care Manual* [in Japanese]. Silver Spring, MD: Association of Zoos & Aquariums (AZA). Available at: <https://assets.speakcdn.com/assets/2332/chimpanzee-care-manual-japanese.pdf>.
- Bakels, J., Bhagwat, S., Drani, E., Infield, M. and Kidd, C. (2016). *Culture and Conservation: Investigating the Linkages between Biodiversity Protection and Cultural Values and Practices*. Cambridge, UK: Arcus Foundation. Available at: <https://www.arcusfoundation.org.s3.amazonaws.com/wp-content/uploads/2017/01/Culture-and-Conservation.pdf>.
- Baker, J., Milner-Gulland, E.J. and Leader-Williams, N. (2012). Park gazetttement and integrated conservation and development as factors in community conflict at Bwindi Impenetrable Forest, Uganda: drivers of community conflict at Bwindi. *Conservation Biology*, **26**(1), 160–70. DOI: 10.1111/j.1523-1739.2011.01777.x.
- Baker, K. (2005). *Enrichment for Non-Human Primates: Chimpanzees*. Bethesda, MD: Office of Laboratory Animal Welfare (OLAW), National Institutes of Health (NIH). Available at: <https://grants.nih.gov/grants/olaw/Chimpanzees.pdf>.
- Baker, K., Jah, F. and Connolly, S. (2018). A radio drama for apes? An entertainment–education approach to supporting ape conservation through an integrated human behaviour, health, and environment serial drama. *The Journal of Development Communication*, **29**(1), 16–24.
- Bale, R. (2016). How saving one chimp led to a new kind of anti-poaching group. *Wildlife Watch*, June 8, 2016. Available at: <https://www.nationalgeographic.com/news/2016/06/ofir-drori-wildlife-corruption-laga/>.
- Balluch, M. and Theuer, E. (2007). Trial on personhood for chimp 'Hiasl'. ALTEX. Available at: [http://www.altex.ch/resources/Altex\\_2007\\_4\\_335\\_342\\_Balluch.pdf](http://www.altex.ch/resources/Altex_2007_4_335_342_Balluch.pdf).
- Balter, M. (2010). Chimps grieve over dead relative. *Science: News*. Available at: <https://www.sciencemag.org/news/2010/04/chimps-grieve-over-dead-relatives>.
- Banaji, M.R. and Greenwald, A.G. (2014). *Blindspot: Hidden Biases of Good People*. London, UK: Penguin Books Ltd.
- Banes, G.L., Chua, W., Elder, M. and Kao, J. (2018). Orang-utans *Pongo* spp. in Asian zoos: current status, challenges and progress towards long-term population sustainability. *International Zoo Yearbook*, **52**(1), 150–63. DOI: 10.1111/izy.12178.
- Barbora, S. (2017). Riding the rhino: conservation, conflicts, and militarisation of Kaziranga National Park in Assam. *Antipode*, **49**(5), 1145–63. DOI: 10.1111/anti.12329.
- Barelli, C., Heistermann, M., Boesch, C. and Reichard, U.H. (2007). Sexual swellings in wild white-handed gibbon females (*Hylobates lar*) indicate the probability of ovulation. *Hormones and Behavior*, **51**, 221–30.
- Barnosky, A.D., Koch, P.L., Feranec, R.S., Wing, S.L. and Shabel, A.B. (2004). Assessing the causes of Late Pleistocene extinctions on the continents. *Science*, **306**(5693), 70–5. DOI: 10.1126/science.1101476.
- Barrett, C.B. and Arcese, P. (1995). Are integrated conservation–development projects (ICDPs) sustainable? On the conservation of large mammals in sub-Saharan Africa. *World Development*, **23**(7), 1073–84. DOI: 10.1016/0305-750X(95)00031-7.
- Bartlett, T.Q. (2007). The Hylobatidae: small apes of Asia. In *Primates in Perspective*, ed. C. Campbell, A. Fuentes, K. C. Mackinnon, M. Panger and S. K. Bearder. New York, NY: Oxford University Press, pp. 274–89.
- Bartlett, T.Q. (2009). *The Gibbons of Khao Yai: Seasonal Variation in Behavior and Ecology*. Upper Saddle River, NJ: Pearson.
- Barton, D., Chen, Y. and Jin, A. (2013). Mapping China's middle class. *McKinsey Quarterly*, June 1, 2013. Available at: <https://www.mckinsey.com/industries/retail/our-insights/mapping-chinas-middle-class>.
- Bassett, T.J. (2005). Card-carrying hunters, rural poverty, and wildlife decline in northern Côte d'Ivoire. *The Geographical Journal*, **171**(1), 24–35. DOI: 10.1111/j.1475-4959.2005.00147.x.
- Bates, L. (2017). *Joint Affidavit of Lucy Bates and Richard M. Byrne*. January 25, 2017. Available at: <https://www.nonhumanrights.org/client-happy/>. Accessed December, 2019.
- BBC (2018). Chimpanzee Robby's circus wins German court battle to keep him. *BBC News*, November 9, 2018. Available at: <https://www.bbc.com/news/world-europe-46149725>.

- Beauchamp, T.L., Ferdowsian, H.R. and Gluck, J.P. (2014). Rethinking the ethics of research involving nonhuman animals: introduction. *Theoretical Medicine and Bioethics*, **35**(2), 91–6. DOI: 10.1007/s11017-014-9291-7.
- Beaune, D. (2015). What would happen to the trees and lianas if apes disappeared? *Oryx*, **49**(3), 442–6. DOI: 10.1017/S0030605314000878.
- Beaune, D., Bretagnolle, F., Bollache, L., et al. (2013). The bonobo-dialium positive interactions: seed dispersal mutualism. *American Journal of Primatology*, **75**(4), 394–403. DOI: 10.1002/ajp.22121.
- Beck, B., Walkup, K., Rodrigues, M., et al. (2007). *Best Practice Guidelines for the Re-introduction of Great Apes*. Gland, Switzerland: International Union for Conservation of Nature (IUCN) Species Survival Commission (SSC), Primate Specialist Group. Available at: <https://portals.iucn.org/library/sites/library/files/documents/SSC-OP-035.pdf>.
- Becker, C.D. and Ghimire, K. (2003). Synergy between traditional ecological knowledge and conservation science supports forest preservation in Ecuador. *Conservation Ecology*, **8**(1), e1. Available at: <http://www.consecol.org/vol8/iss1/art1/>
- Bender, J. and Ziegler, S. (2009). GIS based threat analysis of gorilla habitat in the Congo Basin. *Zentralblatt für Geologie und Paläontologie, Teil I, Geologie*, **2009**(1/2), 97–111.
- Bender, K. (2010). Oakland Zoo home to former movie star chimpanzees. *Mercury News*, August 25, 2010. Available at: <https://www.mercurynews.com/2010/08/25/oakland-zoo-home-to-former-movie-star-chimpanzees/>.
- Benítez-López, A., Alkemade, R., Schipper, A.M., et al. (2017). The impact of hunting on tropical mammal and bird populations. *Science*, **356**(6334), 180–3. DOI: 10.1126/science.aaj1891.
- Bennett, E.L. (2002). Is there a link between wild meat and food security? *Conservation Biology*, **16**(3), 590–2.
- Bennett, N.J., Roth, R., Klain, S.C., et al. (2017a). Conservation social science: understanding and integrating human dimensions to improve conservation. *Biological Conservation*, **205**, 93–108. DOI: 10.1016/j.biocon.2016.10.006.
- Bennett, N.J., Roth, R., Klain, S.C., et al. (2017b). Mainstreaming the social sciences in conservation. *Conservation Biology*, **31**(1), 56–66. DOI: 10.1111/cobi.12788.
- Bergin, D. and Nijman, V. (2020). Wildlife trade research methods for lorises and pottos. In *Evolution, Ecology and Conservation of Lorises and Pottos*, ed. K.A.I. Nekaris and A. Burrows. Cambridge, UK: Cambridge University Press, pp. 339–61.
- Bergl, R.A., Dunn, A., Fowler, A., et al. (2016). *Gorilla gorilla* ssp. *diehli* (errata version published in 2016). *The IUCN Red List of Threatened Species*. 2016: e.T39998A102326240. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <http://dx.doi.org/10.2305/IUCN.UK.2016-2.RLTS.T39998A17989492.en>.
- Bergl, R.A., Warren, Y., Nicholas, A., et al. (2012). Remote sensing analysis reveals habitat, dispersal corridors and expanded distribution for the critically endangered Cross River gorilla, *Gorilla gorilla diehli*. *Oryx*, **46**, 278–89.
- Berkes, F. (2004). Rethinking community-based conservation. *Conservation Biology*, **18**(3), 621–30. DOI: 10.1111/j.1523-1739.2004.00077.x.
- Bermejo, M., Rodríguez-Tejijeiro, J.D., Illera, G., et al. (2006). Ebola outbreak killed 5000 gorillas. *Science*, **314**(5805), 1564. DOI: 10.1126/science.1133105.
- Bessa, J., Sousa, C. and Hockings, K.J. (2015). Feeding ecology of chimpanzees (*Pan troglodytes verus*) inhabiting a forest-mangrove-savanna-agricultural matrix at Caiquene-Cadique, Cantanhez National Park, Guinea-Bissau. *American Journal of Primatology*, **77**(6), 651–65.
- Blanco, V. and Waltert, M. (2013). Does the tropical agricultural matrix bear potential for primate conservation? A baseline study from western Uganda. *Journal for Nature Conservation*, **21**, 383–93.
- Blomley, T., Namara, A., McNeilage, A., et al. (2010). *Development and Gorillas? Assessing Fifteen Years of Integrated Conservation and Development in South-Western Uganda*. London, UK: International Institute for Environment and Development (IIED). Available at: <https://portals.iucn.org/library/sites/library/files/documents/Man-Dev-676.1-001.pdf>.
- Bobo, K.S., Aghomo, F.F.M. and Ntumwel, B.C. (2015). Wildlife use and the role of taboos in the conservation of wildlife around the Nkwende Hills Forest Reserve, South-west Cameroon. *Journal of Ethnobiology and Ethnomedicine*, **11**(1), 2. DOI: 10.1186/1746-4269-11-2.

- Boesch, C. (2013). *Affidavit of Christophe Boesch in the Matter of a Proceeding under Article 70 of the CPLR for a Writ of Habeas Corpus. The Nonhuman Rights Project, Inc., on behalf of Tommy, Petitioners, v. Patrick C. Lavery, individually and as an officer of Circle L Trailer Sales, Inc., Diane Lavery, and Circle L Trailer Sales, Inc.* November 21, 2013. Available at: <https://www.nonhumanrights.org/content/uploads/Ex-5-Boesch-Affidavit-Tommy-Case.pdf>. Accessed December, 2019.
- Boesch, C. (2015). *Affidavit of Christophe Boesch in the Matter of a Proceeding under Article 70 of the CPLR for a Writ of Habeas Corpus. The Nonhuman Rights Project, Inc., on behalf of Kiko, Petitioner, v. Carmen Presti, individually and as an officer and director of The Primate Sanctuary, Inc., Christie E. Presti, individually and as an officer and director of The Primate Sanctuary, Inc., and the Primate Sanctuary, Inc.* October 14, 2015. Available at: <https://www.nonhumanrights.org/client-kiko/>. Accessed December, 2019.
- Booker, F. and Roe, D. (2017). *First Line of Defence? A Review of Evidence of the Effectiveness of Engaging Communities to Tackle Illegal Wildlife Trade.* London, UK: International Institute for Environment and Development (IIED).
- Boonratana, R., Duckworth, J.W., Phiapalath, P., Reumaux, J.-F. and Sisomphane, C. (2011). The precarious status of the white-handed gibbon *Hylobates lar* in Lao PDR. *Asian Primates Journal*, **2**(1), 13–20.
- Borneman, J. and Hammoudi, A. (2009). *Being There: The Fieldwork Encounter and the Making of Truth.* Berkeley, CA: University of California Press.
- Bowen-Jones, E. (2012). *Tackling Human–Wildlife Conflict: A Prerequisite for Linking Conservation and Poverty Alleviation. A Decision-Makers Guide to Financial and Institutional Mechanisms.* London, UK: International Institute for Environment and Development (IIED). Available at: <https://pubs.iied.org/pdfs/G03725.pdf>.
- Bowen-Jones, E. and Pendry, S. (1999). The threat to primates and other mammals from the bushmeat trade in Africa, and how this threat could be diminished. *Oryx*, **33**(3), 233–46. DOI: 10.1046/j.1365-3008.1999.00066.x.
- Bowers v. Hardwick.* 478 US 186 (1986). Available at: <https://supreme.justia.com/cases/federal/us/478/186/>.
- Bowler, M.T., Tobler, M.W., Endress, B.A., Gilmore, M.P. and Anderson, M.J. (2017). Estimating mammalian species richness and occupancy in tropical forest canopies with arboreal camera traps. *Remote Sensing in Ecology and Conservation*, **3**(3), 146–57. DOI: 10.1002/rse2.35.
- Boyer, K. (2011). *Chimpanzee conservation in light of impending iron ore mining project in SE Senegal.* Masters thesis. Ames, IA: Iowa State University. Available at: <https://lib.dr.iastate.edu/etd/10215/>.
- Bradley, B.J., Doran-Sheehy, D.M., Lukas, D., Boesch, C. and Vigilant, L. (2004). Dispersed male networks in western gorillas. *Current Biology*, **14**(6), 510–3. DOI: 10.1016/j.cub.2004.02.062.
- Bradshaw, G.A., Capaldo, T., Lindner, L. and Grow, G. (2008). Building an inner sanctuary: complex PTSD in chimpanzees. *Journal of Trauma & Dissociation*, **9**(1), 9–34. DOI: 10.1080/15299730802073619.
- Brashares, J.S., Abrahms, B., Fiorella, K.J., et al. (2014). Wildlife decline and social conflict. *Science*, **345**(6195), 376–8. DOI: 10.1126/science.1256734.
- Brashares, J.S., Arcese, P., Sam, M.K., et al. (2004). Bushmeat hunting, wildlife declines, and fish supply in West Africa. *Science*, **306**(5699), 1180–3. DOI: 10.1126/science.1102425.
- Brashares, J.S., Golden, C.D., Weinbaum, K.Z., Barrett, C.B. and Okello, G.V. (2011). Economic and geographic drivers of wildlife consumption in rural Africa. *Proceedings of the National Academy of Sciences*, **108**(34), 13931–6. DOI: 10.1073/pnas.1011526108.
- Brechin, S.R. and West, P.C. (1990). Protected areas, resident peoples, and sustainable conservation: the need to link top down with bottom up. *Society & Natural Resources*, **3**(1), 77–9. DOI: 10.1080/08941929009380707.
- Brncic, T.M., Amarasekaran, B. and McKenna, A. (2010). *Sierra Leone National Chimpanzee Census Project August 2010.* Freetown, Sierra Leone: Tacugama Chimpanzee Sanctuary. Available at: [http://www.tacugama.com/wp-content/uploads/2017/12/2010\\_Brncic\\_SLNCCP\\_Final\\_Report.pdf](http://www.tacugama.com/wp-content/uploads/2017/12/2010_Brncic_SLNCCP_Final_Report.pdf).
- Broad, S., Mulliken, T. and Roe, D. (2003). The nature and extent of legal and illegal trade in wildlife. In *The Trade in Wildlife: Regulation for Conservation*, ed. S. Oldfield. London, UK: Earthscan, pp. 3–22.
- Brockelman, W.Y. and Ali, R. (1987). Methods of surveying and sampling forest primate populations. In *Primate Conservation in the Tropical rainforest*, ed. R.A. Mittermeier and R.W. Marsh. New York, NY: Alan Liss, pp. 23–62.
- Brockelman, W. and Geissmann, T. (2019). *Hoolock leuconedys. The IUCN Red List of Threatened Species.* 2019:e.T118355453A17968300. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <http://dx.doi.org/10.2305/IUCN.UK.2019-1.RLTS.T118355453A17968300.en>.

- Brockelman, W. and Geissmann, T. (2020). *Hylobates lar. The IUCN Red List of Threatened Species.* 2020: e.T10548A17967253. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <https://dx.doi.org/10.2305/IUCN.UK.2020-2.RLTS.T10548A17967253.en>.
- Brockelman, W., Geissmann, T., Timmins, T. and Traeholt, C. (2020). *Hylobates pileatus. The IUCN Red List of Threatened Species.* 2020: e.T10552A17966665. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <https://dx.doi.org/10.2305/IUCN.UK.2020-2.RLTS.T10552A17966665.en>.
- Brockelman, W., Molur, S. and Geissmann, T. (2019). *Hoolock hoolock. The IUCN Red List of Threatened Species.* 2019: e.T39876A17968083. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <https://dx.doi.org/10.2305/IUCN.UK.2019-3.RLTS.T39876A17968083.en>.
- Brockelman, W.Y. and Osterberg, P. (2015). Gibbon rehabilitation project on Phuket successfully reintroduces animals into forest. *Natural History Bulletin of the Siam Society*, **60**(2), 65–8.
- Brockelman, W.Y. and Srikosamatara, S. (1993). Estimation of density of gibbon groups by use of loud songs. *American Journal of Primatology*, **29**(2), 93–108. DOI: 10.1002/ajp.1350290203.
- Brockington, D. (2002). *Fortress Conservation: The Preservation of the Mkomazi Game Reserve, Tanzania.* Oxford, UK: James Currey.
- Brockington, D. and Igoe, J. (2006). Eviction for conservation: a global overview. *Conservation and Society*, **4**(3), 424–70.
- Brooks, C. and Hopkins, M. (2016). How protecting animals led to allegations of torture and rape. *National Geographic*, September 19, 2016. Available at: <https://www.nationalgeographic.com/news/2016/09/wildlife-tanzania-poaching-human-rights-abuses/>.
- Brosnahan, P. (2000). New Zealand's Animal Welfare Act: what is its value regarding non-human hominids? *Animal Law*, **6**, 185–92.
- Brown, D., Fa, J.E. and Gordon, L. (2007). *Assessment of Recent Bushmeat Research and Recommendations to Her Majesty's Government.* London, UK: Overseas Development Institute (ODI). Available at: <http://citeseerx.ist.psu.edu/viewdoc/download;jsessionid=031C5711AC90538F2E32306418A13B1A?doi=10.1.1.617.1723&rep=rep1&type=pdf>.
- Brown, J. (2009). Status of the western black crested gibbon (*Nomascus concolor*) in the Nam Ha National Protected Area, Lao PDR. *Gibbon Journal*, **5**, 28–35.
- Brown, S. (2006). The West develops a taste for bushmeat. *New Scientist Life*, July 8, 2006. Available at: <https://www.newscientist.com/article/dn9503-the-west-develops-a-taste-for-bushmeat/>.
- Browning, E., Gibb, R., Glover-Kapfer, P. and Jones, K.E. (2017). *Passive Acoustic Monitoring in Ecology and Conservation.* WWF Conservation Technology Series 1 (2). Woking, UK: World Wide Fund for Nature (WWF)-UK.
- Brulliard, K. (2017). USDA abruptly purges animal welfare information from its website. *The Washington Post*, February 3, 2017. Available at: <https://www.washingtonpost.com/news/animalia/wp/2017/02/03/the-usda-abruptly-removes-animal-welfare-information-from-its-website/>.
- Brulliard, K. (2018). This pilot rescued a baby chimp and everyone swooned. *The Washington Post*, March 1, 2018. Available at: <https://www.washingtonpost.com/news/animalia/wp/2018/03/01/this-pilot-rescued-a-baby-chimp-and-everyone-swooned/>.
- Bryant, J.V., Olson, V.A., Chatterjee, H.J. and Turvey, S.T. (2015). Identifying environmental versus phylogenetic correlates of behavioural ecology in gibbons: implications for conservation management of the world's rarest ape. *BMC Evolutionary Biology*, **15**(1), 171. DOI: 10.1186/s12862-015-0430-1.
- Bryant, J.V., Zeng, X., Hong, X., Chatterjee, H.J. and Turvey, S.T. (2017). Spatiotemporal requirements of the Hainan gibbon: does home range constrain recovery of the world's rarest ape? *American Journal of Primatology*, **79**(3), e22617. DOI: 10.1002/ajp.22617.
- Buckland, S.T., Anderson, D.R., Burnham, K.P., et al., ed. (2001). *Introduction to Distance Sampling: Estimating Abundance of Biological Populations.* Oxford, UK: Oxford University Press.
- Buckland, S.T., Anderson, D.R., Burnham, K.P., et al., ed. (2007). *Advanced Distance Sampling: Estimating Abundance of Biological Populations.* Oxford, UK: Oxford University Press.

- Buckland, S.T., Plumptre, A.J., Thomas, L. and Rexstad, E.A. (2010). Line transect sampling of primates: can animal-to-observer distance methods work? *International Journal of Primatology*, **31**(3), 485–99. DOI: 10.1007/s10764-010-9408-4.
- Bunyoro-Kitara Kingdom (n.d.). *Bunyoro-Kitara Kingdom: profile*. Available at: [www.bunyoro-kitara.org/5.html](http://www.bunyoro-kitara.org/5.html). Accessed September, 2020.
- Burgess, G., Zain, S., Milner-Gulland, E.J., et al. (2018). *Reducing Demand for Illegal Wildlife Products: Research Analysis on Strategies to Change Illegal Wildlife Product Consumer Behaviour*. Cambridge, UK: TRAFFIC.
- Burke, J. (2018). Six Virunga park rangers killed in DRC wildlife sanctuary. *The Guardian*, April 10, 2018. Available at: <https://www.theguardian.com/weather/2018/apr/09/six-virunga-park-rangers-killed-in-drc-wildlife-sanctuary>.
- Burney, D.A., Robinson, G.S. and Burney, L.P. (2003). *Sporormiella* and the late Holocene extinctions in Madagascar. *Proceedings of the National Academy of Sciences*, **100**(19), 10800–5. DOI: 10.1073/pnas.1534700100.
- Burns, S.J., Godfrey, L.R., Faina, P., et al. (2016). Rapid human-induced landscape transformation in Madagascar at the end of the first millennium of the Common Era. *Quaternary Science Reviews*, **134**, 92–9. DOI: 10.1016/j.quascirev.2016.01.007.
- Buscher, B. (2018). From biopower to ontopower? Violent responses to wildlife crime and the new geographies of conservation. *Conservation and Society*, **16**(2), 157–69. DOI: 10.4103/cs.cs\_16\_159.
- Butynski, T.M. (2001). Africa's great apes. In *Great Apes and Humans: The Ethics of Coexistence*, ed. B.B. Beck, T.S. Stoinski, M. Hutchins, et al. Washington DC: Smithsonian Institution Press.
- Buxton, R.T., Lendrum, P.E., Crooks, K.R. and Wittemyer, G. (2018). Pairing camera traps and acoustic recorders to monitor the ecological impact of human disturbance. *Global Ecology and Conservation*, **16**, e00493. DOI: 10.1016/j.gecco.2018.e00493.
- Byrn v. NYCHHC (New York City Health & Hospitals Corp.)*. 31 NY 2d 194 (1972).
- Byrne, R.M. (2016). *Joint Affidavit of Lucy Bates and Richard M. Byrne*. December 5, 2016. Available at: <https://www.nonhumanrights.org/client-happy/>. Accessed December, 2019.
- Byrne, R.W. and Stokes, E.J. (2002). Effects of manual disability on feeding skills in gorillas and chimpanzees. *International Journal of Primatology*, **23**, 539–54. DOI: 10.1023/A:1014917600198.
- Caillaud, D., Ndagijimana, F., Giarrusso, A.J., Vecellio, V. and Stoinski, T.S. (2014). Mountain gorilla ranging patterns: influence of group size and group dynamics. *American Journal of Primatology*, **76**(8), 730–46. DOI: 10.1002/ajp.22265.
- Caldecott, J., Miles, L. and Annan, K.A. (2005). *The World Atlas of Great Apes and their Conservation*. Berkeley and Los Angeles, CA: University of California Press.
- Calvignac-Spencer, S., Leendertz, S.A.J., Gillespie, T.R. and Leendertz, F.H. (2012). Wild great apes as sentinels and sources of infectious disease. *Clinical Microbiology and Infection*, **18**(6), 521–7. DOI: 10.1111/j.1469-0691.2012.03816.x.
- Campbell, C.O., Cheyne, S.M. and Rawson, B.M. (2015). *Best Practice Guidelines for the Rehabilitation and Translocation of Gibbons*. Gland, Switzerland: International Union for Conservation of Nature (IUCN) Species Survival Commission (SSC), Primate Specialist Group. Available at: <https://portals.iucn.org/library/sites/library/files/documents/SSC-OP-051.pdf>.
- Campbell, G., Kuehl, H., Diarrassouba, A., N'Goran, P.K. and Boesch, C. (2011). Long-term research sites as refugia for threatened and over-harvested species. *Biology Letters*, **7**(5), 723–6. DOI: 10.1098/rsbl.2011.0155.
- Campbell, G., Kuehl, H., N'Goran P.K. and Boesch, C. (2008). Alarming decline of West African chimpanzees in Côte d'Ivoire. *Current Biology*, **18**(19), R903–R4. DOI: 10.1016/j.cub.2008.08.015.
- Campbell-Smith, G., Campbell-Smith, M., Singleton, I. and Linkie, M. (2011a). Apes in space: saving an imperilled orangutan population in Sumatra. *PLoS ONE*, **6**(2), e17210. DOI: 10.1371/journal.pone.0017210.
- Campbell-Smith, G., Campbell-Smith, M., Singleton, I. and Linkie, M. (2011b). Raiders of the lost bark: orangutan foraging strategies in a degraded landscape. *PLoS ONE*, **6**(6), e20962. DOI: 10.1371/journal.pone.0020962.
- Campbell-Smith, G., Sembiring, R. and Linkie, M. (2012). Evaluating the effectiveness of human–orangutan conflict mitigation strategies in Sumatra. *Journal of Applied Ecology*, **49**(2), 367–75. DOI: 10.1111/j.1365-2664.2012.02109.x.

- Campbell-Smith, G., Simanjorang, H.V.P., Leader-Williams, N. and Linkie, M. (2010). Local attitudes and perceptions toward crop-raiding by orangutans (*Pongo abelii*) and other nonhuman primates in northern Sumatra, Indonesia. *American Journal of Primatology*, **72**(10), 866–76. DOI: 10.1002/ajp.20822.
- Caniago, I. and Stephen, F.S. (1998). Medicinal plant ecology, knowledge and conservation in Kalimantan, Indonesia. *Economic Botany*, **52**(3), 229–50. DOI: 10.1007/BF02862141.
- Cappelle, N., Després-Einspanner, M.-L., Howe, E.J., Boesch, C. and Kühl, H.S. (2019). Validating camera trap distance sampling for chimpanzees. *American Journal of Primatology*, **81**(3), e22962. DOI: 10.1002/ajp.22962.
- Carbone, L., Alan Harris, R., Gnerre, S., et al. (2014). Gibbon genome and the fast karyotype evolution of small apes. *Nature*, **513**, 195. DOI: 10.1038/nature13679.
- Carlsen, F., Leus, K., Traylor-Holzer, K. and McKenna, A. (2012). *Western Chimpanzee Population and Habitat Viability Assessment for Sierra Leone: Final Report*. Copenhagen: International Union for Conservation of Nature (IUCN) Species Survival Commission (SSC) Conservation Breeding Specialist Group (CBSG)-Europe.
- Carlson, K., Wright, J. and Dönges, H. (2015). In the line of fire: elephant and rhino poaching in Africa. In *Small Arms Survey 2015: Weapons and the World*, ed. Small Arms Survey. Cambridge, UK: Cambridge University Press, pp. 6–35. Available at: <http://www.smallarmssurvey.org/publications/by-type/yearbook/small-arms-survey-2015.html>.
- Carpenter, C.R. (1940). A field study in Siam of the behaviour and social relations of the gibbon *Hylobates lar*. *Comparative Psychological Monographs*, **16**(5), 1–212.
- Casetta, E., Marques da Silva, J. and Vecchi, D. (2019). Biodiversity healing. In *From Assessing to Conserving Biodiversity*, ed. E. Casetta, J. Marques da Silva and D. Vecchi. Cham, Switzerland: Springer, pp. 1–17.
- Cavalieri, P. and Singer, P., ed. (1993). *The Great Ape Project: Equality Beyond Humanity*. London, UK: Fourth Estate Publishing.
- Cawthorn, D.-M. and Hoffman, L.C. (2015). The bushmeat and food security nexus: a global account of the contributions, conundrums and ethical collisions. *Food Research International*, **76**, 906–25. DOI: 10.1016/j.foodres.2015.03.025.
- CAZG (n.d.). *List and distribution of members* [in Chinese]. Chinese Association of Zoological Gardens (CAZG). Available at: <http://www.cazg.org.cn/Home/GetArticleDetails?articleId=52&siteNodeContentSourceId=20&nodeId=bf80a4af-8645-4b60-839c-456d49e365fb&rootNodeId=bf80a4af-8645-4b60-839c-456d49e365fb>. Accessed January, 2020.
- CBD (n.d.-a). *Aichi Biodiversity Targets*. Convention on Biological Diversity (CBD). Available at: <https://www.cbd.int/sp/targets/>. Accessed August, 2019.
- CBD (n.d.-b). *The Convention on Biological Diversity*. Montreal, Canada: Convention on Biological Diversity (CBD). Available at: <https://www.cbd.int>. Accessed January, 2020
- CBD (n.d.-c). *List of parties*. Montreal, Canada: The Convention on Biological Diversity. Available at: <https://www.cbd.int/information/parties.shtml>. Accessed January, 2020.
- CCC (2014). *Orangutana, Sandra s/ Habeas Corpus*. CCC 68831/2014/CA1. Federal Chamber of Criminal Cassation (CCC) of Argentina. Available at: <https://www.animallaw.info/sites/default/files/Orangutana%20Sandra%20s%3A%20Habeas%20Corpus.pdf>.
- CCFU (2018). *Culture and the Conservation of the Great Apes in Uganda*. Kampala: Cross-Cultural Foundation of Uganda (CCFU). Available at: <http://crossculturalfoundation.or.ug/wp-content/uploads/2018/07/Culture-and-Conservation-of-the-great-apes-in-Uganda-CCFU2018.pdf>.
- Ceballos, G., Ehrlich, P.R. and Dirzo, R. (2017). Biological annihilation via the ongoing sixth mass extinction signaled by vertebrate population losses and declines. *Proceedings of the National Academy of Sciences*, **114**(30), E6089–96. DOI: 10.1073/pnas.1704949114.
- CEMAC (2016). *Regulation No. 01/CEMAC/UMAC/CM on the Prevention and Suppression of Money Laundering and the Financing of Terrorism and Proliferation in Central Africa*. Economic and Monetary Community of Central Africa (CEMAC). Available at: [http://spgabac.org/site/wp-content/uploads/2016/06/reglement\\_anglais.pdf](http://spgabac.org/site/wp-content/uploads/2016/06/reglement_anglais.pdf).
- Center for Great Apes (n.d.). *Orangutans*. Wauchula, FL: Center for Great Apes. Available at: <http://www.centerforgreatapes.org/meet-apes/orangutans/>. Accessed July, 2019.

- Chaber, A.-L., Allebone-Webb, S., Lignereux, Y., Cunningham, A.A. and Rowcliffe, J.M. (2010). The scale of illegal meat importation from Africa to Europe via Paris. *Conservation Letters*, **3**(5), 317–21. DOI: 10.1111/j.1755-263X.2010.00121.x.
- Challender, D.W.S. and MacMillan, D.C. (2014). Poaching is more than an enforcement problem. *Conservation Letters*, **7**(5), 484–94. DOI: 10.1111/conl.12082.
- Chan, B.P.L., Lo, Y.F.P. and Mo, Y. (2020). New hope for the Hainan gibbon: formation of a new group outside its known range. *Oryx*, **54**(3), 296. DOI: 10.1017/S0030605320000083.
- Chan, B.P.L., Mak, C.F., Yang, J.-H. and Huang, X.-Y. (2017). Population, distribution, vocalization and conservation of the Gaoligong hoolock gibbon (*Hoolock tianxing*) in the Tengchong section of the Gaoligongshan National Nature Reserve, China. *Primate Conservation*, **31**, 107–13. Available at: [http://static1.sspcdn.com/static/f/1200343/27795205/1515432731637/PC31\\_Chan\\_et\\_al\\_Gaoligong\\_Hoolock.pdf?token=vrIDVVxEAxCKKFqGsok7nJiXgdQ%3D](http://static1.sspcdn.com/static/f/1200343/27795205/1515432731637/PC31_Chan_et_al_Gaoligong_Hoolock.pdf?token=vrIDVVxEAxCKKFqGsok7nJiXgdQ%3D).
- Chan, E. (2018). China marine park apologises after trainer puts lipstick on beluga whale. *South China Morning Post*, June 13, 2018. Available at: <https://www.scmp.com/news/china/society/article/2150576/china-marine-park-apologises-after-trainer-put-lipstick-whale>.
- Chan, H.-K., Zhang, H., Yang, F. and Fischer, G. (2015). Improve customs systems to monitor global wildlife trade. *Science*, **348**(6232), 291–2. DOI: 10.1126/science.aaa3141.
- Chapman, C.A., Chapman, L.J., Naughton-Treves, L., Lawes, M.J. and McDowell, L.R. (2004). Predicting folivorous primate abundance: validation of a nutritional model. *American Journal of Primatology*, **62**(2), 55–69.
- Chapman, C.A. and Onderdonk, D.A. (1998). Forests without primates: primate/plant codependency. *American Journal of Primatology*, **45**, 127–41.
- Chatterjee, H.J. (2009). Evolutionary relationships among the gibbons: a biogeographic perspective. In *The Gibbons. Developments in Primatology: Progress and Prospects*, ed. D. Whittaker and S. Lappan. New York, NY: Springer, pp. 13–36.
- Chatterjee, H.J., Tse, J.S.Y. and Turvey, S.T. (2012). Using ecological niche modelling to predict spatial and temporal distribution patterns in Chinese gibbons: lessons from the present and the past. *Folia Primatologica*, **83**(2), 85–99. DOI: 10.1159/000342696.
- Chausson, A.M., Rowcliffe, J.M., Escouflaire, L., Wieland, M. and Wright, J.H. (2019). Understanding the socio-cultural drivers of urban bushmeat consumption for behavior change interventions in Pointe Noire, Republic of Congo. *Human Ecology*, **47**(2), 179–91. DOI: 10.1007/s10745-019-0061-z.
- Chaves, W.A., Valle, D.R., Monroe, M.C., et al. (2018). Changing wild meat consumption: an experiment in the Central Amazon, Brazil. *Conservation Letters*, **11**(2), e12391. DOI: 10.1111/conl.12391.
- Chen, D., Jiang, D., Liang, S. and Wang, F. (2011). Selective enforcement of regulation. *China Journal of Accounting Research*, **4**(1–2), 9–27. DOI: 10.1016/j.cjar.2011.04.002.
- Chen, W. (2013). Enforcement more important than law. *China Daily*, April 20, 2013. Available at: [http://www.chinadaily.com.cn/opinion/2013-04/20/content\\_16425449.htm](http://www.chinadaily.com.cn/opinion/2013-04/20/content_16425449.htm).
- Cheng'en Wu (1993). *Journey to the West* [translation]. Beijing, China: Foreign Languages Press.
- Cheyne, S.M. (2006). Wildlife reintroduction: considerations of habitat quality at the release site. *BMC Ecology*, **6**(1), 5. DOI: 10.1186/1472-6785-6-5.
- Cheyne, S.M. (2008). Feeding ecology, food choice and diet characteristics of gibbons in a disturbed peat-swamp forest, Indonesia. In *XXII Congress of the International Primatological Society*, ed. P.C. Lee, P. Honess, H. Buchanan-Smith, A. MaClarnon and W.I. Sellers. Edinburgh, UK, pp. 3–8.
- Cheyne, S.M. (2010). Behavioural ecology of gibbons (*Hylobates albifrons*) in a degraded peat-swamp forest. In *Indonesian Primates*, ed. S. Gursky and J. Supriatna. New York, NY: Springer, pp. 121–56. DOI: 10.1007/978-1-4419-1560-3\_8.
- Cheyne, S.M. (n.d.). *The impact of social media on the trafficking of small apes*. Unpublished presentation.
- Cheyne, S.M., Campbell, C.O. and Payne, K.L. (2012). Proposed guidelines for *in situ* gibbon rescue, rehabilitation and reintroduction. *International Zoo Yearbook*, **46**(1), 265–81. DOI: 10.1111/j.1748-1090.2011.00149.x.
- Cheyne, S.M. and Chivers, D.J. (2006). Sexual swellings of female gibbons. *Folia Primatologica*, **77**(5), 345–52. DOI: 10.1159/000093699.

- Cheyne, S.M., Chivers, D.J. and Sugardjito, J. (2008). Biology and behaviour of reintroduced gibbons. *Biodiversity and Conservation*, **17**(7), 1741–51. DOI: 10.1007/s10531-008-9378-4.
- Cheyne, S.M., Gilhooly, L.J., Hamard, M.C., et al. (2016a). Population mapping of gibbons in Kalimantan, Indonesia: correlates of gibbon density and vegetation across the species' range. *Endangered Species Research*, **30**(1), 133–43. DOI: 10.3354/esr00734.
- Cheyne, S.M. and Nijman, V. (2020). *Hylobates abbotti. The IUCN Red List of Threatened Species*. 2020: e.T39889 A17990882. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <https://dx.doi.org/10.2305/IUCN.UK.2020-2.RLTS.T39889A17990882.en>.
- Cheyne, S.M., Sastramidjaja, W.J., Muhalir, Rayadin, Y. and Macdonald, D.W. (2016b). Mammalian communities as indicators of disturbance across Indonesian Borneo. *Global Ecology and Conservation*, **7**, 157–73. DOI: 10.1016/j.gecco.2016.06.002.
- Cheyne, S.M., Stark, D.J., Limin, S.H. and Macdonald, D.W. (2013). First estimates of population ecology and threats to Sunda clouded leopards *Neofelis diardi* in a peat-swamp forest, Indonesia. *Endangered Species Research*, **22**(1), 1–9.
- Cheyne, S.M., Supiansyah, Adul, et al. (2018). Down from the treetops: red langur (*Presbytis rubicunda*) terrestrial behavior. *Primates*, **59**(5), 437–48. DOI: 10.1007/s10329-018-0676-5.
- Cheyne, S.M., Thompson, C.J.H., Phillips, A.C., Hill, R.M.C. and Limin, S.H. (2008). Density and population estimate of gibbons (*Hylobates albicularis*) in the Sabangau catchment, Central Kalimantan, Indonesia. *Primates*, **49**(1), 50–6. DOI: 10.1007/s10329-007-0063-o.
- Chimelong (n.d.). *Home page* [in Chinese]. Available at: <https://www.chimelong.com/>. Accessed January, 2020.
- Chimfunshi (n.d.). *Chimpanzees at Chimfunshi*. Hamburg, Germany: Chimfunshi Verein zum Schutz bedrohter Umwelt e.V. Available at: <https://www.chimfunshi.de/en/chimpanzees/>. Accessed December 4, 2018.
- ChimpCARE (n.d.-a). *Chimpanzees in the US*. Chicago, IL: Lincoln Park Zoo. Available at: <http://www.chimpcare.org/map>. Accessed October, 2019.
- ChimpCARE (n.d.-b). *Project ChimpCARE*. Chicago, IL: Lincoln Park Zoo. Available at: <https://chimpcare.org/>. Accessed January, 2020.
- Chiu, J. (2013). Henan zoo under fire for trying to pass off dog as African lion. *South China Morning Post*, August 15, 2013. Available at: <https://www.scmp.com/news/china/article/1296783/henan-zoo-puts-dog-cage-labels-it-african-lion>.
- Chivers, D.J. (1977). The lesser apes. In *Primate Conservation*, ed. P. Rainier and G.H. Bourne. New York, NY: Academic Press, pp. 539–94.
- Cho, J.H. (2016). American Greetings pulls its chimpanzee greeting cards, at PETA's request. *Cleveland.com*, December 21, 2016. Available at: [https://www.cleveland.com/business/2016/12/american\\_greetings\\_pulls\\_its\\_chimpanzee\\_greeting\\_cards\\_after\\_peta\\_request.html](https://www.cleveland.com/business/2016/12/american_greetings_pulls_its_chimpanzee_greeting_cards_after_peta_request.html).
- Choplin, L. (2017). Update: Beulah, Karen, and Minnie elephant rights lawsuit. *Nonhuman Rights Blog*, December 28, 2017. Available at: <https://www.nonhumanrights.org/blog/update-elephant-rights-lawsuit-12-28-17/>.
- Choudhury, A. (2013). Description of a new subspecies of Hoolock gibbon *Hoolock hoolock* from northeast India. *Newsletter and Journal of the Rhino Foundation for Nature in Northeast India*, **9**, 49–59.
- Chua, L. (2012). *The Christianity of Culture: Conversion, Ethnic Citizenship, and the Matter of Religion in Malaysian Borneo*. New York, NY: Palgrave Macmillan.
- Chua, L. (2018a). Small acts and personal politics: on helping to save the orangutan via social media. *Anthropology Today*, **34**(3), 7–11. DOI: 10.1111/1467-8322.12432.
- Chua, L. (2018b). Too cute to cuddle? 'Witnessing publics' and interspecies relations on the social media-scape of orangutan conservation. *Anthropological Quarterly*, **91**(3), 873–903. DOI: 10.1353/anq.2018.0043.
- Chuo, M.D. (2018). *Great Ape Program knowledge assessment on the trade in apes in Cameroon*. Unpublished report. Cambridge, UK: Arcus Foundation.
- Chuo, M.D. and Angwafo, T.E. (2017a). Chimpanzee in ethno-primateological practices and its implications for biodiversity conservation: Kimbi-Fungom National Park and Kom-Wum Forest Reserve, Cameroon. *American Journal of Agriculture and Forestry*, **5**(5), 157–72. DOI: 10.11648/j.ajaf.20170505.14.

- Chuo, M.D. and Angwafo, T.E. (2017b). Influence of traditional beliefs on the conservation of *Pan troglodytes elliotti*: case study, Kimbi-Fungom National Park and Kom-Wum Forest Reserve, NW Region, Cameroon. *International Journal of Forest, Animal and Fisheries Research*, 1(3), 1–14. DOI: 10.22161/ijfaf.1.3.1.
- Cibot, M., Krief, S., Philippon, J., et al. (2016). Feeding consequences of hand and foot disability in wild adult chimpanzees (*Pan troglodytes schweinfurthii*). *International Journal of Primatology*, 37(4–5), 479–94. DOI: 10.1007/s10764-016-9914-0.
- CITES (1973). *Convention on International Trade in Endangered Species of Wild Fauna and Flora. As amended on April 30, 1983*. Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: <https://www.cites.org/eng/disc/text.php>.
- CITES (2007a). *Conf. 10.3\* Designation and Role of the Scientific Authorities*. Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: [https://www.cites.org/sites/default/files/document/E-Res-10-03\\_0.pdf](https://www.cites.org/sites/default/files/document/E-Res-10-03_0.pdf).
- CITES (2007b). *CoP14 Doc. 50 Annex 1. CITES/GRASP Orang-utan Technical Missions: Thailand and Cambodia*. Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: <https://cites.org/sites/default/files/common/cop/14/doc/E14-50A01.pdf>.
- CITES (2007c). *CoP14 Doc. 53.2. Monitoring of Illegal Trade in Ivory and Other Elephant Products*. Geneva, Switzerland: Convention on International Trade In Endangered Species of Wild Fauna And Flora (CITES). Available at: <https://cites.org/sites/default/files/eng/cop/14/doc/E14-53-2.pdf>.
- CITES (2013a). *CITES Electronic Permitting Toolkit*. Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: [https://cites.org/sites/default/files/eng/prog/e/cites\\_e-toolkit\\_v2.pdf](https://cites.org/sites/default/files/eng/prog/e/cites_e-toolkit_v2.pdf).
- CITES (2013b). *Conf. 13.4 (Rev. CoP16). Conservation of and Trade in Great Apes*. Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: <https://www.cites.org/sites/default/files/document/E-Res-13-04-R16.pdf>. Accessed October, 2018.
- CITES (2014). African, Asian and North American law enforcement officers team up to apprehend wildlife criminals. Operation Cobra II press release, February 10, 2014. *CITES News*. Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: [https://cites.org/sites/default/files/eng/news/sundry/2014/operation\\_cobra\\_ii\\_pr.pdf](https://cites.org/sites/default/files/eng/news/sundry/2014/operation_cobra_ii_pr.pdf).
- CITES (2015a). CITES Secretariat confirms the arrest of former wildlife director in Guinea and applauds national authorities' work. *CITES News*. Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: [https://cites.org/eng/guinea\\_arrest\\_20150903](https://cites.org/eng/guinea_arrest_20150903). Accessed September, 2020.
- CITES (2015b). *Conf. 17.7. Review of Trade in Animal Specimens Reported as Produced in Captivity*. Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: <https://cites.org/sites/default/files/document/E-Res-17-07.pdf>. Accessed February, 2019.
- CITES (2015c). Global alliance celebrates 5 years' achievements in combating wildlife crime. *CITES Press Release*, November 23, 2015. Available at: [https://cites.org/eng/news/pr/global\\_alliance\\_celebrates\\_5\\_years\\_achievements\\_in\\_combating\\_wildlife\\_crime\\_23112015](https://cites.org/eng/news/pr/global_alliance_celebrates_5_years_achievements_in_combating_wildlife_crime_23112015).
- CITES (2016a). *CoP17 Doc. 61. Species-Specific Matters Great Apes (Hominidae spp.)*. Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: <https://cites.org/sites/default/files/eng/cop/17/WorkingDocs/E-CoP17-61.pdf>.
- CITES (2016b). *CoP17 Inf. 33. International Consortium on Combating Wildlife Crime (ICCWC). Background Paper for Meeting of the Conference of the Parties, Johannesburg (South Africa), 24 September–5 October 2016*. Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: <https://cites.org/sites/default/files/eng/cop/17/InfDocs/E-CoP17-Inf-33.pdf>.
- CITES (2016c). *Conf. 17.6. Prohibiting, Preventing, Detecting and Countering Corruption, which Facilitates Activities Conducted in Violation of the Convention*. Geneva, Switzerland: CITES.
- CITES (2017a). *Appendices I, II and III*. Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: <https://cites.org/eng/app/appendices.php>.
- CITES (2017b). *17.232. Great Apes (Hominidae spp.)*. Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: <https://cites.org/eng/node/48656>.

- CITES (2018a). *SC70 Doc. 52. Species Specific Matters: Great Apes (Hominidae spp.)*. Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: <https://cites.org/sites/default/files/eng/com/sc/70/E-SC70-52.pdf>.
- CITES (2018b). *SC70 Sum. 2 (Rev. 1) (01/10/18). Summary: Monday 1 October*. Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: <https://cites.org/sites/default/files/eng/com/sc/70/exsum/E-SC70-Sum-02-R1.pdf>.
- CITES (2019a). *Appendices I, II and III*. Valid from November 26, 2019. Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: <https://cites.org/eng/app/appendices.php>.
- CITES (2019b). *Conf. 13.4 (Rev. CoP18). Conservation of and Trade in Great Apes*. Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: <https://cites.org/sites/default/files/document/E-Res-13-04-R18.pdf>.
- CITES (2019c). International consortium to strengthen global action on combating wildlife crime. *Press Advisory*. Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: [https://www.cites.org/eng/news/pr/International\\_consoritium\\_to\\_strengthen\\_global\\_action\\_on\\_combating\\_wildlife\\_crime\\_15082019](https://www.cites.org/eng/news/pr/International_consoritium_to_strengthen_global_action_on_combating_wildlife_crime_15082019).
- CITES (2019d). Wildlife enforcement networks from around the world meet to further strengthen collaborative efforts against wildlife crime. *CITES News*. Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: [https://www.cites.org/eng/Wildlife\\_enforcement\\_networks\\_from\\_around\\_the\\_world\\_meet\\_to\\_further\\_strengthen\\_collaborative\\_efforts\\_against\\_wildlife\\_crime\\_26082019](https://www.cites.org/eng/Wildlife_enforcement_networks_from_around_the_world_meet_to_further_strengthen_collaborative_efforts_against_wildlife_crime_26082019).
- CITES (n.d.-a). *Annual report*. Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: [https://www.cites.org/eng/imp/reporting\\_requirements/annual\\_report](https://www.cites.org/eng/imp/reporting_requirements/annual_report). Accessed January, 2020.
- CITES (n.d.-b). *Appendix I: included in Nycticebus spp.* Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: <https://cites.org/eng/taxonomy/term/17486>. Accessed October, 2019.
- CITES (n.d.-c). *Captive-produced animals and artificially propagated plants*. Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: <https://www.cites.org/eng/prog/captive-breeding>. Accessed February, 2020.
- CITES (n.d.-d). *The CITES Appendices*. Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: <https://www.cites.org/eng/app/index.php>. Accessed September, 2020.
- CITES (n.d.-e). *CITES compliance procedures*. Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: <https://www.cites.org/eng/res/14/14-03C15.php>. Accessed February, 2020.
- CITES (n.d.-f). *The CITES Secretariat*. Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: <https://www.cites.org/eng/disc/sec/index.php>. Accessed September, 2020.
- CITES (n.d.-g). *The CITES species*. Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: <https://www.cites.org/eng/disc/species.php>. Accessed July, 2019.
- CITES (n.d.-h). *CITES trade database*. Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: <https://trade.cites.org>. Accessed September, 2020.
- CITES (n.d.-i). *eCITES*. Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: <https://cites.org/eng/prog/ecites>. Accessed October, 2018.
- CITES (n.d.-j). *How CITES works*. Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: <https://www.cites.org/eng/disc/how.php>. Accessed September, 2020.
- CITES (n.d.-k). *The International Consortium on Combating Wildlife Crime*. Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: <https://www.cites.org/eng/prog/iccwc.php>. Accessed September, 2020.

- CITES (n.d.-l). *Resolutions of the Conference of the Parties in effect after the 17th meeting* Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: <https://cites.org/eng/res/index.php>. Accessed August, 2019.
- CITES (n.d.-m). *Standing Committee*. Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: <https://www.cites.org/eng/disc/sc.php>. Accessed February, 2020.
- CITES (n.d.-n). *What is CITES?* Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Available at: <https://www.cites.org/eng/disc/what.php>. Accessed October, 2018.
- CITES and GRASP (2006). *CITES/GRASP Orang-utan Technical Mission Indonesia. 8–12 May, 2006*. Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)–Great Apes Survival Partnership (GRASP). Available at: [https://cites.org/sites/default/files/common/prog/ape/ID\\_mission06.pdf](https://cites.org/sites/default/files/common/prog/ape/ID_mission06.pdf).
- CITES and ICPO-INTERPOL (1998). *Memorandum of Understanding between the General Secretariat of ICPO-INTERPOL and the Secretariat of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)*. Geneva, Switzerland: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and International Criminal Police Organization (ICPO-INTERPOL). Available at: <https://cites.org/sites/default/files/common/disc/sec/CITES-Interpol.pdf>.
- CITES, IUCN and TRAFFIC (2013). *Status of African Elephant Populations and Levels of Illegal Killing and the Illegal Trade in Ivory: A Report to the African Elephant Summit*. Washington DC: Convention on International Trade in Endangered Species (CITES) Secretariat, International Union for Conservation of Nature (IUCN) Species Survival Commission (SSC) African Elephant Specialist Group and TRAFFIC International. Available at: [https://www.iucn.org/sites/dev/files/import/downloads/african\\_elephant\\_summit\\_background\\_document\\_2013\\_en.pdf](https://www.iucn.org/sites/dev/files/import/downloads/african_elephant_summit_background_document_2013_en.pdf).
- CITES and WCO (1996). *Memorandum of Understanding Between the World Customs Organization (WCO) and the CITES Secretariat*. Brussels, Belgium: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Secretariat and World Customs Organization (WCO). Available at: <https://cites.org/sites/default/files/eng/disc/sec/CITES-WCO.pdf>.
- Clarke, R.V. (2009). Situational crime prevention: theoretical background and current practice. In *Handbook on Crime and Deviance*, ed. M.D. Krohn, A.J. Lizotte and G. Penly. New York, NY: Springer, pp. 259–76.
- Clement, J. (2019). Number of monthly active Instagram users from January 2013 to June 2018 (in millions). *Statista*, September 2, 2019. Available at: <https://www.statista.com/statistics/253577/number-of-monthly-active-instagram-users/>. Accessed October, 2019.
- ClickPress (2006). Indonesian children welcome the news of the return of 54 smuggled orangutans from Thailand. *ClickPress*, April 24, 2006. Available at: <https://clickpress.com/releases/Detailed/11935005cp.shtml>.
- Clough, C. and May, C. (2018). *Illicit Financial Flows and the Illegal Trade in Great Apes*. Washington DC: Global Financial Integrity (GFI). Available at: <https://www.gfiintegrity.org/wp-content/uploads/2018/10/GFI-Illicit-Financial-Flows-and-the-Illegal-Trade-in-Great-Apes.pdf>.
- CMP (2013). *Open Standards for the Practice of Conservation Version 3.0, April 2013*. The Conservation Measures Partnership (CMP). Available at: <http://cmp-openstandards.org/wp-content/uploads/2017/06/CMP-OS-V3.0-Final-minor-update-May-2107.pdf>.
- CMP (n.d.-a). *Open Standards for the Practice of Conservation: History*. Conservation Measures Partnership (CMP). Available at: <http://cmp-openstandards.org/about-os/history/>. Accessed September, 2019.
- CMP (n.d.-b). *Open Standards for the Practice of Conservation: Resources*. Conservation Measures Partnership (CMP). Available at: <https://cmp-openstandards.org/resources/>. Accessed September, 2020.
- CMS (2014). *Progress Report on the Implementation of the Agreement on the Conservation of Gorillas (UNEP/CMS/COP11/Inf.12.1, 16 August 2014)*. Bonn, Germany: Convention on the Conservation of Migratory Species of Wild Animals (CMS). Available at: [https://www.cms.int/sites/default/files/document/COP11\\_Inf\\_12\\_1\\_Report\\_Gorilla\\_Agreement\\_Eonly.pdf](https://www.cms.int/sites/default/files/document/COP11_Inf_12_1_Report_Gorilla_Agreement_Eonly.pdf).
- CMS (2017). *Report on the Implementation of the CMS Gorilla Agreement (UNEP/CMS/COP12/Inf.6.5, 13 October 2017)*. Bonn, Germany: Convention on the Conservation of Migratory Species of Wild Animals (CMS). Available at: <https://www.cms.int/en/document/report-implementation-cms-gorilla-agreement-1>.

- CMS (2018). CMS Standing Committee paves way for new compliance mechanism. *CMS News*, October 31, 2018. Bonn, Germany: Convention on the Conservation of Migratory Species of Wild Animals (CMS). Available at: <https://www.cms.int/en/news/cms-standing-committee-paves-way-new-compliance-mechanism>.
- CMS (n.d.-a). *CMS family portal*. Bonn, Germany: Convention on the Conservation of Migratory Species of Wild Animals (CMS). Available at: <http://www.migratoryspecies.org>. Accessed October, 2018.
- CMS (n.d.-b). *Gorilla Agreement*. Bonn, Germany: Convention on the Conservation of Migratory Species of Wild Animals (CMS). Available at: <http://www.cms.int/en/legalinstrument/gorilla-agreement>. Accessed October, 2018.
- CMS (n.d.-c). *Gorilla Agreement. Agreement on the conservation of gorillas and their habitats*. Bonn, Germany: Convention on the Conservation of Migratory Species of Wild Animals (CMS). Available at: <https://www.cms.int/gorilla/>. Accessed September, 2020.
- CMS (n.d.-d). *Introduction to CMS*. Bonn, Germany: Convention on the Conservation of Migratory Species of Wild Animals (CMS). Available at: <https://www.cms.int/en/legalinstrument/cms>. Accessed October, 2018.
- CMS (n.d.-e). *Parties and range states*. Bonn, Germany: Convention on the Conservation of Migratory Species of Wild Animals (CMS). Available at: <https://www.cms.int/en/parties-range-states>. Accessed February, 2020.
- Coad, L. (2007). *Bushmeat hunting in Gabon: socio economics and hunter behaviour*. PhD thesis. Cambridge and London, UK: University of Cambridge and Imperial College London.
- Coad, L., Abernethy, K., Balmford, A., et al. (2010). Distribution and use of income from bushmeat in a rural village, Central Gabon. *Conservation Biology*, 24(6), 1510–8. DOI: 10.1111/j.1523-1739.2010.01525.x.
- Coad, L., Fa, J., Abernethy, K., et al. (2019). *Towards a Sustainable, Participatory and Inclusive Wild Meat Sector*. Bogor, Indonesia: Center for International Forestry Research (CIFOR). Available at: [http://www.cifor.org/publications/pdf\\_files/Books/BCoad1901.pdf](http://www.cifor.org/publications/pdf_files/Books/BCoad1901.pdf).
- Cohen-Brown, R. (2015). How JGI fights wildlife crime. *Jane Goodall's Good for All News*, March 2, 2015. Available at: <https://news.janegoodall.org/2015/03/02/how-jgi-fights-wildlife-crime/>.
- Cole, D. (2016). *Engines of Liberty: The Power of Citizen Activists to Make Constitutional Law*. New York, NY: Basic Books.
- Collins, F.S. (2015). NIH will no longer support biomedical research on chimpanzees. *The NIH Director*, November 17, 2015. Bethesda, MD: National Institutes of Health (NIH). Available at: <https://www.nih.gov/about-nih/who-we-are/nih-director/statements/nih-will-no-longer-support-biomedical-research-chimpanzees>.
- Colombian Supreme Court of Justice (2018). *STC4360-2018 de 05 de Abril de 2018. Rad. 11001-22-03-000-2018-0\_0319-01*. Bogota DC, Colombia. Available at: [http://legal.legis.com.co/document/Index?obra=jurcol&document=jurcol\\_c947ae53aeb447bd91e8e9a315311ac5](http://legal.legis.com.co/document/Index?obra=jurcol&document=jurcol_c947ae53aeb447bd91e8e9a315311ac5).
- Colyn, M., Dudu, A. and Mbælele, M.M. (1987). Data on small and medium scale game utilization in the rain forest of Zaire. In *International Symposium and Conference on Wildlife Management in Sub-Saharan Africa*. Harare, Zimbabwe, ed. B.D. Clers. United Nations Educational, Scientific and Cultural Organisation (UNESCO), pp. 109–45.
- Commitante, R., Unwin, S., Sulisty, F., et al. (2018). *Orangutan Veterinary Advisory Group Workshop 2018 Proceedings, Aceh, Indonesia*. United States and UK: Orangutan Conservancy and Chester Zoo/NEZS. Available at: <https://www.ovag.org/uploads/documents/content/2018-ovag-workshop-proceedings.pdf>.
- Conservation Evidence (n.d.-a). *Conservation evidence: providing evidence to improve practice. Actions*. Cambridge, UK: University of Cambridge. Available at: <https://www.conservationevidence.com/data/index?terms=prism>. Accessed May, 2019.
- Conservation Evidence (n.d.-b). *Conservation evidence: providing evidence to improve practice. Evidence champions*. Cambridge, UK: University of Cambridge. Available at: <https://www.conservationevidence.com/content/page/81>. Accessed October, 2019.
- Cook, D., Roberts, M. and Lowther, J. (2002). *The International Wildlife Trade and Organised Crime*. World Wide Fund for Nature (WWF)/TRAFFIC report. Wolverhampton, UK: Regional Research Institute, University of Wolverhampton.
- Coolidge Jr., H.J. (1933). *Pan paniscus*. Pigmy chimpanzee from south of the Congo river. *American Journal of Physical Anthropology*, 18(1), 1–59. DOI: 10.1002/ajpa.1330180113.
- Cooney, R., Roe, D., Dublin, H. and Booker, F. (2018). *Wild Life, Wild Livelihoods: Involving Communities in Sustainable Wildlife Management and Combatting the Illegal Wildlife Trade*. Nairobi, Kenya: United Nations

- Environment Programme (UNEP). Available at: [http://wedocs.unep.org/bitstream/handle/20.500.11822/22864/WLWL\\_Report\\_web.pdf](http://wedocs.unep.org/bitstream/handle/20.500.11822/22864/WLWL_Report_web.pdf).
- Cooney, R., Roe, D., Dublin, H., et al. (2017). From poachers to protectors: engaging local communities in solutions to illegal wildlife trade. *Conservation Letters*, **10**(3), 367–74. DOI: 10.1111/conl.12294.
- Corbey, R. and Lanjouw, A. (2013). *The Politics of Species: Reshaping our Relationships with Other Animals*. Cambridge, UK: Cambridge University Press. DOI: 10.1017/CBO9781139506755.
- Corrada Bravo, C., Álvarez Berrios, R. and Aide, T. (2017). Species-specific audio detection: a comparison of three template-based detection algorithms using random forests. *PeerJ Computer Science*, **3**, e113. DOI: 10.7717/peerj.cs.113.
- Corrigan, J. (2019). 8 Top anti poaching drones for critical wildlife protection. *DroneZon*, June 29, 2019. Available at: <https://www.dronezon.com/drones-for-good/wildlife-conservation-protection-using-anti-poaching-drones-technology/>.
- Corry, S. (2015). Wildlife conservation must support, not destroy, Indigenous Peoples. *Ecologist*, February 6, 2015. Available at: <https://theecologist.org/2015/feb/06/wildlife-conservation-must-support-not-destroy-indigenous-peoples>.
- Coudrat, C.N.Z. and Nanthavong, C. (2014). *Gibbon survey and taxonomical status in Nakai-Nam Theun National Protected Area, Laos reveals one of the largest remaining populations of white-cheeked gibbons: implications for their long-term conservation*. Presented at the XXVIIth International Primatological Society Congress, Hanoi, Viet Nam.
- Courchamp, F., Jaric, I., Albert, C., et al. (2018). The paradoxical extinction of the most charismatic animals. *PLoS Biology*, **16**(4), e2003997. DOI: 10.1371/journal.pbio.2003997.
- Courtenay, J. and Santow, G. (1989). Mortality of wild and captive chimpanzees. *Folia Primatologica*, **52**(3–4), 167–77. DOI: 10.1159/000156395.
- Covarrubias, A. (2005). When the show's over for Hollywood chimps. *Los Angeles Times*, March 22, 2005. Available at: <https://www.latimes.com/archives/la-xpm-2005-mar-22-me-chimps22-story.html>.
- Cover, R.M. (1975). *Justice Accused: Antislavery and the Judicial Process*. New Haven, CT: Yale University Press.
- Covey, R. and McGraw, W.S. (2014). Monkeys in a West African bushmeat market: implications for Cercopithecid conservation in eastern Liberia. *Tropical Conservation Science*, **7**(1), 115–25. DOI: 10.1177/194008291400700103.
- Cowlishaw, G. (1992). Song function in gibbons. *Behaviour*, **121**(1–2), 131–53. DOI: 10.1163/156853992X00471.
- Cowlishaw, G., Mendelson, S. and Rowcliffe, J.M. (2005). Evidence for post-depletion sustainability in a mature bushmeat market. *Journal of Applied Ecology*, **42**(3), 460–8. DOI: 10.1111/j.1365-2664.2005.01046.x.
- Cribb, R., Gilbert, H. and Tiffin, H. (2014). *Wild Man from Borneo: A Cultural History of the Orangutan*. Honolulu, Hawaii: University of Hawai'i Press.
- Crutchlow, R., Plumptre, A.J., Dririru, M., et al. (2015). Spatiotemporal trends of illegal activities from ranger-collected data in a Ugandan national park. *Conservation Biology*, **29**(5), 1458–70. DOI: 10.1111/cobi.12538.
- Crowley, B.E., Godfrey, L.R., Bankoff, R.J., et al. (2017). Island-wide aridity did not trigger recent megafaunal extinctions in Madagascar. *Ecography*, **40**(8), 901–12. DOI: 10.1111/ecog.02376.
- Cruz, J.E. (2006). Sentença do Habeas Corpus impetrado em favor da chimpanzé Suíça. *Revista Brasileira de Direito Animal*, **1**(1), 281–5.
- CSWCT (n.d.). *Chimp profiles*. Entebbe, Uganda: Chimpanzee Sanctuary and Wildlife Conservation Trust (CSWCT). Available at: <https://ngambaisland.org/chimp-profiles/>. Accessed October 31, 2018.
- Curran, J. (2018). *Orangutan Jungle School*. Antenna Pictures, Blue Ant Media and NHNZ.
- CyberTracker (n.d.). *CyberTracker software*. CyberTracker Conservation. Available at: <https://www.cybertracker.org/software/introduction>. Accessed September, 2020.
- Dalton, J. (2018). 'Now or never' battle to save Indonesia's endangered orangutans as British companies still using 'dirty' palm oil. *The Independent*, September 18, 2018. Available at: <https://www.independent.co.uk/news/uk/home-news/orangutan-indonesia-endangered-palm-oil-uk-companies-cadburys-dove-chocolate-great-apes-a8542151.html>.
- Damania, R., Milner-Gulland, E.J. and Crookes, D.J. (2005). A bioeconomic analysis of bushmeat hunting. *Proceedings. Biological Sciences*, **272**(1560), 259–66. DOI: 10.1098/rspb.2004.2945.

- Danaparamita, A. (2016). Don't feed the orangutans – a warning unheeded at popular ecotourism stop. *Mongabay*, November 21, 2016. Available at: <https://news.mongabay.com/2016/11/dont-feed-the-orangutans-a-warning-unheeded-at-popular-ecotourism-stop/>.
- Danquah, E., Oppong, S.K., Akom, E. and Sam, M. (2012). Preliminary survey of chimpanzees and threatened monkeys in the Bia-Goaso forest block in southwestern Ghana. *African Primates*, **7**, 163–74.
- Davis, J.T., Mengersen, K., Abram, N.K., et al. (2013). It's not just conflict that motivates killing of orangutans. *PLoS ONE*, **8**(10), e75373. DOI: [10.1371/journal.pone.0075373](https://doi.org/10.1371/journal.pone.0075373).
- de Boer, W.F., van Langevelde, F., Prins, H.H.T., et al. (2013). Understanding spatial differences in African elephant densities and occurrence, a continent-wide analysis. *Biological Conservation*, **159**, 468–76. DOI: [10.1016/j.biocon.2012.10.015](https://doi.org/10.1016/j.biocon.2012.10.015).
- De Cordova, F., director (1951). *Bedtime for Bonzo*. Universal International Pictures (UI). Available at: <https://www.imdb.com/title/tt0043325/>.
- De Greef, K. and Raemaekers, S. (2014). *South Africa's Illicit Abalone Trade: An Updated Overview and Knowledge Gap Analysis*. Cambridge, UK: TRAFFIC International. Available at: <https://www.traffic.org/site/assets/files/8469/south-africas-illicit-abalone.pdf>.
- de Merode, E. and Cowlishaw, G. (2006). Species protection, the changing informal economy, and the politics of access to the bushmeat trade in the Democratic Republic of Congo. *Conservation Biology*, **20**(4), 1262–71. DOI: [10.1111/j.1523-1739.2006.00425.x](https://doi.org/10.1111/j.1523-1739.2006.00425.x).
- de Merode, E., Smith, K.H., Homewood, K., et al. (2007). The impact of armed conflict on protected-area efficacy in Central Africa. *Biology Letters*, **3**(3), 299–301. DOI: [10.1098/rsbl.2007.0010](https://doi.org/10.1098/rsbl.2007.0010).
- Decree No. 41/2017/ND-CP (2017). *Amendment and Supplementation to a Number of Articles of the Decree on Administrative Penalties for Violations in Fields of Aquaculture, Veterinary, Animal Breeds, Animal Feed; Forest Management, Development and Protection, and Forestry Product Management. Decree No. 41/2017/ND-CP*. Socialist Republic of Viet Nam. Available at: <https://vanbanphapluat.co/decree-41-2017-nd-cp-amendment-to-decree-on-administrative-penalties-for-violations-in-agriculture>.
- Decree No. 157/2013/ND-CP (2013). *Decree on Penalties for Administrative Violations Against Regulations on Forest Management, Development, Protection and Forest Product Management. No. 157/2013/ND-CP*. Socialist Republic of Viet Nam. Available at: <https://vanbanphapluat.co/decree-no-157-2013-nd-cp-penalties-for-administrative-violations-against-regulations-on-forest-management>.
- Deichmann, J.L., Acevedo-Charry, O., Barclay, L., et al. (2018). It's time to listen: there is much to be learned from the sounds of tropical ecosystems. *Biotropica*, **50**(5), 713–8. DOI: [10.1111/btp.12593](https://doi.org/10.1111/btp.12593).
- Delgado, C.L. (2003). Rising consumption of meat and milk in developing countries has created a new food revolution. *The Journal of Nutrition*, **133**(11), 3907S–10S. DOI: [10.1093/jn/133.11.3907S](https://doi.org/10.1093/jn/133.11.3907S).
- Delgado, R.A. (2010). Communication, culture and conservation in orangutans. In *Indonesian Primates*, ed. S. Gursky and J. Supriatna. New York, NY: Springer, pp. 23–40. DOI: [10.1007/978-1-4419-1560-3\\_3](https://doi.org/10.1007/978-1-4419-1560-3_3).
- Delgado, R.A. and van Schaik, C.P. (2000). The behavioral ecology and conservation of the orangutan (*Pongo pygmaeus*): a tale of two islands. *Evolutionary Anthropology: Issues, News, and Reviews*, **9**(5), 201–18. DOI: [10.1002/1520-6505\(2000\)9:5<201::AID-EVAN2>3.0.CO;2-Y](https://doi.org/10.1002/1520-6505(2000)9:5<201::AID-EVAN2>3.0.CO;2-Y).
- Dell'amore, C. (2014). Beloved African elephant killed for ivory – 'monumental' loss. *National Geographic*, June 16, 2014. Available at: <https://www.nationalgeographic.com/news/2014/6/140616-elephants-tusker-satao-poachers-killed-animals-africa-science/>.
- Denyer, S. (2013). In China, victory for wildlife conservation as citizens persuaded to give up shark fin soup. *The Washington Post*. October 19, 2013. Available at: [https://www.washingtonpost.com/world/in-china-victory-for-wildlife-conservation-as-citizens-persuaded-to-give-up-shark-fin-soup/2013/10/19/e8181326-3646-11e3-89db-8002ba99b894\\_story.html](https://www.washingtonpost.com/world/in-china-victory-for-wildlife-conservation-as-citizens-persuaded-to-give-up-shark-fin-soup/2013/10/19/e8181326-3646-11e3-89db-8002ba99b894_story.html).
- Després-Einspenner, M.-L., Howe, E.J., Drapeau, P. and Kühl, H.S. (2017). An empirical evaluation of camera trapping and spatially explicit capture-recapture models for estimating chimpanzee density. *American Journal of Primatology*, **79**(7), e22647. DOI: [10.1002/ajp.22647](https://doi.org/10.1002/ajp.22647).
- Deutsche Welle (2017). German court orders 45-year-old circus chimp to live with other apes. *Deutsche Welle*, April 27, 2017. Available at: <https://www.dw.com/en/german-court-orders-45-year-old-circus-chimp-to-live-with-other-apes/a-38618443>.

- Dias, F.S., Wenceslau, J.F.C., Marques, T.A. and Miller, D.L. (2019). Density and distribution of western chimpanzees around a bauxite deposit in the Boé Sector, Guinea-Bissau. *American Journal of Primatology*, **81**(9), e23047. DOI: 10.1002/ajp.23047.
- Dickson, I.M., Butchart, S.H.M., Dauncey, V., et al. (2017). PRISM – Toolkit for evaluating the outcomes and impacts of small/medium-sized conservation projects. Version 1. PRISM. Available at: <https://conservationevaluation.org/PRISM-Evaluation-Toolkit-V1.pdf>.
- Dillehay, T.D., Goodbred, S., Pino, M., et al. (2017). Simple technologies and diverse food strategies of the Late Pleistocene and Early Holocene at Huaca Prieta, Coastal Peru. *Science Advances*, **3**(5), e1602778. DOI: 10.1126/sciadv.1602778.
- Dillehay, T.D., Ramírez, C., Pino, M., et al. (2008). Monte Verde: seaweed, food, medicine, and the peopling of South America. *Science*, **320**(5877), 784–6. DOI: 10.1126/science.1156533.
- Dingfei, Y. (2014). China ‘main destination’ for illegally traded chimpanzees. *The Guardian*, October 14, 2014. Available at: <https://www.theguardian.com/environment/2014/oct/14/china-main-destination-for-illegally-traded-chimpanzees>.
- Dirzo, R., Young, H.S., Galetti, M., et al. (2014). Defaunation in the Anthropocene. *Science*, **345**(6195), 401–6. DOI: 10.1126/science.1251817.
- Djudjic, D. (2017). Shutterstock ban all unnatural photos of apes and monkeys after appeal from PETA. *DIYPhotography*, December 29, 2017. Available at: <https://www.diyphotography.net/peta-makes-shutterstock-ban-unnatural-photos-apes-monkeys/>.
- Dobson, A.D.M., Milner-Gulland, E.J., Beale, C.M., Ibbett, H. and Keane, A. (2019). Detecting deterrence from patrol data. *Conservation Biology*, **33**(3), 665–75. DOI: 10.1111/cobi.13222.
- Doran-Sheehy, D., Derby, A., Greer, D. and Mongo, P. (2007). Habituation of western gorillas: the process and factors that influence it. *American Journal of Primatology*, **69**, 1–16. DOI: 10.1002/ajp.20442.
- Doran-Sheehy, D., Mongo, P., Lodwick, J. and Conklin-Brittain, N.L. (2009). Male and female western gorilla diet: preferred foods, use of fallback resources, and implications for ape versus old world monkey foraging strategies. *American Journal of Physical Anthropology*, **140**(4), 727–38. DOI: 10.1002/ajpa.21118.
- Dounias, E. and Froment, A. (2011). From foraging to farming among present-day forest hunter-gatherers: consequences on diet and health. *International Forestry Review*, **13**(3), 294–304, 11.
- Dowie, M. (2009). *Conservation Refugees: The Hundred-Year Conflict between Global Conservation and Native Peoples*. Cambridge, MA: MIT Press.
- Downing, D.C. (2012). The effect of the bushmeat trade on African ape populations: critical evaluation of the evidence and potential solutions. *The Collegiate Journal of Anthropology*, **1**.
- Drani, E. and Infield, M. (2014). *Cultural values in conservation: traditional values and practices that impact on ape conservation and welfare*. Unpublished background paper. Commissioned by the Arcus Foundation.
- Draper, R. (2016). Inside the fight to save one of the world’s most dangerous parks. *National Geographic*, July, 2016. Available at: <https://www.nationalgeographic.com/magazine/2016/07/virunga-national-parks-africa-congo-rangers/>.
- Dressler, W., Büscher, B., Schoon, M., et al. (2010). From hope to crisis and back again? A critical history of the global CBNRM narrative. *Environmental Conservation*, **37**(1), 5–15. DOI: 10.1017/S0376892910000044.
- Drewry, R. (1997). Ecotourism: can it save the orangutans? *Inside Indonesia*, **51**, 15–8.
- Duckworth, J.W. (2008). *Preliminary gibbon status review for Lao PDR 2008*. Unpublished report. Hanoi, Viet Nam, and Cambridge, UK: Fauna and Flora International (FFI). Available at: <https://www.issuelab.org/resources/10668/10668.pdf>.
- Duckworth, J.W., Timmins, R.J., Anderson, G.Q.A., et al. (1995). Notes on the conservation and status of the gibbon *Hylobates (Nomascus gabriellae)* in Laos. *Tropical Biodiversity*, **3**, 15–27.
- Duffy, R., Massé, F., Smidt, E., et al. (2019). Why we must question the militarisation of conservation. *Biological Conservation*, **232**, 66–73. DOI: 10.1016/j.biocon.2019.01.013.
- Duffy, R. and St John, F.A.V. (2013). *Poverty, poaching and trafficking: what are the links?* UK: Evidence on Demand. DOI: 10.12774/eod\_hdo59.jun2013.duffy.

- Duffy, R., St John, F.A.V., Büscher, B. and Brockington, D. (2015). The militarization of anti-poaching: undermining long term goals? *Environmental Conservation*, **42**(4), 345–8. DOI: 10.1017/S0376892915000119.
- Duffy, R., St John, F.A.V., Büscher, B. and Brockington, D. (2016). Toward a new understanding of the links between poverty and illegal wildlife hunting. *Conservation Biology*, **30**(1), 14–22. DOI: 10.1111/cobi.12622.
- Dunbar, R.I.M., Cheyne, S.M., Lan, D., et al. (2019). Environment and time as constraints on the biogeographical distribution of gibbons. *American Journal of Primatology*, **81**(1), e22940. DOI: 10.1002/ajp.22940.
- Dunn, A., Bergl, R., Byler, D., et al. (2014). *Revised Regional Action Plan for the Conservation of the Cross River Gorilla (Gorilla gorilla diehli) 2014–2019*. New York, NY: International Union for Conservation of Nature (IUCN) Species Survival Commission (SSC), Primate Specialist Group, and Wildlife Conservation Society (WCS). Available at: <https://portals.iucn.org/library/node/44661>.
- Durham, D. (2015). The status of captive apes. In *State of the Apes: Industrial Agriculture and Ape Conservation*, ed. Arcus Foundation. Cambridge, UK: Cambridge University Press, pp. 228–59. Available at: <http://www.stateoftheapes.com/themes/the-status-of-captive-apes/>.
- Durham, D. (2018). The status of captive apes: a statistical update. In *State of the Apes: Infrastructure Development and Ape Conservation*, ed. Arcus Foundation. Cambridge, UK: Cambridge University Press, pp. 255–63. Available at: <https://www.stateoftheapes.com/volume-3-infrastructure-development/>.
- Durham, D. and Phillipson, A. (2014). Status of captive apes across Africa and Asia: the impact of extractive industry. In *State of the Apes: Extractive Industries and Ape Conservation*, ed. Arcus Foundation. Cambridge, UK: Cambridge University Press, pp. 279–305. Available at: <http://www.stateoftheapes.com/volume-1-extractive-industries/>.
- Duvall, C.S. (2008). Human settlement ecology and chimpanzee habitat selection in Mali. *Landscape Ecology*, **23**(6), 699–716. DOI: 10.1007/s10980-008-9231-x.
- Duvall, C.S. and Smith, G. (2005). Republic of Mali. In *World Atlas of Great Apes and their Conservation*, ed. J.O. Caldecott, J.G. Bennett, H.J. Ruitenbeek and L. Miles. Berkeley, CA: University of California Press, pp. 371–7.
- EAGLE (2017). *The EAGLE Network Annual Report 2017*. EAGLE Network. Available at: <http://www.eagle-enforcement.org/data/files/eagle-network-annual-report-2017.pdf>.
- EAGLE (2019). *The EAGLE Network Annual Report 2019*. Eco Activists for Governance and Law Enforcement (EAGLE). Available at: <https://www.eagle-enforcement.org/data/files/eagle-network-annual-report-2019.pdf>.
- EAGLE (n.d.-a). *Home*. Eco Activists for Governance and Law Enforcement (EAGLE). Available at: <https://www.eagle-enforcement.org/>. Accessed September, 2020.
- EAGLE (n.d.-b). *Our members*. Eco Activists for Governance and Law Enforcement (EAGLE). Available at: <http://www.eagle-enforcement.org/members/>. Accessed September, 2020.
- Eberhardt, J.L. (2019). *Biased: Uncovering the Hidden Prejudice that Shapes How We Think, See, and Do*. New York, NY: Viking.
- ECOSOC (2013). *E/RES/2013/40. Crime Prevention and Criminal Justice Responses to Illicit Trafficking in Protected Species of Wild Fauna and Flora. Resolution Adopted by the Economic and Social Council on 25 July 2013*. Geneva, Switzerland: United Nations Economic and Social Council (ECOSOC). Available at: [https://www.un.org/ga/search/view\\_doc.asp?symbol=E/RES/2013/40](https://www.un.org/ga/search/view_doc.asp?symbol=E/RES/2013/40).
- Effiom, E.O., Nuñez-Iturri, G., Smith, H.G., Ottosson, U. and Olsson, O. (2013). Bushmeat hunting changes regeneration of African rainforests. *Proceedings of the Royal Society B: Biological Sciences*, **280**(1759), 20130246. DOI: 10.1098/rspb.2013.0246.
- Egbe, S.E. (2001). The law, communities and wildlife management in Cameroon. *Rural Development Forestry Network Paper*, **25e**, 1–12. Available at: <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/1216.pdf>.
- EIA (2016). *Time for Action: End the Criminality and Corruption Fuelling Wildlife Crime*. London, UK: Environmental Investigation Agency (EIA). Available at: <https://eia-international.org/news/time-for-action-end-the-criminality-and-corruption-fuelling-wildlife-crime/>.
- Eilenberg, M. (2012). The confession of a timber baron: patterns of patronage on the Indonesian–Malaysian border. *Identities*, **19**(2), 149–67. DOI: 10.1080/1070289X.2012.672841.

- Ekinde, A., Ashu, M. and Sunderland-Groves, J. (2005). *Preliminary ape surveys around the Fungom Forest Reserve and Furu-Awa sub division, North West Province, Cameroon*. Unpublished report to WCS and Cross River Gorilla Project.
- El Bizri, H.R., Morcatty, T.Q., Lima, J.J.S. and Valsecchi, J. (2015). The thrill of the chase: uncovering illegal sport hunting in Brazil through YouTube™ posts. *Ecology and Society*, **20**(3), 30. DOI: 10.5751/ES-07882-200330.
- Elder, A.A. (2009). Hylobatid diets revisited: the importance of body mass, fruit availability, and interspecific competition. In *The Gibbons: New Perspectives on Small Ape Socioecology and Population Biology*, ed. D. Whittaker and S. Lappan. New York, NY: Springer, pp. 133–59. DOI: 10.1007/978-0-387-88604-6\_8.
- Elder, M. (2019). *2018 International Studbook of the Orangutan*. St Paul, MN: Como Park Zoo & Conservatory.
- Ellicott, C. (2011). Meat from chimpanzees 'is on sale in Britain' in lucrative black market. *Daily Mail*, March 11, 2011. Available at: <https://www.dailymail.co.uk/news/article-1361149/Chimpanzee-meat-discovered-British-restaurants-market-stalls.html>.
- Elliott, L. and Schaedla, W.H., ed. (2016). *Handbook of Transnational Environmental Crime*. Cheltenham, UK: Edward Elgar.
- Ellis, C. and Nsase, M. (2017). *Research report: towards designing an environmentally responsible, sustainable livelihoods programme for Walikale Territory, North Kivu, Democratic Republic of Congo*. Technical report for the Jane Goodall Institute.
- Elmhirst, R., Siscawati, M., Basnett, B.S. and Ekowati, D. (2017). Gender and generation in engagements with oil palm in East Kalimantan, Indonesia: insights from feminist political ecology. *The Journal of Peasant Studies*, **44**(6), 1135–57. DOI: 10.1080/03066150.2017.1337002.
- Emerton, L. (1998). *Balancing the Opportunity Costs of Wildlife Conservation for the Communities Around Lake Mburo National Park, Uganda*. London, UK: International Institute for Environment and Development. Available at: <https://pubs.iied.org/pdfs/7798IIED.pdf>.
- Emery Thompson, M. (2013). Reproductive ecology of female chimpanzees. *American Journal of Primatology*, **75**(3), 222–37. DOI: 10.1002/ajp.22084.
- Emery Thompson, M., Jones, J.H., Pusey, A.E., et al. (2007). Aging and fertility patterns in wild chimpanzees provide insights into the evolution of menopause. *Current Biology*, **17**(24), 2150–6. DOI: 10.1016/j.cub.2007.11.033.
- Emery Thompson, M. and Wrangham, R.W. (2008). Diet and reproductive function in wild female chimpanzees (*Pan troglodytes schweinfurthii*) at Kibale National Park, Uganda. *American Journal of Physical Anthropology*, **135**(2), 171–81. DOI: 10.1002/ajpa.20718.
- Emery Thompson, M. and Wrangham, R.W. (2013). *Pan troglodytes* robust chimpanzee. In *Mammals of Africa. Volume II: Primates*, ed. T.M. Butynski, J. Kingdon and J. Kalina. London, UK: Bloomsbury Publishing, pp. 55–64.
- Emery Thompson, M., Zhou, A. and Knott, C.D. (2012). Low testosterone correlates with delayed development in male orangutans. *PLoS ONE*, **7**(10), e47282. DOI: 10.1371/journal.pone.0047282.
- Emlen, J.T. and Schaller, G.B. (1960). Distribution and status of the mountain gorilla (*Gorilla gorilla beringei*) 1959. *Zoologica*, **45**, 41–52.
- Engler, M. and Parry-Jones, R. (2007). *Opportunity or Threat: The Role of the European Union in Global Wildlife Trade*. Brussels, Belgium: TRAFFIC Europe. Available at: <https://www.traffic.org/publications/reports/opportunity-or-threat-the-role-of-the-european-union-in-the-global-wildlife-trade/>.
- ENS (2006). Orangutans seized in Bangkok will be returned to Indonesia. *Environment News Service*, April 18, 2006. Available at: <http://www.ens-newswire.com/ens/apr2006/2006-04-18-01.html>.
- Environmental Protection Authority (2013). *APP201517: Reassessment of Approvals for New Organisms in Zoos. EPA Staff Report*. New Zealand: Environmental Protection Authority. Available at: <https://www.epa.govt.nz/assets/FileAPI/hsno-ar/APP201517/c1ccb924ec/APP201517-APP201517-staff-advice-report.pdf>.
- EPA (n.d.). *The basics of the regulatory process*. US Environmental Protection Agency (EPA). Available at: <https://www.epa.gov/laws-regulations/basics-regulatory-process>. Accessed August, 2019.
- Eriksen, T.H. (2015). *Small Places: Large Issues An Introduction to Social and Cultural Anthropology*, 4th edn. London, UK: Pluto Press. DOI: 10.2307/j.ctt183p184.
- ESS (n.d.). *MIST*. Ecological Software Solutions (ESS). Available at: [www.ecostats.com/MIST](http://www.ecostats.com/MIST). Accessed September, 2020.

- Estrada, A., Garber, P.A., Mittermeier, R.A., *et al.* (2018). Primates in peril: the significance of Brazil, Madagascar, Indonesia and the Democratic Republic of the Congo for global primate conservation. *PeerJ*, **6**, e4869. DOI: 10.7717/peerj.4869.
- Estrada, A., Garber, P.A., Rylands, A.B., *et al.* (2017). Impending extinction crisis of the world's primates: why primates matter. *Science Advances*, **3**(1), e1600946-e. DOI: 10.1126/sciadv.1600946.
- Etiendem, D.N., Hens, L. and Pereboom, Z. (2011). Traditional knowledge systems and the conservation of Cross River gorillas: a case study of Bechati, Fossimondi, Besali, Cameroon. *Ecology and Society*, **16**(3), 22. DOI: 10.5751/ES-04182-160322.
- EU (2010). Directive 2010/63/EU of the European Parliament and of the Council of 22 September 2010 on the Protection of Animals Used for Scientific Purposes. *Official Journal of the European Union*, **L 276** (October 20, 2010), 33–79. Available at: <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:276:0033:0079:en:PDF>.
- Evans, E.P. (1906). *The Criminal Prosecution and Capital Punishment of Animals*. London, UK: William Heinemann. Available at: <https://archive.org/details/criminalprosecutoevaniala/page/n10>.
- Fa, J.E., Albrechtsen, L., Johnson, P.J. and Macdonald, D.W. (2009). Linkages between household wealth, bushmeat and other animal protein consumption are not invariant: evidence from Rio Muni, Equatorial Guinea. *Animal Conservation*, **12**(6), 599–610. DOI: 10.1111/j.1469-1795.2009.00289.x.
- Fa, J.E. and Brown, D. (2009). Impacts of hunting on mammals in African tropical moist forests: a review and synthesis. *Mammal Review*, **39**(4), 231–64. DOI: 10.1111/j.1365-2907.2009.00149.x.
- Fa, J.E., Currie, D. and Meeuwig, J. (2003). Bushmeat and food security in the Congo Basin: linkages between wildlife and people's future. *Environmental Conservation*, **30**(1), 71–8. DOI: 10.1017/S0376892903000067.
- Fa, J.E., Farfán, M.A., Márquez, A.L., Duarte, J. and Vargas, J.M. (2013). Reflections on the impact and management of hunting of wild mammals in tropical forests. *Ecosistemas*, **22**(2), 76–83. DOI: 10.7818/ECOS.2013.22-2.12.
- Fa, J.E., Peres, C.A. and Meeuwig, J. (2002). Bushmeat exploitation in tropical forests: an intercontinental comparison. *Conservation Biology*, **16**(1), 232–7. DOI: 10.1046/j.1523-1739.2002.00275.x.
- Fa, J.E., Ryan, S.F. and Bell, D.J. (2005). Hunting vulnerability, ecological characteristics and harvest rates of bushmeat species in Afrotropical forests. *Biological Conservation*, **121**(2), 167–76. DOI: 10.1016/j.biocon.2004.04.016.
- Fa, J.E., Seymour, S., Dupain, J., *et al.* (2006). Getting to grips with the magnitude of exploitation: bushmeat in the Cross–Sanaga rivers region, Nigeria and Cameroon. *Biological Conservation*, **129**(4), 497–510. DOI: 10.1016/j.biocon.2005.11.031.
- Fa, J.E. and Tagg, N. (2016). Hunting and primate conservation. In *An Introduction to Primate Conservation*, ed. S.A. Wich and M.A. Marshall. Oxford, UK: Oxford University Press, pp. 143–56.
- Fa, J.E., Wright, J.H., Funk, S.M., *et al.* (2019). Mapping the availability of bushmeat for consumption in Central African cities. *Environmental Research Letters*, **14**(9), 094002. DOI: 10.1088/1748-9326/ab36fa.
- Faith, J.T. (2014). Late Pleistocene and Holocene mammal extinctions on continental Africa. *Earth-Science Reviews*, **128**, 105–21. DOI: 10.1016/j.earscirev.2013.10.009.
- Fan, P. (2017). The past, present, and future of gibbons in China. *Biological Conservation*, **210**, 29–39. DOI: 10.1016/j.biocon.2016.02.024.
- Fan, P.-F., Fei, H.-L. and Luo, A.-D. (2014). Ecological extinction of the critically endangered northern white-cheeked gibbon *Nomascus leucogenys* in China. *Oryx*, **48**(1), 52–5. DOI: 10.1017/S0030605312001305.
- Fan, P., Fei, H., Xiang, Z., *et al.* (2010). Social structure and group dynamics of the Cao Vit gibbon (*Nomascus nasutus*) in Bangliang, Jingxi, China. *Folia Primatologica*, **81**(5), 245–53.
- Fan, P.-F., He, K., Chen, X., *et al.* (2017). Description of a new species of hoolock gibbon (Primates: Hylobatidae) based on integrative taxonomy. *American Journal of Primatology*, **79**(5), e22631. DOI: 10.1002/ajp.22631.
- Fan, P.-F. and Jiang, X.-L. (2008). Effects of food and topography on ranging behavior of black crested gibbon (*Nomascus concolor jingdongensis*) in Wuliang Mountain, Yunnan, China. *American Journal of Primatology*, **70**(9), 871–8. DOI: 10.1002/ajp.20577.
- Fan, P.-F. and Jiang, X.-L. (2010). Maintenance of multifemale social organization in a group of *Nomascus concolor* at Wuliang Mountain, Yunnan, China. *International Journal of Primatology*, **31**(1), 1–13. DOI: 10.1007/s10764-009-9375-9.

- Fan, P.-F., Ren, G.-P., Wang, W., *et al.* (2013). Habitat evaluation and population viability analysis of the last population of Cao Vit gibbon (*Nomascus nasutus*): implications for conservation. *Biological Conservation*, **161**, 39–47. DOI: 10.1016/j.biocon.2013.02.014.
- Fan, P.F., Turvey, S.T. and Bryant, J.V. (2019). *Hoolock tianxing. The IUCN Red List of Threatened Species. 2019: e.T118355648A118355666*. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <https://dx.doi.org/10.2305/IUCN.UK.2019-3.RLTS.T118355648A118355666.en>.
- Fan, P.F., Turvey, S.T. and Bryant, J.V. (2020). *Hoolock tianxing* (amended version of 2019 assessment). *The IUCN Red List of Threatened Species. 2020: e.T118355648A166597159*. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <https://dx.doi.org/10.2305/IUCN.UK.2020-1.RLTS.T118355648A166597159.en>.
- FAO (2013). *FAO Statistical Yearbook 2013: Africa Food and Agriculture*. Accra, Ghana: Food and Agriculture Organization (FAO). Available at: <http://www.fao.org/3/i3107e/i3107e.PDF>.
- FAO (2017). *The Future of Food and Agriculture: Trends and Challenges*. Rome, Italy: Food and Agriculture Organization of the United Nations (FAO). Available at: <http://www.fao.org/3/a-i6583e.pdf>.
- Fargo, J., director (1978). *Every Which Way But Loose*. Warner Brothers and The Malpaso Company. Available at: [https://www.imdb.com/title/tt0077523/?ref\\_=fn\\_al\\_tt\\_1](https://www.imdb.com/title/tt0077523/?ref_=fn_al_tt_1).
- Farmer, K.H., Buchanan-Smith, H.M. and Jamart, A. (2006). Behavioural adaptation of *Pan troglodytes troglodytes*. *International Journal of Primatology*, **27**(3), 747–65. DOI: 10.1007/s10764-006-9041-4.
- Farmer, K.H. and Jamart, A. (2002). Habitat Ecologique et Liberté des Primates: a case study of chimpanzee re-introduction in the Republic of Congo. *Re-introduction News: Special Primate Issue*, **21**, 16–8.
- Fasel, R., Blattner, C., Mannino, A. and Baumann, T. (2016). Fundamental rights for primates. Policy paper. *Sentience Politics*, **1**, 1–16.
- Federal Ministry of Food and Agriculture (n.d.). *Improving animal welfare in Germany*. Germany: Federal Ministry of Food and Agriculture. Available at: [https://www.bmel.de/EN/Animals/AnimalWelfare/\\_Texte/Versuchstierrichtline\\_Tierschutzgesetz.html](https://www.bmel.de/EN/Animals/AnimalWelfare/_Texte/Versuchstierrichtline_Tierschutzgesetz.html). Accessed September 12, 2019.
- Felbab-Brown, V. (2017). *The Extinction Market. Wildlife Trafficking and How to Counter It*. London, UK: Hurst and Company.
- Felbab-Brown, V. (2018). To counter wildlife trafficking, local enforcement, not en-route interdiction, is key. *Mongabay*, January 20, 2018. Available at: <https://news.mongabay.com/2018/01/to-counter-wildlife-trafficking-local-enforcement-not-en-route-interdiction-is-key-commentary/>.
- Fellowes, J., Chan, B., Lok, P., *et al.* (2008). Current status of the Hainan gibbon (*Nomascus hainanus*): progress of population monitoring and other priority actions. *Asian Primates Journal*, **1**(1), 2–9.
- Ferdowsian, H.R., Durham, D.L., Kimwele, C., *et al.* (2011). Signs of mood and anxiety disorders in chimpanzees. *PLoS ONE*, **6**(6), e19855. DOI: 10.1371/journal.pone.0019855.
- Ferraro, J.V., Plummer, T.W., Pobiner, B.L., *et al.* (2013). Earliest archaeological evidence of persistent hominin carnivory. *PLoS ONE*, **8**(4), e62174. DOI: 10.1371/journal.pone.0062174.
- Ferraro, P.J. and Pressey, R.L. (2015). Measuring the difference made by conservation initiatives: protected areas and their environmental and social impacts. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **370**, 4–8. DOI: 10.1098/rstb.2014.027.
- Ferreira de Souza Dias, B. (2016). *GEF and the Convention on Biological Diversity*. Washington DC: Global Environment Facility (GEF). Available at: <https://www.thegef.org/news/gef-and-convention-biological-diversity>.
- Finkelman, P. (2012). Slavery in the United States: persons or property? In *The Legal Understanding of Slavery: From the Historical to the Contemporary*, ed. J. Allain. Oxford, UK: Oxford University Press, pp. 105–34.
- Flightradar24 (n.d.) *CDG/LFPG Paris Charles de Gaulle Airport France*. Stockholm, Sweden: Flightradar24. Available at: <https://www.flightradar24.com/data/airports/cdg/routes>. Accessed October, 2020.
- Foerster, S., Wilkie, D.S., Morelli, G.A., *et al.* (2012). Correlates of bushmeat hunting among remote rural households in Gabon, Central Africa. *Conservation Biology*, **26**(2), 335–44. DOI: 10.1111/j.1523-1739.2011.01802.x.
- Forte, D.L. (2015). Nonhuman animal legislation and speciesist discourse. Argentina's Pet Responsibility Act: anti-cruelty law or death row pardon? *Language and Ecology*, 1–19.

- Franks, P. and Twinamatsiko, M. (2017). *Lessons Learnt from 20 Years of Revenue Sharing at Bwindi Impenetrable National Park, Uganda*. London, UK: International Institute for Environment and Development (IIED). Available at: <https://pubs.iied.org/pdfs/17612IIED.pdf>.
- Fraundorfer, M. (2017). The rediscovery of indigenous thought in the modern legal system: the case of the great apes. *Global Policy*, **9**(1), 17–25. DOI: 10.1111/1758-5899.12517.
- Freeland (2016). *USAID ARREST Program, Final Report, December 23, 2016*. Bangkok, Thailand: Freeland.
- Freeland (2018). WildScan: new mobile app to help combat illegal wildlife trade in Asia. *Freeland News*, Updated October 17, 2018. Available at: <https://www.freeland.org/post/wildscan-new-mobile-app-to-help-combat-illegal-wildlife-trade-in-asia>.
- Freeman, H.D. and Ross, S.R. (2014). The impact of atypical early histories on pet or performer chimpanzees. *PeerJ*, **2**, e579. DOI: 10.7717/peerj.579.
- French Parliament (1804). *Loi no. 1804-01-25*. Paris, France: French Parliament. Available at: <https://www.legifrance.gouv.fr/affichCodeArticle.do?cidTexte=LEGITEXT000006428710&cidTexte=LEGITEXT00006070721&categorieLien=id&dateTexte=19990106>.
- French Parliament (2015). *Loi no. 2015-177 du 16 février 2015 relative à la modernisation et à la simplification du droit et des procédures dans les domaines de la justice et des affaires intérieures*. Paris, France: French Parliament. Available at: <https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000030248562&categorieLien=id>.
- Freund, C., Rahman, E. and Knott, C. (2017). Ten years of orangutan-related wildlife crime investigation in West Kalimantan, Indonesia. *American Journal of Primatology*, **79**(11), 22620. DOI: 10.1002/ajp.22620.
- Friends of Washoe (n.d.). *Chimpanzees in entertainment*. Ellensburg, WA: Friends of Washoe. Available at: [https://www.friendsofwashoe.org/learn/captive\\_chimps/entertainment.html](https://www.friendsofwashoe.org/learn/captive_chimps/entertainment.html). Accessed October, 2019.
- Fruth, B., Hickey, J.R., André, C., et al. (2016). *Pan paniscus* (errata version published in 2016). *The IUCN Red List of Threatened Species*. 2016: e.T15932A102331567. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <http://dx.doi.org/10.2305/IUCN.UK.2016-2.RLTS.T15932A17964305.en>.
- Fruth, B. and Hohmann, G. (1996). Nest building behavior in the great apes: the great leap forward? In *Great Ape Societies*, ed. W. McGrew, L. Marchant and T. Nishida. Cambridge, UK: Cambridge University Press, pp. 225–40. DOI: 10.1017/CBO9780511752414.019.
- Fruth, B., Tagg, N. and Stewart, F. (2018). Sleep and nesting behavior in primates: a review. *American Journal of Physical Anthropology*, **166**(3), 499–509. DOI: 10.1002/ajpa.23373.
- Fruth, B., Williamson, E.A. and Richardson, M.C. (2013). Bonobo *Pan paniscus*. In *Handbook of the Mammals of the World. Volume 3: Primates*, ed. R.A. Mittermeier, A.B. Rylands and D.E. Wilson. Barcelona, Spain: Lynx Edicions, pp. 853–4.
- FSC (2015). *FSC International Standard. FSC Principles and Criteria for Forest Stewardship*. FSC-STD-01-001 V5-2 EN. London, UK: Forest Stewardship Council (FSC). Available at: <https://ic.fsc.org/file-download/fsc-principles-and-criteria-for-forest-stewardship.a-409.pdf>.
- Fugate, J.M.B. (2013). *Affidavit of Jennifer M. B. Fugate In the Matter of a Proceeding under Article 70 of the CPLR for a Writ of Habeas Corpus. The Nonhuman Rights Project, Inc., on behalf of Tommy, Petitioners, v. Patrick C. Lavery, individually and as an officer of Circle L Trailer Sales, Inc., Diane Lavery, and Circle L Trailer Sales, Inc.* November 22, 2013. Available at: <https://www.nonhumanrights.org/content/uploads/Ex-6-Fugate-Affidavit-Tommy-Case.pdf>. Accessed December, 2019.
- Furuichi, T. (2009). Factors underlying party size differences between chimpanzees and bonobos: a review and hypotheses for future study. *Primates*, **50**(3), 197–209. DOI: 10.1007/s10329-009-0141-6.
- Furuichi, T., Idani, G., Ihobe, H., et al. (1998). Population dynamics of wild bonobos (*Pan paniscus*) at Wamba. *International Journal of Primatology*, **19**(6), 1029–43. DOI: 10.1023/A:1020326304074.
- Gadgil, M., Berkes, F. and Folke, C. (1993). Indigenous knowledge for biodiversity conservation. *Ambio*, **22** 151–6 DOI: [www.jstor.org/stable/4314060](http://www.jstor.org/stable/4314060).
- GADM (n.d.). *GADM maps and data*. Available at: <https://gadm.org/index.html>. Accessed September, 2020.
- GAIN (n.d.). *Great Ape Information Network*. Kyoto, Japan: National BioResource Project (NBRP)-Great Ape Information Network (GAIN). Available at: <http://www.shigen.nig.ac.jp/gain/index.jsp>. Accessed September 2, 2018.

- Galdikas, B. (1982). Orangutans as seed dispersers at Tanjung Puting, Central Kalimantan: implications for conservation. In *The Orangutan: Its Biology and Conservation*, ed. L. de Boer. The Hague: Dr W. Junk Publishers.
- Gallego-Zamorano, J., Benítez-López, A., Santini, L., et al. (2020). Combined effects of land use and hunting on distributions of tropical mammals. *Conservation Biology*, **34**, 5, 1271–80. DOI: 10.1111/cobi.13459.
- Gallo, K. and Anest, K. (2018). Orang-utans in conservation education. In *Chinese-Language Orang-utan Husbandry Manual*, ed. G.L. Banes, M. Fox, C. Sodaro and Y. Bai. Beijing and Nanjing, China: Chinese Association of Zoological Gardens and Nanjing Hongshan Forest Zoo.
- Ganas, J., Robbins, M.M., Nkurunungi, J.B., Kaplin, B.A. and McNeilage, A. (2004). Dietary variability of mountain gorillas in Bwindi Impenetrable National Park, Uganda. *International Journal of Primatology*, **25**(5), 1043–72. DOI: 10.1023/b:ijop.0000043351.20129.44.
- Gang, B. (1996). PAWS slaps orangutan trainer Berosini with suit. *Las Vegas Sun*, March 8, 1996. Available at: <https://lasvegassun.com/news/1996/mar/08/paws-slaps-orangutan-trainer-berosini-with-suit/>.
- GAP (2017). Argentine judge refuses to transfer orangutan Sandra to Great Apes Sanctuary of Sorocaba, Brazil. *Great Ape Project (GAP)*, July 18, 2017. Available at: <http://www.projetogap.org.br/en/noticia/argentine-judge-refuses-to-transfer-orangutan-sandra-to-great-apes-sanctuary-of-sorocaba-brazil/>.
- Garner, B.A. (2014). *Black's Law Dictionary*, 10th edn. Eagan, MN: Thomson West, Aspatore Books.
- Garriga, R., Marco, I., Casas-Díaz, E., et al. (2019). Factors influencing wild chimpanzee (*Pan troglodytes verus*) relative abundance in an agriculture–swamp matrix outside protected areas. *PLoS ONE*, **14**(5), e0215545. DOI: 10.1371/journal.pone.0215545.
- Garriga, R.M., Marco, I., Casas-Díaz, E., Amarasekaran, B. and Humle, T. (2018). Perceptions of challenges to subsistence agriculture, and crop foraging by wildlife and chimpanzees *Pan troglodytes verus* in unprotected areas in Sierra Leone. *Oryx*, **52**(4), 761–74. DOI: 10.1017/S0030605316001319.
- Gaveau, D.L.A., Sloan, S., Moliedena, E., et al. (2014). Four decades of forest persistence, clearance and logging on Borneo. *PLoS ONE*, **9**(7), e101654. DOI: 10.1371/journal.pone.0101654.
- Geertz, C. (1973). Thick description: toward an interpretive theory of culture. In *The Interpretation of Cultures: Selected Essays*, ed. C. Geertz. New York, NY: Basic Books, pp. 3–30.
- Geissmann, T. (1991). Reassessment of age of sexual maturity in gibbons (*Hylobates* spp.). *American Journal of Primatology*, **23**(1), 11–22. DOI: 10.1002/ajp.1350230103.
- Geissmann, T. and Bleisch, W. (2020). *Nomascus hainanus*. *The IUCN Red List of Threatened Species*. 2020: e.T41643A17969392. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <https://dx.doi.org/10.2305/IUCN.UK.2020-2.RLTS.T41643A17969392.en>.
- Geissmann, T., Grindley, M., Ngwe, L., et al. (2013). *The Conservation Status of Hoolock Gibbons in Myanmar*. Zürich, Switzerland: Gibbon Conservation Alliance. Available at: [http://www.gibbonconservation.org/o7\\_publications/book/2013\\_hoolock\\_myanmar.pdf](http://www.gibbonconservation.org/o7_publications/book/2013_hoolock_myanmar.pdf).
- Geissmann, T., Nijman, V., Boonratana, R., et al. (2020). *Hylobates agilis*. *The IUCN Red List of Threatened Species*. 2020: e.T10543A17967655. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <https://dx.doi.org/10.2305/IUCN.UK.2020-2.RLTS.T10543A17967655.en>.
- Geng, B. (1998). *Geng Biao Huiyi Lu [Geng Biao Remembers: 1949–1992]* [in Chinese]. Nanjing, China: Jiangsu People's Press.
- Gettleman, J. (2017). Smuggled, beaten and drugged: the illicit global ape trade. *New York Times*, November 4, 2017. Available at: <https://www.nytimes.com/2017/11/04/world/africa/ape-trafficking-bonobos-orangutans.html>.
- GFI (2018). New study quantifies value of illegal trade in great apes. *GFI Press Release*. Available at: <https://www.gfintegrity.org/press-release/new-study-quantifies-value-of-illegal-trade-in-great-apes/>.
- Ghiglieri, M.P. (1984). *The Chimpanzees of Kibale Forest: A Field Study of Ecology and Social Structure*. New York, NY: Columbia University Press.
- Gilhooley, L.J., Rayadin, Y. and Cheyne, S.M. (2015). A comparison of hylobatid survey methods using triangulation on Müller's gibbon (*Hylobates muelleri*) in Sungai Wain Protection Forest, East Kalimantan, Indonesia. *International Journal of Primatology*, **36**(3), 567–82. DOI: 10.1007/s10764-015-9845-1.
- Gillespie, T.R., Nunn, C.L. and Leendertz, F.H. (2008). Integrative approaches to the study of primate infectious disease: implications for biodiversity conservation and global health. *American Journal of Physical Anthropology*, **137**(S47), 53–69. DOI: 10.1002/ajpa.20949.

- Global Witness (2019). *Enemies of the State: How Governments and Business Silence Land and Environmental Defenders*. London, UK: Global Witness.
- Goodall, J. (2009). Loving chimps to death. *Los Angeles Times*, February 25, 2009. Available at: <https://www.latimes.com/archives/la-xpm-2009-feb-25-oe-goodall25-story.html>.
- Goodall, J. (2015). *Affidavit of Jane Goodall In the Matter of a Proceeding under Article 70 of the CPLR for a Writ of Habeas Corpus. The Nonhuman Rights Project, Inc., on behalf of Kiko, Petitioner, v. Carmen Presti, individually and as an officer and director of The Primate Sanctuary, Inc., Christie E. Presti, individually and as an officer and director of The Primate Sanctuary, Inc., and the Primate Sanctuary, Inc.* September 21, 2015. Available at: <https://www.nonhumanrights.org/client-kiko/>. Accessed December, 2019.
- Goodall, J., Fouts, R., Patterson, F., et al., ed. (2003). *The Great Ape Project Census: Recognition for the Uncounted*. Portland, OR: Great Ape Project.
- Goossens, B., Chikhi, L., Ancrenaz, M., et al. (2006). Genetic signature of anthropogenic population collapse in orang-utans. *PLoS Biology*, **4**(2), e25. DOI: [10.1371/journal.pbio.0040025](https://doi.org/10.1371/journal.pbio.0040025).
- Goossens, B., Kapar, M.D., Kahar, S. and Ancrenaz, M. (2011). First sighting of Bornean orang-utan twins in the wild. *Asian Primates Journal*, **2**(1), 10–2.
- Gordon, R. (2016). Moving targets: hunting in contemporary Africa. *Journal of Contemporary African Studies*, **34**(1), 1–6. DOI: [10.1080/02589001.2016.1196323](https://doi.org/10.1080/02589001.2016.1196323).
- Gorilla Guardians (n.d.). *Activities*. Gorilla Guardians. Available at: [www.ibiyacuvillage.org/index.php/home/about\\_us/activities](http://www.ibiyacuvillage.org/index.php/home/about_us/activities). Accessed September, 2020.
- GRACE (n.d.). *About*. North Kivu Province, DRC: Gorilla Rehabilitation and Conservation Education Center (GRACE). Available at: <https://gracegorillas.org/grace-about-the-organization/>. Accessed October, 2019.
- Granjon, A.-C., Robbins, M.M., Arinaitwe, J., et al. (2020). Estimating abundance and growth rates in a wild mountain gorilla population. *Animal Conservation* **23**(4), 455–65. DOI: [10.1111/acv.12559](https://doi.org/10.1111/acv.12559).
- GRASP (n.d.-a). *Apes Seizure Database*. Nairobi, Kenya: Great Apes Survival Partnership (GRASP). Available at: <https://database.un-grasp.org/>. Accessed September, 2020.
- GRASP (n.d.-b). *Great Apes Survival Partnership*. Nairobi, Kenya: Great Apes Survival Partnership (GRASP). Available at: <http://www.un-grasp.org>. Accessed September, 2020.
- GRASP (n.d.-c). *Range states*. Nairobi, Kenya: Great Apes Survival Partnership (GRASP). Available at: <https://www.un-grasp.org/our-partners/range-states/>. Accessed October 24, 2019.
- GRASP and IUCN (2018). *Report to the CITES Standing Committee on the Status of Great Apes*. Nairobi, Kenya, and Gland, Switzerland: United Nations Environment Programme Great Apes Survival Partnership (GRASP) and International Union for Conservation of Nature (IUCN). Available at: [http://www.primate-sg.org/storage/pdf/GRASP\\_\\_IUCN\\_2018\\_Report\\_to\\_CITES\\_on\\_the\\_Status\\_of\\_Great\\_Apes.pdf](http://www.primate-sg.org/storage/pdf/GRASP__IUCN_2018_Report_to_CITES_on_the_Status_of_Great_Apes.pdf).
- Gray, M., McNeilage, A., Fawcett, K., et al. (2010). Censusing the mountain gorillas in the Virunga Volcanoes: complete sweep method versus monitoring. *African Journal of Ecology*, **48**(3), 588–99. DOI: [10.1111/j.1365-2028.2009.01142.x](https://doi.org/10.1111/j.1365-2028.2009.01142.x).
- Gray, M., Roy, J., Vigilant, L., et al. (2013). Genetic census reveals increased but uneven growth of a critically endangered mountain gorilla population. *Biological Conservation*, **158**(Supplement C), 230–8. DOI: [10.1016/j.biocon.2012.09.018](https://doi.org/10.1016/j.biocon.2012.09.018).
- Gray, T.N.E., Hughes, A.C., Laurance, W.F., et al. (2018). The wildlife snaring crisis: an insidious and pervasive threat to biodiversity in Southeast Asia. *Biodiversity and Conservation*, **27**(4), 1031–7. DOI: [10.1007/s10531-017-1450-5](https://doi.org/10.1007/s10531-017-1450-5).
- Gray, T.N.E., Phan, C. and Long, B. (2010). Modelling species distribution at multiple spatial scales: gibbon habitat preferences in a fragmented landscape. *Animal Conservation*, **13**(3), 324–32. DOI: [10.1111/j.1469-1795.2010.00351.x](https://doi.org/10.1111/j.1469-1795.2010.00351.x).
- Green Customs (n.d.). *The Green Customs Initiative*. Nairobi, Kenya: Green Customs Initiative Secretariat. Available at: <http://www.greencustoms.org/>. Accessed September, 2020.
- Green, J.M.H., Fisher, B., Green, R.E., et al. (2018). Local costs of conservation exceed those borne by the global majority. *Global Ecology and Conservation*, **14**, e00385. DOI: [10.1016/j.gecco.2018.e00385](https://doi.org/10.1016/j.gecco.2018.e00385).
- Greenberg, J. (2004). *Crusaders in the Courts: Legal Battles of the Civil Rights Movement*. Northport, NY: Twelve Tables Press.

- Greenfield, S. and Veríssimo, D. (2019). To what extent is social marketing used in demand reduction campaigns for illegal wildlife products? Insights from elephant ivory and rhino horn. *Social Marketing Quarterly*, **25**(1), 40–54. DOI: 10.1177/1524500418813543.
- Greengrass, E. (2015). Commercial hunting to supply urban markets threatens mammalian biodiversity in Sapo National Park. *Oryx*, **50**(3), 397–404. DOI: 10.1017/S0030605315000095.
- Greenpeace (2018). *Rang-tan: the story of dirty palm oil*. Greenpeace International. Available at: <https://www.youtube.com/watch?v=TQQXstNh4g>. Accessed October, 2019.
- Gregory, T., Carrasco Rueda, F., Deichmann, J., Kolowski, J. and Alonso, A. (2014). Arboreal camera trapping: taking a proven method to new heights. *Methods in Ecology and Evolution*, **5**(5), 443–51. DOI: 10.1111/2041-210X.12177.
- Grimm, D. (2017). Research on lab chimps is over. Why have so few been retired to sanctuaries? *Science News*, June 12, 2017. Available at: <https://www.sciencemag.org/news/2017/06/research-lab-chimps-over-why-have-so-few-been-retired-sanctuaries>.
- Großmann, K. (2018). Conflicting ecologies in a ‘failed’ gaharu nursery program in Central Kalimantan, Indonesia. *Sojourn: Journal of Social Issues in Southeast Asia*, **33**, 319–40. DOI: 10.1355/sj33-2d.
- Gruber, T., Luncz, L., Morchen, J., et al. (2019). Cultural change in animals: a flexible behavioural adaptation to human disturbance. *Palgrave Communications*, **5**, 9. DOI: 10.1057/s41599-019-0271-4.
- Guan, Z.-H., Ma, C.-Y., Fei, H.-L., et al. (2018). Ecology and social system of northern gibbons living in cold seasonal forests. *Zoological Research*, **39**(4), 255–65. DOI: 10.24272/j.issn.2095-8137.2018.045.
- Güneralp, B., Lwasa, S., Masundire, H., Parnell, S. and Seto, K.C. (2017). Urbanization in Africa: challenges and opportunities for conservation. *Environmental Research Letters*, **13**, 015002. DOI: 10.1088/1748-9326/aa94fe.
- Guschanski, K., Vigilant, L., McNeilage, A., et al. (2009). Counting elusive animals: comparing field and genetic census of the entire mountain gorilla population of Bwindi Impenetrable National Park, Uganda. *Biological Conservation*, **142**(2), 290–300. DOI: 10.1016/j.biocon.2008.10.024.
- Haddaway, N.R. and Bayliss, H.R. (2015). Shades of grey: two forms of grey literature important for reviews in conservation. *Biological Conservation*, **191**, 827–9. DOI: 10.1016/j.biocon.2015.08.018.
- Hahn, B.H., Shaw, G.M., De Cock, K.M. and Sharp, P.M. (2000). AIDS as a zoonosis: scientific and public health implications. *Science*, **287**(5453), 607–14. DOI: 10.1126/science.287.5453.607.
- Hakizimana, D. and Huynen, M.C. (2013). Chimpanzee (*Pan troglodytes schweinfurthii*) population density and abundance in Kibira National Park, Burundi. *Pan Africa News*, **20**(2), 16–9.
- Hallam, C.D., Johnson, A., O’Kelly, H., et al. (2016). Using occupancy-based surveys and multi-model inference to estimate abundance and distribution of crested gibbons (*Nomascus* spp.) in central Laos. *American Journal of Primatology*, **78**(4), 462–72. DOI: 10.1002/ajp.22508.
- Hamard, M., Cheyne, S.M. and Nijman, V. (2010). Vegetation correlates of gibbon density in the peat-swamp forest of the Sabangau catchment, Central Kalimantan, Indonesia. *American Journal of Primatology*, **72**(7), 607–16. DOI: 10.1002/ajp.20815.
- Hamdi v. Rumsfeld*. 542 US 507 (2004). Available at: <https://cdn.loc.gov/service/ll/usrep/usrep542/usrep542507/usrep542507.pdf>.
- Hamilton, E. (1964). *The Echo of Greece*. New York, NY: W.W. Norton and Co.
- Hance, J. (2009). Transmitters implanted in orangutans for tracking after release into the wild. *Mongabay*, November 23, 2009. Available at: <https://news.mongabay.com/2009/11/transmitters-implanted-in-orangutans-for-tracking-after-release-into-the-wild/>.
- Hanoi Conference on the Illegal Wildlife Trade (2016). *Hanoi Statement on Illegal Wildlife Trade*. Hanoi, Viet Nam. Available at: <http://iwthanoi.vn/wp-content/uploads/2019/09/hanoi-statement-on-illegal-wildlife-trade.pdf>.
- Harcourt, A.H. and Greenberg, J. (2001). Do gorilla females join males to avoid infanticide? A quantitative model. *Animal Behaviour*, **62**(5), 905–15. DOI: 10.1006/anbe.2001.1835.
- Hardin, G. (1968). The tragedy of the commons. *Science*, **162**(3859), 1243–8. DOI: 10.1126/science.162.3859.1243.
- Harfoot, M., Glaser, S.A.M., Tittensor, D.P., et al. (2018). Unveiling the patterns and trends in 40 years of global trade in CITES-listed wildlife. *Biological Conservation*, **223**, 47–57. DOI: 10.1016/j.biocon.2018.04.017.

- Harris, D. and Karamehmedovic, A. (2009). Bushmeat sold on open market in US. *ABC News*, December 11, 2009. Available at: <https://abcnews.go.com/Nightline/IntoTheWild/bushmeat-africa-sold-open-market-us/story?id=9312518>.
- Harrison, M., Roe, D., Baker, J., et al. (2015). *Wildlife Crime: A Review of the Evidence on Drivers and Impacts in Uganda*. London, UK: International Institute for Environment and Development (IIED). Available at: <https://pubs.iied.org/pdfs/17576IIED.pdf>.
- Harrison, R.D., Sreekar, R., Brodie, J.F., et al. (2016). Impacts of hunting on tropical forests in Southeast Asia. *Conservation Biology*, **30**(5), 972–81. DOI: 10.1111/cobi.12785.
- Harrison, T., Krigbaum, J. and Manser, J. (2006). Primate biogeography and ecology on the Sunda Shelf islands: a paleontological and zooarchaeological perspective. In *Primate Biogeography: Progress and Prospects*, ed. S.M. Lehman and J.G. Fleagle. Boston, MA: Springer US, pp. 331–72. DOI: 10.1007/0-387-31710-4\_12.
- Harrison, T. (1966). The gibbon in west Borneo folklore and augury. *Sarawak Museum Journal*, **14**, 132–45.
- Hart, M. (2018). Perth zoo keeper's heartfelt tribute after death of world's oldest Sumatran orangutan. *The West Australian*, June 18, 2018. Available at: <https://thewest.com.au/news/wa/perth-zoo-keepers-heartfelt-tribute-after-death-of-worlds-oldest-sumatran-orangutan-ng-b88869397z>.
- Haslett, C. (2015). Click to like this: is Instagram a hub for illegal ape deals? *Mongabay*, December 10, 2015. Available at: <https://news.mongabay.com/2015/12/click-to-like-this-is-instagram-a-hub-for-illegal-ape-deals/>.
- Hassan, R., Scholes, R. and Ash, N., ed. (2005). *Ecosystems and Human Wellbeing. Volume 1. Current State and Trends*. Washington DC: Island Press, Millennium Ecosystem Assessment.
- Hastie, J. and McCrea-Steele, T. (2014). *Wanted – Dead or Alive. Exposing Online Wildlife Trade*. London, UK: International Fund for Animal Welfare (IFAW). Available at: <https://www.ifaw.org/uk/resources/wanted-dead-or-alive-report>.
- Hatton, J., Couto, M. and Oglethorpe, J. (2001). *Biodiversity and War: A Case Study of Mozambique*. Washington DC: World Wildlife Fund (WWF) Biodiversity Support Program.
- Hawdon, J. and Ryan, J. (2011). Neighborhood organizations and resident assistance to police. *Sociological Forum*, **26**(4), 897–920.
- Head, J. (2014). *Effecting behaviour change around bushmeat consumption: Nam Kading National Protected Area, Lao PDR*. Unpublished report. Cambridge, UK: Arcus Foundation.
- Head, J. (2015). *Assessing the drivers of wild-meat hunting*. Commissioned unpublished background paper. Cambridge, UK: Arcus Foundation.
- Head, J. (2017). *Knowledge Assessment on the Global Trade in Apes*. Internal report. Cambridge, UK: Arcus Foundation.
- Head, J.S., Boesch, C., Makaga, L. and Robbins, M.M. (2011). Sympatric chimpanzees (*Pan troglodytes troglodytes*) and gorillas (*Gorilla gorilla gorilla*) in Loango National Park, Gabon: dietary composition, seasonality, and inter-site comparisons. *International Journal of Primatology*, **32**(3), 755–75. DOI: 10.1007/s10764-011-9499-6.
- Head, J.S., Boesch, C., Robbins, M.M., et al. (2013). Effective sociodemographic population assessment of elusive species in ecology and conservation management. *Ecology and Evolution*, **3**(9), 2903–16. DOI: 10.1002/ece3.670.
- Heinicke, S., Kalan, A.K., Wagner, O.J.J., et al. (2015). Assessing the performance of a semi-automated acoustic monitoring system for primates. *Methods in Ecology and Evolution*, **6**(7), 753–63. DOI: 10.1111/2041-210X.12384.
- Heinicke, S., Mundry, R., Boesch, C., et al. (2019a). Advancing conservation planning for western chimpanzees using IUCN SSC A.P.E.S. — the case of a taxon-specific database. *Environmental Research Letters*, **14**(6), 064001. DOI: 10.1088/1748-9326/ab1379.
- Heinicke, S., Mundry, R., Boesch, C., et al. (2019b). Characteristics of positive deviants in western chimpanzee populations. *Frontiers in Ecology and Evolution*, **7**, 16. DOI: 10.3389/fevo.2019.00016.
- HELP Congo (n.d.). *Sponsorship*. Lissieu, France: Habitat Ecologique et Liberté des Primates (HELP). Available at: <http://help-primates.org/en/parrainage.html>. Accessed December 4, 2018.
- Hemsworth, P.H., Mellor, D.J., Cronin, G.M. and Tilbrook, A.J. (2015). Scientific assessment of animal welfare. *New Zealand Veterinary Journal*, **63**(1), 24–30. DOI: 10.1080/00480169.2014.966167.
- Henao, L.A. and Calatrava, A. (2016). In Argentina, freedom still distant for Sandra the orangutan. *AP: Associated Press*, September 29, 2016. Available at: <https://apnews.com/e65b2d8b707b49ab85ddfa2fie466020>.

- Henchion, M., Hayes, M., Mullen, A.M., Fenelon, M. and Tiwari, B. (2017). Future protein supply and demand: strategies and factors influencing a sustainable equilibrium. *Foods*, **6**(7), 53.
- Herbinger, I., Boesch, C. and Rothe, H. (2001). Territory characteristics among three neighboring chimpanzee communities in the Taï National Park, Côte d'Ivoire. *International Journal of Primatology*, **22**(2), 143–67. DOI: 10.1023/a:1005663212997.
- Hermans, V. (2011). *Ranging behaviour of snare-injured female chimpanzees (Pan troglodytes schweinfurthii) of the Sonso community in the Budongo Forest, Uganda*. MRes Primateology thesis. Roehampton, UK: University of Roehampton.
- Hernandez-Castro, J. and Roberts, D. (2015). Automatic detection of potentially illegal online sales of elephant ivory via data mining. *PeerJ Computer Science*, **1**, e10. DOI: 10.7717/peerj-cs.10.
- Hickey, G.M., Pouliot, M., Smith-Hall, C., Wunder, S. and Nielsen, M.R. (2016). Quantifying the economic contribution of wild food harvests to rural livelihoods: a global-comparative analysis. *Food Policy*, **62**, 122–32. DOI: 10.1016/j.foodpol.2016.06.001.
- Hickey, J.R., Basabose, A., Gilardi, K.V., et al. (2018). *Gorilla beringei* ssp. *beringei*. The IUCN Red List of Threatened Species. 2018: e.T39999A17989719. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <http://dx.doi.org/10.2305/IUCN.UK.2018-2.RLTS.T39999A17989719.en>.
- Hickey, J.R., Granjon, A.-C., Vigilant, L., et al. (2019). *Virunga 2015–2016 Surveys: Monitoring Mountain Gorillas, Other Select Mammals, and Illegal Activities*. Kigali, Rwanda: Greater Virunga Transboundary Collaboration (GVTC), IGCP & Partners. Available at: [http://igcp.org/wp-content/uploads/Virunga-Census-2015-2016-Final-Report-2019-with-French-summary-2019\\_04\\_24.pdf](http://igcp.org/wp-content/uploads/Virunga-Census-2015-2016-Final-Report-2019-with-French-summary-2019_04_24.pdf).
- Hickey, J.R., Nackoney, J., Nibbelink, N.P., et al. (2013). Human proximity and habitat fragmentation are key drivers of the rangewide bonobo distribution. *Biodiversity and Conservation*, **22**(13), 3085–104. DOI: 10.1007/s10531-013-0572-7.
- Hickman, A. (2018). Iceland's Rang-tan campaign delivers 65m views, sales and consideration lift. *PR Week*, December 3, 2018. Available at: <https://www.prweek.com/article/1520088/icelands-rang-tan-campaign-delivers-65m-views-sales-consideration-lift>.
- Hicks, T.C., Darby, L., Hart, J., et al. (2010). Trade in orphans and bushmeat threatens one of the Democratic Republic of the Congo's most important populations of eastern chimpanzees (*Pan troglodytes schweinfurthii*). *African Primates*, **7**(1), 1–18.
- Hill, R., Dyer, G.A., Lozada-Ellison, L.M., et al. (2015). A social-ecological systems analysis of impediments to delivery of the Aichi 2020 Targets and potentially more effective pathways to the conservation of biodiversity. *Global Environmental Change*, **34**, 22–34. DOI: 10.1016/j.gloenvcha.2015.04.005.
- Hoàn, T.Đ., Dũng, L.V. and Trung, N.V. (2016). Báo cáo Tổng điều tra liên khu Vuợn Cao vité (Nomascus nasutus) tại Khu Bảo tồn loài và sinh cảnh Vuợn Cao vité huyện Trùng Khánh, tỉnh Cao Bằng, Việt Nam và Khu bảo tồn Bảng Luợng, Trịnh Tây, Quảng Tây, Trung Quốc [in Vietnamese]. Hanoi, Viet Nam: Flora & Fauna International (FFI).
- Hockings, K. and Humle, T. (2009). *Best Practice Guidelines for the Prevention and Mitigation of Conflict Between Humans and Great Apes*. Gland, Switzerland: International Union for Conservation of Nature (IUCN) Species Survival Commission (SSC), Primate Specialist Group. Available at: <https://portals.iucn.org/library/efiles/documents/ssc-op-037.pdf>.
- Hockings, K.J., Humle, T., Carvalho, S. and Matsuzawa, T. (2012). Chimpanzee interactions with nonhuman species in an anthropogenic habitat. *Behaviour*, **149**(3–4), 299–324.
- Hockings, K.J. and McLennan, M.R. (2012). From forest to farm: systematic review of cultivar feeding by chimpanzees – management implications for wildlife in anthropogenic landscapes. *PLoS ONE*, **7**(4), e33391. DOI: 10.1371/journal.pone.0033391.
- Hockings, K.J., McLennan, M.R., Carvalho, S., et al. (2015). Apes in the Anthropocene: flexibility and survival. *Trends in Ecology & Evolution*, **30**(4), 215–22. DOI: 10.1016/j.tree.2015.02.002.
- Hockings, K.J., Yamakoshi, G., Kabasawa, A. and Matsuzawa, T. (2010). Attacks on local persons by chimpanzees in Bossou, Republic of Guinea: long-term perspectives. *American Journal of Primatology*, **72**(10), 887–96. DOI: 10.1002/ajp.20784.
- Hoffmann, C., Zimmermann, F., Biek, R., et al. (2017). Persistent anthrax as a major driver of wildlife mortality in a tropical rainforest. *Nature*, **548**, 82. DOI: 10.1038/nature23309.

- Hohmann, G., Gerloff, U., Tautz, D. and Fruth, B. (1999). Social bonds and genetic ties: kinship, association and affiliation in a community of bonobos (*Pan paniscus*). *Behaviour*, **136**(9), 1219–35. DOI: 10.1163/15685399501739.
- Hohmann, G., Robbins, M.M. and Boesch, C., ed. (2006). *Feeding Ecology in Apes and Other Primates: Ecological, Physiological, and Behavioural Aspects*. Cambridge Studies in Biological and Evolutionary Anthropology Volume 48. Cambridge, UK: Cambridge University Press.
- Höing, A., Quinten, M.C., Indrawati, Y.M., Cheyne, S.M. and Waltert, M. (2013). Line transect and triangulation surveys provide reliable estimates of the density of Kloss' gibbons (*Hylobates klossii*) on Siberut Island, Indonesia. *International Journal of Primatology*, **34**(1), 148–56. DOI: 10.1007/s10764-012-9655-7.
- Holden, S.T., Deininger, K. and Ghebru, H. (2009). Impacts of low-cost land certification on investment and productivity. *American Journal of Agricultural Economics*, **91**(2), 359–73. DOI: 10.1111/j.1467-8276.2008.01241.x.
- Holmern, T., Muya, J. and Røskift, E. (2007). Local law enforcement and illegal bushmeat hunting outside the Serengeti National Park, Tanzania. *Environmental Conservation*, **34**(1), 55–63. DOI: 10.1017/S0376892907003712.
- Hoppe, E., Pauyl, M., Gillespie, T.R., et al. (2015). Multiple cross-species transmission events of human adenoviruses (HAdV) during hominine evolution. *Molecular Biology and Evolution*, **32**(8), 2072–84. DOI: 10.1093/molbev/msv090.
- Horta Duarte, R. (2017). Zoos in Latin America. In *Oxford Research Encyclopedia of Latin American History*, ed. Oxford Research Encyclopedias. Oxford, UK: Oxford University Press, pp. 1–20. Available at: <https://oxfordre.com/latinamericanhistory/view/10.1093/acrefore/9780199366439.001.0001/acrefore-9780199366439-e-439>.
- Horwitz, R.H., Islari, R., Bose, A., et al. (2010). Community protection of the Manas Biosphere Reserve in Assam, India, and the endangered golden langur *Trachypithecus geei*. *Oryx*, **44**(2), 252–60. DOI: 10.1017/S0030605310000037.
- Howell, S. and Talle, A. (2012). *Returns to the Field: Multitemporal Research and Contemporary Anthropology*. Bloomington, IN: Indiana University Press.
- Hrdy, S.B. (1979). Infanticide among animals: a review, classification, and examination of the implications for the reproductive strategies of females. *Ethology and Sociobiology*, **1**(1), 13–40. DOI: 10.1016/0162-3095(79)90004-9.
- Huertas, S.M., Gallo, C. and Galindo, F. (2014). Drivers of animal welfare policy in the Americas. *Revue Scientifique et Technique (International Office of Epizootics)*, **33**, 67–76.
- Hughes, N., Rosen, N., Gretsky, N. and Sommer, V. (2011). Will the Nigeria-Cameroon Chimpanzee go extinct? Models derived from intake rates of ape sanctuaries. In *Primates of Gashaka. Developments in Primatology: Progress and Prospects*, ed. V. Sommer and C. Ross. New York, NY: Springer, pp. 545–75. DOI: 10.1007/978-1-4419-7403-7\_14.
- Hume, L. and Mulcock, J. (2004). Introduction: awkward spaces, productive places. In *Anthropologists in the Field: Cases in Participant Observation*, ed. L. Hume and J. Mulcock. New York, NY: Columbia University Press, pp. xi–xxviii.
- Humle, T., Boesch, C., Campbell, G., et al. (2016a). *Pan troglodytes* ssp. *verus* (errata version published in 2016). *The IUCN Red List of Threatened Species*. 2016: e.T15935A102327574. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <http://dx.doi.org/10.2305/IUCN.UK.2016-2.RLTS.T15935A17989872.en>.
- Humle, T., Colin, C., Laurans, M. and Raballand, E. (2011). Group release of sanctuary chimpanzees (*Pan troglodytes*) in the Haut Niger National Park, Guinea, west Africa: ranging patterns and lessons so far. *International Journal of Primatology*, **32**(2), 456–73. DOI: 10.1007/s10764-010-9482-7.
- Humle, T., Maisels, F., Oates, J.F., Plumptre, A. and Williamson, E.A. (2016b). *Pan troglodytes* (errata version published in 2018). *The IUCN Red List of Threatened Species*. 2016: e.T15933A129038584. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <https://dx.doi.org/10.2305/IUCN.UK.2016-2.RLTS.T15933A17964454.en>.
- HUTAN-KOCP (n.d.). *Links*. Sabah, Malaysia: Kinabatangan Orang-utan Conservation Programme (HUTAN-KOCP). Available at: <https://www.hutan.org.my/links/>. Accessed: October 20, 2019
- ICCWC (2013). *First Global Meeting of the Wildlife Enforcement Networks, 5 March 2013: Meeting Report*. Bangkok, Thailand: International Consortium on Combating Wildlife Crime (ICCWC). Available at: <https://www.cites.org/sites/default/files/common/docs/ICCWC%20Report%20-%20First%20Global%20Meeting%20of%20the%20WENs%20-%20Final.pdf>.
- ICCWC (2016). *Second Global Meeting of the Wildlife Enforcement Networks, 28–29 September 2016: Meeting Report*. Johannesburg, South Africa: International Consortium on Combating Wildlife Crime (ICCWC). Available at: [https://cites.org/sites/default/files/eng/prog/iccwc/WENs/Report\\_2nd\\_Global\\_WEN\\_meeting-final.pdf](https://cites.org/sites/default/files/eng/prog/iccwc/WENs/Report_2nd_Global_WEN_meeting-final.pdf).

- Iceland (2018). *Say hello to Rang-tan*. Iceland Foods. Available at: <https://www.youtube.com/watch?v=JdpSplWI2o>. Accessed October, 2019.
- Ichikawa, M., Hattori, S. and Yasuoka, H. (2016). Bushmeat crisis, forestry reforms and contemporary hunting among Central African forest hunters. In *Hunter-Gatherers a Changing World*, ed. V. Reyes-García and A. Pyhälä: Cham, Switzerland: Springer, pp. 59–75.
- IFAW (2008). *Killing with Keystrokes*. Yarmouth Port, MA: International Fund for Animal Welfare (IFAW). Available at: [https://dijyxxz9imt9yb.cloudfront.net/resource/202/attachment/regular/Killing\\_with\\_Keystrokes.pdf](https://dijyxxz9imt9yb.cloudfront.net/resource/202/attachment/regular/Killing_with_Keystrokes.pdf).
- IFAW (2014). *Wanted – Dead or Alive: Exposing Online Wildlife Trade*. London, UK: International Fund for Animal Welfare (IFAW). Available at: <https://dijyxxz9imt9yb.cloudfront.net/resource/251/attachment/original/IFAW-Wanted-Dead-or-Alive-Exposing-Online-Wildlife-Trade-2014.pdf>.
- Igoe, J. (2006). Measuring the costs and benefits of conservation to local communities. *Journal of Ecological Anthropology*, 10, 72–7.
- Imong, I. and Chukwu, H. (2019). Saving Cross River gorillas in Nigeria through radio drama. *Gorilla Journal*, 58, 7–8. Available at: [https://www.berggorilla.org/fileadmin/user\\_upload/pdf/journal/journal\\_en/gorilla-journal-58-english.pdf](https://www.berggorilla.org/fileadmin/user_upload/pdf/journal/journal_en/gorilla-journal-58-english.pdf).
- Imong, I.S., Kühl, H.S., Robbins, M.M. and Mundry, R. (2016). Evaluating the potential effectiveness of alternative management scenarios in ape habitat. *Environmental Conservation*, 43(2), 161–71. DOI: 10.1017/S0376892915000417.
- Imong, I., Robbins, M.M., Mundry, R., Bergl, R. and Kühl, H.S. (2014a). Distinguishing ecological constraints from human activity in species range fragmentation: the case of Cross River gorillas. *Animal Conservation*, 17(4), 323–31. DOI: 10.1111/acv.12100.
- Imong, I., Robbins, M.M., Mundry, R., Bergl, R. and Kühl, H.S. (2014b). Informing conservation management about structural versus functional connectivity: a case-study of Cross River gorillas. *American Journal of Primatology*, 76(10), 978–88. DOI: 10.1002/ajp.22287.
- Infield, M. (2011). *Cultural values and conservation delivery in Liberia. A preliminary investigation of Lake Piso multiple use reserve*. Unpublished report. Cambridge, UK: Arcus Foundation.
- Infield, M., Entwistle, A., Anthem, H., Mugisha, A. and Phillips, K. (2018). Reflections on cultural values approaches to conservation: lessons from 20 years of implementation. *Oryx*, 52(2), 220–30. DOI: 10.1017/S0030605317000928.
- Ingram, D.J., Coad, L., Abernethy, K.A., et al. (2018). Assessing Africa-wide pangolin exploitation by scaling local data. *Conservation Letters*, 11(2), e12389. DOI: 10.1111/conl.12389.
- Ingram, D.J., Coad, L., Collen, B., et al. (2015). Indicators for wild animal offtake: methods and case study for African mammals and birds. *Ecology and Society*, 20(3), 40. DOI: 10.5751/ES-07823-200340.
- Inogwabini, B.-I., Bewa, M., Longwango, M., Abokome, M. and Vuvu, M. (2008). The bonobos of the Lake Tumba–Lake Maindombe hinterland: threats and opportunities for population conservation. In *The Bonobos*, ed. T. Furuichi and J. Thompson. New York, NY: Springer, pp. 273–90.
- Inogwabini, B.-I., Matungila, B., Mbende, L., Abokome, M. and Tshimanga, W.T. (2007). Great apes in the Lake Tumba landscape, Democratic Republic of Congo: Newly described populations. *Oryx*, 4, 532–8. DOI: 10.1017/S0030605307414120.
- Instagram (2017). Protecting wildlife and nature from exploitation. *Info Center*, December 4, 2017. Available at: <https://instagram-press.com/blog/2017/12/04/protecting-wildlife-and-nature-from-exploitation/>.
- Instagram (n.d.-a). *How do I learn more about wildlife exploitation?* Instagram. Available at: <https://help.instagram.com/859615207549041>. Accessed January, 2020.
- Instagram (n.d.-b). *Our story*. Info Center, Instagram. Available at: <https://instagram-press.com/our-story/>. Accessed October, 2019.
- International Monetary Fund (2018). *People's Republic of China: Staff Report for the 2018 Article IV Consultation*. IMF Country Reports 18/240. Washington DC: International Monetary Fund (IMF). Available at: [https://www.elibrary.imf.org/doc/IMF002/25384-9781484370797/25384-9781484370797/Other\\_formats/Source\\_PDF/25384-9781484370858.pdf](https://www.elibrary.imf.org/doc/IMF002/25384-9781484370797/25384-9781484370797/Other_formats/Source_PDF/25384-9781484370858.pdf).
- Internet World Stats (n.d.). *Internet usage in Asia*. Bogota, Colombia: Miniwatts Marketing Group. Available at: <https://www.internetworldstats.com/stats3.htm>. Accessed April, 2020.

- INTERPOL (2012). INTERPOL launches National Environmental Security Task Force initiative. *INTERPOL News*, September 18, 2012. Lyon, France: INTERPOL. Available at: <https://www.interpol.int/News-and-Events/News/2012/INTERPOL-launches-National-Environmental-Security-Task-Force-initiative>.
- INTERPOL (2017). Anti-wildlife trafficking operation results in global arrests and seizures. *INTERPOL News*, March 2, 2017. Lyon, France: INTERPOL. Available at: <https://www.interpol.int/News-and-Events/News/2017/Anti-wildlife-trafficking-operation-results-in-global-arrests-and-seizures>.
- INTERPOL (n.d.-a). *About INTERPOL*. Lyon, France: INTERPOL. Available at: <https://www.interpol.int/About-INTERPOL/Overview>. Accessed October, 2018.
- INTERPOL (n.d.-b). *Our response to environmental crime*. Lyon, France: INTERPOL. Available at: <https://www.interpol.int/en/Crimes/Environmental-crime/Our-response-to-environmental-crime>. Accessed January, 2020.
- INTERPOL-UNEP (2016). *Strategic Report: Environment, Peace and Security – A Convergence of Threats*. Lyon, France: INTERPOL and United Nations Environment Programme (UNEP). Available at: [https://wedocs.unep.org/bitstream/handle/20.500.11822/17008/environment\\_peace\\_security.pdf?sequence=1&isAllowed=y](https://wedocs.unep.org/bitstream/handle/20.500.11822/17008/environment_peace_security.pdf?sequence=1&isAllowed=y).
- IRF (2019). *2009–2019: Ranger Roll of Honour In Memoriam*. International Ranger Federation (IRF). Available at: <https://www.internationalrangers.org/wp-content/uploads/2019/07/2009-2019-Honour-Roll-2-1.pdf>. Accessed August 23, 2019.
- Isaac, G.L. (1978). The Harvey Lecture Series, 1977–1978. Food sharing and human evolution: archaeological evidence from the Plio-Pleistocene of East Africa. *Journal of Anthropological Research*, **34**(3), 311–25. DOI: [10.1086/jar.34.3.3629782](https://doi.org/10.1086/jar.34.3.3629782).
- IUCN (2012). *IUCN Red List Categories and Criteria, Version 3.1*, 2nd edn. Gland, Switzerland, and Cambridge, UK: International Union for Conservation of Nature (IUCN) Species Survival Commission (SSC). Available at: <https://www.iucnredlist.org/resources/categories-and-criteria>.
- IUCN (2014). *Regional Action Plan for the Conservation of Western Lowland Gorillas and Central Chimpanzees 2015–2025*. Gland, Switzerland: International Union for Conservation of Nature (IUCN) Species Survival Commission (SSC), Primate Specialist Group. Available at: Available at: [https://d2ouvy59podg6k.cloudfront.net/downloads/wea\\_apes\\_plan\\_2014\\_7mb.pdf](https://d2ouvy59podg6k.cloudfront.net/downloads/wea_apes_plan_2014_7mb.pdf).
- IUCN (2018). *The IUCN Red List of Threatened Species. Version 2018-1*. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <http://www.iucnredlist.org>. Accessed June, 2018.
- IUCN (2019). *The IUCN Red List of Threatened Species. Version 2019-2*. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <https://www.iucnredlist.org>. Accessed 2019.
- IUCN (2020). *The IUCN Red List of Threatened Species. Version 2020-1*. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <https://www.iucnredlist.org>. Accessed March 19, 2020.
- IUCN and ICCN (2012). *Bonobo (Pan paniscus): Conservation Strategy 2012–2022*. Gland, Switzerland: International Union for Conservation of Nature (IUCN) Species Survival Commission (SSC), Primate Specialist Group, and Institut Congolais pour la Conservation de la Nature (ICCN). Available at: <https://portals.iucn.org/library/efiles/documents/2012-083.pdf>.
- IUCN SSC (n.d.-a). *A.P.E.S. portal: species*. Leipzig, Germany: Max Planck Society. Available at: <http://apesportal.eva.mpg.de/status/species>. Accessed 2019–2020.
- IUCN SSC (n.d.-b). *A.P.E.S. portal: about*. Leipzig, Germany: Max Planck Society. Available at: <http://apes.eva.mpg.de>. Accessed 2019–2020.
- IUCN SSC (n.d.-c). *A.P.E.S. portal database: literature*. Leipzig, Germany: Max Planck Society. Available at: <http://apesportal.eva.mpg.de/database/literature>. Accessed 2019–2020.
- IUCN SSC (n.d.-d). *A.P.E.S. portal database: data archive*. Leipzig, Germany: Max Planck Society. Available at: <http://apesportal.eva.mpg.de/database/archive>. Accessed 2019–2020.
- IUCN SSC PSG (n.d.). *Action plans*. Arlington, VA: International Union for Conservation of Nature (IUCN) Species Survival Commission (SSC), Primate Specialist Group (PSG). Available at: [http://www.primate-sg.org/action\\_plans/](http://www.primate-sg.org/action_plans/). Accessed May, 2019.
- IUCN SSC PSG SSA (n.d.-a). *Category: surveys*. Oxford, UK: International Union for Conservation of Nature (IUCN) Species Survival Commission (SSC), Primate Specialist Group (PSG) Section on Small Apes (SSA). Available at: <https://gibbons.asia/category/surveys/>. Accessed October, 2019.

- IUCN SSC PSG SSA (n.d.-b). *Resources*. Oxford, UK: International Union for Conservation of Nature (IUCN) Species Survival Commission (SSC), Primate Specialist Group (PSG) Section on Small Apes (SSA). Available at: <https://gibbons.asia/resources/>. Accessed October, 2019.
- J.A.C.K. (n.d.). *Support a chimpanzee*. Katanga, RDC: J.A.C.K. Available at: <https://jackchimp.yolasite.com/support-a-chimp.php>. Accessed December 31, 2018.
- Jacobsen, S., Freeman, H., Santymire, R. and Ross, S. (2017). Atypical early experiences of captive chimpanzees (*Pan troglodytes*) are associated with higher hair cortisol concentrations as adults. *Royal Society Open Science*, **4**, 170932. DOI: 10.1098/rsos.170932.
- Jambiya, G., Milledge, S. and Mtango, N. (2007). *'Night Time Spinach': Conservation and Livelihood Implications of Wild Meat Use in Refugee Situations in North-Western Tanzania*. Dar es Salaam, Tanzania: TRAFFIC East/Southern Africa.
- Jensvold, M.L. (2013). *Affidavit of Mary Lee Jensvold In the Matter of a Proceeding under Article 70 of the CPLR for a Writ of Habeas Corpus*. The Nonhuman Rights Project, Inc., on behalf of Tommy, Petitioners, v. Patrick C. Lavery, individually and as an officer of Circle L Trailer Sales, Inc., Diane Lavery, and Circle L Trailer Sales, Inc. November 24, 2013. Available at: <https://www.nonhumanrights.org/content/uploads/Ex-7-Jensvold-Affidavit-Tommy-Case.pdf>. Accessed December, 2019.
- Jensvold, M.L. (2015). *Affidavit of Mary Lee Jensvold In the Matter of a Proceeding under Article 70 of the CPLR for a Writ of Habeas Corpus*. The Nonhuman Rights Project, Inc., on behalf of Kiko, Petitioner, v. Carmen Presti, individually and as an officer and director of The Primate Sanctuary, Inc., Christie E. Presti, individually and as an officer and director of The Primate Sanctuary, Inc., and the Primate Sanctuary, Inc. September 29, 2015. Available at: <https://www.nonhumanrights.org/client-kiko/>. Accessed December, 2019.
- JGI (n.d.). *Project Ushiriki Consortium*. Vienna, VA: Jane Goodall Institute (JGI). Available at: <https://www.jane-goodall.org/project/africa-programs/ushiriki/>. Accessed July, 2020.
- JGI, TNC, CBSG, et al. (2011). *Tanzania Chimpanzee Conservation Action Planning Workshop Report*. Arlington, USA: Jane Goodall Institute (JGI). Available at: [http://static1.squarespace.com/static/f/1200343/26917569/1458146882763/tz\\_c-cap\\_report\\_2012.pdf?token=j12ekz%2fkltus5fgyhvgvgnusyf8pk%3d](http://static1.squarespace.com/static/f/1200343/26917569/1458146882763/tz_c-cap_report_2012.pdf?token=j12ekz%2fkltus5fgyhvgvgnusyf8pk%3d).
- JGI South Africa (n.d.). *Adoptions*. Mpumalanga, South Africa: Jane Goodall Institute (JGI) South Africa. Available at: <https://www.chimpeden.com/adoptions.html>. Accessed December 1, 2018.
- Johnston, M. (2015). Auckland Zoo puts down 'unhappy and agitated' gibbon. *New Zealand Herald*, January 22, 2015. Available at: [https://www.nzherald.co.nz/nz/news/article.cfm?c\\_id=1&objectid=11389939](https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=11389939).
- Jones, K.E., Patel, N.G., Levy, M.A., et al. (2008). Global trends in emerging infectious diseases. *Nature*, **451**, 990–3. DOI: 10.1038/nature06536.
- Joshi, L., Wijaya, K., Sirait, M. and Mulyoutami, E. (2004). *Indigenous Systems and Ecological Knowledge among Dayak People in Kutai Barat, East Kalimantan – A Preliminary Report*. Bogor: World Agroforestry Centre (ICRAF). Available at: <http://www.worldagroforestry.org/downloads/Publications/PDFS/wpo4193.pdf>.
- Junker, J., Arroyo-Rodríguez, V., Boonratana, R., et al. (2020). Severe lack of evidence limits effective conservation of the world's primates. *BioScience*, **70**(9), 794–803. DOI: 10.1093/biosci/biaao82.
- Junker, J., Blake, S., Boesch, C., et al. (2012). Recent decline in suitable environmental conditions for African great apes. *Diversity and Distributions*, **18**(11), 1077–91. DOI: 10.1111/ddi.12005.
- Junker, J., Boesch, C., Freeman, T., et al. (2015a). Integrating wildlife conservation with conflicting economic land-use goals in a West African biodiversity hotspot. *Basic and Applied Ecology*, **16**, 690–702.
- Junker, J., Boesch, C., Mundry, R., et al. (2015b). Education and access to fish but not economic development predict chimpanzee and mammal occurrence in West Africa. *Biological Conservation*, **182**, 27–35. DOI: 10.1016/j.biocon.2014.11.034.
- Junker, J., Kühl, H.S., Orth, L., et al. (2017). *Primate Conservation: Global Evidence for the Effects of Interventions*. Cambridge, UK: University of Cambridge.
- Juste, J., Fa, J.E., Perez Del Val, J. and Castroviejo, J. (1995). Market dynamics of bushmeat species in Equatorial Guinea. *Journal of Applied Ecology*, **32**(3), 454–67. DOI: 10.2307/2404644.
- Kakati, K. (2000). *Impact of forest fragmentation on the Hoolock gibbon (Hylobates hoolock) in Assam, India*. PhD thesis. Cambridge, UK: University of Cambridge.

- Kalan, A.K., Mundry, R., Wagner, O.J.J., *et al.* (2015). Towards the automated detection and occupancy estimation of primates using passive acoustic monitoring. *Ecological Indicators*, **54**, 217–26. DOI: 10.1016/j.ecolind.2015.02.023.
- Kalan, A.K., Piel, A.K., Mundry, R., *et al.* (2016). Passive acoustic monitoring reveals group ranging and territory use: a case study of wild chimpanzees (*Pan troglodytes*). *Frontiers in Zoology*, **13**(1), 34. DOI: 10.1186/s12983-016-0167-8.
- Kalpers, J., Williamson, E.A., Robbins, M.M., *et al.* (2003). Gorillas in the crossfire: population dynamics of the Virunga mountain gorillas over the past three decades. *Oryx*, **37**(3), 326–37. DOI: 10.1017/S0030605303000589.
- Kano, T. and Asato, R. (1994). Hunting pressure on chimpanzees and gorillas in the Motaba River area, northeastern Congo. *African Study Monographs*, **15**(3), 1–3.
- Kaplan, H., Hill, K., Lancaster, J. and Hurtado, A.M. (2000). A theory of human life history evolution: Diet, intelligence, and longevity. *Evolutionary Anthropology: Issues, News, and Reviews*, **9**(4), 156–85. DOI: 10.1002/1520-6505(2000)9:4<156::Aid-evan5>3.0.co;2-7.
- Karam-Gemael, M., Loyola, R., Penha, J. and Izzo, T. (2018). Poor alignment of priorities between scientists and policymakers highlights the need for evidence-informed conservation in Brazil. *Perspectives in Ecology and Conservation*, **16**(3), 125–32. DOI: 10.1016/j.pecon.2018.06.002.
- Karanth, K.K., Gopalaswamy, A.M., DeFries, R. and Ballal, N. (2012). Assessing patterns of human–wildlife conflicts and compensation around a central Indian protected area. *PLoS ONE*, **7**(12), e50433. DOI: 10.1371/journal.pone.0050433.
- Karesh, W.B., Cook, R.A., Bennett, E.L. and Newcomb, J. (2005). Wildlife trade and global disease emergence. *Emerging Infectious Diseases*, **11**(7), 1000–2. DOI: 10.3201/eid1107.050194.
- Kasane Conference on The Illegal Wildlife Trade (2015). *Kasane Conference on The Illegal Wildlife Trade 25th March 2015: Statement*. London, UK: Department for Environment, Food & Rural Affairs (Defra). Available at: <https://www.gov.uk/government/publications/illegal-wildlife-trade-kasane-statement>.
- Keane, A., Jones, J.P.G., Edwards-Jones, G. and Milner-Gulland, E.J. (2008). The sleeping policeman: understanding issues of enforcement and compliance in conservation. *Animal Conservation*, **11**(2), 75–82. DOI: 10.1111/j.1469-1795.2008.00170.x.
- Keane, A., Jones, J.P.G. and Milner-Gulland, E.J. (2011). Encounter data in resource management and ecology: pitfalls and possibilities. *Journal of Applied Ecology*, **48**(5), 1164–73. DOI: 10.1111/j.1365-2664.2011.02034.x.
- Kemp, S. (2019). *The Global State of Digital in 2019 Report*. Canada: Hootsuite, We Are Social. Available at: <https://hootsuite.com/pages/digital-in-2019>. Accessed August 1, 2019.
- Kerr, M. (2017). Great apes in Asian circus-style shows on rise – so is trafficking. *Mongabay*, April 12, 2017. Available at: <https://news.mongabay.com/2017/04/great-apes-in-asian-circus-style-shows-on-rise-so-is-trafficking/>. Accessed March 25, 2020.
- Khan, M.K.M. (1970). Distribution and population of siamang and gibbons in the state of Perak. *Malayan Nature Journal*, **24**, 3–8.
- Kheng, V., Zichello, J.M., Lumbantobing, D.N., *et al.* (2018). Phylogeography, population structure, and conservation of the Javan gibbon (*Hylobates moloch*). *International Journal of Primatology*, **39**(1), 5–26. DOI: 10.1007/s10764-017-0005-7.
- King, J. (2013). *Affidavit of James King In the Matter of a Proceeding under Article 70 of the CPLR for a Writ of Habeas Corpus. The Nonhuman Rights Project, Inc., on behalf of Tommy, Petitioners, v. Patrick C. Lavery, individually and as an officer of Circle L Trailer Sales, Inc., Diane Lavery, and Circle L Trailer Sales, Inc.* November 21, 2013. Available at: <https://www.nonhumanrights.org/content/uploads/Ex-8-King-Affidavit-Tommy-Case.pdf>. Accessed December, 2019.
- King, M.L., Jr (1963). Letter from Birmingham Jail [The Negro Is Your Brother]. *The Atlantic Monthly*, Available at: [https://web.cn.edu/kwheeler/documents/Letter\\_Birmingham\\_Jail.pdf](https://web.cn.edu/kwheeler/documents/Letter_Birmingham_Jail.pdf). Accessed September, 2019.
- King, S. (n.d.). Cinema simians. *Los Angeles Times*. Available at: <https://www.latimes.com/entertainment/la-et-monkeymovies-pg-photogallery.html>. Accessed January, 2020.
- Kirkby, A., Spira, C., Bahati, B., *et al.* (2015). *Investigating Artisanal Mining and Bushmeat Around Protected Areas: Kahuzi-Biega National Park and Itombwe Reserve*. New York, NY: Wildlife Conservation Society (WCS).
- Knight, A. (2008). The beginning of the end for chimpanzee experiments? *Philosophy, Ethics, and Humanities in Medicine*, **3**(1), 16. DOI: 10.1186/1747-5341-3-16.

- Knott, C.D. (1998). Changes in orangutan caloric intake, energy balance, and ketones in response to fluctuating fruit availability. *International Journal of Primatology*, **19**(6), 1061–79. DOI: 10.1023/a:1020330404983.
- Knott, C.D. (2005). Energetic responses to food availability in the great apes: implications for hominin evolution. In *Seasonality in Primates: Studies of Living and Extinct Human and Non-Human Primates*, ed. D.K. Brockman and C.P. van Schaik. New York, NY: Cambridge University Press, pp. 351–78.
- Knott, C.D., Scott, A.M., O'Connell, C.A., et al. (2019). Possible male infanticide in wild orangutans and a re-evaluation of infanticide risk. *Scientific Reports*, **9**(1), 7806. DOI: 10.1038/s41598-019-42856-w.
- Knowledge@Wharton (2018). How tech companies are helping to curb wildlife trafficking. *Knowledge@Wharton*, March 14, 2018. Available at: <https://knowledge.wharton.upenn.edu/article/how-tech-companies-are-helping-to-curb-wildlife-trafficking/>.
- Knowles, G. (2016). Why 1,800 tigers are in a rundown China park: to be made into wine. *South China Morning Post*, April 21, 2016. Available at: <https://www.scmp.com/magazines/post-magazine/travel-leisure/article/1937522/why-1800-tigers-are-rundown-china-park-be>.
- Kockelman, P. (2016). *The Chicken and the Quetzal: Incommensurate Ontologies and Portable Values in Guatemala's Cloud Forest*. Durham, NC: Duke University Press.
- Köndgen, S., Kühl, H., N'Goran, P.K., et al. (2008). Pandemic human viruses cause decline of endangered great apes. *Current Biology*, **18**(4), 260–4. DOI: 10.1016/j.cub.2008.01.012.
- König, A. (2016). Identity constructions and Dayak ethnic strife in West Kalimantan, Indonesia. *The Asia Pacific Journal of Anthropology*, **17**(2), 121–37. DOI: 10.1080/14442213.2016.1146917.
- Korematsu v. United States*. 324 US 885 (1944). Available at: <http://cdn.loc.gov/service/ll/usrep/usrep323/usrep323214/usrep323214.pdf>.
- Kormos, R., Boesch, C., Bakarr, M.I. and Butynski, T.M. (2003). *West African Chimpanzees: Status, Survey and Conservation Action Plan*. Gland, Switzerland: International Union for Conservation of Nature (IUCN) Species Survival Commission (SSC). Available at: <https://portals.iucn.org/library/sites/library/files/documents/2003-059.pdf>.
- Kormos, R., Kormos, C.F., Humle, T., et al. (2014). Great apes and biodiversity offset projects in Africa: the case for national offset strategies. *PLoS ONE*, **9**(11), e111671. DOI: 10.1371/journal.pone.0111671.
- Kortlandt, A. (1986). The use of stone tools by wild living chimpanzees and earliest hominids. *Journal of Human Evolution*, **15**, 77–132. DOI: 10.1016/S0047-2484(86)80068-9.
- Kouakou, C.Y., Boesch, C. and Kühl, H. (2009). Estimating chimpanzee population size with nest counts: validating methods in Taï National Park. *American Journal of Primatology*, **71**(6), 447–57. DOI: 10.1002/ajp.20673.
- Kramer, R., Sawyer, R., Amato, S. and LaFontaine, P. (2017). *The US Elephant Ivory Market: A New Baseline*. Washington DC: TRAFFIC. Available at: [http://www.trafficj.org/publication/17\\_The\\_US\\_Elephant\\_Ivory\\_Market.pdf](http://www.trafficj.org/publication/17_The_US_Elephant_Ivory_Market.pdf).
- Kramm, W. (1879). Tochtjes in Tapanoeli. *Sumatra-Courant*, **20**, 1–2.
- Krishnasamy, K. and Stoner, S. (2016). *Trading Faces: A Rapid Assessment on the use of Facebook to Trade Wildlife in Peninsular Malaysia*. Petaling Jaya, Malaysia: TRAFFIC. Available at: <https://www.traffic.org/site/assets/files/2434/trading-faces-facebook-malaysia.pdf>.
- Kroeber, A.L. and Kluckhohn, C. (1952). *Culture: A Critical Review of Concepts and Definitions*. Papers of the Peabody Museum of American Archeology and Ethnology, Vol. XLVII, No. 1. Cambridge, MA: Harvard University.
- Kronen, M., Vunisea, A., Magron, F. and McArdle, B. (2010). Socio-economic drivers and indicators for artisanal coastal fisheries in Pacific island countries and territories and their use for fisheries management strategies. *Marine Policy*, **34**(6), 1135–43. DOI: 10.1016/j.marpol.2010.03.013.
- Kübler, S., Owenga, P., Reynolds, S.C., Rucina, S.M. and King, G.C.P. (2015). Animal movements in the Kenya Rift and evidence for the earliest ambush hunting by hominins. *Scientific Reports*, **5**, 14011. DOI: 10.1038/srep14011.
- Kühl, H.S., Boesch, C., Kulik, L., et al. (2019). Human impact erodes chimpanzee behavioral diversity. *Science*, **363**(6434), 1453. DOI: 10.1126/science.aau4532.
- Kühl, H., Maisels, F., Ancrenaz, M. and Williamson, E.A. (2008). *Best Practice Guidelines for Surveys and Monitoring of Great Ape Populations*. Gland, Switzerland: International Union for Conservation of Nature (IUCN) Species Survival Commission (SSC), Primate Specialist Group. Available at: <https://portals.iucn.org/library/files/documents/ssc-op-036.pdf>.

- Kühl, H.S., Nzengui, C., Yeno, S.L.D., *et al.* (2009). Discriminating between village and commercial hunting of apes. *Biological Conservation*, **142**(7), 1500–6. DOI: 10.1016/j.biocon.2009.02.032.
- Kühl, H.S., Sop, T., Williamson, E.A., *et al.* (2017). The critically endangered western chimpanzee declines by 80%. *American Journal of Primatology*, **79**(9), e22681-e. DOI: 10.1002/ajp.22681.
- Kümpel, N.F., Milner-Gulland, E.J., Cowlishaw, G. and Rowcliffe, J.M. (2010). Incentives for hunting: the role of bushmeat in the household economy in rural Equatorial Guinea. *Human Ecology*, **38**(2), 251–64. DOI: 10.1007/s10745-010-9316-4.
- Kupika, O. and Nhamo, G. (2016). Mainstreaming biodiversity and wildlife management into climate change policy frameworks in selected east and southern African countries. *Jàmbá: Journal of Disaster Risk Studies*, **8**(3). DOI: 10.4102/jamba.v8i3.254.
- LAGA (2015). *Annual Report January – December 2015*. Cameroon: Last Great Ape Organization (LAGA). Available at: <http://www.laga-enforcement.org/en/annual-report-2015-R>.
- LAGA (n.d.). *Home*. Cameroon: Last Great Ape Organization (LAGA). Available at: <http://www.laga-enforcement.org>. Accessed September, 2020.
- Lambert, J.E. (1998). Primate frugivory in Kibale National Park, Uganda, and its implications for human use of forest resources. *African Journal of Ecology*, **36**(3), 234–40. DOI: 10.1046/j.1365-2028.1998.00131.x.
- Lambert, J.E. (2011). Primate seed dispersers as umbrella species: a case study from Kibale National Park, Uganda, with implications for Afrotropical forest conservation. *American Journal of Primatology*, **73**(1), 9–24. DOI: 10.1002/ajp.20879.
- Lamprey, R. (2017). *Community-based restoration of ecological corridors between chimpanzee forests in Uganda's Albertine rift*. Unpublished background paper. Commissioned by the Arcus Foundation.
- Lange, K.E. (2017). Sanctuary. *The Humane Society*, May 1, 2017. Available at: <https://www.humanesociety.org/news/abandoned-chimps-find-sanctuary>.
- Lanjouw, A. (2015). Economic development and conservation of biodiversity: understanding the interface of ape conservation and industrial agriculture. In *State of the Apes: Industrial Agriculture and Ape Conservation*, ed. Arcus Foundation. Cambridge, UK: Cambridge University Press, pp. 13–39.
- Lappan, S. (2008). Male care of infants in a siamang (*Sympthalangus syndactylus*) population including socially monogamous and polyandrous groups. *Behavioral Ecology and Sociobiology*, **62**(8), 1307–17. DOI: 10.1007/s00265-008-0559-7.
- Lappan, S. (2009). Flowers are an important food for small apes in southern Sumatra. *American Journal of Primatology*, **71**(8), 624–35. DOI: 10.1002/ajp.20691.
- Larkin, M. (2010). Latin America's welfare issues prevalent yet ignored. *JAVMA News*, January 15, 2010. Available at: <https://www.avma.org/News/JAVMANews/Pages/100115e.aspx>.
- Laurance, W.F., Carolina Useche, D., Rendeiro, J., *et al.* (2012). Averting biodiversity collapse in tropical forest protected areas. *Nature*, **489**, 290. DOI: 10.1038/nature11318.
- Laurance, W.F., Croes, B.M., Tchignoumba, L., *et al.* (2006). Impacts of roads and hunting on central African rainforest mammals. *Conservation Biology*, **20**(4), 1251–61. DOI: 10.1111/j.1523-1739.2006.00420.x.
- Lavorgna, A., Rutherford, C., Vaglica, V., Smith, M.J. and Sajeva, M. (2018). CITES, wild plants, and opportunities for crime. *European Journal on Criminal Policy and Research*, **24**(3), 269–88. DOI: 10.1007/s10610-017-9354-1.
- Laws of Malaysia (2008). *International Trade in Endangered Species Act 2008 [Act 686] (as at 1 October 2018)*. Malaysia: Laws of Malaysia. Available at: <http://www.agc.gov.my/agcportal/uploads/files/Publications/LOM/EN/Act%20686.pdf>.
- Lawson, K. and Vines, A. (2014). *Global Impacts of the Illegal Wildlife Trade: The Costs of Crime, Insecurity and Institutional Erosion*. London, UK: Chatham House (The Royal Institute of International Affairs). Available at: <https://www.chathamhouse.org/sites/default/files/public/Research/Africa/o214Wildlife.pdf>.
- LCRP (n.d.). *Our story*. Liberia Chimpanzee Rescue and Protection (LCRP). Available at: <http://www.liberia-chimpanzeerescue.org/our-story.html>. Accessed November 1, 2018.
- League of Nations (1926). *The Convention to Suppress the Slave Trade and Slavery*. Geneva, Switzerland: League of Nations. Available at: [https://ec.europa.eu/anti-trafficking/legislation-and-case-law/international-legislation-united-nations/1926-slavery-convention\\_en](https://ec.europa.eu/anti-trafficking/legislation-and-case-law/international-legislation-united-nations/1926-slavery-convention_en).

- Leberatto, A.C. (2016). Understanding the illegal trade of live wildlife species in Peru. *Trends in Organized Crime*, **19**(1), 42–66. DOI: 10.1007/s12117-015-9262-z.
- Lee, F. (2013). Gibbons escape at Christchurch's Orana Park. *Stuff*, September 8, 2013. Available at: <https://www.stuff.co.nz/the-press/news/9138922/Gibbons-escape-at-Christchurchs-Orana-Park>.
- Lee, T., Sigouin, A., Pinedo-Vasquez, M. and Nasi, R. (2014). *The Harvest of Wildlife for Bushmeat and Traditional Medicine in East, South and Southeast Asia: Current Knowledge Base, Challenges, Opportunities and Areas for Future Research*. Bogor, Indonesia: Center for International Forestry Research (CIFOR). Available at: [http://www.cifor.org/publications/pdf\\_files/OccPapers/OP-115.pdf](http://www.cifor.org/publications/pdf_files/OccPapers/OP-115.pdf).
- Leendertz, S., Wich, S., Ancrenaz, M., et al. (2016). Ebola in great apes: current knowledge, possibilities for vaccination, and implications for conservation and human health. *Mammal Review*, **47**(2), 98–111. DOI: 10.1111/mam.12082.
- Legal Atlas (2018). *Legis-Apes Project*. Presented at the Congress of the International Primatology Society, August, 2018, Nairobi, Kenya.
- Legal Atlas (n.d.). *Home*. Missoula, MT: Legal Atlas. Available at: <https://www.legal-atlas.com/>. Accessed September, 2020.
- Leighton, D.S.R. (1987). Gibbons: territoriality and monogamy. In *Primate Societies*, ed. B.B. Smuts, D.L. Cheyney, R.M. Seyfarth, R.W. Wrangham and T.T. Struhsaker. Chicago IL: University of Chicago Press.
- Leighton, M. (1993). Modelling dietary selectivity by Bornean orangutans: evidence of multiple criteria in fruit selection. *International Journal of Primatology*, **14**(2), 257–313.
- Leighty, K.A., Valuska, A.J., Grand, A.P., et al. (2015). Impact of visual context on public perceptions of non-human primate performers. *PLoS ONE*, **10**(2), e0118487. DOI: 10.1371/journal.pone.0118487.
- Leiman, A. and Ghaffar, N. (1996). Use, misuse, and abuse of the orang-utan: exploitation as a threat or the only real salvation? In *The Exploitation of Mammal Populations*, ed. V.J. Taylor. London, UK: Chapman & Hall, pp. 345–57. DOI: 10.1007/978-94-009-1525-1\_20.
- Lescuyer, G. and Nasi, R. (2016). Financial and economic values of bushmeat in rural and urban livelihoods in Cameroon: inputs to the development of public policy. *International Forestry Review*, **18**(s1), 93–107, 15. DOI: 10.1505/146554816819683726.
- Levi, T., Lu, F., Yu, D.W. and Mangel, M. (2011). The behaviour and diet breadth of central-place foragers: an application to human hunters and Neotropical game management. *Evolutionary Ecology Research*, **13**, 171–85. Available at: <http://www.evolutionary-ecology.com/issues/v13/n02/ggar2663.pdf>.
- Ley de Conservación de la Vida Silvestre (1992). *Ley de Conservación de la Vida Silvestre 7317/1992, As amended October 4, 1995*. La Asamblea Legislativa de la República de Costa Rica. Available at: <https://studylib.es/doc/697346/ley-de-conservacion-de-la-vida-silvestre--n°-7317>.
- Ley General de Aduanas (1995). *Ley General de Aduanas No. 7557* La Asamblea Legislativa de la República de Costa Rica. Available at: <https://www.crecex.com/asesoria-juridica/legislacion-consulta/aduanas/ley-aduanas.pdf>.
- Li, B., Li, M., Li, J., et al. (2018). The primate extinction crisis in China: immediate challenges and a way forward. *Biodiversity and Conservation*, **27**(13), 3301–27.
- Li, P.J. (2013). Explaining China's wildlife crisis: cultural tradition or politics of development. In *Ignoring Nature No More: The Case for Compassionate Conservation*, ed. M. Bekoff. Chicago, IL: The University of Chicago Press, pp. 317–30.
- Li, P.J. and Davey, G. (2013). Culture, reform politics, and future directions: a review of China's animal protection challenge. *Society & Animals*, **21**(2013), 34–53. DOI: 10.1163/15685306-12341264.
- Li, T.M. (2015). *Social Impacts of Oil Palm in Indonesia: A Gendered Perspective from West Kalimantan*. Bogor, Indonesia: Center for International Forestry Research (CIFOR). DOI: 10.17528/cifor/005579.
- Lincoln Park Zoo (n.d.). *Chimpanzee SSP*. Chicago, IL: Lincoln Park Zoo. Available at: <https://www.lpzoo.org/conservation-science/projects/chimpanzee-ssp>. Accessed January, 2020.
- Lindsey, P., Balme, G., Becker, M., et al. (2012). *Illegal Hunting and the Bush-Meat Trade in Savanna Africa: Drivers, Impacts and Solutions to Address the Problem*. New York, NY: Panthera.
- Lindsey, P. and Bento, C. (2012). *Illegal Hunting and the Bushmeat Trade in Central Mozambique. A Case-Study from Coutada 9, Manica Province*. Harare, Zimbabwe: TRAFFIC East/Southern Africa. Available at: <https://www.traffic.org/site/assets/files/7163/bushmeat-trade-mozambique.pdf>.

- Lindsey, P.A., Romañach, S.S., Matema, S., *et al.* (2011). Dynamics and underlying causes of illegal bushmeat trade in Zimbabwe. *Oryx*, **45**(1), 84–95. DOI: 10.1017/S0030605310001274.
- Lindshield, S., Bogart, S.L., Gueye, M., Ndiaye, P.I. and Pruetz, J.D. (2019). Informing protection efforts for critically endangered chimpanzees (*Pan troglodytes verus*) and sympatric mammals amidst rapid growth of extractive industries in Senegal. *Folia Primatologica*, **90**(2), 124–36. DOI: 10.1159/000496145.
- Lingomo, B. and Kimura, D. (2009). Taboo of eating bonobo among the Bongando people in the Wamba region, Democratic Republic of Congo. *African Study Monographs*, **30**(4), 209–25.
- Linkie, M., Martyr, D.J., Harihar, A., *et al.* (2015). Editor's choice: safeguarding Sumatran tigers: evaluating effectiveness of law enforcement patrols and local informant networks. *Journal of Applied Ecology*, **52**(4), 851–60. DOI: 10.1111/1365-2664.12461.
- Liswanto, D., Whittaker, D., Geissmann, T. and Whitten, T. (2020). *Hylobates klossii. The IUCN Red List of Threatened Species*. 2020: e.T10547A17967475. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <https://dx.doi.org/10.2305/IUCN.UK.2020-2.RLTS.T10547A17967475.en>.
- Littleton, J. (2005). Fifty years of chimpanzee demography at Taronga Park Zoo. *American Journal of Primatology*, **67**(3), 281–98. DOI: 10.1002/ajp.20185.
- Liu, Z.H., Jiang, H.S., Zhang, R.Z., *et al.* (1987). Field report on the Hainan gibbon. *Primate Conservation*, **8**, 49–50.
- Loibooki, M., Hofer, H., Campbell, K.L. and East, M.L. (2002). Bushmeat hunting by communities adjacent to the Serengeti National Park, Tanzania: the importance of livestock ownership and alternative sources of protein and income. *Environmental Conservation*, **29**(3), 391–8. DOI: 10.1017/S0376892902000279.
- Loken, B., Boer, C. and Kasyanto, N. (2015). Opportunistic behaviour or desperate measure? Logging impacts may only partially explain terrestriality in the Bornean orang-utan *Pongo pygmaeus morio*. *Oryx*, **49**(3), 461–4. DOI: 10.1017/S0030605314000969.
- Loken, B., Spehar, S. and Rayadin, Y. (2013). Terrestriality in the Bornean orangutan (*Pongo pygmaeus morio*) and implications for their ecology and conservation. *American Journal of Primatology*, **75**(11), 1129–38. DOI: 10.1002/ajp.22174.
- London Conference on the Illegal Wildlife Trade (2014). *London Conference on the Illegal Wildlife Trade 12–13 February 2014: Declaration*. London, UK: Department for Environment, Food & Rural Affairs (Defra), Department for International Development (DFID), Foreign & Commonwealth Office (FCO) and Home Office. Available at: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/281289/london-wildlife-conference-declaration-140213.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/281289/london-wildlife-conference-declaration-140213.pdf).
- London Conference on the Illegal Wildlife Trade (2018). *London Conference on the Illegal Wildlife Trade (October 2018): Declaration*. London, UK: Department for Environment, Food & Rural Affairs (Defra), Department for International Development (DFID), Foreign & Commonwealth Office (FCO) and Home Office. Available at: <https://www.gov.uk/government/publications/declaration-london-conference-on-the-illegal-wildlife-trade-2018/london-conference-on-the-illegal-wildlife-trade-october-2018-declaration>.
- Lounela, A. (2015). Climate change disputes and justice in Central Kalimantan, Indonesia. *Asia Pacific Viewpoint*, **56**(1), 62–78. DOI: 10.1111/apv.12088.
- Lowe, C. (2006). *Wild Profusion: Biodiversity Conservation in an Indonesian Archipelago*. Princeton, NJ: Princeton University Press.
- Macfie, E.J. and Williamson, E.A. (2010). *Best Practice Guidelines for Great Ape Tourism*. Gland, Switzerland: International Union for Conservation of Nature (IUCN) Species Survival Commission (SSC), Primate Specialist Group. Available at: <https://portals.iucn.org/library/efiles/documents/SSC-OP-038.pdf>.
- Machovina, B., Feeley, K.J. and Ripple, W.J. (2015). Biodiversity conservation: the key is reducing meat consumption. *Science of The Total Environment*, **536**, 419–31. DOI: 10.1016/j.scitotenv.2015.07.022.
- Madden, F. (2006). Gorillas in the garden: human–wildlife conflict at Bwindi Impenetrable National Park. *Policy Matters*, **14**, 180–90.
- Maekawa, M., Lanjouw, A., Rutagarama, E. and Sharp, D. (2015). Mountain gorilla ecotourism: supporting macroeconomic growth and providing local livelihoods. In *Livelihoods, Natural Resources, and Post-Conflict Peacebuilding*, ed. H. Young and L. Goldman. Abingdon, UK: Taylor and Francis, pp. 167–86.
- Mager, D. (2000). Freed orphan happy at last. *New Zealand Herald*, June 30, 2000. Available at: [https://www.nzherald.co.nz/nz/news/article.cfm?c\\_id=1&objectid=129664](https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=129664).

- Maisels, F., Bergl, R.A. and Williamson, E.A. (2018). *Gorilla gorilla* (amended version of 2016 assessment). *The IUCN Red List of Threatened Species*. 2018: e.T9404A136250858. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <http://dx.doi.org/10.2305/IUCN.UK.2018-2.RLTS.T9404A136250858.en>.
- Maisels, F., Keming, E., Kemei, M. and Toh, C. (2001). The extirpation of large mammals and implications for montane forest conservation: the case of the Kilum-Ijim Forest, North-west Province, Cameroon. *Oryx*, **35**(4), 322–31. DOI: [10.1046/j.1365-3008.2001.00204.x](https://doi.org/10.1046/j.1365-3008.2001.00204.x).
- Maisels, F., Strindberg, S., Blake, S., et al. (2013). Devastating decline of forest elephants in central Africa. *PLoS ONE*, **8**(3), e59469. DOI: [10.1371/journal.pone.0059469](https://doi.org/10.1371/journal.pone.0059469).
- Maisels, F., Strindberg, S., Breuer, T., et al. (2018). *Gorilla gorilla* ssp. *gorilla* (amended version of 2016 assessment). *The IUCN Red List of Threatened Species*. 2018: e.T9406A136251508. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <http://dx.doi.org/10.2305/IUCN.UK.2016-2.RLTS.T9406A136251508.en>.
- Maisels, F., Strindberg, S., Greer, D., et al. (2016). *Pan troglodytes* ssp. *troglodytes* (errata version published in 2016). *The IUCN Red List of Threatened Species*. 2016: e.T15936A102332276. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <http://dx.doi.org/10.2305/IUCN.UK.2016-2.RLTS.T15936A17990042.en>.
- Maldonado, O., Aveling, C., Cox, D., et al. (2012). *Grauer's Gorillas and Chimpanzees in Eastern Democratic Republic of Congo (Kahuzi-Biega, Maiko, Tayna and Itombwe Landscape): Conservation Action Plan 2012–2022*. Gland, Switzerland: International Union for Conservation of Nature (IUCN) Species Survival Commission (SSC), Primate Specialist Group, Ministry of Environment, Nature Conservation & Tourism, Institut Congolais pour la Conservation de la Nature & the Jane Goodall Institute. Available at: <https://www.iucn.org/content/grauers-gorillas-and-chimpanzees-eastern-democratic-republic-congo-kahuzi-biega-maiko-tayna-and-itombwe-landscape-conservation-action-plan-2012-2022>.
- Malone, N.M., Fuentes, A., Purnama, A.R. and Adi Putra, I.M.W. (2003). Displaced Hylobatids: biological, cultural, and economic aspects of the primate trade in Java and Bali, Indonesia. *Tropical Biodiversity*, **8**(1), 41–9.
- Margules, C.R. and Pressey, R.L. (2000). Systematic conservation planning. *Nature*, **405**(6783), 243–53. DOI: [10.1038/35012251](https://doi.org/10.1038/35012251).
- Margulies, J.D. and Karanth, K.K. (2018). The production of human–wildlife conflict: a political animal geography of encounter. *Geoforum*, **95**, 153–64. DOI: [10.1016/j.geoforum.2018.06.011](https://doi.org/10.1016/j.geoforum.2018.06.011).
- Marijnen, E. and Verweijen, J. (2016). Selling green militarization: The discursive (re)production of militarized conservation in the Virunga National Park, Democratic Republic of the Congo. *Geoforum*, **75**, 274–85. DOI: [10.1016/j.geoforum.2016.08.003](https://doi.org/10.1016/j.geoforum.2016.08.003).
- Marks, S.A. (2016). *Life as a Hunt: Thresholds of Identities and Illusions on an African Landscape*. New York and Oxford: Berghahn.
- Marques, A., Martins, I.S., Kastner, T., et al. (2019). Increasing impacts of land use on biodiversity and carbon sequestration driven by population and economic growth. *Nature Ecology & Evolution*, **3**(4), 628–37. DOI: [10.1038/s41559-019-0824-3](https://doi.org/10.1038/s41559-019-0824-3).
- Marshall, A., Lacy, R., Ancrenaz, M., et al. (2009a). Orangutan population biology, life history, and conservation: perspectives from population viability analysis models. In *Orangutans: Geographic Variation in Behavioral Ecology and Conservation*, ed. S.A. Wich, S.S. Utami-Atmoko, T. Mitra Setia and C.P. van Schaik. Oxford, UK: Oxford University Press, pp. 311–26. DOI: [10.1093/acprof:oso/9780199213276.001.0001](https://doi.org/10.1093/acprof:oso/9780199213276.001.0001).
- Marshall, A.J., Ancrenaz, M., Bearley, F.Q., et al. (2009b). The effects of forest phenology and floristics on populations of Bornean and Sumatran orangutans. In *Orangutans: Geographic Variation in Behavioral Ecology and Conservation*, ed. S.A. Wich, S.S. Utami-Atmoko, T. Mitra Setia and C.P. van Schaik. Oxford, UK: Oxford University Press, pp. 97–117.
- Marshall, A.J. and Leighton, M. (2006). How does food availability limit the population density of white-bearded gibbons? In *Feeding Ecology in Apes and Other Primates: Ecological, Physiological and Behavioural Aspects*, ed. G. Hohmann, M. Robbins and C. Boesch. Cambridge Studies in Biological and Evolutionary Anthropology Volume 48. Cambridge, UK: Cambridge University Press, pp. 313–35.
- Marshall, A.J., Meijaard, E., Van Cleave, E. and Sheil, D. (2016). Charisma counts: the presence of great apes affects the allocation of research effort in the paleotropics. *Frontiers in Ecology and the Environment*, **14**(1), 13–9. DOI: [10.1002/14-0195.1](https://doi.org/10.1002/14-0195.1).

- Marshall, A.J., Nardiyono, Engström, L.M., et al. (2006). The blowgun is mightier than the chainsaw in determining population density of Bornean orangutans (*Pongo pygmaeus morio*) in the forests of East Kalimantan. *Biological Conservation*, **129**(4), 566–78. DOI: 10.1016/j.bibcon.2005.11.025.
- Marshall, A.J., Nijman, V. and Cheyne, S. (2020a). *Hylobates albicarbis. The IUCN Red List of Threatened Species*. 2020: e.T39879A17967053. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <https://dx.doi.org/10.2305/IUCN.UK.2020-2.RLTS.T39879A17967053.en>.
- Marshall, A.J., Nijman, V. and Cheyne, S.M. (2020b). *Hylobates muelleri. The IUCN Red List of Threatened Species*. 2020: e.T39888A17990934. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <https://dx.doi.org/10.2305/IUCN.UK.2020-2.RLTS.T39888A17990934.en>.
- Martin, P.S. (1958). Pleistocene ecology and biogeography of North America. In *Zoogeography*, ed. C.L. Hubbs. Washington DC: American Association for the Advancement of Science, pp. 375–420.
- Masi, S., Cipolletta, C. and Robbins, M.M. (2009). Western lowland gorillas (*Gorilla gorilla gorilla*) change their activity patterns in response to frugivory. *American Journal of Primatology*, **71**(2), 91–100. DOI: 10.1002/ajp.20629.
- Masjid Shahid Ganj and others v. Shiromani Gurdwara Parbandhak Committee*. Amritsar, AIR 1938 369, 15 (Lahore High Court, Full Bench) (1938). Available at: <https://www.casemine.com/judgement/uk/5b4dc2642c94e07cccd24247>.
- Massé, F. and Lunstrum, E. (2016). Accumulation by securitization: commercial poaching, neoliberal conservation, and the creation of new wildlife frontiers. *Geoforum*, **69**, 227–37. DOI: 10.1016/j.geoforum.2015.03.005.
- Matschie, P. (1900). Über geographische Abarten des afrikanischen Elefanten. *Sitzungsberichte der Gesellschaft Naturforschender Freunde zu Berlin*, **8**, 189–97.
- Matsuzawa, T. (2013). *Affidavit of Tetsuro Matsuzawa In the Matter of a Proceeding under Article 70 of the CPLR for a Writ of Habeas Corpus. The Nonhuman Rights Project, Inc., on behalf of Tommy, Petitioners, v. Patrick C. Lavery, individually and as an officer of Circle L Trailer Sales, Inc., Diane Lavery, and Circle L Trailer Sales, Inc. November 23, 2013*. Available at: <https://www.nonhumanrights.org/content/uploads/Ex-9-Matsuzawa-Affidavit-Tommy-Case.pdf>. Accessed December, 2019.
- Matsuzawa, T., Humle, T. and Sugiyama, Y., ed. (2011). *The Chimpanzees of Bossou and Nimba*. Tokyo, Japan: Springer. DOI: 10.1007/978-4-431-53921-6\_3.
- Mawah, G.A., Funk, S.M., Child, B., et al. (2018). Food and livelihoods in park-adjacent communities: the case of the Odzala Kokoua National Park. *Biological Conservation*, **222**, 44–51. DOI: 10.1016/j.biocon.2018.03.036.
- Maxwell, S.L., Fuller, R.A., Brooks, T.M. and Watson, J.E. (2016). Biodiversity: the ravages of guns, nets and bulldozers. *Nature*, **536**(7615), 143–5.
- Mayaux, P., Pekel, J.-F., Desclée, B., et al. (2013). State and evolution of the African rainforests between 1990 and 2010. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **368**(1625), 20120300. DOI: 10.1098/rstb.2012.0300.
- Mc Guinness, S. and Taylor, D. (2014). Farmers' perceptions and actions to decrease crop raiding by forest-dwelling primates around a Rwandan forest fragment. *Human Dimensions of Wildlife*, **19**(2), 179–90. DOI: 10.1080/10871209.2014.853330.
- McCarthy, M.S., Després-Einspenner, M.-L., Samuni, L., et al. (2018). An assessment of the efficacy of camera traps for studying demographic composition and variation in chimpanzees (*Pan troglodytes*). *American Journal of Primatology*, **80**(9), e22904. DOI: 10.1002/ajp.22904.
- McCaslin, M.L. and Scott, K.W. (2003). The five-question method for framing a qualitative research study. *The Qualitative Report*, **8**(3), 447–61. Available at: <https://nsuworks.nova.edu/tqr/vol8/iss3/6>.
- McComb, K. (2016). *Affidavit of Karen McComb. December 22, 2016*. Available at: <https://www.nonhumanrights.org/client-happy/>. Accessed December, 2019.
- McConkey, K.R. (2000). Primary seed shadow generated by gibbons in the rain forests of Barito Ulu, central Borneo. *American Journal of Primatology*, **52**(1), 13–29. DOI: 10.1002/1098-2345(200009)52:1<13::AID-AJP2>3.0.CO;2-Y.
- McGraw, W.S. (2007). Vulnerability and conservation of the Tai monkey flora. In *Monkeys of the Tai Forest: An African Primate Community*, ed. W.S. McGraw, K. Zuberbühler and R. Noë. Cambridge, UK: Cambridge University Press, pp. 290–316.
- McGrew, W.C. (2013). *Affidavit of William C. McGrew In the Matter of a Proceeding under Article 70 of the CPLR for a Writ of Habeas Corpus. The Nonhuman Rights Project, Inc., on behalf of Tommy, Petitioners, v. Patrick C. Lavery, individually and as an officer of Circle L Trailer Sales, Inc., Diane Lavery, and Circle L Trailer Sales, Inc. November 23, 2013*. Available at: <https://www.nonhumanrights.org/content/uploads/Ex-9-McGrew-Affidavit.pdf>.

- Lavery, individually and as an officer of Circle L Trailer Sales, Inc., Diane Lavery, and Circle L Trailer Sales, Inc. November 21, 2013. Available at: <https://www.nonhumanrights.org/content/uploads/Ex-10-McGrew-Affidavit-Tommy-Case.pdf>. Accessed December, 2019.
- McGrew, W.C. (2015). *Affidavit of William C. McGrew In the Matter of a Proceeding under Article 70 of the CPLR for a Writ of Habeas Corpus. The Nonhuman Rights Project, Inc., on behalf of Kiko, Petitioner, v. Carmen Presti, individually and as an officer and director of The Primate Sanctuary, Inc., Christie E. Presti, individually and as an officer and director of The Primate Sanctuary, Inc., and the Primate Sanctuary, Inc.* October 9, 2015. Available at: <https://www.nonhumanrights.org/client-kiko/>. Accessed December, 2019.
- McKenna, E. and Light, A. (2004). *Animal Pragmatism: Rethinking Human-Nonhuman Relationships*. Bloomington, IN: Indiana University Press.
- McKinnon, M.C., Mascia, M.B., Yang, W., Turner, W.R. and Bonham, C. (2015). Impact evaluation to communicate and improve conservation non-governmental organization performance: the case of Conservation International. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **370**(1681), 20140282. DOI: doi:10.1098/rstb.2014.0282.
- McLennan, M.R. and Hockings, K.J. (2014). Wild chimpanzees show group differences in selection of agricultural crops. *Scientific Reports*, **4**, 5956. DOI: 10.1038/srep05956.
- McLennan, M.R. and Hockings, K.J. (2016). The aggressive apes? Causes and contexts of great ape attacks on local persons. In *Problematic Wildlife: A Cross-Disciplinary Approach*, ed. F.M. Angelici. Cham, Switzerland: Springer, pp. 373–94. DOI: 10.1007/978-3-319-22246-2\_18.
- McLennan, M.R., Hyeroba, D., Asimwe, C., Reynolds, V. and Wallis, J. (2012). Chimpanzees in mantraps: lethal crop protection and conservation in Uganda. *Oryx*, **46**(4), 598–603. DOI: 10.1017/S0030605312000592.
- McRae, M. (2000). Central Africa's orphan gorillas. *National Geographic*, **197**(2), 84–97.
- Meder, A. (2012). Buffer zone and human–wildlife conflict management. *Gorilla Journal*, **44**, 17–9.
- Meijaard, E., Abram, N.K., Wells, J.A., et al. (2013). People's perceptions about the importance of forests on Borneo. *PLoS ONE*, **8**(9), e73008. DOI: 10.1371/journal.pone.0073008.
- Meijaard, E., Albar, G., Nardiyono, et al. (2010a). Unexpected ecological resilience in Bornean orangutans and implications for pulp and paper plantation management. *PLoS ONE*, **5**(9), e12813. DOI: 10.1371/journal.pone.0012813.
- Meijaard, E., Buchori, D., Hadiprakarsa, Y., et al. (2011a). Quantifying killing of orangutans and human–orangutan conflict in Kalimantan, Indonesia. *PLoS ONE*, **6**(11), e27491. DOI: 10.1371/journal.pone.0027491.
- Meijaard, E., Buchori, D., Hadiprakarsa, Y., et al. (2012a). Correction: Quantifying killing of orangutans and human–orangutan conflict in Kalimantan, Indonesia. *PLoS ONE*, **7**(3). DOI: 10.1371/annotation/7b65cf64-9fd5-4b95-baf2-8824c4785ab1.
- Meijaard, E., Garcia-Ulloa, J., Sheil, D., et al., ed. (2018). *Oil Palm and Biodiversity. A Situation Analysis by the IUCN Oil Palm Task Force*. Gland, Switzerland: International Union for Conservation of Nature (IUCN) Oil Palm Task Force. Available at: <https://portals.iucn.org/library/sites/library/files/documents/2018-027-En.pdf>.
- Meijaard, E., Mengersen, K., Buchori, D., et al. (2011b). Why don't we ask? A complementary method for assessing the status of great apes. *PLoS ONE*, **6**(3), 1–10. DOI: 10.1371/journal.pone.0018008.
- Meijaard, E. and Sheil, D. (2008). Cuddly animals don't persuade poor people to back conservation. *Nature*, **454**(7201), 159. DOI: 10.1038/454159b.
- Meijaard, E., Welsh, A., Ancrenaz, M., et al. (2010b). Declining orangutan encounter rates from Wallace to the present suggest the species was once more abundant. *PLoS ONE*, **5**(8), e12042. DOI: 10.1371/journal.pone.0012042.
- Meijaard, E., Wich, S., Ancrenaz, M. and Marshall, A.J. (2012b). Not by science alone: why orangutan conservationists must think outside the box. *Year in Ecology and Conservation Biology*, **1249**, 29–44. DOI: 10.1111/j.1749-6632.2011.06288.x.
- Mellinger, D.K., Stafford, K.M., Moore, S.E., Dziak, R.P. and Matsumoto, H. (2007). An overview of fixed passive acoustic observation methods for cetaceans. *Oceanography*, **20**(4), 36–45. DOI: 10.5670/oceanog.2007.03.
- Mellor, D.J., Hunt, S. and Gusset, M. (2015). *Caring for Wildlife: The World Zoo and Aquarium Animal Welfare Strategy*. Gland, Switzerland: World Association of Zoos and Aquariums (WAZA) Executive Office. Available at: <https://www.waza.org/priorities/animal-welfare/animal-welfare-strategies/>.

- Mellor, D.J. and Webster, J.R. (2014). Development of animal welfare understanding drives change in minimum welfare standards. *Revue Scientifique et Technique (International Office of Epizootics)*, **33** (1), 121–30.
- Meltzer, D.J. (2015). Pleistocene overkill and North American mammalian extinctions. *Annual Review of Anthropology*, **44**(1), 33–53. DOI: 10.1146/annurev-anthro-102214-013854.
- Meola, C.A. (2013). Navigating gender structure: women's leadership in a Brazilian participatory conservation project. *Forests, Trees and Livelihoods*, **22**(2), 106–23. DOI: 10.1080/14728028.2013.798947.
- Miller, G.S. (1903). Mammals collected by Dr. W. L. Abbott on the coast and islands of northwest Sumatra. *Proceedings of the United States National Museum*, **26**(1317), 437–83. DOI: 10.5479/si.00963801.26-1317.437.
- Milliken, T. and Shaw, J. (2012). *The South Africa–Viet Nam Rhino Horn Trade Nexus: A Deadly Combination of Institutional Lapses, Corrupt Wildlife Industry Professionals and Asian Crime Syndicates*. Johannesburg, South Africa: TRAFFIC. Available at: <https://www.traffic.org/publications/reports/the-south-africa-viet-nam-rhino-horn-trade-nexus/>.
- Milner-Gulland, E.J. (2012). Interactions between human behaviour and ecological systems. *Philosophical Transactions of the Royal Society B: Biological Sciences*, **367**(1586), 270–8. DOI: doi:10.1098/rstb.2011.0175.
- Milner-Gulland, E.J. and Bennett, E.L. (2003). Wild meat: the bigger picture. *Trends in Ecology & Evolution*, **18**(7), 351–7. DOI: 10.1016/S0169-5347(03)00123-X.
- Milner-Gulland, E.J. and Leader-Williams, N. (1992). A model of incentives for the illegal exploitation of black rhinos and elephants: poaching pays in Luangwa Valley, Zambia. *Journal of Applied Ecology*, **29**(2), 388–401. DOI: 10.2307/2404508.
- Milner-Gulland, E.J., McGregor, J.A., Agarwala, M., et al. (2014). Accounting for the impact of conservation on human well-being. *Conservation Biology*, **28**(5), 1160–6. DOI: 10.1111/cobi.12277.
- Milner-Gulland, E.J. and Rowcliffe, J.M. (2007). *Conservation and Sustainable Use*. Oxford, UK: Oxford University Press.
- Ministry of Forestry (1990). *Act of the Republic of Indonesia No. 5 of 1990. Concerning Conservation of Living Resources and Their Ecosystems*. Republic of Indonesia. Available at: <http://extwprlegs1.fao.org/docs/pdf/ins3867.pdf>.
- Mishra, C., Allen, P., McCarthy, T., et al. (2003). The role of incentive programs in conserving the snow leopard. *Conservation Biology*, **17**(6), 1512–20. DOI: 10.1111/j.1523-1739.2003.00092.x.
- Mitani, J.C. (2009). Male chimpanzees form enduring and equitable social bonds. *Animal Behaviour*, **77**(3), 633–40. DOI: 10.1016/j.anbehav.2008.11.021.
- Mitani, J.C., Watts, D.P. and Amsler, S.J. (2010). Lethal intergroup aggression leads to territorial expansion in wild chimpanzees. *Current Biology*, **20**(12), R507–R8. DOI: 10.1016/j.cub.2010.04.021.
- Mitchell, M.W., Locatelli, S., Ghobrial, L., et al. (2015). The population genetics of wild chimpanzees in Cameroon and Nigeria suggests a positive role for selection in the evolution of chimpanzee subspecies. *BMC Evolutionary Biology*, **15**(1), 3. DOI: 10.1186/s12862-014-0276-y.
- Mittermeier, R.A., Rylands, A.B. and Wilson, D.E., ed. (2013). *Handbook of the Mammals of the World. Volume 3: Primates*. Barcelona, Spain: Lynx Edicions.
- Moon, K., Blackman, D.A., Adams, V.M., et al. (2019). Expanding the role of social science in conservation through an engagement with philosophy, methodology, and methods. *Methods in Ecology and Evolution*, **10**(3), 294–302. DOI: 10.1111/2041-210X.13126.
- Moore, J.F., Mulindahabi, F., Masozera, M.K., et al. (2018). Are ranger patrols effective in reducing poaching-related threats within protected areas? *Journal of Applied Ecology*, **55**(1), 99–107. DOI: 10.1111/1365-2664.12965.
- Moorhouse, T.P., Dahlsjö, C.A.L., Baker, S.E., D'Cruze, N.C. and Macdonald, D.W. (2015). The customer isn't always right – conservation and animal welfare implications of the increasing demand for wildlife tourism. *PLoS ONE*, **10**(10), e0138939. DOI: 10.1371/journal.pone.0138939.
- Morgan, B., Adeleke, A., Bassey, T., et al. (2011). *Regional Action Plan for the Conservation of the Nigeria-Cameroon Chimpanzee (Pan troglodytes elliotti)*. New York, NY: International Union for Conservation of Nature Species (IUCN) Species Survival Commission (SSC), Primate Specialist Group, and Zoological Society of San Diego, CA. Available at: <https://portals.iucn.org/library/sites/library/files/documents/2011-123-En.pdf>.
- Morgan, D. and Sanz, C. (2006). Chimpanzee feeding ecology and comparisons with sympatric gorillas in the Goualougo Triangle, Republic of Congo. In *Feeding Ecology in Apes and Other Primates: Ecological, Physiological*

- and Behavioural Aspects*, ed. G. Hohmann, M. Robbins and C. Boesch. Cambridge Studies in Biological and Evolutionary Anthropology Volume 48. Cambridge, UK: Cambridge University Press, pp. 97–122.
- Morgan, D. and Sanz, C. (2007). *Best Practice Guidelines for Reducing the Impact of Commercial Logging on Great Apes in Western Equatorial Africa*. Gland, Switzerland: International Union for Conservation of Nature (IUCN) Species Survival Commission (SSC), Primate Specialist Group. Available at: <https://portals.iucn.org/library/node/9059>.
- Morgan, D.B., Sanz, C., Greer, D., et al. (2013). *Great Apes and FSC: Implementing 'Ape Friendly' Practices in Central Africa's Logging Concessions*. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <https://portals.iucn.org/sites/library/files/documents/SSC-OP-049.pdf>.
- Morris, M.C. (2013). Improved nonhuman animal welfare is related more to income equality than it is to income. *Journal of Applied Animal Welfare Science*, **16**(3), 272–93. DOI: [10.1080/10888705.2013.768921](https://doi.org/10.1080/10888705.2013.768921).
- Morrow, K. (2009). United Kingdom. In *The Role of the Judiciary in Environmental Governance: Comparative Perspectives*, ed. L.J. Kotzé and A.R. Paterson. Alphen aan den Rijn, the Netherlands: Kluwer Law International, pp. 151–79.
- Moss, C.J. (2017). *Affidavit of Cynthia J. Moss*. May 6, 2017. Available at: <https://www.nonhumanrights.org/client-happy/>. Accessed December, 2019.
- Muehlenbein, M.P. and Ancrenaz, M. (2009). Minimizing pathogen transmission at primate ecotourism destinations: the need for input from travel medicine. *Journal of Travel Medicine*, **16**(4), 229–32. DOI: [10.1111/j.1708-8305.2009.00346.x](https://doi.org/10.1111/j.1708-8305.2009.00346.x).
- Muhire, B. and Ellis, C. (2018). *Analyse de la chaîne de valeur du commerce de la viande de brousse: Walikale, Lubutu, Kisangani et Kindu*. Technical report for the Jane Goodall Institute.
- Muhire, B. and Ellis, C. (2019). *Analyse des facteurs de consommation de la viande de brousse: Acteurs et moteurs déterminants—Province du Tshopo, Maniema et Nord Kivu (RDC)*. Technical report for the Jane Goodall Institute.
- Mullins, A. (2010). Dodge makes chimp disappear in TV ad. *OpposingViews*, August 16, 2010. Available at: <https://www.opposingviews.com/category/dodge-s-disappearing-ape>.
- Mulyoutami, E., Rismawan, R. and Joshi, L. (2009). Local knowledge and management of simpukng (forest gardens) among the Dayak people in East Kalimantan, Indonesia. *Forest Ecology and Management*, **257**(10), 2054–61. DOI: [10.1016/j.foreco.2009.01.042](https://doi.org/10.1016/j.foreco.2009.01.042).
- Munanura, I.E., Backman, K.F., Hallo, J.C. and Powell, R.B. (2016). Perceptions of tourism revenue sharing impacts on Volcanoes National Park, Rwanda: a Sustainable Livelihoods framework. *Journal of Sustainable Tourism*, **24**(12), 1709–26. DOI: [10.1080/09669582.2016.1145228](https://doi.org/10.1080/09669582.2016.1145228).
- Munn, J. (2006). Effects of injury on the locomotion of free-living chimpanzees in the Budongo Forest Reserve, Uganda. In *Primates of Western Uganda*, ed. N.E. Newton-Fisher, H. Notman, J.D. Paterson and V. Reynolds. New York: Springer, pp. 259–317.
- Murai, M., Ruffler, H., Berlemon, A., et al. (2013). Priority areas for large mammal conservation in Equatorial Guinea. *PLoS ONE*, **8**(9), e75024. DOI: [10.1371/journal.pone.0075024](https://doi.org/10.1371/journal.pone.0075024).
- Nagaoka, L., Rick, T. and Wolverton, S. (2018). The overkill model and its impact on environmental research. *Ecology and Evolution*, **8**(19), 9683–96. DOI: [10.1002/ece3.4393](https://doi.org/10.1002/ece3.4393).
- Naidoo, R. and Adamowicz, W.L. (2005). Biodiversity and nature-based tourism at forest reserves in Uganda. *Environment and Development Economics*, **10**(2), 159–78. DOI: [10.1017/S1355770X0400186X](https://doi.org/10.1017/S1355770X0400186X).
- Naidoo, R., Weaver, L.C., Diggle, R.W., et al. (2016). Complementary benefits of tourism and hunting to communal conservancies in Namibia. *Conservation Biology*, **30**(3), 628–38. DOI: [10.1111/cobi.12643](https://doi.org/10.1111/cobi.12643).
- Nardoto, G.B., Murrieta, R.S.S., Prates, L.E.G., et al. (2011). Frozen chicken for wild fish: nutritional transition in the Brazilian Amazon region determined by carbon and nitrogen stable isotope ratios in fingernails. *American Journal of Human Biology*, **23**(5), 642–50. DOI: [10.1002/ajhb.21192](https://doi.org/10.1002/ajhb.21192).
- Nasi, R., Brown, D., Wilkie, D., et al. (2008). *Conservation and Use of Wildlife-Based Resources: The Bushmeat Crisis*. Montreal, Canada, and Bogor, Indonesia: Secretariat of the Convention on Biological Diversity, and Center for International Forestry Research (CIFOR). Available at: <https://www.cbd.int/doc/publications/cbd-ts-33-en.pdf>.
- Nasi, R., Taber, A. and van Vliet, N. (2011). Empty forests, empty stomachs? Bushmeat and livelihoods in the Congo and Amazon Basins. *International Forestry Review*, **13**(3), 355–68. Available at: [http://www.cifor.org/publications/pdf\\_files/articles/ANasi1101.pdf](http://www.cifor.org/publications/pdf_files/articles/ANasi1101.pdf).

- Nater, A., Mattle-Greminger, M.P., Nurcahyo, A., *et al.* (2017). Morphometric, behavioral, and genomic evidence for a new orangutan species. *Current Biology*, **27**(22), 3487–98.e10. DOI: 10.1016/j.cub.2017.09.047.
- National Assembly of Cameroon (1994). *Law 94/01 of 20 January 1994 to Lay Down Forestry, Wildlife and Fisheries Regulations*. Yaoundé, Cameroon: Republic of Cameroon. Available at: [https://sherloc.unodc.org/res/cld/document/law-no--94-01-of-20-january-1994-to-lay-down-forestry--wildlife-and-fisheries-regulations-en\\_html/Law\\_No.\\_94-01\\_on\\_Forestry\\_Wildlife\\_and\\_Fisheries\\_EN.pdf](https://sherloc.unodc.org/res/cld/document/law-no--94-01-of-20-january-1994-to-lay-down-forestry--wildlife-and-fisheries-regulations-en_html/Law_No._94-01_on_Forestry_Wildlife_and_Fisheries_EN.pdf).
- Nature* (2008). News in Brief: Spain awards apes legal rights. *Nature*, **454**, 15.
- Ndiaye, S. (2011). *Conservation du Chimpanzé au Sénégal. Etat des Connaissances et Réactualisation du Plan d'Actions*. Report for USAID/Wula Nafaa.
- Neilson, E., Nijman, V. and Nekaris, K.A.I. (2013). Conservation assessments of arboreal mammals in difficult terrain: occupancy modeling of pileated gibbons (*Hylobates pileatus*). *International Journal of Primatology*, **34**(4), 823–35. DOI: 10.1007/s10764-013-9688-6.
- Nekaris, B.K.A.-I., Campbell, N., Coggins, T.G., Rode, E.J. and Nijman, V. (2013). Tickled to death: analysing public perceptions of ‘cute’ videos of threatened species (slow lorises – *Nycticebus* spp.) on web 2.0 sites. *PLoS ONE*, **8**(7), e69215. DOI: 10.1371/journal.pone.0069215.
- NEPAD (2013). *Agriculture in Africa: Transformation and Outlook*. Johannesburg, South Africa: NEPAD Agency for the African Union. Available at: <http://nepad.org/caadp/publication/agriculture-africa-transformation-and-outlook>.
- NESREA (2007). *National Environmental Standards and Regulations Enforcement Agency (Establishment) Act, 2007 No. 25*. National Assembly of the Federal Republic of Nigeria. Available at: <http://extwprlegs1.fao.org/docs/pdf/nig120569.pdf>.
- Neugebauer, E. (2018). *Evaluating conservation efforts to inform future management decisions for western chimpanzees*. MSc thesis. Frankfurt, Germany: University of Frankfurt, Institute for Ecology, Evolution & Diversity.
- New Zealand Parliament (1999). *Animal Welfare Act 1999. Public Act 1999 No. 142. Reprint as at 8 September 2018*. Wellington, New Zealand: Parliamentary Counsel Office. Available at: <http://www.legislation.govt.nz/act/public/1999/0142/latest/DLM49664.html>.
- New Zealand Parliament (2014). *Te Urewera Act 2014. Public Act 2014 No. 51. Reprint as at 1 October 2018*. Wellington, New Zealand: Parliamentary Counsel Office. Available at: [www.legislation.govt.nz/act/public/2014/0051/latest/DLM6183601.html](http://www.legislation.govt.nz/act/public/2014/0051/latest/DLM6183601.html).
- New Zealand Parliament (2017). *Te Awa Tupua (Whanganui River Claims Settlement) Act 2017. Public Act 2017 No. 7*. Wellington, New Zealand: Parliamentary Counsel Office. Available at: [www.legislation.govt.nz/act/public/2017/0007/latest/whole.html](http://www.legislation.govt.nz/act/public/2017/0007/latest/whole.html).
- Newman, A. (2009). Pet chimpanzee attacks woman in Connecticut. *New York Times*, February 17, 2009. Available at: <https://www.nytimes.com/2009/02/17/world/americas/17iht-chimp.1.20241928.html>.
- Newmark, W.D. and Hough, J.L. (2000). Conserving wildlife in Africa: integrated conservation and development projects and beyond. *BioScience*, **50**(7), 585–92. DOI: 10.1641/0006-3568(2000)050[0585:Cwaic]2.0.Co;2.
- Newton, A.C. and Cantarello, E. (2014). *An Introduction to the Green Economy: Science, Systems and Sustainability*. Abingdon, UK: Routledge.
- Nforngwa, E. (2017). Trade in skulls, body parts severely threatens Cameroon’s great apes. *Mongabay*, January 19, 2017. Available at: <https://news.mongabay.com/2017/01/trade-in-skulls-body-parts-severely-threatens-cameroon-great-apes/>.
- N’Goran, K.P., Ndomba, D.L. and Beukou, G.B. (2016). *Rapport de l’inventaire des grands et moyens mammifères dans le segment RCA du paysage trinational de la Sangha*. Unpublished report. Bayanga, Central African Republic: Bureau Régional du WWF pour l’Afrique.
- Nguyen, J. (2018). How Instagram is changing advertising in Southeast Asia. *e27*, December 17, 2018. Available at: <https://e27.co/how-instagram-is-changing-advertising-in-southeast-asia-20181217/>.
- Nguyen, M.H., Coudrat, C.N.Z., Roos, C., Rawson, B.M. and Duckworth, J.W. (2020). *Nomascus siki. The IUCN Red List of Threatened Species*. 2020: e.T39896A17968765. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <https://dx.doi.org/10.2305/IUCN.UK.2020-2.RLTS.T39896A17968765.en>.

- NhRP (n.d.-a). *Client, Happy (elephant): first elephant to pass mirror self-recognition test; held alone at the Bronx Zoo.* Coral Springs, FL: Nonhuman Rights Project (NhRP). Available at: <https://www.nonhumanrights.org/client-happy/>. Accessed September 9, 2019.
- NhRP (n.d.-b). *Client, Kiko (chimpanzee): a former animal “actor,” partially deaf from past physical abuse.* Coral Springs, FL: Nonhuman Rights Project (NhRP). Available at: <https://www.nonhumanrights.org/client-kiko/>. Accessed September 9, 2019.
- NhRP (n.d.-c). *Client, Tommy (chimpanzee): the NhRP’s first client.* Coral Springs, FL: Nonhuman Rights Project (NhRP). Available at: <https://www.nonhumanrights.org/client-tommy/>. Accessed September 9, 2019.
- NhRP (n.d.-d). *Clients, Hercules and Leo (chimpanzees): two former research subjects and the first nonhuman animals to have a habeas corpus hearing.* Coral Springs, FL: Nonhuman Rights Project (NhRP). Available at: <https://www.nonhumanrights.org/hercules-leo/>. Accessed September 9, 2019.
- NhRP (n.d.-e). *Litigation: confronting the core issue of nonhuman animals’ legal thinghood.* Coral Springs, FL: Nonhuman Rights Project (NhRP). Available at: <https://www.nonhumanrights.org/litigation-2/>. Accessed September, 2020.
- NhRP (Nonhuman Rights Project, Inc.) ex rel. *Hercules and Leo v. Stanley.* 16 NYS 3d 898 (NY Sup Ct) (2015). Available at: <https://casetext.com/case/nonhuman-rights-project-inc-ex-rel-hercules-v-stanley>.
- NhRP (Nonhuman Rights Project, Inc.) ex rel. *Kiko v. Boniello and Presti* (4th Dept) (2014). Available at: <https://www.nonhumanrights.org/content/uploads/4.-Petition-for-Mandamus-Kikos-Appeal.pdf>.
- NhRP (Nonhuman Rights Project, Inc.) ex rel. *Kiko v. Presti.* 124 AD 3d 1334 (4th Dept) (2015).
- NhRP (Nonhuman Rights Project, Inc.) ex rel. *Tommy v. Lavery.* (2013). Available at: <https://www.nonhumanrights.org/content/uploads/Petition-re-Tommy-Case-Fulton-Cty-NY.pdf>.
- NhRP (Nonhuman Rights Project, Inc.) ex rel. *Tommy v. Lavery.* 54 NYS 3d 392, 394, 396 (1st Dept) (2017).
- NhRP (Nonhuman Rights Project, Inc.) ex rel. *Tommy v. Lavery.* 31 NY 3d 1054 (2018). Available at: [http://courts.state.ny.us/Reporter/3dseries/2018/2018\\_03309.htm](http://courts.state.ny.us/Reporter/3dseries/2018/2018_03309.htm).
- NhRP (Nonhuman Rights Project, Inc.) v. R.W. Commerford and Sons, Inc. 192 Conn App 36 (2019). Available at: <https://static.lettersblogatory.com/wp-content/uploads/2019/09/192AP408.pdf>.
- Nielsen, H. and Spenceley, A. (2011). The success of tourism in Rwanda: gorillas and more. In *Yes Africa Can: Success Stories from a Dynamic Continent*, ed. P. Chuhuan-Pole and M. Angwafo. Washington DC: The World Bank.
- Nielsen, M.R., Meilby, H., Smith-Hall, C., Pouliot, M. and Treue, T. (2018). The importance of wild meat in the Global South. *Ecological Economics*, **146**, 696–705. DOI: [10.1016/j.ecolecon.2017.12.018](https://doi.org/10.1016/j.ecolecon.2017.12.018).
- Nielsen, M.R., Pouliot, M., Meilby, H., Smith-Hall, C. and Angelsen, A. (2017). Global patterns and determinants of the economic importance of bushmeat. *Biological Conservation*, **215**, 277–87. DOI: [10.1016/j.biocon.2017.08.036](https://doi.org/10.1016/j.biocon.2017.08.036).
- NIH (2018). *Council of Councils Working Group on Assessing the Safety of Relocating At-Risk Chimpanzees.* Bethesda, MD: National Institutes of Health (NIH). Available at: [https://dpcpsi.nih.gov/sites/default/files/CoC\\_May\\_2018\\_WG\\_Report\\_508.pdf](https://dpcpsi.nih.gov/sites/default/files/CoC_May_2018_WG_Report_508.pdf).
- Nijman, V. (2001). Effect of behavioural changes due to habitat disturbance on density estimation of rain forest vertebrates, as illustrated by gibbons (Primates: Hylobatidae). In *The Balance between Biodiversity Conservation and Sustainable Use of Tropical Rain Forests*, ed. P.J.M. Hillegers and H.H. de Longh. Wageningen, the Netherlands: Tropenbos International, pp. 217–25.
- Nijman, V. (2004). Conservation of the Javan gibbon *Hylobates moloch*: population estimates, local extinctions and conservation priorities. *Raffles Bulletin of Zoology*, **51**(1), 271–80.
- Nijman, V. (2005a). *Hanging in the Balance: An Assessment of Trade in Orang-Utans and Gibbons on Kalimantan, Indonesia.* Petaling Jaya, Malaysia: TRAFFIC Southeast Asia. Available at: <https://portals.iucn.org/library/sites/library/files/documents/Traf-092.pdf>.
- Nijman, V. (2005b). *In Full Swing: An Assessment of trade in Orang-utans and Gibbons on Java and Bali, Indonesia.* Petaling Jaya, Selangor, Malaysia: TRAFFIC Southeast Asia. Available at: [https://www.traffic.org/site/assets/files/3984/in\\_full\\_swing.pdf](https://www.traffic.org/site/assets/files/3984/in_full_swing.pdf).
- Nijman, V. (2009). *An Assessment of Trade in Gibbons and Orang-Utans in Sumatra, Indonesia.* Petaling Jaya, Malaysia: TRAFFIC Southeast Asia. Available at: <https://www.traffic.org/site/assets/files/3986/sumatran-gibbons-orangutans.pdf>.

- Nijman, V. (2010). An overview of international wildlife trade from Southeast Asia. *Biodiversity and Conservation*, **19**(4), 1101–14. DOI: 10.1007/s10531-009-9758-4.
- Nijman, V. (2017a). North Africa as a source for European eel following the 2010 EU CITES eel trade ban. *Marine Policy*, **85**, 133–7. DOI: 10.1016/j.marpol.2017.06.036.
- Nijman, V. (2017b). Orangutan trade, confiscations, and lack of prosecutions in Indonesia. *American Journal of Primatology*, **79**(11), 22652. DOI: 10.1002/ajp.22652.
- Nijman, V. (2020). *Hylobates moloch*. The IUCN Red List of Threatened Species. 2020: e.T10550A17966495. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <https://dx.doi.org/10.2305/IUCN.UK.2020-2.RLTS.T10550A17966495.en>.
- Nijman, V., Cheyne, S. and Traeholt, C. (2020). *Hylobates funereus*. The IUCN Red List of Threatened Species. 2020: e.T39890A17990856. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <https://dx.doi.org/10.2305/IUCN.UK.2020-2.RLTS.T39890A17990856.en>.
- Nijman, V. and Geissmann, T. (2008). *Sympalangus syndactylus*. The IUCN Red List of Threatened Species. 2008: e.T39779A10266335. Gland, Switzerland: International Union for Conservation of Nature (IUCN).
- Nijman, V., Geissmann, T., Traeholt, C., Roos, C. and Nowak, M.G. (2020). *Sympalangus syndactylus*. The IUCN Red List of Threatened Species. 2020: e.T39779A17967873. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <https://dx.doi.org/10.2305/IUCN.UK.2020-2.RLTS.T39779A17967873.en>.
- Nijman, V. and Healy, A. (2016). Present-day international primate trade in historical context. In *An Introduction to Primate Conservation*, ed. S. Wich and A. Marshall. Cambridge, UK: Cambridge University Press, pp. 129–42.
- Nijman, V. and Menken, S.B. (2005). Assessment of census techniques for estimating density and biomass of gibbons (Primates: Hylobatidae). *Raffles Bulletin of Zoology*, **53**(1), 169–79.
- Nijman, V., Nekaris, K.A.I., Donati, G., Bruford, M. and Fa, J. (2011). Primate conservation: measuring and mitigating trade in primates. *Endangered Species Research*, **13**(2), 159–61.
- Nijman, V., Spaan, D., Rode-Margono, E.J., Wirdateti and Nekaris, K.A.I. (2017). Changes in the primate trade in Indonesian wildlife markets over a 25-year period: fewer apes and langurs, more macaques, and slow lorises. *American Journal of Primatology*, **79**(11), e22517. DOI: 10.1002/ajp.22517.
- Nijman, V., Yang Martinez, C.F. and Shepherd, C.R. (2009). Saved from trade: donated and confiscated gibbons in zoos and rescue centres in Indonesia. *Endangered Species Research*, **9**, 151–7.
- Nonhuman Rights (2018). Second petition filed on behalf of captive elephants in Connecticut. *Nonhuman Rights Blog*, June 11, 2018. Available at: <https://www.nonhumanrights.org/blog/second-petition-connecticut/>.
- Nonhuman Rights (2020). Tuitt decision in Happy's elephant rights case: FAQ. *Nonhuman Rights Blog*, February 25, 2020. Available at: <https://www.nonhumanrights.org/blog/tuitt-decision-in-happys-elephant-rights-case-faq/>.
- Normand, E. and Boesch, C. (2009). Sophisticated Euclidean maps in forest chimpanzees. *Animal Behaviour*, **77**(5), 1195–201. DOI: 10.1016/j.anbehav.2009.01.025.
- Noutcha, M.A.E., Nzeako, S.O. and Okiwelu, S.N. (2017). Offtake numbers at 5-yearly intervals over a 10 year-period in the catchment area of a rural bushmeat market, Rivers State, Nigeria. *Journal of Scientific Research & Reports*, **13**(3), 1–5. DOI: 10.9734/JSR/2017/31600.
- Nowak, M.G., Rianti, P., Wich, S.A., Meijaard, E. and Fredriksson, G.M. (2017). *Pongo tapanuliensis*. The IUCN Red List of Threatened Species. 2017: e.T120588639A120588662. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <http://dx.doi.org/10.2305/IUCN.UK.2017-3.RLTS.T120588639A120588662.en>.
- Nudd, T. (2010). Under fire, Dodge makes a chimp disappear. *Adweek*, August 12, 2010. Available at: <https://www.adweek.com/creativity/under-fire-dodge-makes-chimp-disappear-12368/>.
- Nuñez-Iturri, G. and Howe, H.F. (2007). Bushmeat and the fate of trees with seeds dispersed by large primates in a lowland rain forest in western Amazonia. *Biotropica*, **39**(3), 348–54. DOI: 10.1111/j.1744-7429.2007.00276.x.
- Nuñez-Iturri, G., Olsson, O. and Howe, H.F. (2008). Hunting reduces recruitment of primate-dispersed trees in Amazonian Peru. *Biological Conservation*, **141**(6), 1536–46. DOI: 10.1016/j.biocon.2008.03.020.
- NYCourts.gov (n.d.). *Appellate Courts: Appellate Divisions*. New York, NY: New York State Unified Court System. Available at: <https://www.nycourts.gov/courts/appellatedivisions.shtml>. Accessed September, 2019.

- NYS Supreme Court (2013a). *Order to Show Cause and Writ of Habeas Corpus. Index No. 13-32098. December 5, 2013.* Suffolk County, New York State (NYS). Available at: <https://www.nonhumanrights.org/content/uploads/Transcript-of-Suffolk-County-Decision-re-Hercules-Leo-12.5.13.pdf>. Accessed December, 2019.
- NYS Supreme Court (2013b). *Transcript in the Matter of a Proceeding under Article 10 of the CPLR for a Writ of Habeas Corpus, The Nonhuman Rights Project, Inc., ex rel. Kiko Petitioners, against Carmen Presti, Individually and as an Officer and Director of The Primate Sanctuary, Inc., Christie Presti, Individually and as an Officer and Director of The Primate Sanctuary, Inc., and the Primate Sanctuary, Inc., Respondents. Index No. 15L125. December 9, 2013.* Niagara County, New York State (NYS). Available at: [https://www.nonhumanrights.org/content/uploads/Transcript\\_of\\_Oral\\_Argument\\_-\\_Niagara\\_County\\_12-9-13.pdf](https://www.nonhumanrights.org/content/uploads/Transcript_of_Oral_Argument_-_Niagara_County_12-9-13.pdf). Accessed December, 2019.
- NYS Supreme Court (2013c). *Transcript in the Matter of a Proceeding under Article 70 of the CPLR for a Writ of Habeas Corpus, Petitioners, against Index No. 02051 Patrick C. Lavery, Individually and as an Officer of Circle L Trailer Sales, Inc., Diane Lavery and Circle L Trailer Sales, Inc., Respondents. December 2, 2013.* Fulton County, New York State (NYS): Montgomery County Courthouse. Available at: <https://www.nonhumanrights.org/content/uploads/Fulton-Cty-hearing-re.-Tommy-12-2-13.pdf>. Accessed December, 2019.
- NYS Supreme Court (2014). *Petitioners-Appellants' Memorandum of Law in Support of Motion for Reargument. Index No. 2014-01825. April 16, 2014.* Supreme Court of the State of New York (NYS) Appellate Division: Second Judicial Department. Available at: <https://www.nonhumanrights.org/content/uploads/5.-Memorandum-of-law-in-support-of-motion-for-reargument-Hercules-Leo.pdf>. Accessed December, 2019.
- NYS Supreme Court (2018). *Order to Show Cause. Index No. 18-45164. November 16, 2018.* Orleans County, New York State (NYS). Available at: <https://www.nonhumanrights.org/content/uploads/Order-to>Show-Cause-Happy.pdf>. Accessed December, 2019.
- O'Brien, T.G., Kinnaird, M.F., Nurcahyo, A., Iqbal, M. and Rusmanto, M. (2004). Abundance and distribution of sympatric gibbons in a threatened Sumatran rain forest. *International Journal of Primatology*, **25**(2), 267–84. DOI: [10.1023/B:IJOP.0000019152.83883.1c](https://doi.org/10.1023/B:IJOP.0000019152.83883.1c).
- Oates, J.F., Abedi-Lartey, M., McGraw, W.S., Struhsaker, T.T. and Whitesides, G.H. (2000). Extinction of a west African red colobus monkey. *Conservation Biology*, **14**(5), 1526–32. DOI: [10.1046/j.1523-1739.2000.99230.x](https://doi.org/10.1046/j.1523-1739.2000.99230.x).
- Oates, J.F., Bergl, R.A. and Linder, J.M. (2004). *Africa's Gulf of Guinea Forests: Biodiversity Patterns and Conservation Priorities*. Washington DC: Conservation International. Available at: <http://www.bioone.org/doi/book/10.1896/1-881173-82-8>.
- Oates, J.F., Doumbe, O., Dunn, A., et al. (2016). *Pan troglodytes ssp. elliotti. The IUCN Red List of Threatened Species.* 2016: e.T40014A17990330. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <http://dx.doi.org/10.2305/IUCN.UK.2016-2.RLTS.T40014A17990330.en>.
- Oates, J.F., Koné, I., McGraw, S. and Osei, D. (2019). *Piliocolobus waldroni. The IUCN Red List of Threatened Species.* 2019: e.T18248A92650711. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <http://dx.doi.org/10.2305/IUCN.UK.2019-1.RLTS.T18248A92650711.en>.
- Oates, J.F., Sunderland-Groves, J., Bergl, R., et al. (2007). *Regional Action Plan for the Conservation of the Cross River Gorilla (Gorilla gorilla diehli)*. Gland, Switzerland and Arlington, VA: International Union for Conservation of Nature (IUCN) Species Survival Commission (SSC), Primate Specialist Group, and Conservation International. Available at: <https://portals.iucn.org/library/sites/library/files/documents/2007-012.pdf>.
- Oben, B.O., Molua, E.L. and Oben, P.M. (2015). Profitability of small-scale integrated fish-rice-poultry farms in Cameroon. *Journal of Agricultural Science*, **7**(11), 232–44. DOI: [10.5539/jas.v7n11p232](https://doi.org/10.5539/jas.v7n11p232).
- OC&C Strategy Consultants (2017). *Taking a Serious Look at Fun: The Growth of the Leisure Industry in China.* London, UK: OC&C Strategy Consultants. Available at: <https://www.occcstrategy.com/media/1327/occ-taking-a-serious-look-at-fun.pdf>.
- Odum, E.P. (1970). Optimum population and environment: a Georgia microcosm. *Current History*, **58**, 355–9.
- OECD (2009). *Determination and Application of Administrative Fines for Environmental Offences: Guidance for Environmental Enforcement Authorities in EECCA Countries*. Paris, France: Organisation for Economic Co-operation and Development (OECD). Available at: <https://www.oecd.org/env/outreach/42356640.pdf>.
- OECD (2012). *Illegal Trade in Environmentally Sensitive Goods*. OECD Trade Policy Studies. Paris, France: Organisation for Economic Co-operation and Development (OECD) Publishing. Available at: <http://dx.doi.org/10.1787/9789264174238-en>.

- Ogra, M.V. (2012). Gender mainstreaming in community-oriented wildlife conservation: experiences from non-governmental conservation organizations in India. *Society & Natural Resources*, **25**(12), 1258–76. DOI: 10.1080/08941920.2012.677941.
- Ohanesian, A. (2018). Kenya's Sweetwaters sanctuary: chimpanzees without borders. *Al Jazeera*, May 9, 2018. Available at: <https://www.aljazeera.com/indepth/inpictures/kenya-sweetwaters-sanctuary-chimpanzees-borders-180508100626979.html>.
- Ohashi, G. and Matsuzawa, T. (2011). Deactivation of snares by wild chimpanzees. *Primates*, **52**(1), 1–5.
- OIE (2019). *Terrestrial Animal Health Code*, 28th edn. Paris, France: World Organisation for Animal Health (OIE). Available at: <http://www.oie.int/en/standard-setting/terrestrial-code/>.
- OIE (n.d.). *Regional Animal Welfare Strategy (RAWS) for Asia, the Far East and Oceania*. Paris, France: World Organisation for Animal Health (OIE). Available at: <https://rr-asia.oie.int/en/projects/animal-welfare/>. Accessed December, 2019.
- Okiwelu, S., Ewurum, N. and Noutcha, A.E. (2009). Wildlife harvesting and bushmeat trade in Rivers State, Nigeria. I. Species composition, seasonal abundance and cost. *Scientia Africana*, **8**(2), 1–8.
- Ol Pejeta Conservancy (n.d.). *Sweetwaters Chimpanzee Sanctuary*. Nanyuki, Kenya: Ol Pejeta Conservancy. Available at: <https://www.olpejetaconservancy.org/wildlife/chimpanzees/sweetwaters-chimpanzee-sanctuary/>. Accessed December 31, 2018.
- Olupot, W., McNeilage, A.J. and Plumptre, A.J. (2009). *An Analysis of Socioeconomics of Bushmeat Hunting at Major Hunting Sites in Uganda*. Working Paper No. 38. Bronx, NY: Wildlife Conservation Society (WCS).
- Omar, S. and Rathakrishnan, M. (2016). *Pantang larang makanan masyarakat Melanau Sarawak*. Presented at the International Conference on Social Sciences and Humanities (PASAK 2016), 20–21 April 2016, KUIS Convention Center, International Islamic University College Selangor (KUIS).
- Ondoua Ondoua, G., Beodo Moundjim, E., Mambo Marindo, J.C., et al. (2017). *An Assessment of Poaching and Wildlife Trafficking in the Garamba-Bili-Chinko Transboundary Landscape*. Cambridge, UK: TRAFFIC. Available at: <https://www.traffic.org/site/assets/files/1591/garamba-bili-chinko-xxs.pdf>.
- OpenStreetMap (n.d.). *OpenStreetMap*. Available at: <https://www.openstreetmap.org/#map=5/54.910/-3.432>. Accessed September, 2020.
- Osterberg, P., Samphanthamit, P., Maprang, O., Punnaidee, S. and Brockelman, W.Y. (2015). Gibbon (*Hylobates lar*) reintroduction success in Phuket, Thailand, and its conservation benefits. *American Journal of Primatology*, **77**(5), 492–501. DOI: 10.1002/ajp.22367.
- Östlund, R., director (2017). *The Square*. Plattform Produktion. Available at: <https://www.imdb.com/title/tt4995790/>.
- Osvath, M. (2013). *Affidavit of Mathias Osvath In the Matter of a Proceeding under Article 70 of the CPLR for a Writ of Habeas Corpus. The Nonhuman Rights Project, Inc., on behalf of Tommy, Petitioners, v. Patrick C. Lavery, individually and as an officer of Circle L Trailer Sales, Inc., Diane Lavery, and Circle L Trailer Sales, Inc.* November 19, 2013. Available at: <https://www.nonhumanrights.org/content/uploads/Ex-11-Osvath-Affidavit-Tommy-Case.pdf>. Accessed December, 2019.
- Palmer, A. (2018). *Saving and sacrificing: ethical questions in orangutan rehabilitation*. PhD thesis. London, UK: University College London.
- Palombit, R.A. (1992). *Pair bonds and monogamy in wild siamang (*Hylobates syndactylus*) and white-handed gibbon (*Hylobates lar*) in northern Sumatra*. PhD thesis. Davis, CA: University of California Davis.
- Palombit, R.A. (1994). Dynamic pair bonds in Hylobatids: implications regarding monogamous social systems. *Behaviour*, **128**(1), 65–101. DOI: 10.1163/156853994X00055.
- Palombit, R.A. (1997). Inter- and intraspecific variation in the diets of sympatric siamang (*Hylobates syndactylus*) and Lar gibbons (*Hylobates lar*). *Folia Primatologica*, **68**(6), 321–37. DOI: 10.1159/000157260.
- Parliament of Uganda (1996). *Uganda Wildlife Act, Chapter 200*. Uganda Legal Information Institute. Available at: <https://ulii.org/ug/legislation/consolidated-act/200>.
- Parliament of Uganda (2019). *The Uganda Wildlife Act, 2019*. Available at: <https://ulii.org/system/files/legislation/act/2019/2019/Uganda-Wildlife-Act-2019.pdf>.
- PASA (2018). *Pan African Sanctuary Alliance Annual Report 2018*. Portland, OR: Pan African Sanctuary Alliance (PASA). Available at: [https://pasa.org/wp-content/uploads/2019/04/PASA\\_2018\\_Annual\\_Report.pdf](https://pasa.org/wp-content/uploads/2019/04/PASA_2018_Annual_Report.pdf).

- Pasley, J. (2017). Two siamang gibbons escape from Auckland Zoo enclosure. *Stuff*, December 13, 2017. Available at: <https://www.stuff.co.nz/auckland/local-news/central-leader/99771325/two-siamang-gibbons-escape-from-enclosure-in-auckland-zoo>.
- Payne, J. (1988). *Orang-utan Conservation in Sabah. Report 3759*. Kuala Lumpur, Malaysia: World Wide Fund for Nature (WWF), Malaysia International.
- PEGAS (2015). Former head of CITES in Guinea arrested. *PEGAS News*, August 24, 2015. Nanyuki, Kenya: Project to End Great Ape Slavery (PEGAS). Available at: <https://freetheapes.org/2015/08/24/former-head-of-cites-in-guinea-arrested/>.
- PEGAS (2017). *Presidential pardon: former head of Guinea CITES office pardoned before his case was finalized*. *PEGAS News*, January 29, 2017. Nanyuki, Kenya: Project to End Great Ape Slavery (PEGAS). Available at: <https://freetheapes.org/2017/01/29/presidential-pardon-former-head-of-guinea-cites-office-pardoned-before-his-case-was-finalized/>.
- PEGAS (n.d.). *Reply to 'Great apes exported from Guinea to China from 2009 to 2011' SC65 Doc. 34.1 Annex*. Nanyuki, Kenya: Project to End Great Ape Slavery (PEGAS). Available at: <http://danstiles.org/publications/wildlife/39.%20PEGAS%20reply.pdf>. Accessed September, 2020.
- Peh, K.S.-H. and Drori, O. (2010). Fighting corruption to save the environment: Cameroon's experience. *Ambio*, **39**(4), 336–9. DOI: [10.1007/s13280-010-0053-o](https://doi.org/10.1007/s13280-010-0053-o).
- Pemunta, N.V. (2019). Fortress conservation, wildlife legislation and the Baka Pygmies of southeast Cameroon. *GeoJournal*, **84**(4), 1035–55. DOI: [10.1007/s10708-018-9906-z](https://doi.org/10.1007/s10708-018-9906-z).
- Pengfei, F., Nguyen, M.H., Phiaphalath, P., et al. (2020). *Nomascus concolor. The IUCN Red List of Threatened Species*. 2020: e.T39775A17968556. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <https://dx.doi.org/10.2305/IUCN.UK.2020-2.RLTS.T39775A17968556.en>.
- People ex rel. NhRP (Nonhuman Rights Project, Inc.) v. Lavery*. 124 AD 3d 148 (3rd Dept) (2014). Available at: <https://www.leagle.com/decision/innyc020141204335>.
- People v. Graves*, 78 NYS 3d 613 (4th Dept) (2018). Available at: <https://casetext.com/case/people-v-graves-297?resultsNav=false>.
- Peres, C.A. and Palacios, E. (2007). Basin-wide effects of game harvest on vertebrate population densities in Amazonian forests: implications for animal-mediated seed dispersal. *Biotropica*, **39**(3), 304–15. DOI: [10.1111/j.1744-7429.2007.00272.x](https://doi.org/10.1111/j.1744-7429.2007.00272.x).
- Peres, C.A. and Palacios, E. (2007). Basin-wide effects of game harvest on vertebrate population densities in Amazonian forests: implications for animal-mediated seed dispersal. *Biotropica*, **39**(3), 304–15. DOI: [10.1111/j.1744-7429.2007.00272.x](https://doi.org/10.1111/j.1744-7429.2007.00272.x).
- Perez, P.L. (2018). *Green Entanglements: Nature Conservation and Indigenous Peoples' Rights in Indonesia and the Philippines*. Quezon City: University of the Philippines Press.
- PETA (n.d.). *PETA's milestones for animals*. Norfolk, VA: People for the Ethical Treatment of Animals (PETA). Available at: <https://www.peta.org/about-peta/milestones/>. Accessed January, 2020.
- Petre, C.-A., Tagg, N., Haurez, B., et al. (2013). Role of the western lowland gorilla (*Gorilla gorilla gorilla*) in seed dispersal in tropical forests and implications of its decline. *Biotechnology, Agronomy, Society and Environment*, **17**(3), 517–26.
- Petrovan, S.O., Junker, J., Wordley, C.F.R., et al. (2018). Evidence-based synopsis of interventions, a new tool in primate conservation and research. *International Journal of Primatology*, **39**(1), 1–4. DOI: [10.1007/s10764-018-0017-y](https://doi.org/10.1007/s10764-018-0017-y).
- Phassaraudomsak, M. and Krishnasamy, K. (2018). *Trading Faces: A Rapid Assessment on the Use of Facebook to Trade in Wildlife in Thailand*. Petaling Jaya, Malaysia: TRAFFIC. Available at: [https://www.traffic.org/site/assets/files/11073/trading\\_faces\\_thailand\\_2019.pdf](https://www.traffic.org/site/assets/files/11073/trading_faces_thailand_2019.pdf).
- Phelps, J., Webb, E.L., Bickford, D., Nijman, V. and Sodhi, N.S. (2010). Boosting CITES. *Science*, **330**(6012), 1752–3. DOI: [10.1126/science.1195558](https://doi.org/10.1126/science.1195558).
- Phoonjampa, R. and Brockelman, W. (2008). Survey of pileated gibbon *Hylobates pileatus* in Thailand: populations threatened by hunting and habitat degradation. *Oryx*, **42**(4), 600–6. DOI: [10.1017/S0030605308000306](https://doi.org/10.1017/S0030605308000306).
- Plumptre, A.J. (2000). Monitoring mammal populations with line transect techniques in African forests. *Journal of Applied Ecology*, **37**(2), 356–68. DOI: [10.1046/j.1365-2664.2000.00499.x](https://doi.org/10.1046/j.1365-2664.2000.00499.x).

- Plumptre, A.J. and Cox, D. (2006). Counting primates for conservation: primate surveys in Uganda. *Primates*, **47**(1), 65–73. DOI: 10.1007/s10329-005-0146-8.
- Plumptre, A., Hart, J.A., Hicks, T.C., et al. (2016a). *Pan troglodytes* ssp. *schweinfurthii* (errata version published in 2016). *The IUCN Red List of Threatened Species*. 2016: e.T15937A102329417. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <http://dx.doi.org/10.2305/IUCN.UK.2016-2.RLTS.T15937A17990187.en>.
- Plumptre, A., Nixon, S., Caillaud, D., et al. (2016b). *Gorilla beringei* ssp. *graueri* (errata version published in 2016). *The IUCN Red List of Threatened Species*. 2016: e.T39995A102328430. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <http://dx.doi.org/10.2305/IUCN.UK.2016-2.RLTS.T39995A17989838.en>.
- Plumptre, A.J., Nixon, S., Critchlow, R., et al. (2015). *Status of Grauer's Gorilla and Chimpanzees in Eastern Democratic Republic of Congo: Historical and Current Distribution and Abundance*. New York, NY: Wildlife Conservation Society (WCS), Fauna & Flora International (FFI) and Institut Congolais pour la Conservation de la Nature (ICCN). Available at: [http://fscdn.wcs.org/2016/04/04/inbumeq9\\_Status\\_of\\_Grauers\\_gorilla\\_and\\_eastern\\_chimpanzee\\_Report\\_Final.pdf](http://fscdn.wcs.org/2016/04/04/inbumeq9_Status_of_Grauers_gorilla_and_eastern_chimpanzee_Report_Final.pdf).
- Plumptre, A.J., Nixon, S., Kujirakwinja, D.K., et al. (2016c). Catastrophic decline of world's largest primate: 80% loss of Grauer's gorilla (*Gorilla beringei graueri*) population justifies critically endangered status. *PLoS ONE*, **11**(10), e0162697. DOI: 10.1371/journal.pone.0162697.
- Plumptre, A.J. and Reynolds, V. (1997). Nesting behavior of chimpanzees: implications for censuses. *International Journal of Primatology*, **18**, 475–85.
- Plumptre, A., Robbins, M.M. and Williamson, E.A. (2019). *Gorilla beringei*. *The IUCN Red List of Threatened Species*. 2019: e.T39994A115576640. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <http://dx.doi.org/10.2305/IUCN.UK.2019-1.RLTS.T39994A115576640.en>.
- Plumptre, A.J., Rose, R., Nangendo, G., et al. (2010). *Eastern Chimpanzee (Pan troglodytes schweinfurthii): Status Survey and Conservation Action Plan 2010–2020*. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <https://portals.iucn.org/library/sites/library/files/documents/2010-023.pdf>.
- Plumptre, A.J., Sterling, E.J. and Buckland, S.T. (2013). Primate census and survey techniques. In *Primate Ecology and Conservation: A Handbook of Techniques*, ed. E.J. Sterling, N. Bynum and M.E. Blair. Oxford, UK: Oxford University Press, pp. 10–26.
- Pollack, J. (2016). Goodbye, Mr. Chimps: a look at monkeys past in Super Bowl ads. *Ad Age*, January 29, 2016. Available at: <https://adage.com/article/special-report-super-bowl/video-compilation-super-bowl-ads-monkeys/302367>.
- Poole, J. (2016). *Affidavit of Joyce Poole*. December 2, 2016. Available at: <https://www.nonhumanrights.org/client-happy/>. Accessed December, 2019.
- Poole, J. (2018). *Supplemental Affidavit of Joyce Poole*. October 1, 2018. Available at: <https://www.nonhumanrights.org/client-happy/>. Accessed December, 2019.
- Pooley, J.A. and O'Connor, M. (2000). Environmental education and attitudes: emotions and beliefs are what is needed. *Environment and Behavior*, **32**(5), 711–23. DOI: 10.1177/0013916500325007.
- Poulsen, J.R., Clark, C.J. and Bolker, B.M. (2011). Decoupling the effects of logging and hunting on an Afrotropical animal community. *Ecological Applications*, **21**(5), 1819–36.
- Pramatha Nath Mullick v. Pradyumna Kumar Mullick*. 52 Indian Appeals 245, 264 (1925). Available at: <https://indiankanoon.org/doc/290902/>.
- Prescott, J., Rapley, W.A. and Joseph, M.M. (1993–1994). Status and conservation of chimpanzee and gorilla in Cameroon. *Primate Conservation*, **14–15**, 7–12. Available at: [http://www.primate-sg.org/primate\\_conservation/](http://www.primate-sg.org/primate_conservation/).
- Pretty, J. and Smith, D. (2004). Social capital in biodiversity conservation and management. *Conservation Biology*, **18**(3), 631–8. DOI: 10.1111/j.1523-1739.2004.00126.x.
- Primate Info Net (2005). *Chimpanzee Collaboratory*. Madison, WI: University of Wisconsin-Madison. Available at: <http://pin.primate.wisc.edu/idp/idp/entry/547>. Accessed January, 2020.
- PRISM (n.d.). *Toolkit for Evaluating the Outcomes and Impacts of Small/Medium-Sized Conservation Projects*. PRISM. Available at: <https://conservationevaluation.org>. Accessed July, 2020.

- Project Implicit (n.d.). *Project Implicit: social attitudes*. Project Implicit. Available at: <https://implicit.harvard.edu/implicit/>. Accessed December, 2019.
- Projet Primates (n.d.-a). *CCC Chimps: chimps of the Chimpanzee Conservation Center*. Projet Primates. Available at: <https://www.projetprimates.com/ccc-chimps/>. Accessed December 1, 2018.
- Projet Primates (n.d.-b). *Chimpanzee Conservation Center*. Projet Primates. Available at: <https://www.projetprimates.com/chimpanzee-conservation-center>. Accessed October, 2019.
- Protected Planet (n.d.-a). *Kimbi-Fungom in Cameroon*. Cambridge, UK: UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) and International Union for Conservation of Nature (IUCN). Available at: <https://www.protectedplanet.net/kimbi-fungom-national-park>. Accessed October, 2019.
- Protected Planet (n.d.-b). *Rwenzori Mountains in Uganda*. Cambridge, UK: UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) and International Union for Conservation of Nature (IUCN). Available at: <https://www.protectedplanet.net/rwenzori-mountains-national-park>. Accessed October, 2019.
- Protected Planet (n.d.-c). *Tofala in Cameroon*. Cambridge, UK: UN Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) and International Union for Conservation of Nature (IUCN). Available at: <https://www.protectedplanet.net/555622120>. Accessed October, 2019.
- Pruetz, J.D. and Herzog, N.M. (2017). Savanna chimpanzees at Fongoli, Senegal, navigate a fire landscape. *Current Anthropology*, **58**(S16), S337–S50. DOI: 10.1086/692112.
- Pruetz, J.D., Ontl, K.B., Cleaveland, E., et al. (2017). Intragroup lethal aggression in west African chimpanzees (*Pan troglodytes verus*): inferred killing of a former alpha male at Fongoli, Senegal. *International Journal of Primatology*, **38**(1), 31–57. DOI: 10.1007/s10764-016-9942-9.
- Puri, R.K. (2005). *Deadly Dances in the Bornean Rainforest: Hunting Knowledge of the Penan Benalui*. Royal Netherlands Institute of Southeast Asian and Caribbean Studies Monograph Series. Leiden, the Netherlands: KITLV Press.
- Pyhälä, A., Osuna Orozco, A. and Counsell, S. (2016). *Protected Areas on the Congo Basin: Failing Both People and Biodiversity?* London, UK: Rainforest Foundation-UK. Available at: <https://www.rainforestfoundationuk.org/media.ashx/protected-areas-in-the-congo-basin-failing-both-people-and-diversity-english.pdf>.
- Quinten, M.C., Stirling, F., Schwarze, S., Dinata, Y. and Hedges, K. (2014). Knowledge, attitudes and practices of local people on Siberut Island (West-Sumatra, Indonesia) towards primate hunting and conservation. *Journal of Threatened Taxa*, **6**(11), 6389–98. DOI: 10.11609/JoTT.03963.6389-98.
- Ramutsindela, M. (2016). Wildlife crime and state security in south(ern) Africa: an overview of developments. *Politikon*, **43**(2), 159–71. DOI: 10.1080/02589346.2016.1201376.
- Rawson, B.M., Hoang, M.D., Roos, C., Van, N.T. and Nguyen, M.H. (2020a). *Nomascus gabriellae. The IUCN Red List of Threatened Species*. 2020: e.T128073282A17968950. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <https://dx.doi.org/10.2305/IUCN.UK.2020-2.RLTS.T128073282A17968950.en>.
- Rawson, B.M., Insua-Cao, P., Nguyen, M.H., et al. (2011). *The Conservation Status of Gibbons in Vietnam*. Hanoi, Viet Nam: Fauna & Flora International (FFI) and Conservation International. Available at: <http://www.gibbons.de/main/books/2011gibbons-vietnam.pdf>.
- Rawson, B.M., Nguyen, M.H., Coudrat, C.N.Z., et al. (2020b). *Nomascus leucogenys. The IUCN Red List of Threatened Species*. 2020: e.T39895A17969139. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <https://dx.doi.org/10.2305/IUCN.UK.2020-2.RLTS.T39895A17969139.en>.
- Rawson, B.M., Roos, C., Nguyen, M.H., et al. (2020c). *Nomascus nasutus. The IUCN Red List of Threatened Species*. 2020: e.T41642A17969578. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <https://dx.doi.org/10.2305/IUCN.UK.2020-2.RLTS.T41642A17969578.en>.
- Ray, P.C., Kumar, A., Devi, A., et al. (2015). Habitat characteristics and their effects on the density of groups of western hoolock gibbon (*Hoolock hoolock*) in Namdapha National Park, Arunachal Pradesh, India. *International Journal of Primatology*, **36**(3), 445–59. DOI: 10.1007/s10764-015-9834-4.
- Raymond, C.M., Fazey, I., Reed, M.S., et al. (2010). Integrating local and scientific knowledge for environmental management. *Journal of Environmental Management*, **91**(8), 1766–77. DOI: 10.1016/j.jenvman.2010.03.023.
- Reichard, U. (1995). Extra-pair copulations in a monogamous gibbon (*Hyalobates lar*). *Ethology*, **100**(2), 99–112. DOI: 10.1111/j.1439-0310.1995.tb00319.x.

- Reinartz, G., Ingmanson, E.J. and Vervaet, H. (2013). *Pan paniscus gracile* chimpanzee (bonobo, pygmy chimpanzee). In *Mammals of Africa. Volume II: Primates*, ed. T. Butynski, J. Kingdom and J. Kalina. London, UK: Bloomsbury Publishing, pp. 64–9.
- Republic of Indonesia (2009). *Environmental Protection and Management Law no. 32/ 2009, dated October 3, 2009*. Republic of Indonesia. Available at: <http://extwprlegs1.fao.org/docs/pdf/ins97643.pdf>.
- Republic of Indonesia (2018). *Regulation of the Ministry of Environment and Forestry Number P.20/MENLHK/SETJEN/KUM.1/6/2018 on the Drawn up List of Protected Plant and Animal Species*. Republic of Indonesia.
- Reuter, K.E., Randell, H., Wills, A.R. and Sewall, B.J. (2016). The consumption of wild meat in Madagascar: drivers, popularity and food security. *Environmental Conservation*, **43**(3), 273–83. DOI: 10.1017/S0376892916000059.
- Reuters (2006). Kick boxing orangutans get to go home. *NBC News World Environment*, November 21, 2006.
- Reynolds, V. (2005). *The Chimpanzees of the Budongo Forest: Ecology, Behaviour and Conservation*. Oxford, UK: Oxford University Press.
- Reynolds, V. and Reynolds, F. (1965). Chimpanzees of Budongo Forest. In *Primate Behaviour: Field Studies of Monkeys and Apes*, ed. I. Devore. New York, NY: Holt, Rinehart & Winston, pp. 368–424.
- Ribeiro, J.W., Sugai, L.S.M. and Campos-Cerqueira, M. (2017). Passive acoustic monitoring as a complementary strategy to assess biodiversity in the Brazilian Amazonia. *Biodiversity and Conservation*, **26**(12), 2999–3002. DOI: 10.1007/s10531-017-1390-0.
- Richard, L., Mouinga-Ondeme, A., Betsem, E., et al. (2016). Zoonotic transmission of two new strains of human T-lymphotropic virus type 4 in hunters bitten by a gorilla in Central Africa. *Clinical Infectious Diseases*, **63**(6), 800–3. DOI: 10.1093/cid/ciw389.
- Rijken, H.D. (1978). *A field study on Sumatran orangutans (Pongo pygmaeus abelii Lesson 1827). Ecology, behaviour and conservation*. Doctoral thesis. Wageningen, The Netherlands: Nature Conservation Department, Agricultural University Wageningen.
- Rijken, H.D. and Meijaard, E. (1999). *Our Vanishing Relative? The Status of Wild Orangutans at the Close of the Twentieth Century*. Dordrecht, the Netherlands: Kluwer Academic.
- Ripple, W.J., Abernethy, K., Betts, M.G., et al. (2016). Bushmeat hunting and extinction risk to the world's mammals. *Royal Society Open Science*, **3**(10), 160498. DOI: 10.1098/rsos.160498.
- Rivers v. Katz*. 67 NY 2d 485 (1986). Available at: <https://www.leagle.com/decision/198655267ny2d4851500>.
- Robbins, A.M., Gray, M., Basabose, A., et al. (2013). Impact of male infanticide on the social structure of mountain gorillas. *PLoS ONE*, **8**(11), 1–10. DOI: 10.1371/journal.pone.0078256.
- Robbins, A.M., Stoinski, T., Fawcett, K. and Robbins, M.M. (2011a). Lifetime reproductive success of female mountain gorillas. *American Journal of Physical Anthropology*, **146**(4), 582–93. DOI: 10.1002/ajpa.21605.
- Robbins, M.M. (2011). Gorillas: diversity in ecology and behavior. In *Primates in Perspective*, ed. C.J. Campbell, A. Fuentes, K.C. MacKinnon, S. Bearder and R.M. Stumpf. Oxford, UK: Oxford University Press, pp. 326–39.
- Robbins, M.M., Bernejo, M., Cipoletta, C., et al. (2004). Social structure and life-history patterns in western gorillas (*Gorilla gorilla gorilla*). *American Journal of Primatology*, **64**, 145–59.
- Robbins, M.M., Gray, M., Fawcett, K.A., et al. (2011b). Extreme conservation leads to recovery of the Virunga mountain gorillas. *PLoS ONE*, **6**, 1–10. DOI: 10.1371/journal.pone.0019788.
- Robbins, M.M., Gray, M., Kagoda, E. and Robbins, A.M. (2009). Population dynamics of the Bwindi mountain gorillas. *Biological Conservation*, **142**(12), 2886–95. DOI: 10.1016/j.biocon.2009.07.010.
- Robbins, M.M. and Robbins, A.M. (2018). Variation in the social organization of gorillas: life history and socio-ecological perspectives. *Evolutionary Anthropology: Issues, News, and Reviews*, **27**, 218–33. DOI: 10.1002/evan.21721.
- Robbins, M.M. and Sawyer, S. (2007). Intergroup encounters in mountain gorillas of Bwindi Impenetrable National Park, Uganda. *Behaviour*, **144**(12), 1497–519. DOI: 10.1163/156853907782512146.
- Robertson, S. (2017). Why law enforcement is essential to stopping illegal wildlife trade. *World Bank Blogs*, July 27, 2017. Available at: <https://blogs.worldbank.org/voices/why-law-enforcement-essential-stopping-illegal-wildlife-trade>.
- Robinson, B.E., Masuda, Y.J., Kelly, A., et al. (2018). Incorporating land tenure security into conservation. *Conservation Letters*, **11**(2), e12383. DOI: 10.1111/conl.12383.

- Robinson, J.G. and Bennett, E.L. (2004). Having your wildlife and eating it too: an analysis of hunting sustainability across tropical ecosystems. *Animal Conservation*, **7**(4), 397–408. DOI: 10.1017/s1367943004001532.
- Robinson, J.G., Redford, K.H. and Bennett, E.L. (1999). Wildlife harvest in logged tropical forests. *Science*, **284**(5414), 595–6. DOI: 10.1126/science.284.5414.595.
- Robson, S.L. and Wood, B. (2008). Hominin life history: reconstruction and evolution. *Journal of Anatomy*, **212**(4), 394–425. DOI: 10.1111/j.1469-7580.2008.00867.x.
- Roderick, K. (1990). Spectacle, complete with apes, in Vegas courtroom: animal rights: Stardust headliner Bobby Berosini is suing after tapes showed him hitting his orangutans. *Los Angeles Times*, August 8, 1990. Available at: <https://www.latimes.com/archives/la-xpm-1990-08-08-mn-161-story.html>.
- Rodriguez, M., Pascual, M., Wingard, J., et al. (2019). *Legal Protection of Great Apes & Gibbons: Country Profiles for 17 Range Countries*. Missoula, MT: Legal Atlas. Available at: [https://www.legal-atlas.com/uploads/2/6/8/4/26849604/apes\\_legal\\_protection\\_feb\\_2019\\_.pdf](https://www.legal-atlas.com/uploads/2/6/8/4/26849604/apes_legal_protection_feb_2019_.pdf).
- Roe, D. and Booker, F. (2019a). Engaging local communities in tackling illegal wildlife trade: a synthesis of approaches and lessons for best practice. *Conservation Science and Practice*, **1**(5), e26. DOI: 10.1111/csp2.26.
- Roe, D. and Booker, F. (2019b). *More Than Words: Are Commitments to Tackle Illegal Wildlife Trade Being Met?* Godalming, UK: World Wide Fund for Nature (WWF)-UK. Available at: [https://www.wwf.org.uk/sites/default/files/2019-08/WWF\\_IWT\\_Report\\_v8.pdf](https://www.wwf.org.uk/sites/default/files/2019-08/WWF_IWT_Report_v8.pdf).
- Roe, D., Booker, F., Day, M., et al. (2015). Are alternative livelihood projects effective at reducing local threats to specified elements of biodiversity and/or improving or maintaining the conservation status of those elements? *Environmental Evidence*, **4**(1), 22. DOI: 10.1186/s13750-015-0048-1.
- Rogers, M.E., Abernethy, K., Bermejo, M., et al. (2004). Western gorilla diet: a synthesis from six sites. *American Journal of Primatology*, **64**(2), 173–92. DOI: 10.1002/ajp.20071.
- Rogers, M.E., Voysey, B.C., McDonald, K.E., Parnell, R.J. and Tutin, C.E.G. (1998). Lowland gorillas and seed dispersal: the importance of nest sites. *American Journal of Primatology*, **45**(1), 45–68. DOI: 10.1002/(sici)1098-2345(1998)45:1<45::Aid-ajp5>3.0.co;2-w.
- Román, V. (2015). Argentina grants an orangutan human-like rights. *Scientific American*, January 9, 2015. Available at: <https://www.scientificamerican.com/article/argentina-grants-an-orangutan-human-like-rights/>.
- Romer v. Evans*. 517 US 620 (1996). Available at: [https://web.stanford.edu/~mrosenfe/Romer\\_v\\_Evans\\_SC\\_1996.pdf](https://web.stanford.edu/~mrosenfe/Romer_v_Evans_SC_1996.pdf).
- Ron, T. and Refisch, J. (2013). *Towards a Transboundary Protected Area Complex in the Mayombe Forest Ecosystems: Strategic Plan*. United Nations Environment Programme (UNEP), Great Apes Survival Partnership (GRASP) and International Union for Conservation of Nature (IUCN). Available at: <https://portals.iucn.org/library/sites/library/files/documents/2013-029-En.pdf>.
- Rosen, G.E. and Smith, K.F. (2010). Summarizing the evidence on the international trade in illegal wildlife. *EcoHealth*, **7**(1), 24–32. DOI: 10.1007/s10393-010-0317-y.
- Rosenbaum, K. (2007). *Legislative Drafting Guide: A Practitioner's View, A Resource for People Working on International Technical Assistance Projects*. FAO Legal Papers Online 64. Rome, Italy: Food and Agriculture Organization (FAO). Available at: <http://www.fao.org/3/a-bb097e.pdf>.
- Rosenbaum, S., Vecellio, V. and Stoinski, T. (2016). Observations of severe and lethal coalitionary attacks in wild mountain gorillas. *Scientific Reports*, **6**(1), 37018. DOI: 10.1038/srep37018.
- Ross, S.R., Lukas, K.E., Lonsdorf, E.V., et al. (2008). Inappropriate use and portrayal of chimpanzees. *Science*, **319**(5869), 1487. DOI: 10.1126/science.1154490.
- Ross, S.R., Freeman, V.M. and Lonsdorf, E.V. (2011). Specific image characteristics influence attitudes about chimpanzee conservation and use as pets. *PLoS ONE*, **6**(7), e22050. DOI: 10.1371/journal.pone.0022050.
- Rousseau, J. (1990). *Central Borneo: Ethnic Identity and Social Life in a Stratified Society*. Oxford, UK: Clarendon Press.
- Rovero, F., Mtui, A., Kitegile, A., et al. (2015). Primates decline rapidly in unprotected forests: evidence from a monitoring program with data constraints. *PLoS ONE*, **10**(2), e0118330. DOI: 10.1371/journal.pone.0118330.
- Rovero, F., Mtui, A.S., Kitegile, A.S. and Nielsen, M.R. (2012). Hunting or habitat degradation? Decline of primate populations in Udzungwa Mountains, Tanzania: an analysis of threats. *Biological Conservation*, **146**(1), 89–96. DOI: 10.1016/j.biocon.2011.09.017.

- Rowcliffe, J.M., de Merode, E. and Cowlishaw, G. (2004). Do wildlife laws work? Species protection and the application of a prey choice model to poaching decisions. *Proceedings of the Royal Society of London, Series B: Biological Sciences*, **271**(1557), 2631–6. DOI: doi:10.1098/rspb.2004.2915.
- Roy, J., Vigilant, L., Gray, M., et al. (2014). Challenges in the use of genetic mark–recapture to estimate the population size of Bwindi mountain gorillas (*Gorilla beringei beringei*). *Biological Conservation*, **180**(Supplement C), 249–61. DOI: 10.1016/j.biocon.2014.10.011.
- Roylance, F.D. (2010). Retired show biz chimps come to Maryland Zoo. *The Baltimore Sun*, August 16, 2010. Available at: <https://www.baltimoresun.com/maryland/bs-xpm-2010-08-16-bs-md-chimps-maryland-zoo-20100816-story.html>.
- Rubis, J.M. (2017). Ritual revitalisation as adaptation to environmental stress: skull-blessing in Bidayuh communities of Borneo. *Third World Thematics: A TWQ Journal*, **2**(2–3), 356–75. DOI: 10.1080/23802014.2017.1402667.
- Russell, C. (2001). Primate-focused ecotourism: proceed with caution. *Laboratory Primate Newsletter*, **40**(4), 7–8.
- Russell, C.L. (1995). The social construction of orangutans: an ecotourist experience. *Society & Animals*, **3**(2), 151–70. DOI: 10.1163/156853095X00134.
- Russon, A.E. (2002). Return of the native: cognition and site-specific expertise in orangutan rehabilitation. *International Journal of Primatology*, **23**(3), 461–78.
- Russon, A.E., Wich, S.A., Ancrenaz, M., et al. (2009). Geographic variation in orangutan diets. In *Orangutans: Geographic Variation in Behavioral Ecology and Conservation*, ed. S.A. Wich, S. Utami-Atmoko, T. Mitra Setia and C.P. van Schaik. Oxford, UK: Oxford University Press, pp. 135–56.
- Sá, R. and van Schijndel, J. (2010). *Gastrointestinal parasites of chimpanzees (Pan troglodytes verus) in the Boé sector, Republic of Guinea-Bissau. Preliminary survey and mid report*. Unpublished report. Chimbo Foundation.
- Sá, R.M.M., Ferreira da Silva, M., Sousa, F.M. and Minhós, T. (2012). The trade and ethnobiological use of chimpanzee body parts in Guinea-Bissau. *TRAFFIC Bulletin*, **24**(1), 31–4.
- Sabuhoro, E., Wright, B., Munanura, I.E., Nyakabwa, I.N. and Nibigira, C. (2017). The potential of ecotourism opportunities to generate support for mountain gorilla conservation among local communities neighboring Volcanoes National Park in Rwanda. *Journal of Ecotourism*, 1–17. DOI: 10.1080/14724049.2017.1280043.
- Sachs, J.D. (2006). *The End of Poverty*. London, UK: Penguin Books.
- Sacramento Zoo (2018). Sacramento Zoo primate expert travels to China to help lead the country's first orangutan husbandry workshop. *Sacramento Zoo News*, November 28, 2018. Available at: <https://www.saczoo.org/2018/11/sacramento-zoo-primate-expert-travels-to-china-to-help-lead-the-countrys-first-orangutan-husbandry-workshop/>.
- Safari World (2017). *Minutes of Annual Shareholders Meeting, April 24, 2017*. Bangkok, Thailand: Safari World Public Co. Ltd. Available at: [http://www.safareworld.com/investor/home/pdf/2560\\_e/2.pdf](http://www.safareworld.com/investor/home/pdf/2560_e/2.pdf).
- Safari World (n.d.). *Orangutan boxing show*. Bangkok, Thailand: Safari World Public Co. Ltd. Available at: <http://www.safareworld.com/oran.html>. Accessed October, 2019.
- Sakamaki, T., Mulavwa, M. and Furuichi, T. (2009). Flu-like epidemics in wild bonobos (*Pan paniscus*) at Wamba, the Luo Scientific Reserve, Democratic Republic of Congo. *Pan Africa News*, **16**, 1–4.
- Salafsky, N., Boshoven, J., Burivalova, Z., et al. (2019). Defining and using evidence in conservation practice. *Conservation Science and Practice*, **1**(5), e27. DOI: 10.1111/csp2.27.
- Samuels, G. (2016). Chimpanzees have rights, says Argentine judge as she orders Cecilia be released from zoo. *The Independent*, November 7, 2016. Available at: <http://www.independent.co.uk/news/world/americas/argentina-judge-says-chimpanzee-poor-conditions-has-rights-and-should-be-freed-from-zoo-a7402606.html>.
- Sánchez, K. (2015). *Oil palm industry and orangutan rescues*. Unpublished background paper commissioned by Arcus Foundation. Indonesia: International Animal Rescue (IAR).
- Santika, T., Ancrenaz, M., Wilson, K.A., et al. (2017). First integrative trend analysis for a great ape species in Borneo. *Scientific Reports*, **7**(1), 1–16. DOI: 10.1038/s41598-017-04435-9.
- Sarma, K., Krishna, M. and Kumar, A. (2015). Fragmented populations of the vulnerable eastern hoolock gibbon *Hoolock leuconedys* in the Lower Dibang Valley district, Arunachal Pradesh, India. *Oryx*, **49**(1), 133–9. DOI: 10.1017/S0030605312001299.

- Sarti, F.M., Adams, C., Morsello, C., et al. (2015). Beyond protein intake: bushmeat as source of micronutrients in the Amazon. *Ecology and Society*, **20**(4), 22. DOI: 10.5751/ES-07934-200422.
- Sas-Rolfes, M.T., Challender, D.W.S., Hinsley, A., Veríssimo, D. and Milner-Gulland, E.J. (2019). Illegal wildlife trade: scale, processes, and governance. *Annual Review of Environment and Resources*, **44**(1), 201–28. DOI: 10.1146/annurev-environ-101718-033253.
- Savage-Rumbaugh, E.S. (2013). *Affidavit of Emily Sue Savage-Rumbaugh In the Matter of a Proceeding under Article 70 of the CPLR for a Writ of Habeas Corpus. The Nonhuman Rights Project, Inc., on behalf of Tommy, Petitioners, v. Patrick C. Lavery, individually and as an officer of Circle L Trailer Sales, Inc., Diane Lavery, and Circle L Trailer Sales, Inc.* November 22, 2013. Available at: <https://www.nonhumanrights.org/content/uploads/Ex-12-Savage-Rumbaugh-Affidavit-Tommy-Case.pdf>. Accessed December, 2019.
- Savage-Rumbaugh, E.S. (2015). *Affidavit of Emily Sue Savage-Rumbaugh In the Matter of a Proceeding under Article 70 of the CPLR for a Writ of Habeas Corpus. The Nonhuman Rights Project, Inc., on behalf of Kiko, Petitioner, v. Carmen Presti, individually and as an officer and director of The Primate Sanctuary, Inc., Christie E. Presti, individually and as an officer and director of The Primate Sanctuary, Inc., and the Primate Sanctuary, Inc.* December 1, 2015. Available at: <https://www.nonhumanrights.org/client-kiko/>. Accessed December, 2019.
- Savini, T., Boesch, C. and Reichard, U.H. (2008). Home-range characteristics and the influence of seasonality on female reproduction in white-handed gibbons (*Hyalobates lar*) at Khao Yai National Park, Thailand. *American Journal of Physical Anthropology*, **135**(1), 1–12. DOI: 10.1002/ajpa.20578.
- Schapiro, R. (2009a). All it takes is \$45,000 and a phone call to get a pet chimp. *New York Daily News*, February 21, 2009. Available at: <https://www.nydailynews.com/news/takes-45-000-phone-call-pet-chimp-article-1.369397>.
- Schapiro, R. (2009b). The worst story I ever heard. *Esquire*, November 11, 2009. Available at: <https://www.esquire.com/news-politics/a5609/chimpanzee-attack-0409/>.
- Scheffers, B.R., Oliveira, B.F., Lamb, I. and Edwards, D.P. (2019). Global wildlife trade across the tree of life. *Science*, **366**(6461), 71–6. DOI: 10.1126/science.aav5327.
- Schiller, A. (1997). *Small Sacrifices: Religious Change and Cultural Identity Among the Ngaju of Indonesia*. New York and Oxford: Oxford University Press.
- Schlegel, H. and Müller, S. (1839–1844). Bijdragen tot de natuurlijke historie van den orang-oetan (*Simia satyrus*). In *Verhandelingen over de Natuurlijke Geschiedenis der Nederlandsche Overzeesche Bezittingen: Zoologie*, ed. C.J. Temminck. Leiden, the Netherlands: Luchtmans, pp. 1–28.
- Schoene, C.U.R. and Brend, S.A. (2002). Primate sanctuaries: a delicate conservation approach. *South African Journal of Wildlife Research*, **32**(2), 109–13.
- Schouteden, H. (1930). Le chimpanzé de la rive gauche du Congo. *Bulletin du Cercle Zoologique Congolais*, **VI**(4), 114–9.
- Schreer, V. (2016). *Longing for prosperity in Indonesian Borneo*. PhD thesis. Canterbury, UK: University of Kent.
- Schroepfer, K.K., Rosati, A.G., Chartrand, T. and Hare, B. (2011). Use of 'entertainment' chimpanzees in commercials distorts public perception regarding their conservation status. *PLoS ONE*, **6**(10), e26048. DOI: 10.1371/journal.pone.0026048.
- Schulte-Herbrüggen, B., Cowlishaw, G., Homewood, K. and Rowcliffe, J.M. (2013). The importance of bushmeat in the livelihoods of west African cash-crop farmers living in a faunally-depleted landscape. *PLoS ONE*, **8**(8), e72807. DOI: 10.1371/journal.pone.0072807.
- Schulze, K., Knights, K., Coad, L., et al. (2018). An assessment of threats to terrestrial protected areas. *Conservation Letters*, **11**(3), e12435. DOI: 10.1111/conl.12435.
- Schwarz, E. (1929). Das Vorkommen des Schimpansen auf den linken Kongo-Ufer. *Revue de Zoologie et de Botanique Africaine*, **16**(4), 425–6.
- Schwitzer, C., Mittermeier, R.A., Johnson, S.E., et al. (2014). Averting lemur extinctions amid Madagascar's political crisis. *Science*, **343**(6173), 842–3. DOI: 10.1126/science.1245783.
- Seiler, N., Boesch, C., Mundry, R., Stephens, C. and Robbins, M.M. (2017). Space partitioning in wild, non-territorial mountain gorillas: the impact of food and neighbours. *Royal Society Open Science*, **4**(11), 170720. DOI: 10.1098/rsos.170720.

- Seiler, N., Boesch, C., Stephens, C., et al. (2018). Social and ecological correlates of space use patterns in Bwindi mountain gorillas. *American Journal of Primatology*, **80**(4), e22754. DOI: 10.1002/ajp.22754.
- Seiler, N. and Robbins, M.M. (2016). Factors influencing ranging on community land and crop raiding by mountain gorillas. *Animal Conservation*, **19**(2), 176–88. DOI: 10.1111/acv.12232.
- Sen, A. (1999). *Development as Freedom*. Oxford, UK: Oxford University Press.
- Serckx, A., Huynen, M.-C., Bastin, J.-F., et al. (2014). Nest grouping patterns of bonobos (*Pan paniscus*) in relation to fruit availability in a forest-savannah mosaic. *PLoS ONE*, **9**(4), e93742. DOI: 10.1371/journal.pone.0093742.
- Serpell, J.A. (2002). Anthropomorphism and anthropomorphic selection – beyond the ‘cute response’. *Society & Animals*, **10**(4), 437–54. DOI: 10.1163/156853002320936926.
- Sesink Clee, P.R., Abwe, E.E., Ambahe, R.D., et al. (2015). Chimpanzee population structure in Cameroon and Nigeria is associated with habitat variation that may be lost under climate change. *BMC Evolutionary Biology*, **15**(1), 2. DOI: 10.1186/s12862-014-0275-z.
- Setiawan, A., Nugroho, T.S., Wibisono, Y., Ikawati, V. and Sugardjito, J. (2012). Population density and distribution of Javan gibbon (*Hoolock moloch*) in Central Java, Indonesia. *Biodiversitas*, **13**, 23–32.
- Shapiro, J. (2001). *Mao’s War Against Nature: Politics and the Environment in Revolutionary China*. Cambridge, UK: Cambridge University Press.
- Shen, A. (2017). Visitors to Chinese zoo feel deflated after discovering new penguin display consists of blow-up toys. *South China Morning Post*, December 1, 2017. Available at: <https://www.scmp.com/news/china/society/article/2122445/visitors-chinese-zoo-feel-deflated-after-discovering-new-penguin>.
- Shenoy, R. (2019). This orangutan’s ‘personhood’ victory brings hope to US animal rights movement. *PRI*, November 20, 2019. Available at: <https://www.pri.org/stories/2019-11-20/orangutan-s-personhood-victory-brings-hope-us-animal-rights-movement>.
- Shepherd, C. (2010). Illegal primate trade in Indonesia exemplified by surveys carried out over a decade in North Sumatra. *Endangered Species Research*, **11**(3), 201–5. DOI: 10.3354/esr00276.
- Sherman, J. and Greer, D. (2018). The status of captive apes. In *State of the Apes: Infrastructure Development and Ape Conservation*, ed. Arcus Foundation. Cambridge, UK: Cambridge University Press, pp. 225–55. Available at: <https://www.stateoftheapes.com/themes/ch-8-the-status-of-captive-apes/>.
- Shields, P., Jones, C. and McKimson, R., directors (1970). *Lancelot Link: Secret Chimp*. American Broadcasting Company (ABC) and Sandler-Burns-Marmer Productions. Available at: [https://www.imdb.com/title/tt0065309/fullcredits?ref\\_=ttco\\_sa\\_1](https://www.imdb.com/title/tt0065309/fullcredits?ref_=ttco_sa_1).
- Shukman, D. and Piranty, S. (2017). The secret trade in baby chimps. *BBC News Science and Environment*, January 30, 2017. Available at: <https://www.bbc.co.uk/news/resources/idt-5e8c4bac-c236-4cd9-bacc-db96d733f6cf>.
- Shuxian, Z., Li, P.J. and Su, P.-F. (2005). Animal welfare consciousness of Chinese college students: findings and analysis. *China Information*, **19**(1), 67–95. DOI: 10.1177/0920203X05051020.
- Sifuna, N. (2012). The future of traditional customary uses of wildlife in modern Africa: a case study of Kenya and Botswana. *Advances in Anthropology*, **2**, 31–8. DOI: 10.4236/aa.2012.21004.
- Silk, M.J., Crowley, S.L., Woodhead, A.J. and Nuno, A. (2018). Considering connections between Hollywood and biodiversity conservation. *Conservation Biology*, **32**(3), 597–606. DOI: 10.1111/cobi.13030.
- Sillander, K. and Alexander, J. (2016). Belonging in Borneo: refiguring Dayak ethnicity in Indonesia. *The Asia Pacific Journal of Anthropology*, **17**(2), 95–101. DOI: 10.1080/14442213.2016.1152882.
- Sillitoe, P. (2003). *Managing Animals in New Guinea: Preying the Game in the Highlands*. Studies in Environmental Anthropology Vol. 7. New York, NY: Routledge.
- Silom Advisory Co. (2017). *Opinion of the Independent Financial Advisor regarding to the asset acquisition of Safari World Company Limited* [translation]. Prepared by Silom Advisory Company Limited. Available at: [https://www.safareworld.com/investor/home/pdf/2560\\_e4.pdf](https://www.safareworld.com/investor/home/pdf/2560_e4.pdf).
- Sims, D. (2016). *The Jungle Book* points toward a CGI future. *The Atlantic*, April 18, 2016. Available at: <https://www.theatlantic.com/entertainment/archive/2016/04/the-jungle-book-and-the-uncanny-valley/478767/>.
- Singapore Zoo (n.d.). *Special experiences: jungle breakfast with wildlife*. Singapore: Singapore Zoo. Available at: <https://www.wrs.com.sg/en/singapore-zoo/animals-and-zones/orangutan.html>. Accessed September, 2020.

- Singleton, I., Knott, C.D., Morrogh-Bernard, H.C., Wich, S.A. and van Schaik, C.P. (2009). Ranging behavior of orangutan females and social organization. In *Orangutans: Geographic Variation in Behavioral Ecology and Conservation*, ed. S.A. Wich, S. Utami-Atmoko, T. Mitra Setia and C.P. van Schaik. Oxford, UK: Oxford University Press, pp. 205–13.
- Singleton, I., Wich, S.A., Nowak, M., Usher, G. and Utami-Atmoko, S.S. (2017). *Pongo abelii* (errata version published in 2018). *The IUCN Red List of Threatened Species*. 2017: e.T121097935A123797627. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <http://dx.doi.org/10.2305/IUCN.UK.2017-3.RLTS.T121097935A115575085.en>.
- Sitas, N., Baillie, J.E.M. and Isaac, N.J.B. (2009). What are we saving? Developing a standardized approach for conservation action. *Animal Conservation*, **12**(3), 231–7. DOI: 10.1111/j.1469-1795.2009.00244.x.
- SMART (n.d.-a). *Home*. Spatial Monitoring and Reporting Tool (SMART). Available at: <https://smartconservationtools.org>. Accessed September, 2020.
- SMART (n.d.-b). *SMART Partnership*. Spatial Monitoring and Reporting Tool (SMART). Available at: <https://smartconservationtools.org/smart-partnership>. Accessed September, 2020.
- Smith, J. and Cheyne, S.M. (2017). *Investigating the extent and prevalence of gibbons being traded online in habitat countries: a preliminary report for Arcus Foundation*. Oxford, UK: Oxford Brookes University.
- Smith, J.H., King, T., Campbell, C., Cheyne, S.M. and Nijman, V. (2018). Modelling population viability of three independent Javan gibbon (*Hyalobates moloch*) populations on Java, Indonesia. *Folia Primatologica*, **88**(6), 507–22. DOI: 10.1159/000484559.
- Smithsonian Institute (n.d.). *What does it mean to be human?* Washington DC: Smithsonian Institution. Available at: <http://humanorigins.si.edu/evidence/genetics>. Accessed December, 2019.
- Sollund, R., Stefes, C.H. and Germani, A.R., ed. (2016). *Fighting Environmental Crime in Europe and Beyond: The Role of the EU and Its Member States*. London, UK: Palgrave Macmillan.
- Somerset v. Stewart*. 1 Lofft 1 (KB) (1772). Available at: <http://www.commonlii.org/int/cases/EngR/1772/57.pdf>.
- Sosnowski, M. (2019). Black markets: a comparison of the illegal ivory and narcotic trades. *Deviant Behavior*, 1–10. DOI: 10.1080/01639625.2019.1568360.
- Soto Reyes, M. (2019). Scandals and teen dropoff weren't enough to stop Facebook's growth. *Business Insider*, April 26, 2019. Available at: <https://www.businessinsider.com/facebook-grew-monthly-average-users-in-q1-2019-4?r=US&IR=T>.
- Species360 (n.d.). *Zoological Information Management System (ZIMS). Species holding reports 2018*. Minneapolis, MN: Species360. Available at: <https://zims.species360.org>. Accessed November, 2018.
- Spehar, S.N., Sheil, D., Harrison, T., et al. (2018). Orangutans venture out of the rainforest and into the Anthropocene. *Science Advances*, **4**(6), 1–13. DOI: 10.1126/sciadv.1701422.
- Srikosamatara, S. (1984). Ecology of pileated gibbons in South-East Asia. In *The Lesser Apes: Evolutionary and Behavioural Biology*, ed. H.H. Preuschoft, D.J. Chivers, W.Y. Brockelman and N. Creel. Edinburgh, UK: Edinburgh University Press, pp. 242–57.
- Stanford, C.B. (1999). *The Hunting Apes: Meat Eating and the Origins of Human Behavior*. Princeton, NJ: Princeton University Press.
- State Council (1993). *Circular of the State Council on Banning the Trade of Rhinoceros Horn and Tiger Bone*. Beijing, China: State Council of the People's Republic of China. Available at: [https://sherloc.unodc.org/cld/document/chn/1993/circular\\_of\\_the\\_state\\_council\\_on\\_banning\\_the\\_trade\\_of\\_rhinoceros\\_horn\\_and\\_tiger\\_bone.html](https://sherloc.unodc.org/cld/document/chn/1993/circular_of_the_state_council_on_banning_the_trade_of_rhinoceros_horn_and_tiger_bone.html).
- Sterling, E.J., Filardi, C., Toomey, A., et al. (2017). Biocultural approaches to well-being and sustainability indicators across scales. *Nature Ecology & Evolution*, **1**(12), 1798–806. DOI: 10.1038/s41559-017-0349-6.
- Stevens, S.F. (1997). *Conservation through Cultural Survival: Indigenous Peoples and Protected Areas*. Washington DC: Island Press.
- Stewart, F.A. (2011). Why sleep in a nest? Empirical testing of the function of simple shelters made by wild chimpanzees. *American Journal of Physical Anthropology*, **146**(2), 313–8. DOI: 10.1002/ajpa.21580.
- Stewart, K. (1988). Suckling and lactational anoestrus in wild gorillas (*Gorilla gorilla*). *Journal of Reproduction and Fertility*, **83**(2), 627–34.

- Stiles, D. (2011). *Elephant Meat Trade in Central Africa: Summary Report*. Gland, Switzerland: International Union for Conservation of Nature (IUCN).
- Stiles, D. (2016). *The Illegal Trade in Great Apes. A Report Prepared by the Project to End Great Ape Slavery (PEGAS)*. Johannesburg, South Africa. Available at: <https://freetheapes.files.wordpress.com/2014/11/cop17-report.pdf>.
- Stiles, D. (2017). Social media trafficking of great apes raises concern. *SWARA Magazine*, May 25, 2017.
- Stiles, D., Redmond, I., Cress, D., Nellemann, C. and Formo, R.K. (2013). *Stolen Apes: The Illicit Trade in Chimpanzees, Gorillas, Bonobos and Orangutans. A Rapid Response Assessment*. Arendal, Sweden: United Nations Environment Programme and GRID-Arendal. Available at: <https://www.grida.no/publications/191>.
- Stokes, D. (2017). Pileated gibbons poached as bushmeat to feed illegal rosewood loggers. *Mongabay*, January 17, 2017. Available at: <https://news.mongabay.com/2017/01/pileated-gibbons-poached-as-bushmeat-to-feed-illegal-rosewood-loggers/>.
- Strindberg, S., Maisels, F., Williamson, E.A., et al. (2018). Guns, germs, and trees determine density and distribution of gorillas and chimpanzees in western Equatorial Africa. *Science Advances*, **4**(4), eaar2964. DOI: [10.1126/sciadv.aar2964](https://doi.org/10.1126/sciadv.aar2964).
- Strona, G., Stringer, S.D., Vieilledent, G., et al. (2018). Small room for compromise between oil palm cultivation and primate conservation in Africa. *Proceedings of the National Academy of Sciences*, **115**(35), 8811–6. DOI: [10.1073/pnas.1804775115](https://doi.org/10.1073/pnas.1804775115).
- Struebig, M.J., Fischer, M., Gaveau, D.L.A., et al. (2015a). Anticipated climate and land-cover changes reveal refuge areas for Borneo's orang-utans. *Global Change Biology*, **21**(8), 2891–904. DOI: [10.1111/gcb.12814](https://doi.org/10.1111/gcb.12814).
- Struebig, M.J., Wilting, A., Gaveau, D.L.A., et al. (2015b). Targeted conservation to safeguard a biodiversity hotspot from climate and land-cover change. *Current Biology*, **25**(3), 372–8. DOI: [10.1016/j.cub.2014.11.067](https://doi.org/10.1016/j.cub.2014.11.067).
- Stuff* (n.d.). 25 best movie CGI effects ever. *Stuff*. Available at: <https://www.stuff.tv/news/25-best-movie-cgi-effects-ever/labyrinth-1986>. Accessed January, 2020.
- Sugiyama, Y. and Fujita, S. (2011). The demography and reproductive parameters of Bossou chimpanzees. In *The Chimpanzees of Bossou and Nimba*, ed. T. Matsuzawa, T. Humle and Y. Sugiyama. Tokyo, Japan: Springer, pp. 23–34. DOI: [10.1007/978-4-431-53921-6\\_4](https://doi.org/10.1007/978-4-431-53921-6_4).
- Sugiyama, Y. and Humle, T. (2011). A wild chimpanzee uses a stick to disable a snare at Bossou, Guinea. *Pan Africa News*, **18**(1), 3–4.
- Summers, H. (2018). Outrage over alleged plan to export rare animals from Congo to China. *The Guardian*, July 2, 2018. Available at: <https://www.theguardian.com/global-development/2018/jul/02/outrage-alleged-plan-export-rare-animals-democratic-republic-congo-china-gorillas-endangered-species-zoos>.
- Sun, G.Z., Ni, Q.Y., Huang, B., et al. (2012). Population, distribution and conservation status of western black crested gibbon. *Forest Conservation*, **1**, 38–43.
- Sunday, O. (2019). What is magic without ape parts? Inside the illicit trade devastating Nigeria's apes. *Mongabay*, May 29, 2019. Available at: [https://news.mongabay.com/2019/05/what-is-magic-without-ape-parts-inside-the-illicit-trade-devastating-nigerias-apes/?fbclid=IwARovKf8vBiKh5ystWSIPv792CoX1qOtOrjEafkZU3BsPayCI\\_1z0994VgCY](https://news.mongabay.com/2019/05/what-is-magic-without-ape-parts-inside-the-illicit-trade-devastating-nigerias-apes/?fbclid=IwARovKf8vBiKh5ystWSIPv792CoX1qOtOrjEafkZU3BsPayCI_1z0994VgCY).
- Sutherland, W.J., ed. (2009). *Conservation Science and Action*. Oxford, UK: Wiley-Blackwell.
- Sutherland, W.J., Broad, S., Butchart, S.H.M., et al. (2019a). A horizon scan of emerging issues for global conservation in 2019. *Trends in Ecology & Evolution*, **34**(1), 83–94. DOI: [10.1016/j.tree.2018.11.001](https://doi.org/10.1016/j.tree.2018.11.001).
- Sutherland, W.J., Fleishman, E., Clout, M., et al. (2019b). Ten years on: a review of the first global conservation horizon scan. *Trends in Ecology & Evolution*, **34**(2), 139–53. DOI: [10.1016/j.tree.2018.12.003](https://doi.org/10.1016/j.tree.2018.12.003).
- Sutherland, W.J., Pullin, A.S., Dolman, P.M. and Knight, T.M. (2004). The need for evidence-based conservation. *Trends in Ecology & Evolution*, **19**(6), 305–8. DOI: [10.1016/j.tree.2004.03.018](https://doi.org/10.1016/j.tree.2004.03.018).
- Sutherland, W.J. and Woodrooff, H.J. (2009). The need for environmental horizon scanning. *Trends in Ecology & Evolution*, **24**(10), 523–7. DOI: [10.1016/j.tree.2009.04.008](https://doi.org/10.1016/j.tree.2009.04.008).
- Svancara, L.K., Brannon J., R., Scott, M., et al. (2005). Policy-driven versus evidence-based conservation: a review of political targets and biological needs. *BioScience*, **55**(11), 989–95. DOI: [10.1641/0006-3568\(2005\)055\[0989:pvecar\]2.0.co;2](https://doi.org/10.1641/0006-3568(2005)055[0989:pvecar]2.0.co;2).

- Swamy, V. and Pinedo-Vasquez, M. (2014). *Bushmeat Harvest in Tropical Forests: Knowledge Base, Gaps and Research Priorities*. Bogor, Indonesia: Center for International Forestry Research (CIFOR).
- Swarna Nantha, H. and Tisdell, C. (2009). The orangutan–oil palm conflict: economic constraints and opportunities for conservation. *Biodiversity and Conservation*, **18**(2), 487–502. DOI: 10.1007/s10531-008-9512-3.
- SYCR (n.d.). *Our sanctuary*. Portland, OR: Sanaga Yong Chimpanzee Rescue (SYCR). Available at: <https://www.sychimprescue.org/our-sanctuary/>. Accessed December 31, 2018.
- Szantoi, Z., Smith, S.E., Strona, G., Koh, L.P. and Wich, S.A. (2017). Mapping orangutan habitat and agricultural areas using Landsat OLI imagery augmented with unmanned aircraft system aerial photography. *International Journal of Remote Sensing*, **38**(8–10), 2231–45. DOI: 10.1080/01431161.2017.1280638.
- Tadie, D. and Fischer, A. (2013). Hunting, social structure and human–nature relationships in Lower Omo, Ethiopia: people and wildlife at a crossroads. *Human Ecology*, **41**(3), 447–57. DOI: 10.1007/s10745-012-9561-9.
- TAG de Simios de la AZA (2010). *Manual para cuidado de chimpancés (Pan troglodytes)*. Silver Spring, MD: Association of Zoos & Aquariums (AZA). Available at: [https://assets.speakcdn.com/assets/2332/chimpanzee\\_care\\_manual\\_spanish\\_alpza.pdf](https://assets.speakcdn.com/assets/2332/chimpanzee_care_manual_spanish_alpza.pdf).
- Tagg, N., Maddison, N., Dupain, J., et al. (2018). A zoo-led study of the great ape bushmeat commodity chain in Cameroon. *International Zoo Yearbook*, **52**(1), 182–93. DOI: 10.1111/izy.12175.
- Tagg, N., Willie, J., Duarte, J., Petre, C.A. and Fa, J.E. (2015). Conservation research presence protects: a case study of great ape abundance in the Dja region, Cameroon. *Animal Conservation*, **18**(6), 489–98. DOI: 10.1111/acv.12212.
- Tashiro, Y., Idani, G.I., Kimura, D. and Bongori, L. (2007). Habitat changes and decreases in the bonobo population in Wamba, Democratic Republic of the Congo. *African Study Monographs*, **28**(2), 99–106.
- Taylor, G., Scharlemann, J.P.W., Rowcliffe, M., et al. (2015). Synthesising bushmeat research effort in West and Central Africa: a new regional database. *Biological Conservation*, **181**, 199–205. DOI: 10.1016/j.biocon.2014.11.001.
- Taylor, R. (2001). A step at a time: New Zealand's progress toward hominid rights. *Animal Law*, **7** (35), 35–43.
- TEA/AECOM (2017). *Theme Index and Museum Index: The Global Attractions Attendance Report*. Burbank, CA: Themed Entertainment Association (TEA). Available at: [http://www.teaconnect.org/images/files/TEA\\_268\\_653730\\_180517.pdf](http://www.teaconnect.org/images/files/TEA_268_653730_180517.pdf).
- TEEB (2008). *The Economics of Ecosystems and Biodiversity – An Interim Report*. European Communities. Geneva, Switzerland: The Economics of Ecosystems and Biodiversity (TEEB).
- Teleki, G. and Baldwin, L. (1979). *Known and Estimated Distributions of Extant Chimpanzee Populations (Pan troglodytes and Pan paniscus) in Equatorial Africa*. The World Conservation Union (IUCN) Species Survival Commission (SSC), Primate Specialist Group.
- Tello, I.Z. (2016). En una decisión judicial inédita, la mona Cecilia será trasladada de Mendoza a Brasil. *Los Andes*, November 3, 2016.
- Tenaza, R. (2012). *The primate skull trade in Bali*. Unpublished presentation. University of the Pacific, California/International Union for Conservation of Nature (IUCN) Species Survival Commission (SSC) Primate Specialists Group.
- The Atlanta Constitution* (1938). Famous chimpanzee, Jiggs, dies on coast. *The Atlanta Constitution*, March 2, 1938.
- The Coalition (2020). *Offline and in the Wild: A Progress Report of the Coalition to End Wildlife Trafficking Online*. Coalition to End Wildlife Trafficking Online. Available at: <https://www.endwildlifetraffickingonline.org/our-progress>.
- The Economist* (2013). What is the difference between common and civil law? *The Economist*, July 17, 2013. Available at: <https://www.economist.com/the-economist-explains/2013/07/16/what-is-the-difference-between-common-and-civil-law>.
- The Stationery Office (2018). *Ivory Act 2013, Chapter 30*. Norwich, UK: The Stationery Office. Available at: [http://www.legislation.gov.uk/ukpga/2018/30/pdfs/ukpga\\_20180030\\_en.pdf](http://www.legislation.gov.uk/ukpga/2018/30/pdfs/ukpga_20180030_en.pdf).
- Thieme, H. (1997). Lower Palaeolithic hunting spears from Germany. *Nature*, **385**(6619), 807–10. DOI: 10.1038/385807ao.
- Thinh, V.N., Mootnick, A.R., Thanh, V.N., Nadler, T. and Roos, C. (2010). A new species of crested gibbon, from the central Annamite mountain range. *Vietnamese Journal of Primatology*, **4**, 1–12.

- Thinh, V.N., Roos, C., Rawson, B.M., et al. (2020). *Nomascus annamensis*. The IUCN Red List of Threatened Species. 2020: e.T120659170A120659179. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: <https://dx.doi.org/10.2305/IUCN.UK.2020-2.RLTS.T120659170A120659179.en>.
- Thomson, L.K. (2000). *The effect of the Dayak worldwide, customs, traditions, and customary law (Adat-Istiadat) on the interpretation of the Gospel in West Kalimantan, Indonesian Borneo*. PhD thesis. Glenside, PA: Faculty of Theology, Arcadia University.
- Tiédoué, M.R., Kone, S.S., Diarrassouba, A. and Tondossama, A. (2019). *Etat de conservation du Parc national de Taï : Résultats du suivi écologique, Phase 13*. Soubré, Côte d'Ivoire: Office Ivoirien des Parcs et Réserves/ Direction de Zone Sud-ouest.
- Timmins, B. (2019). Facial recognition tool tackles illegal chimp trade. *BBC News*, January 22, 2019. Available at: <https://www.bbc.com/news/science-environment-46945302>.
- Tokuyama, N., Emikey, B., Bafike, B., et al. (2012). Bonobos apparently search for a lost member injured by a snare. *Primates*, 53(3), 215–9.
- Traeholt, C., Bunthoeun, R., Rawson, B., et al. (2005). *Status Review of Pileated Gibbon, Hylobates pileatus, and Yellow-Cheeked Crested Gibbon, Nomascus gabriellae, in Cambodia*. Phnom Penh, Cambodia: Fauna & Flora International (FFI) Cambodia Programme Office.
- TRAFFIC (2008). *What's Driving the Wildlife Trade? A Review of Expert Opinion on Economic and Social Drivers of the Wildlife Trade and Trade Control Efforts in Cambodia, Indonesia, Lao PDR and Vietnam. East Asia and Pacific Region Sustainable Development Discussion Papers*. Washington DC: East Asia and Pacific Region Sustainable Development Department, World Bank. Available at: [http://www.trafficj.org/publication/o8\\_what%27s\\_driving\\_the\\_wildlife\\_trade.pdf](http://www.trafficj.org/publication/o8_what%27s_driving_the_wildlife_trade.pdf).
- TRAFFIC (2012). e-Commerce companies declare zero-tolerance towards illegal online wildlife trading. *TRAFFIC News*, June 8, 2012. Available at: <https://www.traffic.org/news/e-commerce-companies-declare-zero-tolerance-towards-illegal-online-wildlife-trading/>.
- TRAFFIC (2014). Orangutan, gibbons and other animals seized at Soekarno-Hatta International Airport Jakarta, Indonesia. *TRAFFIC News*, June 17, 2014. Available at: <https://www.traffic.org/news/orangutan-gibbons-and-other-animals-seized-at-soekarno-hatta-international-airport/>.
- TRAFFIC (2016). *Captive Breeding and Ranching: The Case for a New CITES Mechanism for Reviewing Trade*. TRAFFIC Briefing. Cambridge, UK: TRAFFIC. Available at: <https://www.traffic.org/site/assets/files/7515/cites-cop17-ranching-captive-breeding.pdf>.
- TRAFFIC International (2018). *Wildlife Trade Information System*. Cambridge, UK: TRAFFIC International.
- Trahan, J.R. (2008). The distinction between persons and things: an historical perspective. *Journal of Civil Law Studies*, 1(1), 9–20.
- Tranquilli, S., Abedi-Lartey, M., Abernethy, K., et al. (2014). Protected areas in tropical Africa: assessing threats and conservation activities. *PLoS ONE*, 9(12), e114154. DOI: 10.1371/journal.pone.0114154.
- Tranquilli, S., Abedi-Lartey, M., Amsini, F., et al. (2012). Lack of conservation effort rapidly increases African great ape extinction risk. *Conservation Letters*, 5(1), 48–55. DOI: 10.1111/j.1755-263X.2011.00211.x.
- Trayford, H.R. and Farmer, K.H. (2012). An assessment of the use of telemetry for primate reintroductions. *Journal for Nature Conservation*, 20, 311–25.
- TripAdvisor (n.d.). *Cuddle an orangutan – Bali Zoo*. UK: TripAdvisor. Available at: [https://www.tripadvisor.co.uk>ShowUserReviews-g2646686-d1793975-r420737290-Bali\\_Zoo-Sukawati\\_Gianyar\\_Regency\\_Bali.html](https://www.tripadvisor.co.uk>ShowUserReviews-g2646686-d1793975-r420737290-Bali_Zoo-Sukawati_Gianyar_Regency_Bali.html). Accessed October, 2019.
- TTGLF (n.d.). *Our story*. South Melbourne, Australia: The Thin Green Line Foundation (TTGLF). Available at: <https://thingreenline.org.au/story/>. Accessed July, 2019.
- Tumusiime, D.M.E.G. and Tweheyo, M.B.F. (2010). Wildlife snaring in Budongo Forest Reserve, Uganda. *Human Dimensions of Wildlife*, 15(2), 129–44.
- Tumusiime, D. and Vedeld, P. (2012). False promise or false premise? Using tourism revenue sharing to promote conservation and poverty reduction in Uganda. *Conservation and Society*, 10(1), 15–28. DOI: 10.4103/0972-4923.92189.
- Turvey, S.T., Bruun, K., Ortiz, A., et al. (2018). New genus of extinct Holocene gibbon associated with humans in Imperial China. *Science*, 360(6395), 1346–9. DOI: 10.1126/science.aa04903.

- Turvey, S.T., Traylor-Holzer, K., Wong, M.H.G., et al. (2015). *International Conservation Planning Workshop for the Hainan Gibbon: Final Report*. London/Apple Valley, MN: Zoological Society of London/International Union for Conservation of Nature (IUCN) Species Survival Commission (SSC) Conservation Breeding Specialist Group. Available at: [https://www.cpsg.org/sites/cbsg.org/files/documents/Hainan\\_Gibbon\\_Workshop\\_Report.pdf](https://www.cpsg.org/sites/cbsg.org/files/documents/Hainan_Gibbon_Workshop_Report.pdf).
- Tutin, C.E.G., Ancrenaz, M., Paredes, J., et al. (2001). Conservation biology framework for the release of wild-born orphaned chimpanzees into the Conkouati Reserve, Congo. *Conservation Biology*, 15(5), 1247–57. DOI: 10.1111/j.1523-1739.2001.00046.x.
- Tutin, C.E.G. and Fernandez, M. (1984). Nationwide census of gorilla (*Gorilla g. gorilla*) and chimpanzee (*Pan t. troglodytes*) populations in Gabon. *American Journal of Primatology*, 6(4), 313–36. DOI: 10.1002/ajp.1350060403.
- Tutin, C.E.G., Fernandez, M., Rogers, M.E., et al. (1991). Foraging profiles of sympatric lowland gorillas and chimpanzees in the Lope Reserve, Gabon. *Philosophical Transactions of the Royal Society of London, Series B: Biological Sciences*, 334(1270), 179–86. DOI: 10.1098/rstb.1991.0107.
- Tutin, C., Stokes, E., Boesch, C., et al. (2005). *Regional Action Plan for the Conservation of Chimpanzees and Gorillas in Western Equatorial Africa*. Washington DC: Conservation International. Available at: <https://portals.iucn.org/library/sites/library/files/documents/2005-115.pdf>.
- Tweh, C.G., Lormie, M.M., Kouakou, C.Y., et al. (2015). Conservation status of chimpanzees *Pan troglodytes verus* and other large mammals in Liberia: a nationwide survey. *Oryx*, 49(4), 710–8. DOI: 10.1017/S0030605313001191.
- Twinamatsiko, M., Baker, J., Harrison, M., et al. (2014). *Linking Conservation, Equity and Poverty Alleviation: Understanding Profiles and Motivations of Resource Users and Local Perceptions of Governance at Bwindi Impenetrable National Park*. London, UK: International Institute for Environment and Development (IIED). Available at: <https://pubs.iied.org/pdfs/14630IIED.pdf>.
- Tyson, L., Draper, C. and Turner, D. (2016). *The Use of Wild Animals in Performance 2016*. Born Free Foundation.
- UK Parliament (1807). *An Act for the Abolition of the Slave Trade*. 47 Geo III Sess. 1 c. 36. London, UK: UK Parliament. Available at: [https://www.pdavis.nl/Legis\\_06.htm](https://www.pdavis.nl/Legis_06.htm).
- UK Parliament (1833). *Slavery Abolition Act 1833*. 3 & 4 Will. IV c. 73. London, UK: UK Parliament. Available at: [https://www.pdavis.nl/Legis\\_07.htm](https://www.pdavis.nl/Legis_07.htm).
- UN (1948). *Universal Declaration of Human Rights*. United Nations General Assembly Resolution 217 A. Paris, 10 December. Geneva, Switzerland: United Nations (UN) General Assembly. Available at: <https://www.un.org/en/universal-declaration-human-rights/>.
- UN (1956). *Supplementary Convention on the Abolition of Slavery, the Slave Trade, and Institutions and Practices Similar to Slavery. Adopted by a Conference of Plenipotentiaries convened by Economic and Social Council Resolution 608(XXI) of 30 April 1956*. Geneva, Switzerland: United Nations (UN). Available at: <https://www.ohchr.org/EN/ProfessionalInterest/Pages/SupplementaryConventionAbolitionOfSlavery.aspx>.
- UN (1966). *International Covenant on Civil and Political Rights*. Geneva, Switzerland: United Nations (UN). Available at: <https://www.ohchr.org/en/professionalinterest/pages/ccpr.aspx>.
- UN DESA (2018). *The World's Cities in 2018—Data Booklet*. ST/ESA/SER.A/417. New York, NY: United Nations (UN) Department of Economic and Social Affairs (DESA) Population Division. Available at: [https://www.un.org/en/events/citiesday/assets/pdf/the\\_worlds\\_cities\\_in\\_2018\\_data\\_booklet.pdf](https://www.un.org/en/events/citiesday/assets/pdf/the_worlds_cities_in_2018_data_booklet.pdf).
- UN DESA (2019). *World Urbanization Prospects 2018: Highlights*. ST/ESA/SER.A/421. New York, NY: United Nations (UN), Department of Economic and Social Affairs (DESA), Population Division. Available at: <https://population.un.org/wup/Publications/Files/WUP2018-Highlights.pdf>.
- UN Environment (2016a). Apes Seizure Database reveals true extent of illegal trade. *UN Environment Programme – Environment for Development News*, September 29, 2016. Capacity4dev. Available at: <https://eropa.eu/capacity4dev/uneep/blog/apes-seizure-database-reveals-true-extent-illegal-trade>.
- UN Environment (2016b). *Implementing the African Strategy on Combating Illegal Exploitation and Trade in Wild Fauna and Flora: The Role and Contribution of the Lusaka Agreement*. Brussels, Belgium: United Nations Environment Programme (UN Environment).
- UNEP (2016). *UNEP/EA.2/Res.14. Illegal Trade in Wildlife and Wildlife Products (4 August 2019)*. Resolution 2/14. Nairobi, Kenya: United Nations Environment Programme (UNEP). Available at: [http://wedocs.unep.org/bitstream/handle/20.500.11822/17508/K1607258\\_UNEPEA2\\_RES14E.pdf?sequence=8&isAllowed=y](http://wedocs.unep.org/bitstream/handle/20.500.11822/17508/K1607258_UNEPEA2_RES14E.pdf?sequence=8&isAllowed=y).

- UNEP-WCMC (2019a). *Protected Area Profile for Brunei Darussalam from the World Database of Protected Areas, November 2019*. Cambridge, UK: United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) and International Union for Conservation of Nature (IUCN). Available at: [www.protectedplanet.net](http://www.protectedplanet.net).
- UNEP-WCMC (2019b). *Protected Area Profile for Cameroon from the World Database of Protected Areas, October 2019*. Cambridge, UK: United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) and International Union for Conservation of Nature (IUCN). Available at: [www.protectedplanet.net](http://www.protectedplanet.net).
- UNEP-WCMC (2019c). *Protected Area Profile for Democratic Republic of Congo from the World Database of Protected Areas, November 2019*. Cambridge, UK: United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) and International Union for Conservation of Nature (IUCN). Available at: [www.protectedplanet.net](http://www.protectedplanet.net).
- UNEP-WCMC (2019d). *Protected Area Profile for Indonesia from the World Database of Protected Areas, October 2019*. Cambridge, UK: United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) and International Union for Conservation of Nature (IUCN). Available at: [www.protectedplanet.net](http://www.protectedplanet.net).
- UNEP-WCMC (2019e). *Protected Area Profile for Malaysia from the World Database of Protected Areas, October 2019*. Cambridge, UK: United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) and International Union for Conservation of Nature (IUCN). Available at: [www.protectedplanet.net](http://www.protectedplanet.net).
- UNEP-WCMC (2019f). *Protected Area Profile for Nigeria from the World Database of Protected Areas, October 2019*. Cambridge, UK: United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) and International Union for Conservation of Nature (IUCN). Available at: [www.protectedplanet.net](http://www.protectedplanet.net).
- UNEP-WCMC (2019g). *Protected Area Profile for Rwanda from the World Database of Protected Areas, October 2019*. Cambridge, UK: United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) and International Union for Conservation of Nature (IUCN). Available at: [www.protectedplanet.net](http://www.protectedplanet.net).
- UNEP-WCMC (2019h). *Protected Area Profile for Uganda from the World Database of Protected Areas, October 2019*. Cambridge, UK: United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) and International Union for Conservation of Nature (IUCN). Available at: [www.protectedplanet.net](http://www.protectedplanet.net).
- UNEP-WCMC (n.d.-a). *CITES Trade Database*. Cambridge, UK: United Nations Environment World Conservation Monitoring Centre (UNEP-WCMC). Available at: <https://www.unep-wcmc.org/resources-and-data/cites-trade-database>. Accessed October, 2018.
- UNEP-WCMC (n.d.-b). *Our expertise*. Cambridge, UK: United Nations Environment Programme (UNEP)-World Conservation Monitoring Centre (WCMC). Available at: <https://www.unep-wcmc.org/expertise>. Accessed September, 2020.
- UNEP-WCMC and CITES Secretariat (n.d.). *Species+*. United Nations Environment World Conservation Monitoring Centre (UNEP-WCMC) and Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Secretariat. Available at: <https://www.speciesplus.net/species>. Accessed September, 2019.
- UNESCO (n.d.). *Great apes app wins Mobile WebAward for best environmental mobile application*. United Nations Educational, Scientific and Cultural Organization (UNESCO). Available at: <https://en.unesco.org/news/great-apes-app-wins-mobilewebaward-best-environmental-mobile-application-o>. Accessed September, 2020.
- UNGA (2000). *A/RES/55/25. United Nations Convention against Transnational Organized Crime. Resolution 55/25. Adopted November 15*. New York, NY: United Nations General Assembly (UNGA). Available at: [https://treaties.un.org/doc/source/docs/A\\_RES\\_55\\_25-E.pdf](https://treaties.un.org/doc/source/docs/A_RES_55_25-E.pdf).
- UNGA (2015). *A/RES/69/314. Tackling Illicit Trafficking in Wildlife (19 August 2015). Resolution 69/314*. New York, NY: United Nations General Assembly (UNGA). Available at: <https://undocs.org/en/A/RES/69/314>.
- UNODC (2004). *United Nations Convention Against Transnational Organized Crime and the Protocols Thereto*. Vienna, Austria: United Nations Office on Drugs and Crime (UNODC). Available at: <https://www.unodc.org/documents/treaties/UNTOC/Publications/TOC%20Convention/TOCebook-e.pdf>.
- UNODC (2012). *Wildlife and Forest Crime Analytic Toolkit*. Vienna, Austria: United Nations Office on Drugs and Crime (UNODC). Available at: [http://www.unodc.org/documents/Wildlife/Toolkit\\_e.pdf](http://www.unodc.org/documents/Wildlife/Toolkit_e.pdf).
- UNODC (2016). *World Wildlife Crime Report: Trafficking in Protected Species*. Vienna, Austria: United Nations Office on Drugs and Crime (UNODC). Available at: [https://www.unodc.org/documents/data-and-analysis/wildlife/World\\_Wildlife\\_Crime\\_Report\\_2016\\_final.pdf](https://www.unodc.org/documents/data-and-analysis/wildlife/World_Wildlife_Crime_Report_2016_final.pdf).

- UNODC (n.d.-a). *About UNODC*. Vienna, Austria: United Nations Office on Drugs and Crime (UNODC). Available at: <http://www.unodc.org/unodc/en/about-unodc/index.html?ref=menutop>. Accessed October, 2018.
- UNODC (n.d.-b). *United Nations Convention against Transnational Organized Crime and the Protocols Thereto*. Vienna, Austria: United Nations Office on Drugs and Crime (UNODC). Available at: <https://www.unodc.org/unodc/en/organized-crime/intro/UNTOC.html>. Accessed October, 2018.
- UNODC (n.d.-c). *Wildlife and forest crime*. Vienna, Austria: United Nations Office on Drugs and Crime (UNODC). Available at: <http://www.unodc.org/unodc/en/wildlife-and-forest-crime/index.html>. Accessed October, 2018.
- US Congress (2000). *Chimpanzee Health Improvement, Maintenance and Protection Act (2000). Senate Report 106-494*. Washington DC: Government Printing Office (GPO). Available at: <https://congress.gov/106/crpt/srpt494/CRPT-106srpt494.pdf>.
- US Fish and Wildlife Service (2018). Endangered and threatened wildlife and plants; taxonomical update for orangutan (83 FR 2085). *Federal Register*, 83(10), 2085. Available at: <https://www.federalregister.gov/documents/2018/01/16/2018-00610/endangered-and-threatened-wildlife-and-plants-taxonomical-update-for-orangutan>.
- USAID (2015). *Asia's Regional Response to Endangered Species Trafficking*. Bangkok, Thailand: US Agency for International Development (USAID) Regional Development Mission for Asia (RDMA). Available at: <https://www.usaid.gov/asia-regional/fact-sheets/asias-regional-response-endangered-species-trafficking>.
- Utami-Atmoko, S.S., Mitra Setia, T., Goossens, B., et al. (2009a). Orangutan mating behaviour and strategy. In *Orangutans: Geographic Variation in Behavioral Ecology and Conservation*, ed. S.A. Wich, S.S. Utami-Atmoko, T. Mitra Setia and C.P. van Schaik. Oxford, UK: Oxford University Press, pp. 235–44.
- Utami-Atmoko, S.S., Singleton, I., van Noordwijk, M.A., van Schaik, C.P. and Mitra Setia, T. (2009b). Male–male relationships in orangutans. In *Orangutans: Geographic Variation in Behavioral Ecology and Conservation*, ed. S.A. Wich, S.S. Utami-Atmoko, T. Mitra Setia and C.P. van Schaik. Oxford, UK: Oxford University Press, pp. 225–33.
- Utami-Atmoko, S., Traylor-Holzer, K., Rifqi, M.A., et al., ed. (2017). *Orangutan Population and Habitat Viability Assessment: Final Report*. Apple Valley, MN: International Union for Conservation of Nature (IUCN) Species Survival Commission (SSC) Conservation Breeding Specialist Group.
- Utami-Atmoko, S., Traylor-Holzer, K., Rifqi, M.A., et al., ed. (2019). *Orangutan Population and Habitat Viability Assessment: Final Report*. Jakarta, Indonesia, and Apple Valley, MN: Ministry of Environment and Forestry of Indonesia, and International Union for Conservation of Nature (IUCN) Species Survival Commission (SSC) Conservation Planning Specialist Group.
- Utermohlen, M. and Baine, P. (2018). *In Plane Sight: Wildlife Trafficking in the Air Transport Sector*. Washington DC: Center for Advanced Defense (C4ADS). Available at: <https://www.traffic.org/publications/reports/in-plane-sight>.
- UWA (n.d.). *Conservation Tariff: January 2018 to December 2019*. Kampala, Uganda: Uganda Wildlife Authority (UWA). Available at: <https://ugandawildlife.org/images/pdfs/UWA-Tariff-2018-2019.pdf>. Accessed September, 2019.
- van der Meer, D. (2016). *Can the random encounter model be a useful tool in estimating chimpanzee density?* Internship report. The Netherlands: VHL University of Applied Sciences and Chimbo Foundation.
- van der Meer, I.P. (2014). *Inventory of the vegetation structure and food availability for the Western chimpanzee (*Pan troglodytes verus*) in the Boé region, Guinea-Bissau*. Internship report. Wageningen, the Netherlands: Wageningen University.
- Van Dyke, W.S., director (1932). *Tarzan the Ape Man*. Metro-Goldwyn-Mayer (MGM). Available at: [https://www.imdb.com/title/tt0023551/fullcredits/?ref\\_=tt\\_ov\\_st\\_sm](https://www.imdb.com/title/tt0023551/fullcredits/?ref_=tt_ov_st_sm).
- Van Gulik, R.H. (1967). *The Gibbon in China: An Essay in Chinese Animal Lore*. Leiden: E. J. Brill.
- van Noordwijk, M.A., Sauren, S.E.B., Nuzuar, et al. (2009). Development of independence: Sumatran and Bornean orangutans compared. In *Orangutans: Geographic Variation in Behavioral Ecology and Conservation*, ed. S.A. Wich, S.S. Utami-Atmoko, T. Mitra Setia and C. P. van Schaik. Oxford, UK: Oxford University Press, pp. 189–203.
- van Noordwijk, M.A., Utami-Atmoko, S.S., Knott, C.D., et al. (2018). The slow ape: high infant survival and long interbirth intervals in wild orangutans. *Journal of Human Evolution*, 125, 38–49. DOI: 10.1016/j.jhevol.2018.09.004.
- van Noordwijk, M.A., Willemse, E.P., Utami-Atmoko, S.S., Kuzawa, C.W. and van Schaik, C.P. (2013). Multi-year lactation and its consequences in Bornean orangutans (*Pongo pygmaeus wurmbii*). *Behavioral Ecology and Sociobiology*, 67(5), 805–14. DOI: 10.1007/s00265-013-1504-y.

- van Schaik, C. (2002). Fragility of traditions: the disturbance hypothesis for the loss of local traditions in orangutans. *International Journal of Primatology*, **23**(3), 527–38. DOI: 10.1023/A:1014965516127.
- van Schaik, C.P., Monk, K.A. and Robertson, J.M.Y. (2001). Dramatic decline in orang-utan numbers in the Leuser ecosystem, northern Sumatra. *Oryx*, **35**(1), 14–25. DOI: 10.1046/j.1365-3008.2001.00150.x.
- van Uhm, D.P. (2018a). The social construction of the value of wildlife: a green cultural criminological perspective. *Theoretical Criminology*, **22**(3), 384–401. DOI: 10.1177/1362480618787170.
- van Uhm, D.P. (2018b). Wildlife and laundering: Interaction between the under and upper world. In *Green Crimes and Dirty Money*, ed. T. Spapens, R. White, D. van Uhm and W. Huisman. London, UK: Routledge, pp. 197–214. DOI: 10.4324/9781351245746.
- van Uhm, D.P. and Moreto, W.D. (2017). Corruption within the illegal wildlife trade: a symbiotic and antithetical enterprise. *The British Journal of Criminology*, **58**(4), 864–85. DOI: 10.1093/bjc/azx032.
- van Vliet, N. and Mbazza, P. (2011). Recognizing the multiple reasons for bushmeat consumption in urban areas: a necessary step toward the sustainable use of wildlife for food in Central Africa. *Human Dimensions of Wildlife*, **16**(1), 45–54. DOI: 10.1080/10871209.2010.523924.
- van Vliet, N., Nasi, R. and Taber, A. (2011). From the forest to the stomach: bushmeat consumption from rural to urban settings in Central Africa. In *Non-Timber Forest Products in the Global Context*, ed. S. Shackleton, C. Shackleton and P. Shanley. Berlin, Heidelberg: Springer, pp. 129–45. DOI: 10.1007/978-3-642-17983-9\_6.
- van Vliet, N., Quiceno-Mesa, M.P., Cruz-Antia, D., et al. (2015). From fish and bushmeat to chicken nuggets: the nutrition transition in a continuum from rural to urban settings in the Tri frontier Amazon region. *Ethnobiology and Conservation*, **4**(6), 1–12. DOI: 10.15451/ec2015-7-4.6-1-12.
- Vanthomme, H., Kolowski, J., Korte, L. and Alonso, A. (2013). Distribution of a community of mammals in relation to roads and other human disturbances in Gabon, central Africa. *Conservation Biology*, **27**(2), 281–91. DOI: 10.1111/cobi.12017.
- Varki, A. and Altheide, T.K. (2005). Comparing the human and chimpanzee genomes: searching for needles in a haystack. *Genome Research*, **15**(12), 1746–58. DOI: 10.1101/gr.3737405.
- Vermeulen, C., Julve, C., Doucet, J.-L. and Monticelli, D. (2009). Community hunting in logging concessions: towards a management model for Cameroon's dense forests. *Biodiversity and Conservation*, **18**(10), 2705–18. DOI: 10.1007/s10531-009-9614-6.
- Verweijen, J. and Marijnen, E. (2018). The counterinsurgency/conservation nexus: guerrilla livelihoods and the dynamics of conflict and violence in the Virunga National Park, Democratic Republic of the Congo. *The Journal of Peasant Studies*, **45**(2), 300–20. DOI: 10.1080/03066150.2016.1203307.
- Viator (n.d.). *Breakfast with the orangutans at Bali Zoo*. Viator. Available at: <https://www.viator.com/tours/Ubud-Breakfast-with-the-Orangutans-at-Bali-Zoo/d5467-22460P10>. Accessed September, 2020.
- Vidal, J. (2014). This could be the year we start to save, not slaughter, the shark. *The Guardian*. January 11, 2014. Available at: <https://www.theguardian.com/environment/2014/jan/11/shark-finning-in-decline-in-far-east>.
- Vining, J. and Ebreo, A. (2002). Emerging theoretical and methodological perspectives on conservation behavior. In *Handbook of Environmental Psychology*, ed. R.B. Bechtel and A. Churchman. Hoboken, NJ: John Wiley & Sons Inc., pp. 541–58.
- Virunga Alliance (n.d.-a). *Gorilla Orphans Project*. DRC: Virunga Alliance. Available at: <https://virunga.org/alliance/gorilla-orphans>. Accessed September, 2020
- Virunga Alliance (n.d.-b). *Rangers Project*. DRC: Virunga Alliance. Available at: <https://virunga.org/alliance/rangers-project>. Accessed September, 2020
- Visit Rwanda (n.d.). *Gorilla tracking*. Kigali, Rwanda: Rwanda Development Board. Available at: <https://www.visitrwanda.com/interests/gorilla-tracking/>. Accessed October, 2019.
- VoiceBoxer (2016). What about English in China? *VoiceBoxer*, February 25, 2016. Available at: <http://voiceboxer.com/english-in-china/>.
- Voigt, M., Wich, S.A., Ancrenaz, M., et al. (2018). Global demand for natural resources eliminated more than 100,000 Bornean orangutans. *Current Biology*, **28**(5), 761–9. DOI: 10.1016/j.cub.2018.01.053.
- Voysey, B.C., McDonald, K.E., Rogers, M.E., Tutin, C.E.G. and Parnell, R.J. (1999a). Gorillas and seed dispersal in the Lopé Reserve, Gabon. I. Gorilla acquisition by trees. *Journal of Tropical Ecology*, **15**(1), 23–38. DOI: 10.1017/S0266467499000656.

- Voysey, B.C., McDonald, K.E., Rogers, M.E., Tutin, C.E.G. and Parnell, R.J. (1999b). Gorillas and seed dispersal in the Lope Reserve, Gabon. II. Survival and growth of seedlings. *Journal of Tropical Ecology*, **15**(1), 39–60.
- Wadley, R.L. and Colfer, C.J.P. (2004). Sacred forest, hunting, and conservation in West Kalimantan, Indonesia. *Human Ecology*, **32**(3), 313–38. DOI: 10.1023/B:HUEC.0000028084.30742.do.
- Wadley, R.L., Colfer, C.J.P. and Hood, I.G. (1997). Hunting primates and managing forests: the case of Iban forest farmers in Indonesian Borneo. *Human Ecology*, **25**(2), 243–71. DOI: 10.1023/a:1021926206649.
- Wadman, M. (2017). More groups sue to force USDA to restore online animal welfare records. *Science News*, February 22, 2017. Available at: <http://www.sciencemag.org/news/2017/02/breaking-reversal-usda-reposts-some-animal-welfare-records-it-had-scrubbed-website>.
- WageIndicator (n.d.). Salaries. WageIndicator Foundation. Available at: <https://wageindicator.org/salary>. Accessed December, 2018.
- Wagner, K. (2019). Wildlife traffickers use Facebook, Instagram to find black-market buyers. *Bloomberg*, July 11, 2019. Available at: <https://www.bloomberg.com/news/articles/2019-07-11/wildlife-traffickers-use-facebook-instagram-to-find-black-market-buyers>.
- Walker, K.K., Walker, C.S., Goodall, J. and Pusey, A.E. (2018). Maturation is prolonged and variable in female chimpanzees. *Journal of Human Evolution*, **114**, 131–40. DOI: 10.1016/j.jhevol.2017.10.010.
- Wallis, J. (1997). A survey of reproductive parameters in the free-ranging chimpanzees of Gombe National Park. *Journal of Reproduction and Fertility*, **109**, 297–307. DOI: 10.1530/jrf.0.1090297.
- Walsh, P.D., Abernathy, K.A., Bermejo, M., et al. (2003). Catastrophic ape decline in western equatorial Africa. *Nature*, **422**, 611–4. DOI: 10.1038/nature01566.
- Walter, E.V. (1984). Nature on trial: the case of the rooster that laid an egg. In *Methodology, Metaphysics and the History of Science. Boston Studies in the Philosophy of Science* 84, ed. R.S. Cohen and M.W. Wartofsky. Dordrecht, the Netherlands: Springer, pp. 295–321. Available at: [https://link.springer.com/chapter/10.1007/978-94-009-6331-3\\_13](https://link.springer.com/chapter/10.1007/978-94-009-6331-3_13).
- Walters, G., Schleicher, J., Hymas, O. and Coad, L. (2015). Evolving hunting practices in Gabon: lessons for community-based conservation interventions. *Ecology and Society*, **20**(4), 31. DOI: 10.5751/ES-08047-200431.
- Walz, E., Wilson, D., Stauffer, J.C., et al. (2017). Incentives for bushmeat consumption and importation among West African immigrants, Minnesota, USA. *Emerging Infectious Disease Journal*, **23**(12), 2095. DOI: 10.3201/eid2312.170563.
- WAP (n.d.-a). *Animal Protection Index*. London, UK: World Animal Protection (WAP). Available at: <https://api.worldanimalprotection.org>. Accessed April, 2020.
- WAP (n.d.-b). *Methodology*. London, UK: World Animal Protection (WAP). Available at: <https://api.worldanimalprotection.org/methodology>. Accessed December, 2019.
- Warren, T. and Baker, K.J.M. (2019). WWF's secret war. *Buzzfeed News*, March 4, 2019. Available at: <https://www.buzzfeednews.com/article/tomwarren/wwf-world-wide-fund-nature-parks-torture-death>.
- Warren, T., Baker, K.J.M. and Engert, M. (2019). Leaked report: WWF-backed guards raped pregnant women and tortured villagers at a wildlife park funded by the US government. *Buzzfeed News*, July 11, 2019. Available at: <https://www.buzzfeednews.com/article/tomwarren/leaked-report-wwf-backed-guards-raped-pregnant-women>.
- Watts, D.P. (1984). Composition and variability of mountain gorilla diets in the central Virungas. *American Journal of Primatology*, **7**(4), 323–56. DOI: 10.1002/ajp.1350070403.
- Watts, D.P. (1989). Infanticide in mountain gorillas: new cases and a reconsideration of the evidence. *Ethology*, **81**(1), 1–18. DOI: 10.1111/j.1439-0310.1989.tb00754.x.
- Watts, D.P., Muller, M., Amsler, S.J., Mbabazi, G. and Mitani, J.C. (2006). Lethal intergroup aggression by chimpanzees in Kibale National Park, Uganda. *American Journal of Primatology*, **68**(2), 161–80. DOI: 10.1002/ajp.20214.
- WAZA (n.d.). *About WAZA*. World Association of Zoos and Aquariums (WAZA). Available at: <https://www.waza.org/about-waza/>. Accessed January, 2020.
- WCF (2012). *Etat de la faune et des menaces dans les aires protégées terrestres et principales zones de forte biodiversité de République de Guinée*. Conakry, Guinea: Wild Chimpanzee Foundation (WCF). Available at: <https://rris.biopama.org/sites/default/files/2019-03/2012WCFBiodivGn.pdf>.
- WCF (2014). *Study of a key area for the preservation of chimpanzee in West Africa: preliminary inventory along the Bafing River, Republic of Guinea*. Unpublished report. Conakry, Guinea: Wild Chimpanzee Foundation (WCF).

- WCO (2012). *Illicit Trade Report 2012*. Brussels, Belgium: World Customs Organization (WCO). Available at: [http://www.wcoomd.org/-/media/wco/public/global/pdf/topics/enforcement-and-compliance/activities-and-programmes/illicit-trade-report/itr\\_2012\\_en.pdf?db=web](http://www.wcoomd.org/-/media/wco/public/global/pdf/topics/enforcement-and-compliance/activities-and-programmes/illicit-trade-report/itr_2012_en.pdf?db=web).
- WCO (2017). Project INAMA: situation analysis and first results. *WCO News*, **82**, February 2017. Available at: <http://www.wcoomd.org/-/media/wco/public/global/pdf/topics/enforcement-and-compliance/activities-and-programmes/environmental-crime/wco-news-article/project-inama-situation-analysis-and-first-results.pdf?db=web>.
- WCO (n.d.-a). *ENVIRONET*. Brussels, Belgium: World Customs Organization (WCO). Available at: <http://www.wcoomd.org/-/media/wco/public/global/pdf/topics/enforcement-and-compliance/activities-and-programmes/environmental-crime/environment/concept-note-en.pdf?la=en>. Accessed October, 2018.
- WCO (n.d.-b). *Environment programme*. Brussels, Belgium: World Customs Organization (WCO). Available at: <http://www.wcoomd.org/en/topics/enforcement-and-compliance/activities-and-programmes/environment-programme.aspx>. Accessed October, 2018.
- WCO (n.d.-c). *National Customs Enforcement Network (nCEN)*. Brussels, Belgium: World Customs Organization (WCO). Available at: <http://www.wcoomd.org/en/topics/enforcement-and-compliance/instruments-and-tools/cen-suite/ncen.aspx>. Accessed September, 2020.
- WCO (n.d.-d). *Project GAPIN*. Brussels, Belgium: World Customs Organization (WCO). Available at: <http://www.wcoomd.org/en/topics/integrity/resources/project-gapin.aspx>. Accessed October, 2018.
- WCO (n.d.-e). *Publications*. Brussels, Belgium: World Customs Organization (WCO). Available at: <http://www.wcoomd.org/en/topics/enforcement-and-compliance/resources/publications.aspx>. Accessed October, 2018.
- WCO (n.d.-f). *Regional intelligence liaison offices*. Brussels, Belgium: World Customs Organization (WCO). Available at: <http://www.wcoomd.org/en/about-us/wco-regional-bodies/rilo.aspx>. Accessed September, 2020.
- WCO (n.d.-g). *WCO in brief*. Brussels, Belgium: World Customs Organization (WCO). Available at: <http://www.wcoomd.org/en/about-us/what-is-the-wco.aspx>. Accessed October, 2018.
- WCS (2012). Illegal orangutan trader prosecuted. *ScienceDaily*, February 23, 2012. Available at: [www.sciencedaily.com/releases/2012/02/120223142430.htm](http://www.sciencedaily.com/releases/2012/02/120223142430.htm).
- WCS Nigeria (n.d.). *My Gorilla – My Community*. Calabar, Nigeria: Wildlife Conservation Society (WCS) Nigeria. Available at: <https://nigeria.wcs.org/Global-Initiatives/My-Gorilla-My-Community.aspx>. Accessed July, 2019.
- Wei, S., Ma, C., Tan, W., et al. (2017). Discovery of a new formed group and current population status of eastern black crested gibbon in Bangliang National Nature Reserve, Guangxi, China. *Acta Theriologica Sinica*, **37**, 233–40.
- Wei, W., Wang, X., Claro, F., et al. (2004). The current status of the Hainan black-crested gibbon *Nomascus* sp. cf. *nasutus hainanus* in Bawangling National Nature Reserve, Hainan, China. *Oryx*, **38**(4), 452–6. DOI: 10.1017/S0030605304000845.
- Wen Naifei and Tan Siqi (2013). Changsha is so hot, even African gorillas can't stand it. *Xiaoxiang Morning News*, August 7, 2013.
- Wenceslau, J.F.C. (2014). *Bauxite mining and chimpanzees population distribution, a case study in the Boé sector, Guinea-Bissau*. Masters thesis. The Netherlands: VHL University of Applied Sciences and Chimbo Foundation.
- Wessling, E.G., Deschner, T., Mundry, R., et al. (2018). Seasonal variation in physiology challenges the notion of chimpanzees (*Pan troglodytes verus*) as a forest-adapted species. *Frontiers in Ecology and Evolution*, **6**, 60. DOI: 10.3389/fevo.2018.00060.
- West, P. (2005). Translation, value, and space: theorizing an ethnographic and engaged environmental anthropology. *American Anthropologist*, **107**(4), 632–42. DOI: 10.1525/aa.2005.107.4.632.
- West, P. (2006). *Conservation is our Government Now: The Politics of Ecology in Papua New Guinea*. Durham, NC: Duke University Press.
- Westphal, M.I., Browne, M., MacKinnon, K. and Noble, I. (2008). The link between international trade and the global distribution of invasive alien species. *Biological Invasions*, **10**(4), 391–8. DOI: 10.1007/s10530-007-9138-5.
- Weta Digital (n.d.). *Caesar*. Wellington, New Zealand: Weta Digital. Available at: <https://www.wetafx.co.nz/films-case-studies/caesar/>. Accessed January, 2020.
- White, A. and Fa, J.E. (2014). The bigger picture: indirect impacts of extractive industries on apes and ape habitat. In *State of the Apes: Extractive Industries and Ape Conservation*, ed. Arcus Foundation. Cambridge, UK: Cambridge University Press, pp. 197–225.

- White, G.C., Anderson, D.R., Burnham, K.P. and Otis, D.L. (1982). *Capture–Recapture and Removal Methods for Sampling Closed Populations*. Los Alamos, NM: Los Alamos National Laboratory.
- Whittaker, D.J. (2005). New population estimates for the endemic Kloss's gibbon *Hylobates klossii* on the Mentawai Islands, Indonesia. *Oryx*, **39**(4), 458–61. DOI: 10.1017/S0030605305001134.
- Whittaker, D.J., Morales, J.C. and Melnick, D.J. (2003). *Conservation biology of Kloss's gibbons (Hylobates klossii)*. Presented at the Seventy-Second Annual Meeting of the American Association of Physical Anthropologists, April 23–26, 2003 Tempe, AZ.
- Wicander, S. and Coad, L. (2014). *Learning Our Lessons: A Review of Alternative Livelihood Projects in Central Africa*. Gland, Switzerland: International Union for Conservation of Nature (IUCN). Available at: [https://www.iucn.org/sites/dev/files/import/downloads/english\\_version.pdf](https://www.iucn.org/sites/dev/files/import/downloads/english_version.pdf).
- Wicander, S. and Coad, L. (2018). Can the provision of alternative livelihoods reduce the impact of wild meat hunting in west and central Africa? *Conservation and Society*, **16**(4), 441–58. DOI: 10.4103/cs.cs\_17\_56.
- Wich, S.A., de Vries, H. and Ancrenaz, M. (2009). Orangutan life history variation. In *Orangutans: Geographic Variation in Behavioral Ecology and Conservation*, ed. S.A. Wich, S.S. Utami-Atmoko, T. Mitra Setia and C.P. van Schaik. Oxford, UK: Oxford University Press, pp. 65–75.
- Wich, S.A., Fredriksson, G., Usher, G., Kühl, H.S. and Nowak, M.G. (2019). The Tapanuli orangutan: status, threats, and steps for improved conservation. *Conservation Science and Practice*, **1**(6), e33. DOI: 10.1111/csp2.33.
- Wich, S.A., Fredriksson, G.M., Usher, G., et al. (2012a). Hunting of Sumatran orang-utans and its importance in determining distribution and density. *Biological Conservation*, **146**(1), 163–9. DOI: 10.1016/j.biocon.2011.12.006.
- Wich, S.A., Garcia-Ulloa, J., Kühl, Hjalmar S., et al. (2014). Will oil palm's homecoming spell doom for Africa's great apes? *Current Biology*, **24**(14), 1659–63. DOI: 10.1016/j.cub.2014.05.077.
- Wich, S.A., Gaveau, D., Abram, N., et al. (2012b). Understanding the impacts of land-use policies on a threatened species: is there a future for the Bornean orang-utan? *PLoS ONE*, **7**(11), e49142. DOI: 10.1371/journal.pone.0049142.
- Wich, S.A., Geurts, M.L., Mitra Setia, T. and Utami-Atmoko, S.S. (2006). Influence of fruit availability on Sumatran orangutan sociality and reproduction. In *Feeding Ecology in Apes and Other Primates: Ecological, Physiological and Behavioral Aspects*, ed. G. Hohmann, M.M. Robbins and C. Boesch. Cambridge Studies in Biological and Evolutionary Anthropology Volume 48. Cambridge, UK: Cambridge University Press, pp. 337–58.
- Wich, S.A., Meijaard, E., Marshall, A.J., et al. (2008). Distribution and conservation status of the orang-utan (*Pongo* spp.) on Borneo and Sumatra: how many remain? *Oryx*, **42**(3), 329–39. DOI: 10.1017/S003060530800197X.
- Wich, S.A., Singleton, I., Nowak, M.G., et al. (2016). Land-cover changes predict steep declines for the Sumatran orangutan (*Pongo abelii*). *Science Advances*, **2**(3), e1500789. DOI: 10.1126/sciadv.1500789.
- Wich, S.A., Struebig, M., Refisch, J., et al. (2015). *The Future of the Bornean Orangutan: Impacts of Change in Land Cover and Climate*. Nairobi, Kenya: UNEP/GRASP. Available at: <https://www.unenvironment.org/resources/report/future-bornean-orangutan-impacts-change-land-cover-and-climate>.
- Wich, S.A., Utami-Atmoko, S., Mitra Setia, T. and van Schaik, C.P., ed. (2009). *Orangutans: Geographic Variation in Behavioral Ecology and Conservation*. Oxford, UK: Oxford University Press.
- WildAid (2011). *Annual Report 2011*. San Francisco, CA: WildAid. Available at: <https://wildaid.org/wp-content/uploads/2017/10/2011-Annual-Report.pdf>.
- WildAid (2012). *Annual Report 2012*. San Francisco, CA: WildAid. Available at: [https://wildaid.org/wp-content/uploads/2017/10/2012-Annual-Report-WildAid\\_Layout\\_web.pdf](https://wildaid.org/wp-content/uploads/2017/10/2012-Annual-Report-WildAid_Layout_web.pdf).
- WildAid (2013). *Annual Report 2013*. San Francisco, CA: WildAid. Available at: [https://wildaid.org/wp-content/uploads/2017/10/WildAid\\_Annual\\_Report\\_2013\\_Final\\_Low-Res.pdf](https://wildaid.org/wp-content/uploads/2017/10/WildAid_Annual_Report_2013_Final_Low-Res.pdf).
- WildAid (2014a). *Evidence of Declines in Shark Fin Demand China*. San Francisco, CA: WildAid. Available at: [https://wildaid.org/wp-content/uploads/2017/09/SharkReport\\_Evidence-of-Declines-in-Shark-Fin-Demand\\_China.pdf](https://wildaid.org/wp-content/uploads/2017/09/SharkReport_Evidence-of-Declines-in-Shark-Fin-Demand_China.pdf).
- WildAid (2014b). *Ivory Demand in China 2012–2014*. San Francisco, CA: WildAid. Available at: [https://wildaid.org/wp-content/uploads/2017/09/Print\\_Ivory-Report\\_Final\\_v3.pdf](https://wildaid.org/wp-content/uploads/2017/09/Print_Ivory-Report_Final_v3.pdf).
- WildAid (2015). *Rhino Horn Demand 2012–2014*. San Francisco, CA: WildAid. Available at: [https://wildaid.org/wp-content/uploads/2017/09/Rhino-Horn-Report\\_Final\\_v2.pdf](https://wildaid.org/wp-content/uploads/2017/09/Rhino-Horn-Report_Final_v2.pdf).

- WildAid (2016). *2016 Annual Report*. San Francisco, CA: WildAid. Available at: [https://wildaid.org/wp-content/uploads/2017/10/Annual-Report\\_2016-2.pdf](https://wildaid.org/wp-content/uploads/2017/10/Annual-Report_2016-2.pdf).
- WildAid (2017). *2017 Annual Report*. San Francisco, CA: WildAid. Available at: <https://wildaid.org/wp-content/uploads/2018/04/Annual-Report-2017.pdf>.
- WildAid (2018a). *Sharks in Crisis: Evidence of Positive Behavioral Change in China as New Threats Emerge*. San Francisco: WildAid, CA. Available at: <https://wildaid.org/wp-content/uploads/2018/02/WildAid-Sharks-in-Crisis-2018.pdf>.
- WildAid (2018b). *25 Years After China's Rhino Horn Ban, Poaching Persists*. San Francisco, CA: WildAid. Available at: <https://wildaid.org/wp-content/uploads/2018/09/25-Years-After-Chinas-Ban.pdf>.
- WildAid (n.d.). *Programs*. San Francisco, CA: WildAid. Available at: <https://wildaid.org/program>. Accessed September, 2020.
- Wild Earth Allies (2018). Snares: an unintended threat to great apes. *Wild Earth Allies*, June 1, 2018. Available at: <https://wildearthallies.org/snares-unintended-threat-great-apes/>.
- Wild for Life (n.d.). *Champions*. Wild for Life. Available at: <https://wildfor.life/champions>.
- Wildlife Watch (2018). Exclusive: an inside look at Cecil the lion's final hours. *National Geographic*, March 5, 2018. Available at: <https://www.nationalgeographic.co.uk/animals/2018/03/exclusive-inside-look-cecil-lions-final-hours>.
- Wilkie, D.S., Bennett, E.L., Peres, C.A. and Cunningham, A. (2011). The empty forest revisited. *Annals of the New York Academy of Sciences*, **1223**, 120–8. DOI: [10.1111/j.1749-6632.2010.05908.x](https://doi.org/10.1111/j.1749-6632.2010.05908.x).
- Wilkie, D.S. and Carpenter, J.F. (1999). Bushmeat hunting in the Congo Basin: an assessment of impacts and options for mitigation. *Biodiversity and Conservation*, **8**(7), 927–55. DOI: [10.1023/a:1008877309871](https://doi.org/10.1023/a:1008877309871).
- Wilkie, D.S., Painter, M. and Jacob, A. (2016). *Rewards and Risks Associated with Community Engagement in Anti-Poaching and Anti-Trafficking*. Washington DC: US Agency for International Development (USAID). Available at: [https://pdf.usaid.gov/pdf\\_docs/PAooM3R4.pdf](https://pdf.usaid.gov/pdf_docs/PAooM3R4.pdf).
- Wilkie, D.S., Starkey, M., Abernethy, K., et al. (2005). Role of prices and wealth in consumer demand for bushmeat in Gabon, Central Africa. *Conservation Biology*, **19**(1), 268–74. DOI: [10.1111/j.1523-1739.2005.00372.x](https://doi.org/10.1111/j.1523-1739.2005.00372.x).
- Wilkie, D.S., Wieland, M., Boulet, H., et al. (2016). Eating and conserving bushmeat in Africa. *African Journal of Ecology*, **54**(4), 402–14. DOI: [10.1111/aje.12392](https://doi.org/10.1111/aje.12392).
- Willcox, A.S. and Nambu, D.M. (2007). Wildlife hunting practices and bushmeat dynamics of the Banyangi and Mbo people of Southwestern Cameroon. *Biological Conservation*, **134**(2), 251–61. DOI: [10.1016/j.biocon.2006.08.016](https://doi.org/10.1016/j.biocon.2006.08.016).
- Williams, J.M., Lonsdorf, E.V., Wilson, M.L., et al. (2008). Causes of death in the Kasekela chimpanzees of Gombe National Park, Tanzania. *American Journal of Primatology*, **70**(8), 766–77. DOI: [10.1002/ajp.20573](https://doi.org/10.1002/ajp.20573).
- Williamson, D.F. (2004). *Tackling the Ivories: The Status of the US Trade in Elephant and Hippo Ivory*. Washington DC: TRAFFIC North America and World Wildlife Fund (WWF). Available at: [https://www.traffic.org/site/assets/files/4054/tackling\\_the\\_ivories.pdf](https://www.traffic.org/site/assets/files/4054/tackling_the_ivories.pdf).
- Williamson, E.A. (2014). Mountain gorillas: a shifting demographic landscape. In *Primates and Cetaceans: Field Research and Conservation of Complex Mammalian Societies*, ed. J. Yamagiwa and L. Karczmarsk. Tokyo, Japan: Springer, pp. 273–87.
- Williamson, E.A. and Butynski, T.M. (2013a). *Gorilla beringei* eastern gorilla. In *Mammals of Africa. Volume II: Primates*, ed. T.M. Butynski, J. Kingdon and J. Kalina. London, UK: Bloomsbury Publishing, pp. 45–53.
- Williamson, E.A. and Butynski, T.M. (2013b). *Gorilla gorilla* western gorilla. In *Mammals of Africa. Volume II: Primates*, ed. T.M. Butynski, J. Kingdon and J. Kalina. London, UK: Bloomsbury Publishing, pp. 39–45.
- Williamson, E.A., Maisels, F.G., Groves, C.P., et al. (2013). Hominidae. In *Handbook of the Mammals of the World. Volume 3: Primates*, ed. R.A. Mittermeier, A.B. Rylands and D.E. Wilson. Barcelona, Spain: Lynx Edicions, pp. 792–854.
- Wilson, D. and Reeder, D. (2005). *Mammal Species of the World: A Taxonomic and Geographic Reference*, 3rd edn. Baltimore, MD: Johns Hopkins University Press.
- Wilson, H.B., Meijaard, E., Venter, O., Ancrenaz, M. and Possingham, H.P. (2014a). Conservation strategies for orangutans: reintroduction versus habitat preservation and the benefits of sustainably logged forest. *PLoS ONE*, **9**(7), e102174. DOI: [10.1371/journal.pone.0102174](https://doi.org/10.1371/journal.pone.0102174).

- Wilson, M.L., Boesch, C., Fruth, B., et al. (2014b). Lethal aggression in *Pan* is better explained by adaptive strategies than human impacts. *Nature*, **513**, 414–7. DOI: 10.1038/nature13727.
- Wingard, J. and Pascual, M. (2018). *Catch Me If You Can: Legal Challenges to Illicit Wildlife Trafficking over the Internet. Policy Brief Prepared by Legal Atlas on behalf of the Global Initiative against Transnational Organized Crime*. Geneva, Switzerland: The Global Initiative Against Transnational Organized Crime. Available at: <https://www.legal-atlas.com/uploads/2/6/8/4/26849604/digital-dangers-catch-me-if-you-can-july-2018.pdf>.
- Wingard, J. and Pascual, M. (2019). *Following the Money: Wildlife Crimes in Anti-Money Laundering Laws, revised edn.* Missoula, MT: Legal Atlas. Available at: [https://www.legal-atlas.com/uploads/2/6/8/4/26849604/following\\_the\\_money\\_feb\\_11\\_.pdf](https://www.legal-atlas.com/uploads/2/6/8/4/26849604/following_the_money_feb_11_.pdf).
- WIPO (2013). *Customary Law, Traditional Knowledge and Intellectual Property: An Outline of the Issues*. World Intellectual Property Organization (WIPO). Available at: [https://www.wipo.int/export/sites/www/tk/en/resources/pdf/overview\\_customary\\_law.pdf](https://www.wipo.int/export/sites/www/tk/en/resources/pdf/overview_customary_law.pdf).
- Wisconsin Supreme Court (1875). *Motion to Admit Miss Lavinia Goodell to the Bar of this Court*, **39 Wis.** 232 August 1, 1875. Wisconsin Supreme Court. Available at: <https://cite.case.law/wis/39/232/>.
- Wise, S. (2005). *Though the Heavens May Fall: The Landmark Trial that Led to the End of Human Slavery*. Cambridge, MA: Da Capo Press.
- Wise, S. (2017a). Introduction to animal law book. *Syracuse Law Review*, **67**(1), 7–30.
- Wise, S. (2017b). A proposal for a new taxonomy of animal law. *Nonhuman Rights Blog*, December 12, 2017. Available at: <https://www.nonhumanrights.org/blog/new-taxonomy-animal-law/>.
- Wise, S. (2017c). Why the First Department's decision in our chimpanzee rights cases is wildly wrong. *Nonhuman Rights Blog*, June 22, 2017. Available at: <https://www.nonhumanrights.org/blog/first-department-wildly-wrong/>.
- Wittemyer, G., Northrup, J.M., Blanc, J., et al. (2014). Illegal killing for ivory drives global decline in African elephants. *Proceedings of the National Academy of Sciences*, **111**(36), 13117–21. DOI: 10.1073/pnas.1403984111.
- Wong, R.W.Y. (2015). The organization of the illegal tiger parts trade in China. *The British Journal of Criminology*, **56**(5), 995–1013. DOI: 10.1093/bjc/azv080.
- Wood, K.L., Tenger, B., Morf, N. and Kratzer, A. (2014). Bushmeat trafficking in Switzerland. *Gorilla Journal*, **48**, 27–33. Available at: <https://www.berggorilla.org/en/journal/issues/journal-no-48/article-view/bushmeat-trafficking-in-switzerland/>.
- Woodford, M.H., Butynski, T.M. and Karesh, W.B. (2002). Habituating the great apes: the disease risks. *Oryx*, **36**(2), 153–60. DOI: 10.1017/S0030605302000224.
- World Bank Group (2016). *Analysis of International Funding to Tackle Illegal Wildlife Trade*. Washington DC: World Bank. Available at: <https://openknowledge.worldbank.org/handle/10986/25340>.
- World Customs Organization (2017). *HS Nomenclature 2017 Edition*. Brussels, Belgium: World Customs Organization. Available at: <http://www.wcoomd.org/en/topics/nomenclature/instrument-and-tools/hs-nomenclature-2017-edition.aspx>.
- World Population Review (2019). *Africa population 2019*. World Population Review. Available at: <http://worldpopulationreview.com/continents/africa/>. Accessed October, 2019.
- Worldometer (n.d.). *Largest countries in the world (by area)*. Worldometer. Available at: <https://www.worldometers.info/geography/largest-countries-in-the-world>. Accessed August, 2020.
- Wrangham, R.W. (1986). Ecology and social relationships in two species of chimpanzee. In *Ecological Aspects of Social Evolution: Birds and Mammals*, ed. D.I. Rubenstein and R.W. Wrangham. Princeton, NJ: Princeton University Press, pp. 352–78.
- Wrangham, R.W., Chapman, C.A. and Chapman, L.J. (1994). Seed dispersal by forest chimpanzees in Uganda. *Journal of Tropical Ecology*, **10**, 355–68. DOI: 10.1017/S026467400008026.
- Wrangham, R.W., Hagel, G., Leighton, M., et al. (2008). The Great Ape World Heritage Species Project. In *Conservation in the 21st Century: Gorillas as a Case Study*, ed. T.S. Stoinski, H.D. Steklis and P.T. Mehlman. New York, NY: Springer Science and Business Media, pp. 282–95. DOI: 10.1007/978-0-387-70721-1\_14.
- Wright, A.J., Veríssimo, D., Pilfold, K., et al. (2015a). Competitive outreach in the 21st century: why we need conservation marketing. *Ocean & Coastal Management*, **115**, 41–8. DOI: 10.1016/j.ocecoaman.2015.06.029.

- Wright, E., Grueter, C.C., Seiler, N., *et al.* (2015b). Energetic responses to variation in food availability in the two mountain gorilla populations (*Gorilla beringei beringei*). *American Journal of Physical Anthropology*, **158**(3), 487–500. DOI: 10.1002/ajpa.22808.
- Wright, J. and Priston, N. (2010). Hunting and trapping in Lebialem Division, Cameroon: bushmeat harvesting practices and human reliance. *Endangered Species Research*, **11**, 1–12. DOI: 10.3354/esr00244.
- Wright, J.H., Hill, N.A.O., Roe, D., *et al.* (2016). Reframing the concept of alternative livelihoods. *Conservation Biology*, **30**(1), 7–13. DOI: 10.1111/cobi.12607.
- WWF (2011). Arrests made in Uganda mountain gorilla death. *WWF News*, June 22, 2011. Available at: <http://wwf.panda.org/?200728/Arrests-made-in-Uganda-mountain-gorilla-death>.
- WWF (2015). Major successes for largest ever global operation against wildlife crime. *WWF Press Release*, June 19, 2015. Available at: <http://wwf.panda.org/?248311/Major-successes-for-largest-global-operation-ever-against-wildlife-crime>.
- WWF (2018). Leading tech companies unite to stop online wildlife traffickers. *WWF Press Release*, March 7, 2018. Available at: <https://www.worldwildlife.org/press-releases/leading-tech-companies-unite-to-stop-online-wildlife-traffickers>.
- WWF (n.d.). *Coalition to End Wildlife Trafficking Online*. Washington DC: World Wildlife Fund (WWF). Available at: <https://www.worldwildlife.org/pages/coalition-to-end-wildlife-trafficking-online>. Accessed October, 2019.
- Wyatt, T., Johnson, K., Hunter, L., George, R. and Gunter, R. (2018). Corruption and wildlife trafficking: three case studies involving Asia. *Asian Journal of Criminology*, **13**(1), 35–55. DOI: 10.1007/s11417-017-9255-8.
- Wyler, L.S. and Sheikh, P.A. (2008). *International Illegal Trade in Wildlife: Threats and U.S. Policy*. DTIC Document. Washington DC: Library of Congress. Available at: <https://apps.dtic.mil/dtic/tr/fulltext/u2/a479399.pdf>.
- Xie, J., Towsey, M., Zhu, M., Zhang, J. and Roe, P. (2017). An intelligent system for estimating frog community calling activity and species richness. *Ecological Indicators*, **82**, 13–22. DOI: 10.1016/j.ecolind.2017.06.015.
- Xu, X. and Arnason, U. (1996). The mitochondrial DNA molecule of Sumatran orangutan and a molecular proposal for two (Bornean and Sumatran) species of orangutan. *Journal of Molecular Evolution*, **43**(5), 431–7. DOI: 10.1007/bf02337514.
- Xue, Y., Prado-Martinez, J., Sudmant, P.H., *et al.* (2015). Mountain gorilla genomes reveal the impact of long-term population decline and inbreeding. *Science*, **348**(6231), 242–5. DOI: 10.1126/science.aaa3952.
- Yamagiwa, J. and Basabose, A.K. (2009). Fallback foods and dietary partitioning among *Pan* and *Gorilla*. *American Journal of Physical Anthropology*, **140**(4), 739–50. DOI: 10.1002/ajpa.21102.
- Yang, J. (2006). Learners and users of English in China. *English Today*, **22**(2), 3–10. DOI: 10.1017/S0266078406002021.
- Yang, T. (1993). The animal rights theory and the eco-centric arguments [in Chinese]. *Journal of Studies in Dialectics of Nature*, **8**, 54–48.
- Yankwich, L.R. (1959). Social attitudes as reflected in early California law. *Hastings Law Journal*, **10**(3), 250–70.
- Yersin, H., Asimwe, C., Voordouw, M.J. and Zuberbühler, K. (2017). Impact of snare injuries on parasite prevalence in wild chimpanzees (*Pan troglodytes*). *International Journal of Primatology*, **38**(1), 21–30. DOI: 10.1007/s10764-016-9941-x.
- Yin, L.Y., Fei, H.L., Chen, G.S., *et al.* (2016). Effects of group density, hunting, and temperature on the singing patterns of eastern hoolock gibbons (*Hoolock leuconedys*) in Gaoligongshan, southwest China. *American Journal of Primatology*, **78**(8), 861–71. DOI: 10.1002/ajp.22553.
- Yuliani, E.L., Adnan, H., Achdiawan, R., *et al.* (2018). The roles of traditional knowledge systems in orang-utan *Pongo* spp. and forest conservation: a case study of Danau Sentarum, West Kalimantan, Indonesia. *Oryx*, **52**, 156–65. Available at: [http://www.cifor.org/publications/pdf\\_files/articles/AYuliani1601.pdf](http://www.cifor.org/publications/pdf_files/articles/AYuliani1601.pdf).
- Yuniar, R.W. (2016). In Southeast Asia, Facebook and Instagram are where people shop. *Wall Street Journal*, December 6, 2016. Available at: <https://www.wsj.com/articles/where-facebook-and-instagram-are-about-shopping-1481023577>.
- Zainol, M.Z., Fadzly, N., Rosely, N. and Ruppert, N. (2018). *Assessment of illegal online primate trade in Malaysia*. Poster presented at the Congress of the International Primatological Society, Nairobi, Kenya.
- Zhang, D., Fei, H.-L., Yuan, S.-D., *et al.* (2014). Ranging behavior of eastern hoolock gibbon (*Hoolock leuconedys*) in a northern montane forest in Gaoligongshan, Yunnan, China. *Primates*, **55**(2), 239–47. DOI: 10.1007/s10329-013-0394-y.

- Zhang, L., Hua, N. and Sun, S. (2008). Wildlife trade, consumption and conservation awareness in southwest China. *Biodiversity and Conservation*, **17**(6), 1493–516. DOI: 10.1007/s10531-008-9358-8.
- Zhao, N. (2002). *The essence of the animal rights arguments is anti-humanity* [in Chinese]. Available at: <https://view.news.qq.com/a/20120118/000013.htm>. Accessed October 28, 2019.
- Zhou, J. (2018). Chinese zoo suspends keeper over ‘mistreatment’ of giant panda. *South China Morning Post*, June 21, 2018. Available at: <https://www.scmp.com/news/china/society/article/2151720/chinese-zoo-suspends-keeper-over-mistreatment-giant-panda>.
- Zhou, J., Wei, F., Li, M., et al. (2005). Hainan black-crested gibbon is headed for extinction. *International Journal of Primatology*, **26**(2), 453–65. DOI: 10.1007/s10764-005-2933-x.
- Zhou, J., Wei, F., Li, M., Pui Lok, C.B. and Wang, D. (2008). Reproductive characters and mating behaviour of wild *Nomascus hainanus*. *International Journal of Primatology*, **29**(4), 1037–46. DOI: 10.1007/s10764-008-9272-7.
- ZOO (2015). *IUCN/SSC Asian Primates Red List Assessment Workshop, November 19–24, 2015*. Tamil Nadu, India: Zoo Outreach Organization (ZOO). Available at: [https://zooreach.org/ZOO\\_WILD\\_Activities/2015/APA2015.htm](https://zooreach.org/ZOO_WILD_Activities/2015/APA2015.htm).
- ZSL (2014). Sustainable wildlife management in timber concessions. *The Wildlife Wood Project*. ZSL Conservation. London, UK: Zoological Society of London (ZSL). Available at: <https://www.zsl.org/sites/default/files/document/2014-01/Wildlife%20Wood%20Project%20-%20Info%20Sheet%20English.pdf>.
- ZSL (n.d.). *Wildlife Wood Project*. London, UK: Zoological Society of London (ZSL). Available at: <https://www.zsl.org/conservation/regions/africa/wildlife-wood-project>. Accessed October 18, 2019.
- Zuo, M. (2017). China’s terrible zoos and why they’re still thriving. *South China Morning Post*, July 1, 2017. Available at: <https://www.scmp.com/news/china/society/article/2100775/chinas-terrible-zoos-and-why-theyre-still-thriving>.

# Index

## A

- Abbott's gray gibbon (*Hylobates abbotti*) xvi, xx, xxiv–xxv, 30, 160–161, 215, 217, 276, 277, 281
- Abundance Annex 2, 196, 200
- acoustic monitoring 208, 209, 211, 229
- advertising and entertainment industries
- China 100–101
  - Europe 256–257
  - Thailand 111–114
  - United States 107–111, 259
  - see also* portrayals of apes
- advertising of apes/ape products 18–19, 164–175;
- see also* social media
- advocacy and awareness campaigns
- awareness of laws 133, 134, 140, 192
  - Coalition to End Wildlife Trafficking
  - Online 125–126
  - cultural 64, 65
  - reducing ape use in entertainment industry 107–111, 113–114
  - reducing demand 90, 92, 125–126, 128
  - Wild for Life campaign 15
  - WildAid campaigns 265–268
  - see also* behavior change; Great Apes Survival Partnership (GRASP)
- Africa
- ape population estimates 200, 212, 213, 214, 218, 273–274
  - ape population trends 214, 216
  - body parts trade 10, 39, 76–78, 88
  - captive apes 260–261
  - criminal networks 16, 165
  - cross-border law enforcement 134, 135
  - distribution of apes xviii, xix, xxii–xxiii
  - food security/insecurity 80–81, 82
  - international trafficking routes 7, 85–86, 114, 165
  - ofttake rates 77, 78–80
  - sanctuaries and rescue centers 44, 260, 261
  - taboos protecting apes 39
  - wild meat consumption/trade 6, 8–9, 9–10, 72, 75, 76–78, 85–86
  - zoos 260
  - see also specific country*
- agile gibbon (*Hylobates agilis*) xx, xxiv–xxv, 30, 120, 160–161, 215, 217, 276, 277, 280

- agriculture 35, 39, 70, 81, 89–90, 92, 93, 202, 203, 204, 271
- air travel 8, 85–86
- alternative livelihood initiatives 92, 94
- Angola 269, 273
- animal abuse 106, 107, 108, 111
- Animal Protection Index (API) scores 256, 257, 258, 259
- animal rights *see* nonhuman rights
- anti-poaching patrols 30, 55, 56, 87, 88, 136–138, 139, 183, 191, 208, 229
- anti-trafficking enforcement 55, 111–112, 113
- Ape Populations, Environments and Surveys (A.P.E.S.) Portal 2, 199–200, 206, 212, 217–218
- apeAPP 138
- Apes Seizure Database 6, 138, 182–183
- Asia
- ape population estimates 200, 212, 213, 214, 215, 218, 275–277
  - ape population trends 216–217
  - body parts trade 10
  - captive apes 46, 260
  - cross-border law enforcement 136, 191
  - distribution of apes xxiv–xxv
  - food security/insecurity 81
  - international trafficking routes 7, 114, 165
  - ofttake 78
  - online wildlife trade 18, 31, 119
  - population trends 279, 280–281
  - sanctuaries and rescue centers 30, 44, 260
  - wild meat consumption/trade 8, 10, 85
  - zoos 260
  - see also specific country*
- Association of South East Asian Nations (ASEAN) 112–113
- Wildlife Enforcement Network (ASEAN-WEN) 113, 136, 191
- Association of Zoos and Aquariums (AZA) 103, 110, 259
- autonomy 234, 235–238, 241, 247, 248
- awareness-raising campaigns *see* advocacy and awareness campaigns
- B
- Bakonzo people, Uganda 64–65, 66
- Bakweri people, Cameroon 150
- Bangladesh 214, 276
- Banyoro people, Uganda 64–65, 66
- behavior change, human 14–16, 65, 91, 92, 93–94, 146, 225–227; *see also* advocacy and awareness campaigns; demand reduction strategies
- biodiversity 61, 65, 67, 78–82, 84, 90, 145, 184, 186, 199
- body parts trade
- drivers 39, 52, 53–58
  - growing demand 53, 55, 58, 75
  - impacts *see* impacts of killing/capture/trade

- international trade 55, 85  
 monetary values 54, 55  
 online trade 19  
 scale of trade 10  
 skulls 19, 52, 54, 57–58, 59, 88–89  
 supply chains 10  
 tourism commodities 57–58, 59  
 uses of body parts 10, 39;  
*see also* traditional medicine and rituals
- bonobos (*Pan paniscus*)**  
 in captivity 256, 258, 260  
 conservation status 213  
 diet xxvi  
 distribution xviii, xix, xxii–xxiii  
 habitat type and status xxv  
 home and day range xxvii, xxviii  
 international trade 4  
 live ape trade 4, 35, 46  
 nesting xxix  
 offtake rates 89  
 overview xii  
 population estimates 213, 214, 273  
 population trend 216, 278  
 protective legislation 160–161  
 reproduction xxix, xxx  
 seed dispersal 42  
 social organization xx, 29  
 threats to 202  
 wild meat trade 76
- Bornean gray gibbon (*Hylobates muelleri*) xvi, xx, xxiv–xxv, 160–161, 215, 217, 276, 277, 280
- Bornean orangutan (*Pongo pygmaeus*)**  
 body parts trade 57–58  
 case studies 56–58, 59, 61–63  
 conservation status 198–199, 200  
 diet xxvii  
 distribution xxiv–xxv  
 offtake rates 32, 57, 75  
 overview xiv–xv  
 population estimates 6, 212, 213, 218  
 population trend 57, 216  
 protective legislation 160–161  
 reproduction xxx  
 in sanctuaries and rescue centers 57  
 threats to 57, 203, 204  
*see also specific subspecies*
- Bornean white-bearded gibbon (*Hylobates albifrons*) xx, xxiv–xxv, 30, 160–161, 200, 214, 215, 217, 218, 276, 280
- Borneo**  
 body parts trade 57–58, 59  
 ecotourism 144  
 habitat loss/degradation 228  
 international trafficking routes 7, 8  
 law enforcement 133  
 orangutan PHVAs 41  
 pets, orangutans as 98, 114–118, 128  
 protected areas 33  
 sanctuaries and rescue centers 57, 75–76, 114–115, 122  
 taboos protecting apes 39, 87, 148, 150  
 threat levels 3, 5  
 wild meat consumption/trade 34
- Brazil 92, 197, 232, 253, 257, 258
- Brunei 136, 276
- Budongo Forest Reserve, Uganda 26
- Burundi 214, 269, 273
- Bwindi Impenetrable National Park, Uganda 37, 82, 91, 146, 147, 148

## C

### Cambodia

- entertainment parks 113
- gibbon population estimates 214, 276
- legal and regulatory environment
  - checks and balances 175
  - differential liability 166
  - domestic laws 160, 163, 164
  - knowledge requirements and aggravating circumstances 170, 171
  - legal classification of species 159
  - listing status 162, 163, 169
  - penalties 168, 169, 172, 173
  - sanctuaries and rescue centers 30

camera traps 138, 139, 208, 209, 229

### Cameroon

- ape population estimates 273
- behavior change, human 93–94
- body parts trade 10, 54–55, 56, 72, 83, 88, 134, 135
- commodity chain 73–74
- food security/insecurity 82
- international criminal networks 55
- international trafficking routes 7
- legal and regulatory environment
  - checks and balances 175
  - counter-corruption efforts 134, 135
  - differential liability 166–167
  - domestic laws 161, 163
  - forms of law enforcement 14–15
  - knowledge requirements and aggravating circumstances 170, 171
  - penalties 166–167, 168, 172, 173

live ape trade 134

offtake rates 89

sanctuaries and rescue centers 152–153, 261

taboos 39, 56, 65

threats to apes 269

totems 56

traditional medicine and rituals 72, 88

wild meat consumption/trade 6, 46, 56, 77, 80, 83

- Cao Vit gibbon (*Nomascus nasutus*)  
 distribution xxi, xxiv–xxv  
 extinction threat 218  
 population estimates xvi, 215, 276, 277  
 population trend 216, 217, 280  
 protective legislation 160–161  
 social organization xxii  
 captive apes  
 Animal Protection Index (API) scores 256, 257, 258  
 in entertainment industries *see* advertising and entertainment industries  
 groups 255  
 key findings 232–233  
 as pets *see* pets, apes as  
 in research labs 242, 252, 254–255, 258, 259  
 rights *see* nonhuman rights; Nonhuman Rights Project (NhRP)  
 in sanctuaries and rescue centers *see* sanctuaries and rescue centers  
 statistical update  
   Africa 260–261  
   Asia 260  
   conclusion 261–262  
   data 255–256  
   Europe 256  
   Latin America 257–258  
   Oceania 258–260  
   United States 258, 259  
 welfare and well-being barriers 102–105  
 in zoos *see* zoos and wild animal parks  
 capture-recapture survey methods 206, 208, 209, 229  
 Cecilia, chimpanzee 252  
   Center for Great Apes, Wauchula, Florida 251, 252  
 Central Africa  
   corruption 87  
   food security/insecurity 82  
   formal law vs. customary law 135  
   international trafficking routes 7, 8  
   legislation awareness 133  
   taboos 39  
   wild meat consumption/trade 9, 75, 80  
   *see also specific country*  
 Central African Republic (CAR) 7, 36, 56, 80, 82, 183, 269, 273  
 central chimpanzee (*Pan troglodytes troglodytes*)  
   conservation status 213  
   distribution xix, xxii–xxiii  
   habitat type and status xxvi  
   population estimates xii, 213, 273, 274  
   population trend 216, 278  
   threats to 202  
 chimpanzees (*Pan troglodytes*)  
   attributes and traits shared with humans 238–239  
   body parts trade 39, 53, 54–55, 64–65, 85, 87, 88  
   cognition and autonomy 234–235, 236, 237–240  
 conflict with humans 35, 147  
 distribution xviii, xix  
 economic value 4, 46, 77, 84  
 habitat type and status xxv–xxvi  
 home and day range xxvii, xxviii  
 infanticide xxx  
 live trade 4, 35, 46, 101, 102, 179  
 nesting xxix, 206–207  
 offtake rates 6, 79, 89  
 overview xii–xiii  
 permit fraud 179  
 as pets 114, 259  
 population estimates 212, 213, 214, 273–274  
 population trends 216, 278  
 portrayals of 121  
 protective legislation 160–161  
 reproduction xxix, xxx  
 in research labs 242, 252, 254, 259  
 in sanctuaries and rescue centers 258, 259  
 seed dispersal 42  
 social organization xiii, xx, 29  
 status of captive 256, 257, 258, 259, 260, 261  
 surveying 206, 209  
 taboos protecting 39, 66, 150  
 tool use 244–245  
 use in advertising and entertainment industries 107, 108–110, 111, 225–227  
 wild meat trade 9, 39, 76, 77, 225–227  
 in zoos 102, 259  
   *see also specific subspecies*  
 China  
   animal abuse 106  
   animal rights 105–106  
   apes in zoos and wild animal parks 98–106  
   body parts trade 85, 158  
   gibbon populations 200, 205, 216, 276  
   gibbons in myth and folklore 53  
   legal and regulatory environment  
    checks and balances 175  
    conflicting regimes 99  
    differential liability 166  
    gaps 163  
    laws/regulations protecting apes 158, 161, 164  
    listing status 162  
    penalties 168, 172, 173  
   leisure industry 99–101  
   live ape trade 98–106  
   permit fraud 179  
   spending power 99–100  
   traditional medicine and rituals 53  
   “war on nature” 105  
   wild meat trade 30–31, 87, 204  
   WildAid campaigns 265–268  
   wildlife markets 7, 8, 10  
 civil law system 232, 234, 250–253

- climate change 92, 203
- Coalition to End Wildlife Trafficking Online 119, 125–126
- common law system *see* Nonhuman Rights Project (NhRP)
- community engagement
- aims and methods 16
  - alternative livelihood initiatives 91, 145–146
  - cultural understanding 58–65
  - ecotourism benefits 144–145
  - incentive schemes 91
  - indigenous knowledge 221
  - integrated conservation and development projects (ICDPs) 145–146
  - land tenure and wildlife ownership rights 144, 146
  - for law enforcement
    - anti-snaring efforts 141–142
    - conservation benefits, increasing 143–146
    - conservation costs, decreasing 146–148
    - conservation vs. poaching costs–benefits 142–143, 146–150
    - governance and incentive structures 141–142
    - illegal activity benefits, decreasing 148
    - illegal activity costs, increasing 148, 150
    - integrated conservation and development projects (ICDPs) 145–146
    - intervention influences on costs–benefits 143
    - ranger recruitment 141
- My Gorilla–My Community* (MGMC) program 93–94
- revenue-sharing programs 144–145, 146
- see also* advocacy and awareness campaigns; responses at source
- computer-generated imagery (CGI) 109, 110, 111
- Conference of the Parties (COP) 112, 113, 133, 177
- conservation framework, evidence-based
- see* evidence-based conservation
- Conservation Measures Partnership 220
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
- 2018 report on apes 179, 182
  - appendices xviii, 176–177
  - collaborative efforts 191
  - data, importance of 201
  - international regulation 13, 135, 154
  - legal wildlife trade 97
  - Monitoring the Illegal Killing of Elephants (MIKE) 139
  - penalties for wildlife crimes 133
  - permits 177–179
  - protecting apes 179–180
  - reporting systems 94
  - Resolution 134 179, 182
  - scientific and management authority checks and balances 174–175
  - structure 176–178
  - Trade Database 182
  - weaknesses and limitations 154, 177–178, 179, 191
  - wildlife trade database 12
- Convention on the Conservation of Migratory Species of Wild Animals (CMS) 183
- corruption 6, 16, 17, 18, 87, 133, 134, 165–166, 179, 187, 223
- costs–benefits of conservation/poaching 142–150
- counter-corruption efforts 134, 135
- criminal networks 16–18, 155, 165–167, 173, 175, 187, 189;
- see also* organized crime
- Cross River gorilla (*Gorilla gorilla diehli*)
- body parts trade 72
  - conservation status 213
  - distribution xix, xxii–xxiii
  - human pressure impacts 38
  - population estimates xiii, 38, 200, 212, 213, 273, 274
  - population monitoring 139
  - population trend 278
  - taboos protecting 150
  - threats to 202
- culture and religion
- changes 34–35, 39, 55, 57
  - culturally-sensitive research and conservation approaches 39, 48–49, 58–65
  - “culture,” defining 51
  - formal law vs. customary law 132, 133, 135
  - taboos 32, 34, 36, 39, 55, 56, 57, 66, 87, 148, 150
  - totems 55, 56, 64, 66
  - traditional medicine and rituals *see* traditional medicine and rituals
  - Western approaches and terminology, re-evaluating 50–51, 59, 60

## D

- data sharing 224, 225, 227, 228
- databases 6, 12, 101, 138, 139, 178, 182–183, 186, 188, 199–200, 224, 260
- Dayak peoples 56–58, 59, 148, 150
- deforestation *see* habitat loss/degradation
- demand reduction strategies 90–92, 94, 105, 110, 125, 128, 148, 192, 265–268
- Democratic Republic of Congo (DRC)
- ape population estimates 273
  - armed conflict 87
  - awareness-raising campaigns 140
  - body parts trade 84, 88
  - evidence-based conservation case study 225–227
  - legal and regulatory environment
    - awareness-raising campaigns 140
    - cross-border law enforcement 135
    - differential liability 166
    - formal law vs. customary law 135

gaps 164  
 knowledge requirements and aggravating circumstances 170, 171  
 laws/regulations protecting apes 161  
 listing status 162  
 penalties 168, 172, 173  
 militarized conservation 137  
 sanctuaries and rescue centers 261  
 taboos protecting apes 39  
 wild meat consumption/trade 39, 77–78, 80, 84  
 disease 12, 27, 28, 44–45, 201, 202, 204, 269–272  
 distance sampling 205, 208, 209, 229  
 distribution of apes xix–xxi, xxii–xxiii, xxiv–xxv  
 Dja Faunal Reserve, Cameroon 73–74, 77  
 drivers of wildlife crime 10–11, 82–90, 148, 149, 150, 151  
 drones 138, 209, 229

## E

eastern chimpanzee (*Pan troglodytes schweinfurthii*) xii, xix, xxii–xxiii, xxv, 36, 40–41, 213, 216, 273, 274, 278  
 eastern gorilla (*Gorilla beringei*) xiii–xiv, xxv, xxvii, xxix, 160–161, 205; *see also* Grauer's gorilla (*Gorilla beringei graueri*); mountain gorilla (*Gorilla beringei beringei*)  
 eastern hoolock (*Hoolock leuconedys*) xv, xx, xxiv–xxv, 27, 28, 200, 215, 217, 277, 280  
 Ebola virus 44, 270  
 Eco Activists for Governance and Law Enforcement (EAGLE) 13–14, 134, 180  
 economies, ape-based 45–46  
 ecosystem impacts of ape loss 3, 28, 42–43, 80, 95  
 ecotourism *see* tourism  
 education 14, 85, 90, 98, 105–106, 108, 125–126, 148; *see also* advocacy and awareness campaigns; behavior change, human  
 Egypt 7, 114, 179  
 elephants 71, 72, 82, 84, 87, 112, 248–250, 267  
 entertainment industry *see* advertising and entertainment industries  
 ENVIRONET 186  
 Equatorial Guinea 270, 273  
 ethical, legal, practical concerns 43–45  
 Europe 7, 8, 9–10, 85–86, 111, 114, 254, 256–257; *see also specific country*  
 evidence-based conservation basics 218–220 benefits 220 case study 225–227 challenges 220, 221–223 components 221 conservation cycle 221 context-specific strategies 229

data, importance of 200–201  
 data sharing 224, 227  
 development 220  
 evidence types 220–221  
 future survey directions 208–209  
 gibbons 218  
 great apes 217–218  
 horizon scanning 224, 228  
 integration of evidence 224  
 key findings 200  
 online communication options 228  
 population and conservation status 212–217  
 population size estimates 209–212  
 research design 224, 225  
 research reviews 224  
 research summaries 224  
 survey methods 199–200  
 technological advances 229  
 threats to apes 201–204  
 use for apes 221–223  
 extinctions 70, 71, 75, 80, 89, 205

## F

Facebook 18, 19, 31, 119, 120, 126  
 films and television, ape use in *see* advertising and entertainment industries  
 fines 143, 156, 158, 167, 168–169, 170, 171–173  
 food security/insecurity 80–82, 83–84, 89–90, 90–91, 91–92  
 Forest Stewardship Council (FSC) certification 139–140  
 forfeitures 167, 168–169

## G

Gabon ape population estimates 274  
 ape surveys 206  
 attitudes towards gorillas, changing 55  
 ecotourism 55  
 food security/insecurity 82  
 habitat loss/degradation 201  
 international trafficking routes 7  
 laws and law enforcement 133, 134  
 offtake rates 77  
 sanctuaries and rescue centers 261  
 taboos 39  
 threats to apes 270  
 totems 56  
 Gaoligong/Skywalker hoolock (*Hoolock tianxing*) conservation status xv, 215  
 distribution xv, xx  
 population estimates xv, 200, 214, 215, 276, 277  
 population trend 28, 31, 217, 280

- genetic survey methods 206, 208, 209, 229  
 Ghana 75, 80, 214, 270, 274  
 gibbons (Hylobatidae)  
   body parts trade 53, 57, 59  
   in captivity 101, 254, 256, 257, 258, 260  
   conservation status 200  
   diet xxvii  
   distribution xviii, xx–xxi, xxiv–xxv  
   domestic laws protecting 160–161  
   habitat type and status xxvi  
   home and day range xxix  
   listing status 169–170  
   live trade 8, 17, 30, 31, 32, 59–60, 115, 184–185  
   in myths and folklore 53  
   online trade 31, 32, 119–120  
   overview xv–xvii  
   as photo op props 7, 120, 121, 125  
   population estimates 214, 215, 218, 276–277  
   population trends 212, 216–217, 280–281  
   population viability analyses (PVAs) 41  
   reproduction xxx  
   in sanctuaries and rescue centers 30, 31–32  
   seed dispersal 42  
   social organization xx, xxiii, xxv  
   surveying 208, 209–211  
   taboos protecting 57  
   threats to 30, 203–204  
   wild meat trade 30–31, 59, 69  
   *see also specific genus; specific species*
- Gishwati Forest, Rwanda 147  
 Global Environment Facility 184, 186  
 Global Wildlife Conservation 138–139  
 Gorilla Agreement 183  
 Gorilla Guardians 144  
 gorillas (*Gorilla* spp.)  
   body parts trade 39, 85, 88, 134, 135, 190  
   in captivity 101, 102, 103, 114, 256, 257, 258, 259, 260  
   changing human attitudes towards 55  
   conflict with humans 148  
   diet xxvi  
   distribution xix, xxii–xxiii  
   economic value 5  
   ecotourism 55, 144  
   home and day range xxvii–xxviii, xxviii–xxix  
   infanticide xxx  
   integrated conservation and development projects (ICDPs) 146  
   live trade 35, 46, 179  
   nesting xxix  
   offtake rates 79, 89  
   outside protected areas 165  
   overview xiii–xiv  
   population estimates 212, 213, 214, 273–274  
   population trends 216, 278  
   reproduction xxix, xxx  
   in sanctuaries and rescue centers 152–153  
   seed dispersal 43  
   silverback, impact of killing 29, 41  
   social organization xiv, xx, xxi–xxiii, 29, 255  
   socioecology xviii  
   surveying 206, 209  
   taboos protecting 39  
   wild meat trade 68–69, 77  
   *see also specific species; specific subspecies*
- GRACE (Gorilla Rehabilitation and Conservation Education Center), DRC 36, 37, 79, 255  
 Grauer's gorilla (*Gorilla beringei graueri*)  
   conservation status 213  
   distribution xix, xxii–xxiii  
   population estimates xiii, 213, 273  
   population monitoring 139  
   population trend 36, 37, 79, 200, 216, 278  
   threats to xiii, 79, 202  
   Ushiriki consortium, DRC 225–227  
   wild meat trade 76  
 gray literature 220, 224  
 Great Ape Information Network (GAIN) 255  
 Great Ape Project 110, 257  
 great apes *see bonobos (Pan paniscus); chimpanzees (Pan troglodytes); gorillas (Gorilla spp.); orangutans (Pongo spp.)*  
 Great Apes Survival Partnership (GRASP) 6, 103, 138, 154, 179, 182–183, 192, 201  
 Guinea  
   ape population estimates 274  
   body parts trade 88  
   corruption 134, 179  
   international trafficking routes 7  
   legal and regulatory environment  
     checks and balances 175  
     differential liability 166  
     gaps 164  
     knowledge requirements and aggravating circumstances 170, 171  
     laws/regulations protecting apes 161, 164  
     listing status 162  
     penalties 168, 172, 173  
   live ape trade 101  
   permit fraud 179  
   sanctuaries and rescue centers 261  
   taboos 39  
   threats to apes 270  
 Guinea-Bissau 39, 87, 270, 274

## H

- habitat loss/degradation  
   awareness-raising campaigns 122–124  
   barrier to sustainable hunting 89–90

- causing population declines 38, 41, 54, 57, 203, 204, 216, 228  
 leading to human–wildlife conflict 28–29, 35, 75  
 leading to intergroup conflicts 3  
 rate of loss in Africa 90  
 threat to apes 30, 33, 180, 200, 201, 202, 203, 269–272
- habitat type and status xxv–xxvi
- Hainan gibbon (*Nomascus hainanus*)  
 conservation status xvi, 215  
 critically low population xvi, 31, 41, 200, 214, 215, 216, 276  
 distribution xxi, xxiv–xxv  
 population trend 217, 281  
 protective legislation 160–161  
 social organization xxiii
- Happy, elephant 248
- Hercules and Leo, chimpanzees 236, 242, 243–244, 246
- Hiasl, chimpanzee 252–253  
 historical records 205
- home and day range xxvii–xxix
- hoolocks (*Hoolock* spp.) xv; *see also specific species*
- horizon scanning 224, 228
- human rights abuses 132, 136, 137, 138, 150
- Human–Gorilla (HuGo) Conflict Resolution teams, Uganda 148
- human–wildlife conflict  
 competition for resources 29, 75, 81, 115  
 disease transmission 44  
 impact on infant captures 115  
 leading to hunting 28–29, 32, 34–35, 115, 147–148, 180, 201
- hunting/poaching  
 ancient vs. modern 32–33, 57  
 archaeological evidence of 25, 32–33, 70  
 for food *see wild meat consumption/trade*  
 impacts *see impacts of killing/capture/trade*  
 income from 74, 75, 77, 81, 84  
 killing adults to capture infants 29, 35, 36, 37, 43  
 legal and regulatory environment study 164–175  
 link to extinctions 70, 71, 79–80  
 link to human poverty 80–85  
 modernization impacts 25–26, 88  
 offtake *see offtake*  
 opportunistic 32, 34, 57, 61, 72, 74  
 of popular/named animals 15  
 as a result of human–wildlife conflict 28–29, 32, 34–35, 115, 147–148, 180, 201  
 roads, impact of 34, 35, 39, 55, 139, 140  
 scale of hunting pressure 30–38  
 snaring 26–27, 30, 37, 42, 88, 141–142  
 terminology 3, 24, 26  
 threat levels 180, 201, 203, 204  
 trophy hunting 15
- HUTAN Kinabatangan Orang-utan Conservation Programme, Borneo 144
- Hylobates* genus xvi, xviii, xx–xxi, xxiv–xxv, xxix, 119; *see also specific species*
- inbreeding 80, 102–103
- incentive schemes 84, 91, 92, 94
- India 30, 234, 276
- indigenous knowledge 65, 221
- Indonesia  
 animal welfare, attitudes towards 116, 118  
 body parts trade 57  
 gibbon population estimates 214, 276  
 gibbons in myth and folklore 53  
 gibbons in rescue centers 30  
 habitat loss/degradation 75  
 human–wildlife conflict 89, 147–148  
 international trafficking routes 7, 10  
 legal and regulatory environment  
 checks and balances 175  
 cross-border law enforcement 136  
 differential liability 166  
 gaps 164  
 knowledge requirements and aggravating circumstances 170  
 laws/regulations protecting apes 161, 164  
 legal classification of species 159  
 listing status 162  
 penalties 133, 168, 172, 173  
 live ape trade 31, 34, 45–46, 75–76, 111, 113, 128
- online wildlife trade 19, 31, 119
- orangutan population estimates 214, 275
- orangutans as pets 114–118, 133
- sanctuaries and rescue centers 30, 57, 114–115, 124, 156, 157
- threats to apes 203
- tourism 57, 122, 124
- wild meat trade 75, 204  
*see also specific island*
- infanticide xxx, 41
- Instagram 18, 19, 31, 119, 120, 125–126
- integrated conservation and development projects (ICDPs) 145–146
- International Consortium on Combating Wildlife Crime (ICCWC) 189, 190, 191, 192
- International Fund for Animal Welfare (IFAW) 125–126
- International Gorilla Conservation Programme (IGCP) 146, 148
- International Union for Conservation of Nature (IUCN)  
 2018 report to CITES 179–180, 182
- ape surveying guidance 209, 211

conservation status of apes 200  
 FSC certification 139–140  
 human–wildlife conflict 148  
 Primate Specialist Group 6  
 Red List Categories and Criteria xviii, 27, 159, 201, 263–264  
*see also* Ape Populations, Environments and Surveys (A.P.E.S.) Portal  
 Internet *see* social media  
 INTERPOL (International Criminal Police Organization) 154, 155, 184–185, 187, 190, 191–192  
 Ivory Coast  
   ape population estimates 274  
   extinctions 80  
   international trafficking routes 7  
   legal and regulatory environment  
     checks and balances 175  
     differential liability 167  
     gaps 164  
     knowledge requirements and aggravating circumstances 171  
     laws/regulations protecting apes 160, 164  
     listing status 162  
     penalties 169, 172, 173  
   sanctuaries and rescue centers 260–261  
   threats to apes 270  
 ivory trade 13, 16, 71, 72, 84, 87, 158, 265, 267

## J

Jane Goodall Institute 148, 227  
 Japan 254, 255, 260  
 Java 16, 17, 30, 31, 70, 115, 116  
 Jimmy, chimpanzee 253

## K

Kenya 7, 70, 135, 261  
 Kiko, chimpanzee 241–242, 243–244, 246–247, 248  
 Kimbi-Fungom National Park, Cameroon 54–55  
 Kloss' gibbon (*Hylobates klossii*) xx, xxiv–xxv, 28, 30, 160–161, 215, 217, 276, 280  
 Kuwait 114, 115

## L

Lao People's Democratic Republic (Lao PDR)  
   gibbon population estimates 277  
   gibbons in myth and folklore 53  
   legal and regulatory environment  
     checks and balances 175  
   cross-border law enforcement 136

differential liability 167  
 gaps 164  
 knowledge requirements and aggravating circumstances 171  
 laws/regulations protecting apes 161  
 listing status 162, 163, 169  
 penalties 172, 173  
 penalties for wildlife crime 169  
 Nam Kading National Protected Area study 60, 63–64  
 traditional medicine and rituals 53  
 wild meat trade 30–31, 204  
 Lar gibbon (*Hylobates lar*)  
   conservation status 215  
   distribution xx, xxiv–xxv  
   extirpations 205  
   online trade 120  
   population estimates 215, 276, 277  
   population trend 217, 280  
   protective legislation 160–161  
   in sanctuaries and rescue centers 30  
 Last Great Ape Organization (LAGA) 16, 19, 134, 135  
 law enforcement *see* community engagement, for law enforcement; legal and regulatory environment  
 legal and regulatory environment  
 2018 report to CITES 179, 182  
 civil law system 232, 234, 250–253  
 common law system *see* Nonhuman Rights Project (NhRP)  
 international level 191–192  
   Agreement on the Conservation of Gorillas and Their Habitats 183  
   CITES 176–182  
   Convention on the Conservation of Migratory Species of Wild Animals (CMS) 183  
   International Consortium on Combating Wildlife Crime (ICCWC) i 189  
   INTERPOL 187  
   other collaborative initiatives 189–191  
   UN Convention on Biological Diversity (CBD) 184, 186  
   United Nations Convention against Transnational Organized Crime (UNTOC) 188–189  
   United Nations Office on Drugs and Crime (UNODC) 188  
   World Customs Organization (WCO) 186–187  
 national level  
   clarity and transparency 173–174  
   community engagement *see* community engagement, for law enforcement  
   in-depth analyses 164–165  
   differential liability by offender status 165–167  
   effective legal frameworks 133, 135  
   enhancing 94–95

- fines 171–173  
 formal law vs. customary law 132, 133, 135  
 importance 156, 157, 158  
 incentive schemes 91  
 intent requirements and aggravating circumstances 170–171  
 law, policy and enforcement 156  
 law enforcement partnerships 138–141  
 law enforcement study *see* Legal Atlas study  
 law enforcement technology 138–139  
 listing status 158–159, 162  
 militarized law enforcement 136–137, 138  
 multiple laws covering offenses 158  
 penalties 167–170  
 prison terms 173  
 protection approaches 162–163  
 regulation along supply chain 163–164, 176  
 site-based law enforcement pros/cons 136–138  
 strengthening law enforcement 135–136  
 trend analysis 173–175
- nonhuman rights *see* nonhuman rights;  
 Nonhuman Rights Project (NhRP)
- Legal Atlas study 154, 158, 165–175
- Liberia
- ape population estimates 274
  - legal and regulatory environment
    - checks and balances 175
    - cross-border law enforcement 135
    - differential liability 167
    - gaps 164
    - knowledge requirements and aggravating circumstances 170, 171
    - laws/regulations protecting apes 161, 164
    - listing status 162
    - penalties 169, 172, 173
    - sanctuaries and rescue centers 261
    - threats to apes 271
    - totems 56
  - Limbe Wildlife Centre, Cameroon 152–153
  - listing status 158–159, 162, 169, 172
  - live ape trade
    - advocacy and awareness campaigns 107–111, 126–127, 128
    - China's zoos and wild animal parks 98–106
    - CITES permits 177–179
    - criminal networks 8
    - destination countries 7, 114
    - economic values 4–5, 115
    - for entertainment industry *see* advertising and entertainment industries
    - growing demand 75, 114, 192
    - impacts *see* impacts of killing/capture/trade
    - incomes from 45–46
    - key findings 98
    - killing adults to capture infants 29, 35, 36, 37, 43
  - link to wild meat trade 75, 180
  - mixed illegal shipments 16–17
  - numbers 35
  - online trade 18–19, 118–119
  - overview 6–8
  - for pets *see* pets, apes as
  - portrayal's influence on conservation 121–124
  - social media use and influence 31, 32, 118–119, 119–121, 125–126
  - tackling 125–126, 128
  - terminology 3
  - threat levels 201
  - transportation 8, 114, 115
  - uses of live apes 7, 30, 46
  - logging 38, 92, 115, 139, 201, 203;
    - see also* habitat loss/degradation
  - logging companies 139–141, 151
  - Lower Kinabatangan Wildlife Sanctuary, Borneo 141
  - Lusaka Agreement Task Force 135, 191

## M

- Mahale Mountains National Park, Tanzania 40–41
- Malaysia
- body parts trade 10
  - gibbon population estimates 277
  - gibbons in rescue centers 30
  - international trafficking routes 7, 8, 115
  - legal and regulatory environment
    - checks and balances 175
    - cross-border law enforcement 136
    - differential liability 167
    - enforcement coordination 174
    - gaps 163, 164
    - knowledge requirements and aggravating circumstances 171
    - laws/regulations protecting apes 161
    - listing status 162
    - penalties 169, 172, 173
  - online wildlife trade 19, 31, 119–120
  - orangutan population estimates 275
  - sanctuaries and rescue centers 30, 124
  - size of ape population 214
  - threats to apes 203
  - wild meat consumption 32, 33
  - wildlife tourism 124
  - Mali 214, 271, 274
  - Mgahinga Forest Reserve, Uganda 146, 147
  - Middle East 7, 8, 18–19, 85, 114
  - mining 92, 139, 140, 202, 204, 225, 227
  - Mishmi Hills hoolock (*Hoolock hoolock mishmiensis*) xv
  - Moloch gibbon (*Hylobates moloch*) xx, xxiv–xxv, 28, 30, 41, 120, 160–161, 215, 217, 276, 280
  - money laundering 162, 166–167, 189

- mountain gorilla (*Gorilla beringei beringei*)  
 civil conflict impacts 79  
 conflict with humans 37  
 conservation status 213  
 diet xxvi  
 distribution xix  
 ecotourism 45, 91, 92, 144  
 home and day range xxviii  
 live ape trade 36, 37  
 overview xiii–xiv  
 population estimates xiii, 213, 273, 274  
 population surveys 205, 208, 209  
 population trend 216, 278  
 reproduction xxx  
 snare-disabling knowledge 27  
 social organization xxi, xxii–xxiii  
 threats to xiii, 202  
*see also specific subspecies*
- Müller's gibbon (*Hylobates muelleri*) xvi, xxi, xxiv–xxv, 30, 120, 160–161, 214, 215, 217, 276, 280
- multilateral environmental agreements (MEAs) 190
- My Gorilla–My Community* (MGMC) program,  
 Nigeria 93–94
- Myanmar  
 civil conflict 214  
 gibbon population estimates 277  
 legal and regulatory environment  
   checks and balances 175  
   cross-border law enforcement 136  
   differential liability 167  
   knowledge requirements and aggravating  
    circumstances 171  
   laws/regulations protecting apes 160, 164  
   listing status 162  
   penalties 169, 172, 173  
 online gibbon trade 31  
 wild meat trade 31, 204
- N**
- Nam Kading National Protected Area study 60, 63–64
- nesting xxix, 206–207, 209
- Nigeria  
 ape population estimates 274  
 behavior change, human 93–94  
 body parts trade 10, 55, 72, 85  
 international trafficking routes 7  
 legal and regulatory environment  
   checks and balances 175  
   differential liability 167  
   enforcement coordination 174  
   gaps 164  
   knowledge requirements and aggravating  
    circumstances 171
- laws/regulations protecting apes 160  
 listing status 162  
 penalties 169, 172, 173
- My Gorilla–My Community* (MGMC)  
 program 93–94  
 offtake rates 89  
 online trade 19  
 sanctuaries and rescue centers 261  
 threats to apes 271  
 totems 56  
 traditional medicine and rituals 72  
 wild meat trade 6
- Nigeria–Cameroon chimpanzee (*Pan troglodytes ellioti*)  
 conservation status 213  
 distribution xix, xxii–xxiii  
 habitat loss/degradation 35, 54  
 population estimates xii–xiii, 6, 213, 273, 274  
 population trend 216, 278  
 threats to 202
- Nomascus* genus xvi–xvii, xviii, xxi, xxiv–xxv, xxix, 30;  
*see also specific species*
- nonhuman rights  
 civil law system 250–253  
 common law system *see Nonhuman Rights Project (NhRP)*  
 personhood *see personhood*  
 “persons” and “things” dichotomy 231–232  
 public’s changing views 105–106  
 at taxonomic level 254–255  
 welfare vs. rights 232
- Nonhuman Rights Project (NhRP)  
 aims and methods 232  
 chimpanzee campaign  
   cognition and autonomy 237–240  
   legal strategy 234–237  
   New York State legal campaign 241–248  
   value and principles of US judges 240–241
- elephant campaign 248–250
- personhood, establishing 233
- Northeast Bornean orangutan (*Pongo pygmaeus morio*) xix, xxiv, 212, 213, 216, 275, 279
- northern white-cheeked crested gibbon (*Nomascus leucogenys*) xvi, xxi, xxiv–xxv, 160–161, 205, 215, 217, 277, 280
- northern yellow-cheeked crested gibbon (*Nomascus annamensis*)  
 distribution xxi, xxiv–xxv  
 laws protecting 160–161, 162  
 live trade 169, 170  
 overview xvi  
 population estimates 215, 276, 277  
 population trend 217, 280
- Northwest Bornean orangutan (*Pongo pygmaeus pygmaeus*) xix, xxiv, 212, 213, 216, 275, 279
- Nyungwe National Park, Rwanda 137

## O

- offtake
  - estimating rate 31–32, 57, 75–76, 77, 78, 89
  - increase with modern hunting tools/technology 87, 88
  - information, lack of and need for 28, 30, 31–32, 47, 59–60, 72
  - unsustainability of current rates 32, 34, 38–39, 57, 77, 78, 79–80, 89
- Open Standards for the Practice of Conservation 220, 224
- Operation Cobra III (WCO) 186–187
- Operation Thunderbird (INTERPOL) 187
- orangutans (*Pongo spp.*)
  - body parts trade 34, 39, 57, 58–59, 88–89
  - British media portrayals 122–124
  - in captivity
    - as advertising/entertainment tools 107, 108, 109, 110, 111–114
    - as pets 101–102, 116–118, 133
    - in zoos 101–102, 103, 105, 256, 257, 258, 259, 260
  - diet xxvi–xxvii
  - distribution xix, xxiv–xxv
  - habitat type and status xxv, xxvi
  - home and day range xxvii
  - Husbandry Manual 103, 105
  - live trade of 24–25, 176
    - ape victims 96–97
    - by criminal networks 16, 17
    - global market values, annual 46
    - incomes from 45–46
    - Indonesian pet market 114–116
    - international routes 7, 8
    - market values 115
    - value changes from forest to foreign buyer 5, 45–46
  - nonhuman rights 250–252
  - population estimates 212, 213, 214, 218, 275
  - population trends 216, 279
  - reproduction xxix, xxx
    - in sanctuaries and rescue centers 44–45, 75–76, 156, 157
  - social organization xxiii, 29
  - socioecology xviii
  - surveying 209
  - taboos protecting 57, 148, 150
  - threats to 203, 204
  - translocation 44–45
  - wild meat, killed for 9, 32, 33, 34
    - see also specific species*
  - organized crime 17–18, 133, 166, 188–189;
    - see also criminal networks*

## P

- palm oil plantations 32, 33, 81, 115, 122–124, 203, 228
- pangolins 59, 85, 267
- passive acoustic monitoring 208, 229
- penalties for wildlife crime 132, 133, 155, 156, 164, 165, 166, 167–173, 189
- People for the Ethical Treatment of Animals (PETA) 108
- permits 8, 22, 114, 154, 174, 177–179
- personhood
  - non-humans 233–234
  - “persons” and “things” dichotomy 231–232
  - USA - NhRP - chimpanzees 235, 236–237, 239–240, 241, 243, 244, 246–248
  - USA - NhRP - elephants 248–250
- pets, apes as
  - animal welfare, attitudes towards 116, 118
  - demand 114, 204
  - demand reduction strategies 125
  - international trade 114
  - local vs. international trade 7
  - misconceptions 118, 121
  - numbers 258, 259, 260
  - online trade 31, 32, 118, 119–120
  - prosecution of owners 133
- pileated gibbon (*Hylobates pileatus*) xxi, xxiv–xxv, 30, 160–161, 214, 215, 217, 276, 277, 280
- population and habitat viability assessments (PHVAs) 41
- population estimates 213, 273–277
- population trends 212, 214, 216–217, 278–281
- population viability analyses (PVAs) 38–39, 41
- portrayals of apes
  - British media 122–124
  - entertainment parks 111–114
  - films and television 107–111
  - influence on conservation action 121
  - pet-owners' mindsets 116, 118
  - social media 120–121, 124
- prison terms 133, 165, 168–169, 173, 189
- Project ChimpCARE 110
- protected areas 60, 63–64, 71, 78, 91–92, 136–138, 139, 142, 144–147

## R

- rangers 13, 14, 132, 136–138, 139, 141
- ray gill rakers 265, 267
- Regional Intelligence Liaison Offices (RILOs) 186–187
- reproduction xxix–xxx, 38, 40–41
- Republic of Congo
  - ape population estimates 274
  - international trafficking routes 7

- legal and regulatory environment  
 checks and balances 175  
 cross-border law enforcement 135  
 differential liability 167  
 gaps 164  
 knowledge requirements and aggravating circumstances 171  
 laws/regulations protecting apes 161  
 penalties 169, 172, 173  
 sanctuaries 261  
 size of ape population 214  
 threats to apes 271  
 wild meat consumption 77–78
- rescue centers *see* sanctuaries and rescue centers
- research using apes 254–255, 259
- revenue-sharing programs 92, 144–145, 146
- rhino horn 13, 16, 158, 265, 267
- rights, nonhuman *see* nonhuman rights
- roads 34, 35, 55, 139, 140
- Russia 18–19, 113, 114, 257
- Rwanda  
 attitudes towards gorillas, changing 55  
 ecotourism 13, 45, 144  
 human–wildlife conflict 147  
 legal and regulatory environment  
 anti-poaching patrols 137  
 checks and balances 175  
 cross-border law enforcement 135  
 differential liability 167  
 gaps 163, 164  
 knowledge requirements and aggravating circumstances 171  
 laws/regulations protecting apes 161  
 listing status 162  
 penalties 169, 172, 173  
 population estimates 274  
 threats to apes 271  
 Volcanoes National Park 144
- S**
- Sabah 32, 33, 39, 141
- sanctions 166, 167, 168
- sanctuaries and rescue centers  
 apes living in 30, 36, 43–44, 152–153, 260–261  
 estimating offtake rates 31–32, 57, 75–76, 114–115  
 local engagement 141  
 in non-range states 257, 258, 259  
 surge in ape numbers 197, 233, 262
- Sandra, orangutan 250–252
- Sarawak 32, 33
- seed dispersal 42–43
- Senegal 26, 88, 133, 271, 274
- shark fin soup 265–268
- siamang (*Sympthalangus syndactylus*)  
 distribution xxi, xxiv–xxv  
 online trade 119, 120  
 overview xvii  
 population estimates 214, 215, 276, 277  
 population trend 217, 280  
 protective legislation 160–161  
 in sanctuaries and rescue centers 30
- Sierra Leone 39, 42, 261, 272, 274
- Singapore 7, 8, 111, 124, 136, 216
- slavery 233, 236
- SMART (Spatial Monitoring and Reporting Tool)  
 138, 139
- snaring 26–27, 30, 37, 42, 62, 63, 88, 141–142
- social marketing 14–16, 92, 94, 118;  
*see also* behavior change, human
- social media  
 awareness campaigns 125–126  
 “closed” groups 120, 125  
 Coalition to End Wildlife Trafficking Online  
 125–126  
 exposing animal abuse 106  
 gibbons as pets and props 119–121, 204  
 influence on conservation 121  
 influence on public attitudes 57, 106, 118, 123, 124  
 legal/regulatory gaps 163  
 platforms as hideouts for traffickers 118–119  
 social media companies responses to wildlife crime  
 119, 125–126  
 tourists’ selfies with apes 120, 126–127  
 wildlife trade 18–19, 30, 31, 32, 118–121
- socioecology xviii, xx–xxiii, xxv–xxx, 29, 219, 222
- southern white-cheeked crested gibbon  
 (*Nomascus siki*) xvi, xxi, xxiv–xxv, 160–161, 169,  
 215, 217, 277, 280
- southern yellow-cheeked crested gibbon  
 (*Nomascus gabriellae*)  
 distribution xxi, xxiv–xxv  
 laws protecting 160–161  
 live trade 169, 170  
 overview xvi  
 population estimates 215, 276, 277  
 population trend 217, 280
- Southwest Bornean orangutan (*Pongo pygmaeus wurmbii*) xix, xxiv, 212, 213, 216, 275, 279
- Spain 254–255, 257
- Sudan 7, 135
- Suiça, chimpanzee 253
- Sumatra 28, 39, 41, 75–76, 115, 133, 228
- Sumatran orangutan (*Pongo abelii*)  
 diet xxvi  
 distribution xix, xxiv–xxv  
 home and day range xxviii  
 live ape trade 75  
 overview xiv–xv

population estimates 212, 213, 214, 275  
 population trend 216, 279  
 protective legislation 160–161  
 reproduction xxx  
 scale of hunting pressure 33–34  
 threats to 203, 204  
 supply chain  
   body parts trade 10  
   regulation throughout 156, 158, 163–176  
   transportation methods 8  
   value changes along 4–5  
   wild meat trade 8, 9, 73–74  
 surveys, ape 205–211, 217, 229

## T

taboos 32, 34–35, 36, 39, 55, 56, 57, 63, 66, 87, 148, 150  
 Taiwan 102, 103, 265  
 Tanzania  
   ape population estimates 274  
   civil conflict 87  
   cross-border law enforcement 135  
   legal and regulatory environment  
     checks and balances 175  
     differential liability 167  
     gaps 164  
     knowledge requirements and aggravating circumstances 171  
     laws/regulations protecting apes 161  
     listing status 162  
     penalties 169, 172, 173  
   monitoring studies 78  
   threats to apes 272  
   totems 56  
 Tapanuli orangutan (*Pongo tapanuliensis*)  
   discovery xiv  
   distribution xiv, xix, xxiv–xxv, 33–34  
   population estimates xiv, 200, 213, 214, 275  
   population trend 216, 279  
   protective legislation 160–161  
   threats to xiv, 203, 204  
 technological advances  
   for ape population surveying 206, 208–209, 229  
   for film-making 110  
   for hunting 33, 87–88  
   for law enforcement 138–139  
 Thailand  
   apes as photo op props 31, 120, 121, 126–127  
   apes used in advertising and entertainment industries 111–114  
   cross-border law enforcement 136  
   gibbon population estimates 214, 277  
   gibbons in myth and folklore 53  
   gibbons in rescue centers 30

international trafficking routes 7, 8  
 live ape trade 111–113, 115, 119, 128  
 online wildlife trade 119  
 wild meat trade 31, 204  
 WildAid campaigns 265  
 threats to apes 2, 30, 179–181, 200, 201–204, 269–272;  
   see also body parts trade; hunting/poaching; live ape trade; wild meat consumption/trade  
 tigers 102  
 Tommy, chimpanzee 241, 242, 243–244, 246–247  
 totems 55, 56, 64, 66  
 tourism  
   apes as photo op props 7, 31, 46, 120, 121, 124, 125, 126, 127, 204, 260  
   awareness-raising campaigns 125, 128  
   body parts as souvenirs 57–58  
   China's zoos and wild animal parks 98–106  
   community engagement and behavior change 13, 16, 45, 46, 55, 91, 92, 144–145, 146  
   false views of apes 124  
   rescue centers 122  
   Thailand's entertainment parks 111–114  
 traditional medicine and rituals 39, 52, 53–58, 64–65, 72, 87, 88–89, 267  
 TRAFFIC network 12, 17, 31, 119, 125–126  
 transect sampling/walking 206, 208, 209  
 translocation 44–45, 201, 262  
 transnational organized crime (TOC) 17–18  
 Turkey 7, 114, 257

## U

Uganda  
   ape population estimates 274  
   Bwindi Impenetrable National Park 37, 91, 146, 147  
   drivers of wildlife crime 82, 83, 148, 150, 151  
   ecotourism 13, 45, 91, 144–145  
   integrated conservation and development project (ICDP) 146  
   international trafficking routes 7  
   land tenure rights, lack of 146  
   legal and regulatory environment  
     checks and balances 175  
     cross-border law enforcement 135  
     differential liability 167  
     gaps 164  
     knowledge requirements and aggravating circumstances 171  
     laws/regulations protecting apes 160  
     listing status 162  
     penalties 169, 172, 173  
   Uganda Wildlife Act 65  
   Mgahinga Forest Reserve 146  
   revenue-sharing programs 144–145

sanctuaries 261  
 technology 139  
 threats to apes 272  
 totems 56  
 traditional medicine and rituals 53, 64–66  
 Ukraine 18–19, 257  
 United Arab Emirates (UAE) 19, 114  
 United Kingdom (UK) 10, 122–124, 158, 233, 236, 254, 257  
 United Nations (UN)  
   Convention against Transnational Organized Crime (UNTOC) 133, 173, 188–189  
   Convention on Biological Diversity (CBD) 184, 186  
   Environment Programme (UNEP) 15  
   Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) 6, 178, 183  
   Global Programme for Combating Wildlife and Forest Crime 188  
   International Covenant on Civil and Political Rights 233  
   International Trade Statistics Database (UN Comtrade) 12  
   Office on Drugs and Crime (UNODC) 13, 133, 154, 188, 192  
   Universal Declaration of Human Rights 233  
 United States (USA)  
   advocacy and awareness campaigns 107–111  
   apes used in advertising and entertainment industries 107–111, 121  
   apes used in invasive research 254  
   API score 258  
   ASEAN-WEN, support for 191  
   attitudes towards apes 121  
   body parts trade 10, 85  
   captive apes 258, 259  
   CBD unsigned by 184  
   chimpanzees, market value of 107  
   nonhuman rights 254;  
   *see also* Nonhuman Rights Project (NhRP)  
   wild meat trade 9, 58, 85  
 urbanization 81, 91

## V

value of global wildlife trade 12–13  
 Viet Nam  
   body parts trade 59  
   gibbon population estimates 216, 277  
   gibbons in rescue centers 30  
   legal and regulatory environment  
     checks and balances 175  
     cross-border law enforcement 136  
     differential liability 167

enforcement agencies 174  
 gaps 163, 164  
 knowledge requirements and aggravating circumstances 171  
 laws/regulations protecting apes 161  
 listing status 159, 162, 163, 169–170  
 penalties 133, 167, 169, 172, 173  
 live ape trade 59–60  
 traditional medicine and rituals 53  
 wild meat trade 31, 59, 204  
 WildAid campaigns 265, 267  
 Virunga Massif, Africa 36, 37  
 Virunga National Park, DRC 91, 137, 141  
 Volcanoes National Park, Rwanda 144  
 vulnerability of apes 28, 38–39, 40–42, 79, 88

## W

wealth, human 81, 82, 83, 84, 85, 87, 95, 114  
 welfare, animal 232; *see also* nonhuman rights  
 West Africa  
   body parts trade 10, 39  
   criminal networks 16  
   international trafficking routes 8  
   law enforcement 13–14  
   wild meat trade 9, 75, 77  
   *see also specific country*  
 western black crested gibbon (*Nomascus concolor*)  
   xvi, xxi, xxiii, xxiv–xxv, 160–161, 215, 217, 276, 277, 280  
 western chimpanzee (*Pan troglodytes versicolor*)  
   distribution xix, xxii–xxiii  
   habitat type xxv  
   outside protected areas 35  
   population estimates xii, 213, 274  
   population trend xiii, 200, 216, 278  
   population viability analysis (PVA) 38–39  
   threats to apes 202  
 western gorilla (*Gorilla gorilla*) xiii–xiv, xxi–xxii, xxvi, xxvii, xxix, 68–69, 160–161, 205;  
   *see also* Cross River gorilla (*Gorilla gorilla diehli*);  
   western lowland gorilla (*Gorilla gorilla gorilla*)  
 western hoolock (*Hoolock hoolock*) xv, xx, xxiv–xxv, 30, 52, 214, 215, 217, 276, 280  
 western lowland gorilla (*Gorilla gorilla gorilla*)  
   conservation status 213  
   distribution xix, xxii–xxiii  
   home and day range xxviii  
   hunting pressure, scale of 38, 79  
   outside protected areas 38  
   population estimates xiii, 38, 212, 213, 273, 274  
   population trend 216, 278  
   threats to 202  
   wild meat and body parts trade 68–69, 76

- wild animal parks *see zoos and wild animal parks*
- Wild for Life campaign 15
- wild meat consumption/trade
  - barriers to sustainability 89–90
  - body part choices 77
  - commodity chains 73–74
  - demand reduction strategies 90–92, 94
  - disease transmission 44
  - drivers 8, 10, 11, 58, 80–85, 91
  - economic profits 46, 77
  - growing demand 30–31, 53, 58, 71, 75, 84
  - historical context 32, 33, 70–71
  - importance in poor/rural societies 68–69, 82
  - income from 82
  - increase in 87, 89
  - international trade 85–86, 180
  - link to live animal trade 75
  - nutrients 80–81
  - overview 8–10
  - per capita consumption 77–78, 81
  - species consumed 72
  - supply chains 9, 10
  - taboos against 32, 34, 36, 39, 56, 87, 150
  - threat levels 180, 204
  - wild meat as luxury item 84, 85, 111
  - see also* hunting/poaching
- WildAid campaigns 265–268
- wildlife trade, global 12–13
- “wildlife trafficking,” definition of 17
- World Customs Organization (WCO) 154, 155, 178, 184–185, 186–187, 189, 190, 191–192
- World Wide Fund for Nature (WWF) 31, 125–126, 138, 146

## Z

- Zambia 135, 261
- zoos and wild animal parks
  - in Africa 260
  - animal performances 106, 111
  - animal well-being 102–105, 128
  - in Asia 261
  - in China 98–106, 128, 179
  - CITES accreditation 182
  - in Europe 256
  - illegal acquisition of animals 101, 103, 111, 165
  - in Latin America 257
  - nonhuman rights *see* nonhuman rights;
  - Nonhuman Rights Project (NhRP)
  - in Oceania 259, 260
  - permit fraud 179
  - public attitudes 105–106
  - in the United States 258, 259;
  - see also* Nonhuman Rights Project (NhRP)