



## CHAPTER 8



### The Status of Captive Apes

#### Introduction

Achieving meaningful protection for apes depends on ethical and legal frameworks that acknowledge the intrinsic value of apes; if the laws were to extend protection to all apes, then rationalizations for their exploitation would be weakened and risks to their protection minimized. Similarly, the policies governing apes in captivity have implications for apes in their natural habitats because the illicit trade in live apes is driven in part by consumer demand to keep and use apes in captivity (Stiles *et al.*, 2013). Evidence suggests that what people believe about apes in captivity can affect their attitudes and actions regarding apes in their natural habitats. For example, what people see at zoos or in pictures can affect what they think about ape

conservation (Ross *et al.*, 2008; Schroepfer *et al.*, 2011).

The decisions that people make about anything from agriculture to zoos have the potential to affect apes. Scientists recognize that both risks and protective factors that affect apes vary geographically (Funwi-Gabga *et al.*, 2014, p. 263, fig. 9.7). For example, a review of the entire primate order found that human density was a strong predictor of extinction risk (Harcourt and Parks, 2003). A number of studies have shown that apes living outside of protected areas or near concessions often face different risks than those with a home range deep within protected areas (Chapman and Lambert, 2000; McLennan *et al.*, 2012; Arcus Foundation, 2014).

Where apes are held in captivity also influences the risks that individuals face and many of the factors that impact their welfare. Importantly, the laws governing captivity can vary across and within countries, just as they can differ from the international to the local level. These regulations can address the contexts or conditions in which apes may be held in captivity, factors that strongly influence welfare. Apes used in circuses or other performances or held as private pets face a number of distinct welfare risks, such as isolation or punishment during training; these are absent in professionally run sanctuaries and rescue centers (Durham and Phillipson, 2014, p. 283, table 10.1). Geography and context can also determine other factors associated with welfare, such as the provision of veterinary medical care, food and other resources.

The first edition of *State of the Apes* reviews various forms of ape captivity as well as some of the laws that regulate them (Durham and Phillipson, 2014). Two key observations are that 1) what is allowed or forbidden varies globally, and 2) current standards do not always meet the needs of apes or promote their wellbeing. These findings remain relevant. In some places, laws

do not afford protection to all apes in captivity. In others, municipal regulations, national laws and international conventions form a patchwork of protection. The resulting legal framework can offer strong protection for apes, serve some apes some of the time or, in the absence of enforcement mechanisms, amount to little more than words on paper. The range of current laws—and the lack thereof—can influence not only the number of individuals in captivity, but also their quality of life.

The protection afforded to individual apes is also partly determined by their provenance and the time of their capture. The wildlife laws of range states may apply to all apes, affording protection whether individuals are in their natural habitat or in captivity, or they may apply only to apes in their natural habitat. A wild-born ape might thus have a different status under the law than an ape born in captivity. Similar legal and enforcement disparities may exist with respect to the welfare of apes in captivity. In Indonesia, for example, orangutans are protected by law, but their welfare in zoos has been characterized as poor (Susanto, 2014). Fewer than half of Indonesia's zoos have gone through accreditation and a recent government audit found that only four of the country's 58 registered zoos were deemed "decent and appropriate," with the remainder classified as "less than decent" or "bad" (Saudale, 2015).

Numerous apes are found in captivity in countries adjacent to or otherwise in close proximity to ape range states, as evidenced by the 200 chimpanzees who live in sanctuaries in Kenya, South Africa and Zambia (Durham and Phillipson, 2014). Bilateral, regional or multilateral agreements might serve as the legal framework for protections in such circumstances. In other cases, apes who are in captivity in states outside of their range may not enjoy the same legal protection as native ape species. In Thailand, which is a range state for some gibbons, the law

“The range of current laws—and lack thereof—can influence not only the number of apes in captivity, but also their quality of life.”

may not afford the same protections to all species under all circumstances (Nijman and Shepherd, 2011). In the absence of strong, comprehensive laws that restrict private and commercial use of all apes in Thailand, animal charities struggle to effect rescue for cases such as orangutans used in performances or a chimpanzee kept as a private pet (Kaminski, 2010; Haynes, 2012; WFFT, 2015).

In addition to location, the form of captivity, qualities of any given site, and interactions with people and other animals have potential implications for apes' welfare. For example, in common, everyday usage the term "zoo" is used to describe a range of facilities from accredited sites with full-time veterinary services and formal welfare programs to roadside attractions without permits or qualified staff. In the United States, businesses may use words such as *preserve*, *sanctuary* or *conservation center* in their name even though they do not technically engage in those activities and revenues come from exhibition or breeding. It is particularly difficult to control the illegal trade and exploitation that occur online because of the global nature of the Internet and related challenges with enforcement and jurisdiction, although this issue has been gaining attention with the World Trade Organization's Doha Declaration and among a number of UN directorates, government agencies and NGOs in many countries (Obama, 2013; Clark, 2014; Environment DG, n.d.).

Beyond any legal requirements, the standards set by professional associations can also impact apes in captivity, often for the better. Both zoos and sanctuaries have professional associations with membership requirements that address captive care and welfare. Membership in a professional organization does not itself guarantee good welfare, but oversight by a third party creates additional opportunities for maintaining and improving performance and keeping practices up to date. Formal and informal standards of practice can play a role in ape

welfare, not only as foundations of regulations and standards, but also with respect to what apes actually experience on a day-to-day basis and how that influences their quality of life.

To expand the discussion regarding the interdependence of the law, captivity and the wellbeing of apes, this chapter explores two general themes. First, it presents recent data on apes in captivity in range states and adjacent regions in the context of some of the factors that contribute to the ongoing demand for captive care. Second, as a comparison, it reports on what is known about apes in captivity and some of the factors that affect their welfare in non-range states in the consumer countries of the global North. The chapter discusses information about apes in captivity within and outside of range states in light of disparities between policies and social attitudes, highlighting what these might mean for the future of apes both in captivity and in their natural habitats.

“In the United States, businesses may use *preserve*, *sanctuary* or *conservation center* in their name even though they do not technically engage in those activities.”

## Apes in Captivity in Range State Regions

Wild ape populations in Africa and Asia have declined sharply in recent years due to factors including habitat loss, hunting and the illicit wildlife trade. Simultaneously, the number of ape residents at rescue centers and sanctuaries has burgeoned (see Box 8.1). Estimates reported in the first edition of *State of the Apes* indicate that nearly 1,000 chimpanzees were living in sanctuaries across Africa in 2011, along with 55 bonobos and more than 75 gorillas (Durham and Phillipson, 2014, p. 296, table 10.7). Of the chimpanzees, approximately 200 were outside of ape range states, namely in Kenya, South Africa and Zambia. An estimated 1,300–1,600 orangutans live in sanctuaries and rescue centers, alongside approximately 500 gibbons (Stiles *et al.*, 2013; Durham and Phillipson, 2014, pp. 296–7, tables 10.7, 10.8).

**BOX 8.1****Sanctuaries and Rescue and Rehabilitation Centers**

Organizations that provide care for rescued apes are variously called rescue centers, rehabilitation centers and sanctuaries. Although their missions can vary, all of these facilities provide shelter and care for apes. Rescue and rehabilitation centers often specialize in short- and intermediate-term care with the goal of releasing apes back into their natural habitat. By contrast, many sanctuaries focus on long-term or even lifetime care. In practice, these programs often cover a spectrum of care scenarios. A rescue center might be able to translocate a healthy ape within a matter of days, while providing lifelong care for a seriously injured ape. Likewise, a given sanctuary might have several residents fit for release but keep them in residence in the absence of release sites. Yet another sanctuary might provide lifetime care for all residents because the facility is not in a habitat country. In summary, important functions are provided by the full range of facilities that house and care for apes in captivity.

Sanctuary arrival rates vary both over time and from place to place. Retrospective analyses of data from chimpanzee sanctuaries suggest that patterns of arrival reflect a number of factors (Farmer, 2002; Faust *et al.*, 2011; Durham and Phillipson, 2014). In the first half of 2014, the Great Apes Survival Partnership (GRASP) reported that 38 great ape rescues had taken place, a rate almost double that of the prior year (GRASP, 2014a; Platt, 2014). Examples of recent arrivals at ape sanctuaries and rescue centers include the following:

- Two young chimpanzees who had been kept captive at a supermarket in Kinshasa, in the Democratic Republic of Congo, for approximately one year were airlifted to the Lwiro sanctuary after they were confiscated by authorities (GRASP, 2014b).
- In Gabon, three gorillas were transferred to the Fernan-Vas Gorilla Project after spending decades at a research center. As infants, they had been victims of the illicit wildlife trade; subsequently, authorities had placed them at the research facility, where they remained for many years. Now adult (18–33 years old), the gorillas will be able to live out their lives

at the sanctuary. The research center stated that the transfer was part of their efforts to satisfy new US rules regarding the use of apes in biomedical testing (CIRMF, 2014).

- International Animal Rescue (IAR) accepted a scarred and malnourished female orangutan who had been surrendered to local authorities. She had been kept captive as a pet for approximately two years, tethered by a rope around her neck (Francis, 2014).
- The Borneo Orangutan Survival Foundation rehabilitation center in Nyaru Menteng rescued a young male orangutan trapped in a forest fragment adjacent to a farm. Although he was just three and thus too young to be weaned, he was found alone (BOS Foundation, 2014).

**Ape Rescues: The Challenges**

As the examples above illustrate, the reasons for rescue and experiences in captivity prior to rescue can vary considerably. The differences between local pet keeping and illegal trafficking to consumer countries versus other forms of human–wildlife interactions have implications for sanctuaries. The types of interaction that increase risk for apes are also factors that influence arrival rates and other important rescue outcomes, such as health and rehabilitation success. Thus, it is important to ascertain the origins of rescued apes.

Data collected by the IAR Indonesia Foundation in Ketapang, West Kalimantan, revealed that rescued orangutans come from a variety of backgrounds. The greatest proportion (43%) came from villages where local people kept them illegally; 31% were rescued directly from oil palm plantations; and 12% were caught in local community agricultural landscapes (including coconut, rambutan, rice and rubber fields), very often adjacent to oil palm plantations. Only 1% of orangutans

were rescued from the illegal wildlife trade. The remainder (13%) were transferred from other facilities (Sánchez, 2015).

Demands for sanctuary space and services are influenced to some extent by past experiences of ape residents. For example, individuals who were kept as pets can be familiar with or even drawn to people and desensitized to certain risks, while exhibiting specific pathologies as a result of a history of abuse or neglect (Ferdowsian *et al.*, 2011; Freeman and Ross, 2014; see Case

Studies 8.1 and 8.3). Importantly, these same factors are also relevant for welfare and sanctuary outcomes. Facilities that deal with residents of disparate backgrounds and experiences face specific demands on their capacity that go beyond the number of apes present; residents arrive with distinct needs for care and rehabilitation that place a wide range of demands on the facility, its programs and staff. Care and rehabilitation activities can be better tailored to residents if their origins and backgrounds are known.

**Photo:** The reasons for rescue and experiences in captivity prior to rescue can vary considerably. The types of interaction that increase risk for apes are also factors that influence arrival rates and other important rescue outcomes, such as health and rehabilitation success. IAR rescue a mother orangutan and her infant in Peniraman, West Kalimantan. © Feri Latief, IAR Indonesia



Knowledge of resident background may vary more for facilities that serve chimpanzees than those that house orangutans. Not only is the geographic range of orangutans generally smaller, but trade and captivity are also more localized, a pattern explored in more detail below and in Case Study 1.1 in Chapter 1. By the same token, risks are also concentrated, such that the number of orangutans arriving at and passing through rescue centers has been greater than that of chimpanzees (Farmer, 2002; Durham and Phillipson, 2014). Since 75% of known orangutan distribution is found outside of protected areas, understanding whether and how the species could be accommodated in an agro-industrial landscapes is crucial for the long-term survival of these apes (Meijaard *et al.*, 2012). In view of the above-mentioned surge in rescues, current patterns could certainly change. In any case, reversing the trend remains vital for both species.

Any estimates for the number of apes in captivity or the arrival rates in habitat countries belie a much larger and more devastating flow of apes from their natural habitats into captivity around the world. The apes who arrive at sanctuaries and rescue centers represent only a fraction of trafficking cases because arrival figures do not account for individuals who reach the intended, albeit illegal, destination, nor for those killed during capture attempts or trafficking. The adult mortality rates associated with the capture of young apes must be added to the infant deaths to estimate the wider number of trafficking deaths; for every captive infant, 1–2 adults die among orangutans and gorillas, while 5–10 adults are killed among chimpanzees and bonobos (Stiles *et al.*, 2013, p. 36). Given that gibbons tend to live in pairs, it would be reasonable to estimate 1–2 deaths for each captured infant.

There is reason to believe the traffickers who get arrested might not be among the most prolific. As GRASP Programme

Coordinator Doug Cress recently noted, “We’re just catching the losers right now, the guys who aren’t good enough to really pull this off” (Platt, 2014). An evaluation of ape trafficking suggests a much larger scale for criminal networks and illicit trade (Stiles *et al.*, 2013). Indeed, as wildlife law enforcement expert Ofir Drori reports, a number of individual traffickers have sold “hundreds of apes” each (Stiles *et al.*, 2013, p. 7). The source and origin of apes held captive in consumer countries may not be systematically recorded or reported. Except where media attention or confiscations in consumer countries bring these cases to light, there may be insufficient evidence to tie countries of origin or traffickers to the illicit trade; similarly, as discussed below, there may not be enough information to link trafficked apes back to their original habitats. Implementing programs to determine the provenance of confiscated apes and return them to their countries of origin is an important goal for future tracking and enforcement (Stiles *et al.*, 2013).

Factors that put ape populations at risk and that ultimately influence the continued demand for sanctuary space and services in habitat countries—such as habitat conversion, the illicit trade and the transmission of disease—are complex and difficult to disentangle (Arcus Foundation, 2014; Carne *et al.*, 2014; Di Marco *et al.*, 2014; Tranquilli *et al.*, 2014; Wilson *et al.*, 2014a). Among these drivers, all of which are anthropogenic, ongoing habitat conversion remains the key cause behind the flow of apes from their natural habitats to captivity.

Case Studies 8.1 and 8.2 illustrate the types of challenges that affect ape sanctuaries as well as the residents in their care; 8.1 focuses on a rescue center in Cameroon, while 8.2 considers gibbon rescues in Indonesia. The next section compares and contrasts the two case studies to highlight potential opportunities and solutions.

## CASE STUDY 8.1

### Great Ape Rescue in Cameroon: The Sanaga-Yong Rescue Center

Unless otherwise cited, the information for this case study is drawn from author interviews with the Center's founder, Sheri Speede, in September 2014.

#### General Information

Sanaga-Yong Rescue Center (SYRC), a project of In Defense of Animals–Africa, was founded in 1999 to provide sanctuary for orphaned chimpanzees in their natural habitat. The Center is located northeast of the capital, Yaoundé, in the Mbargue Forest, which still has small populations of chimpanzees and gorillas. Over the past 15 years, the organization has added a range of programs to promote the protection of wild apes and their habitats. Sanaga-Yong has worked with law enforcement authorities across Cameroon to seize chimpanzees who are held captive or traded illegally. The organization has about 25 staff members in Cameroon as well as a small team that works through a US charity affiliate, In Defense of Animals–Africa.

#### Direct Care for Chimpanzees and Other Programs at SYRC

SYRC has approximately 0.91 km<sup>2</sup> (91 ha) of forest with facilities that include a veterinary clinic and a camp with staff quarters. The main complex includes six large, fenced enclosures of natural forest where sanctuary residents live. One enclosure is more open and equipped with custom climbing structures and other features for chimpanzees who require specialized care. As of September 2014, 70 chimpanzees were resident at SYRC.

The organization has a number of community and conservation programs. SYRC developed media campaigns focused on decreasing consumer demand for ape meat and recently published a children's book called *Je Protège les Chimpanzés* (I Protect Chimpanzees), which is being used in schools as part of their conservation outreach. For many years, SYRC has had programs to support schools and medical care in communities around the rescue center. Conservation field research recently conducted by SYRC found that apes in the Mbargue Forest are at high risk due to small population sizes, continued habitat loss and degradation, as well as hunting pressure. Social surveys in nearby villages indicated that many communities support the idea of chimpanzee protection and the organization's work.

The very first residents at SYRC were three chimpanzees who had been illegally exhibited at a resort. Once the facility officially opened its doors, the number of residents grew rapidly as the authorities seized more and more chimpanzees. SYRC worked closely with law enforcement on many such cases to rescue chimpanzees, including older individuals who

had been captive for decades, and infants who had been for sale in markets or by illegal traders. In recent years, sanctuary staff members have noticed that people are no longer openly displaying apes in public places and fewer orphaned chimpanzees are arriving at the Center. It is not clear whether or not these changes represent decreases in the number of orphaned chimpanzees or in the volume of illegal trade. Nor is it known whether illegal trafficking has simply been driven further underground. The changes could also indicate that a drop in the wild population has slowed the rate of illegal trade or captivity. It is hard to say for certain, since it is difficult to document the illegal activities and a number of complex spatial and temporal factors can affect the demand for sanctuary space and services (Stiles *et al.*, 2013; Arcus Foundation, 2014).

#### Logging, Agriculture and Human Settlements

For SYRC, commercial logging in the Mbargue Forest has an ongoing impact. Beyond the harvesting of trees by commercial loggers and the illegal logging that followed, the construction of roads by logging companies brought new people to the forest, and some of them settled there. Forest is cleared using the slash-and-burn method to make way for homesteads and fields for subsistence crops, as well as cash crops such as coffee.

Local agriculture is important to the sanctuary for a number of reasons, some of which are positive. For example, SYRC buys most fruit and vegetables for the chimpanzees from farms in nearby villages. Such arrangements are mutually beneficial; farmers have a predictable market for their produce and a reliable source of income, while the sanctuary has a convenient source of food for its residents. These shared interests help the organization foster goodwill and sustain relationships with local communities.

This is not to say that all impacts are positive or that there are no challenges associated with the human settlements and farms in the Mbargue Forest. The large, natural forest enclosures at SYRC provide an excellent setting for rehabilitation and re-release preparation, but no reintroductions have been attempted due to a lack of suitable release sites. The habitat near SYRC, for instance, is close to human settlements and farms and the apes would thus be at risk of experiencing habitat pressures from agriculture and related human–wildlife conflict. The presence of subsistence and smallholder farms in the Mbargue Forest drives habitat loss, fragmentation and degradation, which the wild apes living around the Center are facing as well. Although reintroduced chimpanzees and wild chimpanzee communities in Mbargue Forest could face different risks, it is safe to say that—due to a number of factors, such as sensitivity to human presence and familiarity with the surrounding habitat—ongoing agricultural pressures increase risks for both groups. More







farms, larger plots and less forest increase the chances of encounters, which can be risky for both people and apes.

As discussed in Chapter 1, crop raiding is a significant source of conflict between people and primates, including apes (Campbell-Smith *et al.*, 2010; Strum, 2010; McLennan *et al.*, 2012). Earlier this year, SYRC experienced the devastating consequences of direct conflict, when a male chimpanzee who had escaped from a sanctuary enclosure was later killed at a pineapple farm several kilometers away. In cooperation with Sanaga-Yong and a wildlife law enforcement team from LAGA, the Last Great Ape organization, local authorities executed search warrants, identified the alleged perpetrator and issued a warrant for his arrest. On November 30, 2014, three months after the warrant had been issued, authorities located the suspect in Belabo East, where they successfully arrested him and took him into custody (LAGA, 2014).

While this case was tragic for SYRC, it serves as a compelling example. The sanctuary took the position that a chimpanzee from the sanctuary deserved protection and justice, as do apes in their natural habitat and those who are sold by poachers. In so doing, both the sanctuary and law enforcement authorities demonstrated their commitment to the law and to the intrinsic value of chimpanzees. More broadly, SYRC illustrates how the reach and impact of a sanctuary can extend beyond its walls and fences to bridge gaps in protection, enforcement and social change in ways that can benefit apes in captivity and in their natural habitat.

**Photo:** The large, natural forest enclosures at SYRC provide an excellent setting for rehabilitation and re-release preparation, but no reintroductions have been attempted due to a lack of suitable release sites.

© Jacques Gillon and Sanaga-Yong Chimpanzee Rescue Center

## CASE STUDY 8.2

### Gibbon Rescue in Indonesia: Kalaweit

Unless otherwise cited, the information for this case study was drawn from author interviews with A. “Chanee” Brulé of Kalaweit in September 2014.

#### General Information

Kalaweit is a conservation organization based in Indonesia that rescues gibbons for rehabilitation and reintroduction and provides permanent sanctuary. In addition, Kalaweit has a number of other programs on Borneo and Sumatra. As part of its efforts to protect gibbons and their natural habitats, the organization cooperatively manages two nature reserves through agreements with the Indonesian government. In addition to the founder, Kalaweit employs about 50 people in Indonesia and has one staff member in France.

#### Programs and Direct Care for Gibbons

Kalaweit was initiated in 1997 and began running activities about two years later, once essential agreements with government authorities were in place. The first rescue residents—17 gibbons—had arrived at the facility by December 2000. Agreements with and responsibilities to the Indonesian government expanded through 2004, by which time the number of gibbons taken in at Kalaweit had increased to 240 individuals, reflecting a growth of more than 1,400%. Although arrival rates have slowed over time and some individuals have been released back into the wild, the number of individuals in residence is still increasing, as discussed below.

The organization operates facilities to care for gibbons in captivity on both Borneo and Sumatra. Both the Care Center, where the apes receive initial care and housing after rescue, and the Pawarawen Gibbon Conservation Center are located in Central Kalimantan. Kalaweit also operates outreach and radio programs from Borneo. In 2011, the Supayang Gibbon Conservation Center was established in Western Sumatra. The Center is adjacent to the Supayang Reserve, where gibbons occur naturally. Approximately 30 wild gibbons live in the reserve, a site co-managed with the Indonesian government. In addition, six siamangs live in large, pre-release forest enclosures as part of the earliest stage of their reintroduction process. Efforts are currently under way to expand the size of the reserve.

#### Demand for Sanctuary Space and Services at Kalaweit

The number of gibbons now kept illegally as pets and for entertainment in Java, Kalimantan and Sumatra, the nation’s most populous provinces, is estimated at around 6,000. Deforestation, driven by oil palm development and the extractive industries, is a primary facilitator of the illegal regional pet

trade in gibbons. Activities associated with industrial agriculture and extractive industries, such as road construction, commercial transportation and the movement of people, can make apes more accessible to traffickers and generally more vulnerable. Farms represent a further risk, as apes captured in the wild are sometimes kept illegally as pets or mascots at company sites. Indeed, three gibbons recently rescued by Kalaweit were confiscated from a palm oil company.

The Supayang facility is one of the few in the world where Kloss’s gibbon (*Hylobates klossii*) exists in captivity. If an ambitious government plan to rescue all other Kloss’s gibbons kept as illegal pets is successful, Kalaweit will lead efforts to rehabilitate healthy individuals for reintroduction and provide long-term care for those in need.

The organization currently cares for 254 individuals from five endangered gibbon species at rescue facilities in West Sumatra and Central Kalimantan (see Table 8.1). About 25% of the gibbons at Kalaweit are not candidates for release. A particular concern is past exposure to infectious diseases carried by people or other animals. Kalaweit’s permanent residents also include gibbons who have disabilities that stem from illness or injury, and those who lack the social and behavioral skills to survive independently. With the exception of these special cases, the majority of gibbons at the centers are candidates for reintroduction, and some are ready to begin the process. Since the number of release sites is extremely limited, however, most of the apes at Kalaweit are expected to remain there for the long term, perhaps even permanently.

Much of the forest where gibbons ranged historically has been cleared to make way for oil palm plantations or extractive industries (Arcus Foundation, 2014). Land cleared and degraded by industrial agriculture and extractive industries has drastically reduced the number and size of potential release sites. Currently, the forests available to Kalaweit have very few or no gibbons but do not meet size, quality or other requirements. In areas where the habitat is suitable, the population density of gibbons is too high to accommodate more apes. The lack of release sites is the greatest challenge confronting the organization. Thus, acquiring forest to protect gibbons in their natural habitat and to provide release sites for residents from the rescue centers is one of Kalaweit’s top priorities.

**TABLE 8.1**

Gibbons in Kalaweit Facilities in West Sumatra and Central Kalimantan, September 2013–September 2014

Taxon	Number of arrivals, September 2013–September 2014	Total number of gibbons, September 2014	% increase from 2013 to 2014
Agile gibbon	2	33	6%
Bornean white-bearded gibbon	6	79	8%
Kloss's gibbon	1	7	14%
Müller's gibbon	2	74	3%
Siamang	5	61	8%
<b>Total</b>	<b>16</b>	<b>254</b>	<b>6%</b>

Data source: A. Brulé, personal communication, 2014

## Drivers and Impacts of Ape Sanctuaries

The case studies reveal some of the challenges associated with land conversion. In the Cameroon case study, villagers cleared land for small farms within the forest, causing fragmentation, degradation and the expansion of the human–wildlife frontier—that is, edges where human-dominated landscapes encroach on the sanctuary and surrounding habitat. In Indonesia, Kalaweit has seen extractive industries and industrial agriculture destroy natural forest wholesale. Habitat loss is an immediate issue because apes are stranded on plantations, from where they must be rescued if they are to survive. Factors such as the global markets, trade negotiations and consumer trends are likely to influence industrial farming practice (see Chapter 3); in contrast, smallholder farms are more reactive to population size, human settlement patterns and food security. However, that distinction becomes blurred if smallholder farms are contracted suppliers to agribusinesses.

In both of the sanctuary case studies, habitat destruction and degradation from agriculture and other development activities are reducing the availability of release sites.

There is less and less forest area to consider, and what remains does not meet the sanctuaries' needs. With few or no individuals able to leave the sanctuaries through release, arrivals drive the total number of residents up toward the facilities' limits—and beyond.

In addition to these ecological impacts, agriculture, extractive industries and other development activities can affect sanctuary operations, programs and ape health and wellbeing in other ways. As illustrated by the case studies, these activities can have both direct and indirect effects on the demand for sanctuary space and services. Decreasing habitat and expanding human–wildlife frontiers can result in more frequent and riskier interactions, which can lead to conflict. People can cross paths with apes while walking to their fields or to the market, increasing the risk of disease transmission or conflict-related injury.

The sharing of time and space with people heightens the risk that apes may be injured or exposed to illnesses, which, in turn, increases the likelihood that they may need sanctuary care and rehabilitation, further affecting post-rescue outcomes. The following examples shed light on a variety of such threats:

- The use of chemical pesticides, traps and other defenses that farmers use to protect their crops or livestock increases the risk of illness or injury for apes, and thereby augments the likelihood that they could require human care or spend time in captivity. Apes trapped in snares or injured in human–wildlife conflict may be unable to escape human captors and consequently require human intervention to ensure their survival. In either case, such individuals might subsequently require captive rehabilitation or sanctuary care.
- When habitat conversion is accompanied by the introduction or expansion of animal agriculture and increased livestock density, disease-related risks can increase. Direct and complex transmission scenarios warrant concern. Domestic animals such as livestock can contract diseases in one place and subsequently spread them to humans and other animals, including apes, in another place. A recent study reports instances of tuberculosis among wild chimpanzees (Wolf *et al.*, 2014). Cryptosporidiosis and other parasitic infections are also prevalent in some wild chimpanzee populations that live in close proximity to settlements and farms (Ghai *et al.*, 2014; Parsons *et al.*, 2015). Apes who have been exposed to disease and end up in sanctuary care may have specialized needs, such as veterinary medical requirements. Disease status could also exclude apes as candidates for re-release.
- Human–wildlife conflict associated with agriculture is tied to pet keeping and the local pet trade in apes. Apes who are kept as pets locally account for most sanctuary cases involving trade and trafficking. In contrast to the demand-driven illicit international trade in apes, which is discussed below and in Case Study 8.3, the local pet trade seems to be

more opportunistic. Survey research at the IAR rescue center in Ketapang indicates that pet keeping is typically a secondary result of conflict. When asked about the origins of pet orangutans surrendered to the rescue center, 39% of the previous owners claimed that they had “found” the orangutans, while 29% admitted to buying them. Those who admitted paying for a baby or infant orangutan reported paying an amount between 500,000 and 1.5 million Indonesian rupiah (US\$50–\$150) (Sánchez, 2015). Normally the trade is local and the orangutans originate from a nearby location. In some cases, young orangutans are taken as pets after their mothers are killed for food (Meijaard *et al.*, 2011). Although a small number of respondents in the IAR survey admitted to knowing about such circumstances, many did not want to reveal the origins of a pet orangutan at all; 32% of respondents did not wish to answer the question or the information obtained from them was considered unreliable (Sánchez, 2015).

Apes with histories of other forms of human–wildlife conflict and captivity might have unique needs due to injury, illness or psychological status. For example, apes kept captive as pets are more likely to develop behavioral pathologies and less likely to be socially competent than apes raised by their mothers (Freeman and Ross, 2014). Research has also shown that some orphaned chimpanzees exhibit signs of psychological conditions, such as depression or post-traumatic stress disorder (Ferdowsian *et al.*, 2011, 2012). Such individuals may require specialized housing, veterinary care or other sanctuary services. If basic social integration proves difficult, for instance, apes may require special enclosures and added social support from staff.

## Apes in Captivity in Non-range States of the Global North

To examine the state of apes in different forms of captivity in non-range states of the global North, this section considers information from Europe and the United



States. It relies on official government data, information collected directly from facilities, NGO reports and other published sources. The data reflect gaps in coverage and variations in terms of the level of detail and reliability. While these factors limited the scope and depth of the review for the chapter, they also underscore the importance of maintaining systematic, detailed records and of ensuring transparency in the monitoring of the welfare of apes in captivity.

The data show that most captive apes are living in zoos and sanctuaries. Some of the information reported here is limited to licensed or accredited facilities, which are those that are operated under government authority or have been granted membership in a professional organization. Professional organizations and accrediting bodies include the European Association of Zoos and Aquaria (EAZA) and the European Alliance of Rescue centres and Sanctuaries at the regional level, and the Global Federation of Animal Sanctuaries and the World Association of Zoos and Aquariums at the global level. In this chapter, information that is cited as coming from accredited or member facilities has been sourced from such professional organizations. In addition to establishing their own standards for members, membership organizations can also coordinate practices and the sharing of information across institutions, such as by reporting on the number of individuals or births for a given species. Although such information is primarily for internal use, it is sometimes published or shared externally at the discretion of an organization, as is the case with some of the data in this chapter.

### Apes in Captivity in Europe

Some EU member states, such as Austria and Sweden, have adopted strict rules at the national level that forbid testing on apes (Knight, 2008). More broadly, EU law severely restricts testing on apes, with the

**Photo:** In non-range states of the global North data show that most captive apes are living in zoos and sanctuaries. © Jabruson, 2015. All Rights Reserved. [www.jabruson.photoshelter.com](http://www.jabruson.photoshelter.com)

only possible consideration limited to a safeguard clause for critical emergencies [2010/63/EC Article 55(2)]. Thus, laboratories in the EU hold a limited number of apes, and captive apes are thus found predominantly in zoos and sanctuaries. A small and declining number of apes are kept legally and illegally as pets or performers. The following sections present information about apes who are kept in zoos, circuses and other entertainment settings, and sanctuaries in the EU.

## ZOOS

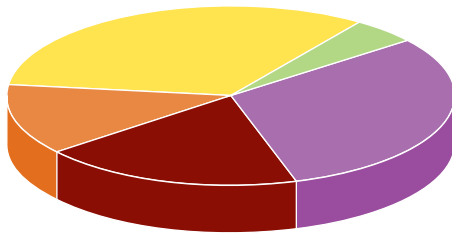
The EU does not engage in the systematic compilation of statistics regarding the number of apes in zoos. Implementation and enforcement of the Zoos Directive 1999/22/EC and related regulations are handled by individual member states, which may also devolve authority to the regional or municipal level (EU, 1999). As noted in the first edition of *State of the Apes*, zoo standards, compliance and reporting vary widely across EU member states (Durham and Phillipson, 2014, pp. 288–9). In Germany, for example, federal authorities do not maintain centralized records that would identify the number of zoos in the country—which is estimated at anywhere between 350 and 850—raising concerns about whether the zoos are licensed (Animal Public eV, Born Free Foundation and Bund gegen Missbrauch der Tiere eV, 2012).

There are more apes in zoos than in any other captive setting in Europe. Thus, knowing how many zoos exist and where they are located is essential to oversight and protection efforts. A full accounting of apes in zoos is key to a better understanding of the scale and nature of the welfare challenges that apes may face. Further, in the EU, individual member states, competent authorities and zoo administrators require such basic information to develop effective ways to address the needs of apes.

In the absence of official EU figures on apes in captivity, the author has compiled information from other sources, including published and unpublished figures and personal communication, which were obtained using methods described in detail elsewhere (Durham and Phillipson, 2014). In particular, the author requested species-holding reports through the online portal of the International Species Information System (ISIS), a voluntary membership organization that represents “more than 800 member zoos, aquariums and related organizations in 84 countries” (ISIS, n.d.). In response to the request, ISIS provided aggregate data indicating the number of apes by taxon from its member facilities in Europe in 2014, though some of the reported figures may represent totals from earlier periods due to varying reporting protocols and technical issues. The data include some facilities in European countries that are not members of the EU, as well as some non-EAZA institutions. Since ISIS membership is voluntary, the provided zoo figures are not necessarily representative of zoo holdings in general, and thus should be considered only a starting point for estimating the number of apes now captive in zoos across Europe.

In total, the figures accounted for 2,284 apes in 204 member institutions, with holdings ranging from 1 to 68 apes per site. The 40 sites with the greatest number of apes accounted for roughly half of the total, while the 40 sites with the smallest number of apes held fewer than 100 apes collectively. The six smallest facilities reported only one individual. Gibbons were the most common taxon in this sample, followed by chimpanzees, gorillas, orangutans and bonobos. Numbers and the proportion of apes in each group are shown in Figure 8.1. The number of solitary apes in the sample was small—29 apes, or 1% of the total. Since apes who lack conspecific companions are a particular welfare concern, even this small number warrants special attention.

**FIGURE 8.1**  
Number and Percentage of Apes  
in Select European Zoos, by  
Taxonomic group



**Legend:**

- Bonobo (108 = 5%)
- Chimpanzee (698 = 31%)
- Gorilla (424 = 19%)
- Orangutan (300 = 13%)
- Gibbon (754 = 33%)

**Notes:** Percentages do not add up to 100% due to rounding. Gibbon category also includes siamangs.

**Data source:** Aggregate data from species-holding reports from select ISIS members, submitted to the author by ISIS in 2014, though some of the reported figures may represent earlier reporting periods.

## Circuses and Entertainment

A small number of apes are kept as performers in the EU. EU regulation 1739/2005/EC specifies that circus operators must register with authorities to move animal performers between countries, but it does not address the welfare of animals in circuses or traveling animal shows (EU, 2005). As with the keeping of apes as pets, the use and welfare of apes in circuses and other live performances is governed at the national level; conditions vary across countries, ranging from the absence of a comprehensive law to outright bans on all animals in circuses (Durham and Phillipson, 2014, pp. 282–3, box 10.1). In Greece, for example, the use of all animals in circuses is banned nationwide; in contrast, approximately 140 communities have enacted local circus regulations in Spain, where laws are adopted at the municipal level (Born Free Foundation, 2013; ENDCAP, n.d.). Estonia and Poland ban the use of “wild-caught” animals, while Austria and

Croatia ban “wild” animals, including “non-domestic species” (Eurogroup for Animals, 2010; ENDCAP, n.d.).

While apes are not among the most common species in circuses and live performances, some continue to be exploited in this manner, and evidence suggests their treatment and welfare is poor. The German amusement park Schwaben Park, which features live animal performances and has been investigated on three separate occasions, allegedly maintains chimpanzees in poor welfare and dangerous conditions (Animal Public eV *et al.*, 2012; Nakott, 2012; Animal Equality, 2013). According to these investigations, the facility has approximately 44 chimpanzees, more than are kept by many accredited zoos and ape sanctuaries. A small number of the chimpanzees perform in daily shows promoted on the park’s website and social media channels, which at times have featured videos and photos of chimpanzees wearing clothes and doing tricks (Schwaben Park, 2011, n.d.).

In the case of circuses and other live entertainment that features apes, the damage is two-fold. First, the individual apes are at risk of poor welfare and chronic suffering, as demonstrated by a recent study of long-term suffering and negative psychosocial effects (Freeman and Ross, 2014). Second, as a growing body of evidence indicates, exposure to apes in unnatural settings and circumstances—such as posing with people and wearing clothing—often leads people to conclude that apes are not endangered, and not in need of conservation or stewardship (Ross and Lukas, 2006; Ross *et al.*, 2008).

Although circus operators and trainers sometimes sell apes that they cannot or do not want to use in live performances any longer, rescue can be an option. Indeed, sanctuaries have recently rescued some apes from within Europe and nearby areas (AAP, 2011; Monkey World, 2012). Apes who were previously used as performers may







have chronic injuries, behavioral pathologies and other health issues that require specialized care, although this is not always the case. Case Study 8.3 details the rescue of Linda, a chimpanzee who was kept as a pet and performer.

**Photo:** Mowgli (16) and Kodua (13) were Hollywood performers as babies. They arrived at the Center for Great Apes ten years ago when their owner/trainer agreed to stop working great apes in the entertainment business. © Patti Ragan, Center for Great Apes

## Sanctuaries

According to the Global Federation of Animal Sanctuaries, the primary purpose of professionally run sanctuaries is to provide lifetime care for the health and welfare of abused, injured or abandoned animals or for those otherwise in need (GFAS, 2013). The number of apes in sanctuaries is a small but important fraction of the total number of apes in captivity, in part because arrivals of new residents represent decreases in the number of vulnerable apes in high-risk settings (see Table 8.2). The author collected relevant

**TABLE 8.2**

Number of Apes in EU Sanctuaries in 2014, by Country and Taxon

Sanctuary name	Country	Taxon	Number of apes
AAP Rescue Center for Exotic Animals	Netherlands	Chimpanzees	37
Gut Aiderbichl*	Austria	Chimpanzees	37
Mona Foundation	Spain	Chimpanzees	14
Monkey World	UK	Chimpanzees	59
		Orangutans	16
		Gibbons	23
Monte Adone	Italy	Chimpanzees	13
Primadomus	Spain	Chimpanzees	9
Rainfer	Spain	Chimpanzees	16
		Orangutans	1
		Gibbons	1
Wales Ape and Monkey Sanctuary	UK	Chimpanzees	7
		Gibbons	3

**Note:** \* Estimated figure

**Sources:** Gut Aiderbichl (2014); Centro de Rescate de Primates Rainfer (n.d.); Monte Adone (n.d.); Wales Ape and Monkey Sanctuary (n.d.-a, n.d.-b); A. Cronin, personal communication, 2014; D. Eastham, personal communication, 2014

### CASE STUDY 8.3

#### EU Case Study: The Rescue of a Chimpanzee Named Linda

Unless otherwise cited, the information for this case study was drawn from author interviews with David van Gennep of AAP in September 2014.

Linda is a female chimpanzee who was probably born around 1978. She was previously kept for use as both a tourist attraction and pet by a private owner in Lanzarote, one of the Canary Islands. Following a complicated rescue, she was flown to a sanctuary in the Netherlands, where she will receive care for the remainder of her life. Details about Linda and what she has experienced epitomize the plight of chimpanzees kept as pets and performers and the challenges that sanctuaries face in their efforts to rescue them.

Linda was purchased as an infant for approximately US\$2,240; her owners used her as a tourist attraction by letting people pose for photographs with her for a fee. At the time, Spanish law permitted this type of exhibition, which was so popular that the purchase price of “exotic” animals could be recovered within a matter of days.

Linda was already in captivity when Spain implemented the Convention on International Trade in Endangered Species (CITES) in 1986. Spain has laws pertaining to animals, including Ley 50/1999 regarding the possession of potentially dangerous wild animals and regulations regarding the operation of zoos, all of which address certain aspects relating to the welfare of apes in captivity (Á. Guede Fernández, personal communication, 2014). Spanish support for the protection of apes seems strong; a parliamentary committee passed a resolution in 2008 that recognizes certain rights for great apes (Glendinning, 2008).

Nevertheless, the law was of little help to Linda. Spain has several autonomous communities that operate under self-governance, including the Canary Islands. As a result, the legal framework is partially decentralized; Spanish laws are implemented at the regional level and autonomous regions may adopt their own laws. Two such laws enacted in the Canary Islands during the 1990s were relevant to Linda’s welfare. In 1991, Ley 8/1991 (BOE-A-1991-16425) was adopted to protect domestic animals—a term broadly interpreted to mean any animals kept in a home and dependent on people for survival. A second law, enacted in 1994 (BOE-A-1994-12127), increased legal restrictions regarding hawkers and peddlers, including the people who sold photo opportunities, such as the ones who exploited Linda (Á. Guede Fernández, personal communication, 2014).

While these types of regulations might be expected to protect animals such as Linda, they failed to do so in her case. Linda fell into a legal loophole. The new laws meant that her owners could no longer use her as a tourist attraction, but what did they mean for Linda? She was not handed over to a sanctuary

or sold by her owners, nor was she seized by the authorities; instead, she was locked away, out of view.

Linda’s owners kept her alone in a room for decades before a family member reportedly saw a documentary and contacted the MONA Foundation, a sanctuary near Barcelona. The sanctuary worked for nearly three years to secure her release, a process hampered by limited cooperation from the authorities in the Canary Islands (MONA Foundation, 2013). When the terms were finally agreed, a veterinary examination revealed that Linda was a carrier of the hepatitis B virus (MONA UK, 2014). The rules, requirements and costs associated with her specialized health care needs meant that it was not possible to find a sanctuary placement for Linda in Spain.

As these developments put Linda’s rescue in jeopardy, a suitable location was needed urgently. Fortunately, following the Dutch government’s ban on biomedical testing on chimpanzees, a sanctuary called AAP had taken in and provided care for the laboratory chimpanzees that had been exposed to human diseases such as hepatitis. AAP was able to offer its considerable expertise and specialized facilities for Linda’s care, but the transfer was dependent on a government permit to import her into the Netherlands. After nearly eight months of concerted efforts by AAP, the authorities finally granted permission for Linda’s transfer in August 2014. Shortly thereafter, she arrived from Lanzarote to begin the next stage of her life and rehabilitation (AAP, 2014).

At the time of writing, Linda had completed her mandatory quarantine period and integration with a new social group was under way. Despite her prolonged isolation, Linda responded positively to social cues, embracing, holding hands and playing with male chimpanzees named Julio and Jim (AAP, 2015).

The sanctuary plans to estimate Linda’s age more precisely with dental and anatomical markers and to identify her geographic origin using DNA once she is thoroughly integrated and has adjusted to the sanctuary. Even given her early progress, the sanctuary expects that Linda may need psychological care as a result of the emotional toll of loneliness, one of the most difficult issues the residents at the sanctuary face during rehabilitation (D. van Gennep, personal communication, 2014). Scientists who work with the sanctuary have found that many residents benefit from treatment, including training, environmental modifications or even psychiatric medication (Kranendonk *et al.*, 2012; Ghosh, 2013).

Linda’s case highlights some key issues concerning the welfare and rescue of apes in captivity, especially those used as pets and performers:

- Purchased as babies, chimpanzees are typically used as performers or kept as pets until they are about five years old, when they begin to act of their own volition (D. van Gennep, personal communication 2014). Due to their physical strength, people can no longer control or handle the apes safely; some even resort to drugging apes or



removing their teeth. The value of keeping and using apes as performers thus changes for the people involved: the costs of housing, managing and handling apes increase, while the benefits—revenue from performance or companionship from holding and playing with them—are in decline or disappear altogether. As a result, some apes are sold or surrendered, while others may be killed. Still others might be transferred to a permanent exhibit, where they are put on display. Some, such as Linda, are hidden away, alone and out of sight, which makes them very vulnerable to abuse, neglect and other welfare risks.

- The legal mechanisms that many people assume provide different forms of protection for apes in captivity—such as CITES, laws on animal welfare, public safety, wildlife conservation and animal cruelty—can prove insufficient in practice. As noted above, they did little for Linda. Despite her status as a member of an endangered species, she was exploited and remained in harm's way for many years. The law did not provide a mechanism for ensuring her health, protecting her welfare or preventing her pain and suffering.
- The restriction of business activities was important in Linda's case. Legislation to restrict private ownership and the use of apes in entertainment is essential to stem the illicit trade in apes and the flow of apes from range states to captivity in consumer countries. The very presence of sustained illegal trade demonstrates that the economic incentives are powerful, such that market solutions alone will not be able to reduce consumer demand.
- Linda was microchipped shortly before her rescue, but prior to that she lacked any permanent identification. Linda's identification raises an important concern regarding age-in-place solutions and other scenarios where private ownership is grandfathered into new regulations: the risk of identity theft. The authorities issued a permit for a female chimpanzee, but it would be extremely difficult to prove that the chimpanzee listed on that permit was the same individual brought to Lanzarote decades earlier, or the chimpanzee now living at AAP. Unique identification is important not only for monitoring the health and welfare of individuals over time, but it is also key to discouraging ongoing trade. Without clear and permanent individual identification, unscrupulous parties could buy apes and then pass them off as individuals named in granted permits.

**Photos:** Linda – one year on from being rescued, her first time outside, and before she was rescued. © AAP/Rob Schreuder, AAP/Petra Sonius and AAP/Roland J Reinders, respectively

“ The framework of federal regulations governing apes in captivity has evolved on a number of fronts in recent years. ”

data by collating published and electronic sources, as well as by requesting information directly from sanctuaries. The data show that 235 apes currently live in European sanctuaries, reflecting a small increase (3%) since 2013, when the figure stood at 211 (Durham and Phillipson, 2014, p. 288); the revised figure takes account of apes at two sites that were not included in the previous survey, Monte Adone in Italy and Rainfer in Spain.

Unless large numbers of individuals are transferred from one institution to another, arrival rates at sanctuaries are typically low, as they reflect rescues of individuals or small groups. Sanctuaries can experience temporary increases in arrival rates if, for example, private owners relinquish animals in anticipation of a new law, or in response to enforcement efforts once it is in place. By anticipating increased demand for sanctuary space and services, sanctuaries can prepare in ways that help to minimize barriers to enforcement. For example, in 2014 the Netherlands adopted a positive list—or “white list”—of the only wild animals that may be kept as pets, and apes are not among them (AAP, 2013). Knowing that this rule would come into force in 2015, AAP was able to prepare for the potential arrival of new residents through voluntary surrender and coordination with law enforcement (D. van Gennepe, personal communication, 2014).

## Apes in Captivity in the United States

In the United States, federal, state and municipal laws have implications for the welfare of apes in captivity. Various federal regulations direct the protection, importation, interstate trade and transport, and minimum welfare requirements for endangered species. These laws explicitly address apes or primates, in addition to other animal species. The frame-

work of federal regulations governing apes in captivity has evolved on a number of fronts in recent years. For example, following a review ordered by the House of Representatives, the federal government adopted a number of new practices regarding experiments on chimpanzees, including improvements to housing and welfare programs (Altevogt *et al.*, 2011).

The same review also dramatically reduced the number of federally owned chimpanzees who were used in experiments—down to 50, through the retirement of more than 300 chimpanzees (NIH, 2013). A number of other ongoing federal policy reviews and proposed laws could have dramatic effects for apes in captivity in the United States. Key examples follow.

### Proposed Legislation: S. 1463/H.R. 2856 Captive Primate Safety Act

On August 1, 2013, the Captive Primate Safety Act was introduced into the Senate, one day after being introduced to the House of Representatives (Boxer, 2013; Fitzpatrick, 2013). The proposed legislation aimed to amend an existing law known as the Lacey Act (18 USC 42-43, 16 USC 3371-3378), which limits trade in wildlife, as well as other activities, by further prohibiting interstate commerce in apes and other primates for the exotic pet trade. Although some state laws regulate possession within state borders, they do not restrict out-of-state dealers, nor do they necessarily apply to commercial activities, such as certain auctions or Internet sales (Paquette, 2014). As a result, interstate enforcement remains a challenge. The bill, S. 1463, was referred to the Committee on Environment and Public Works on the day it was introduced. A review by the Congressional Budget Office found that the changes were relatively minor and would have no significant effect on the federal budget.

On July 30, 2014, the Committee on Environment and Public Works reported favorably and on December 11, 2014, it was placed on the Senate Legislative Calendar. The House of Representatives has not taken further action on H.R. 2856 since referring it to the Subcommittee on Fisheries, Wildlife, Oceans, and Insular Affairs on August 6, 2013. No further action was taken during the 113th Congress, which ended on January 3, 2015.

It is noteworthy that some sanctuaries and animal welfare organizations have opposed adoption of the bill on the grounds that the proposed language would allow the use of small New World monkeys as service animals for people with disabilities (Friends of Animals, 2014). While this exemption would not directly affect apes, it could weaken the law intended to protect them by undermining enforcement. The proposed exemption would give legal recognition to a new category of use under the Lacey Act as no corresponding class of registration exists under another important law, the Animal Welfare Act.

The contradiction inherent in simultaneously restricting trade and codifying a new commercial use that could set a precedent for other species and lead to complex inter-agency enforcement mandates is something that legislators and authorities need to weigh carefully in the context of public health and safety incentives that could be achieved through S. 1463 / H.R. 2856. As written, the proposed legislation would provide additional protections for apes and almost all other species of nonhuman primates nationally, overriding disparate state and local laws (US Senate Committee on Environment and Public Works, 2014). Proponents maintain that achieving increased federal protections for apes and the vast majority of other primates, as well as for public health and safety, while there is a favorable legislative climate outweighs agreeing to concessions in the amendment (Born Free USA, 2013).

## Proposed Legislation: H.R. 3556 Humane Care for Primates Act

On November 20, 2013, the Humane Care for Primates Act was introduced to the House of Representatives (Elmers, 2013). The bill addresses the importation of apes and other primates into the United States for the purposes of sanctuary care. While current laws allow importation for zoo exhibition and other commercial activities, there is no provision for humane sheltering. As a result, under current regulations, a sanctuary would have to register with the United States Department of Agriculture (USDA) as an exhibitor in order to receive apes or other primates from abroad. Indeed, a similar issue regarding international transfer was relevant in the case of the chimpanzee named Linda, as discussed in Case Study 8.3. The proposed legislation would obviate the need for this registration by recognizing that sanctuaries are not, in fact, in the business of exhibition at all. The new rule would distinguish sanctuaries from other forms of captivity, such as roadside zoos or attractions, so that they could rescue primates rather than registering as exhibitors. The bill was referred to the House Subcommittee on Health, and no further action was taken during the 113th Congress.

## Proposed Rule: Split-listing of the Chimpanzee

While the aforementioned National Institutes of Health (NIH) policy changes regarding experimentation on chimpanzees did not affect individuals who were privately owned, the United States Fish and Wildlife Service (USFWS) recently proposed a rule that could further limit experiments and other commercial uses of privately owned chimpanzees (USFWS, 2013).

Beginning in 1990, the USFWS listed chimpanzees under the Endangered Species

Act; wild chimpanzees were designated as *endangered*, while chimpanzees in captivity were accorded the lower status of *threatened*. As a result of this distinction, commonly referred to as *split-listing*, it was legal to use captive chimpanzees in the United States for various trade and commercial purposes, such as circuses and movie performances, and to engage in interstate commerce of chimpanzees and their parts (USFWS, 2013).

In March 2010, stakeholders petitioned the agency to amend the rule. Following a 90-day review, the USFWS announced its finding in 2011 with a public comment period (USFWS, 2013). After an extended review period, on June 12, 2013 the USFWS published its 12-month petition findings and opened another public comment period on the proposed language for new rules regarding the status of chimpanzees (USFWS, 2013). Two years later, on June 12, 2015, the USFWS announced that it would finalize the proposed rule to classify all chimpanzees, both in the wild and in captivity, as endangered (USFWS, 2015a). The government noted that the vast majority of comments received during the public comment period were in favor of the listing, and that most of the comments opposing the rule had been submitted by parties affiliated with the biomedical industry (USDOJ, 2015, p. 34515).

The most significant effect of the new listing is that it makes it illegal for a “person subject to the jurisdiction of the United States” to “take” any listed species, meaning that it is forbidden to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect” a chimpanzee, or to attempt to do so (USDOJ, 2015, p. 34515). The rule also restricts import, export and interstate trade of chimpanzees (USFWS, 2015a).

The US government has emphasized that the new rule does not prohibit ongoing private ownership, normal husbandry or care of legally acquired chimpanzees (USFWS, 2015b). The endangered listing status for chimpanzees will not further restrict exhibitions

that are “designed to educate the public about the ecological role and conservation needs of the affected species,” so long as such exhibition is not found to harm populations in the wild or in captivity (USDOJ, 2015, p. 34518). The agency will continue to consider applications for the “take” of endangered species, including chimpanzees, subject to criteria of the Endangered Species Act. Permits for “take” associated with research, for example, could be permitted under specific circumstances relating to the conservation of endangered species (USFWS, 2015b).

The new rule came into effect on September 14, 2015, 90 days after official publication by the US government (USDOJ, 2015).

### Petition to the USDA: Rulemaking to Prohibit Public Contact with Big Cats, Bears and Nonhuman Primates

On January 7, 2013, a coalition of stakeholders filed a joint petition with the USDA that would affect apes in captivity (USDA APHIS, 2013). Specifically, it addresses private owners, exhibitors and other entertainment businesses that allow the public to handle or otherwise interact with animals such as apes.

The petition cites a number of reasons why the rules are needed, including factors that directly impact the health and welfare of apes: premature mother–infant separation, excessive handling of young animals, abusive training, and zoonotic disease transfer to and from exhibited animals. There is considerable evidence that these factors have long-lasting, detrimental effects on the health and welfare of apes in captivity.

The period for public comment on the changes came to a close on November 18, 2013. According to the USDA website, 15,335 public comments were submitted. If the changes are adopted, they would have the greatest impact on apes who are kept as pets and performers as well as those who are

kept by dealers who trade in apes for these purposes. The USDA has not yet announced the findings of the public review or its response to the petition.

## Sub-national legislation

In addition to laws and regulations at the federal level, state and local laws also impact apes in captivity and influence their welfare. Such laws govern a range of activities, from business operations to criminal animal cruelty. For example, state anti-cruelty laws could potentially be invoked if an ape in captivity has been abused or neglected. The captivity of apes could also be restricted or banned under public safety laws that address dangerous wild animals or under public health regulations that pertain to zoonotic disease. State laws are typically enforced by state agencies, but enforcement can also be devolved to counties or cities, which may enact their own rules.

Variations in state and local laws can impede the coordination of federal, state and local enforcement. Indeed, this issue was one of the justifications listed for the abovementioned Captive Primate Safety Act and the petition for rulemaking on public contact with primates and other animals. On the one hand, disparate state laws can produce a geographic concentration of privately owned apes and certain risks for health and welfare in jurisdictions where regulations are weak or non-existent. On the other hand, state-level authority means that incremental legislative efforts to protect the welfare of apes in captivity can be pursued through state laws without having to build national consensus.

Among the most important state laws that deal explicitly with apes—or primates as a whole—are those that regulate the private ownership of apes as performers and pets. Local coverage varies widely—from the absence of any relevant laws to outright bans. Wherever laws do exist, they may not

cover all pet keeping or afford the same protections for all apes (see Figure 8.2). For example, Texas has a list of 19 banned species that includes great apes but not gibbons (Texas Statutes, 2001). A number of state laws that restrict apes as pets also include an exemption for parties with lawful federal permits (Paquette, 2014). Thus, some people who keep apes as pets can obtain licenses

### BOX 8.2

#### Factors that Support Compliance and Enforcement of New Laws

Delaying adoption of laws that prohibit private ownership or other exploitation of apes without any abatement ultimately increases the number of animals and the cost of implementation and enforcement. That said, sanctuaries and related organizations are aware that rules enacted in haste and without preparation can also lead to problems. When new laws are adopted and implemented, a number of factors that support compliance and enforcement deserve consideration:

- Public awareness campaigns before, during and after implementation can reduce resistance among stakeholders and allow for transitions in responsibility by the authorities and sanctuaries. When laws that ban exhibition and ownership are implemented hastily, they can drive the people and businesses involved underground, making enforcement more difficult.
- It is essential to anticipate the capacity needed to re-home animals who are voluntarily surrendered before and after a new law goes into effect. Restrictions that are phased in or activities that are phased out should be matched closely with rescue and sanctuary capacities to remove barriers to effective enforcement and encourage compliance.
- Training on how to ensure animal safety and care during seizure and the welfare of animals under control of law enforcement plays a role in rescue outcomes, especially when animals cannot immediately be placed in the care of qualified rescue workers.
- Periods of clemency, during which owners and other people can surrender animals without civil or criminal penalty, may help to minimize the number of animals killed or hidden.
- When a new law allows owners to keep animals who are already in their possession for a fixed time period or for the rest of their natural lives—through what is known as a grandfather clause—the permits must be for individually identified animals who have a microchip or are otherwise uniquely identified. Any generic permit, such as for “two gibbons,” would allow an owner to replace one animal for another of the same species—perhaps repeatedly.

**Sources:** personal communication with D. van Gennep, the European Alliance of Rescue centres and Sanctuaries, North American Primate Sanctuary Alliance and individual sanctuaries



**Photo:** The number of apes in sanctuaries is a small but important fraction of the total number of apes in captivity, in part because arrivals of new residents represent decreases in the number of vulnerable apes in high-risk settings. Lar gibbon at the IPPL sanctuary in South Carolina. © IPPL

from the USDA and sidestep restrictions in their state.

State laws can also address the issue of disparity in county or city regulations or limitations in jurisdictions where municipalities do not have the authority to regulate certain activities. Kentucky has one of the strongest laws to prevent the keeping of apes as pets through a focus on trade and importation of wild animals, including apes (301 KY. Admin. Regs. 2:082 - Transportation and holding of exotic wildlife; see Figure 8.2). Before Kentucky enacted this state law, regulation was left to its 121 counties (Truitt, 2014). When the state law was enacted, one section addressed a small number of people who received exemptions to keep apes already in their possession, provided they registered each individual, and subject to strict prohibition on breeding, exchange and replacement (Truitt, 2014). Box 8.2 highlights some challenges and opportunities that are relevant to the adoption of new regulations that impact apes and ape sanctuaries.

State laws on primates as pets can serve as an indicator of major social shifts that have taken place over the past 15 years. Table 8.3 shows the number of states that banned, had some restrictions or lacked laws regarding the keeping of apes and other primates as pets in 2000 and 2014.

The overall trend is positive. During the period under review, the number of states with the strongest laws—that is, bans—nearly doubled, while the number of states without



**TABLE 8.3**

**Number of US States that Banned, Restricted or Lacked Laws Regarding the Keeping of Apes and Other Primates as Pets, 2000 and 2014**

Year	States with bans	States with some restrictions	States without laws
2000	14	8	28
2014	26	11	13

Data source: Paquette (2014)



laws dropped by more than half. Another promising pattern is that states that increased protections largely opted for outright bans over more lenient rules. Figure 8.2 depicts US states according to whether state laws prohibited, allowed or did not regulate the keeping of primates (including apes) as pets in 2014.

## The Number of Apes in Captivity in the United States

Chimpanzees are by far the most common ape in captivity in the United States, followed by gibbons, gorillas and orangutans. The high ranking of gibbons is due to the fact that all genera and species were aggregated into a single group, *gibbons*. Figure 8.3 shows the percentage of apes in captivity by taxonomic group.

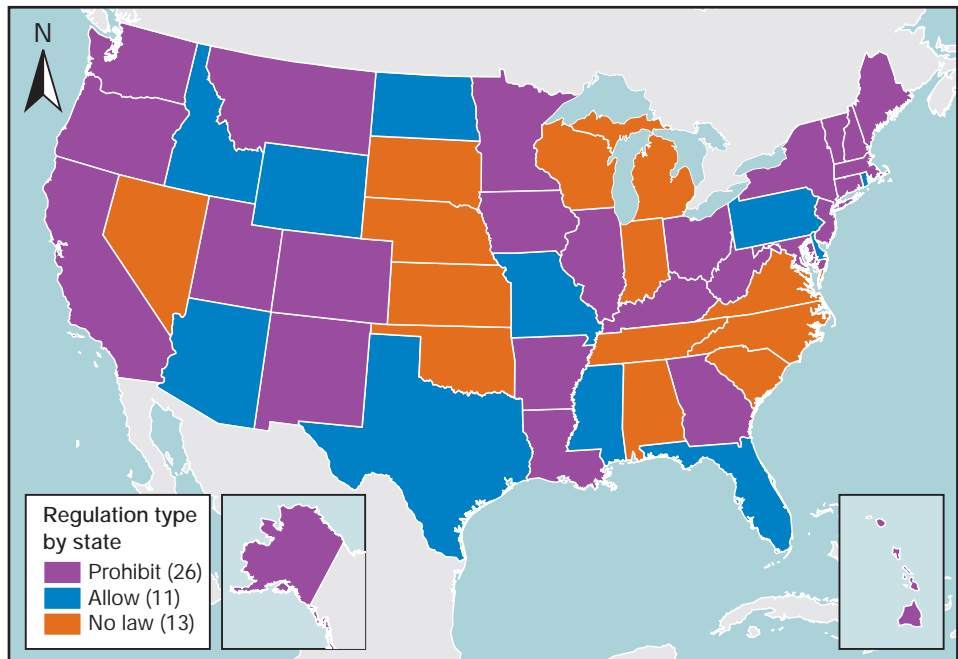
As noted above, some facilities belong to private organizations with distinct standards

of care that provide external review and oversight of their members. In the United States, one example is the North American Primate Sanctuary Alliance (NAPSA), which, in addition to its own membership conditions, requires membership and accreditation through the Global Federation of Animal Sanctuaries (NAPSA, n.d.). It is important to note that not all facilities that claim to be sanctuaries seek accreditation or operate to equivalent standards. Given that chimpanzees account for 62% of apes in the United States, it is critical to appreciate how many are captive outside of accredited institutions, where health and welfare risks are often higher.

Relatively few chimpanzees (14%) are kept in accredited zoos. Perhaps more importantly, slightly more chimpanzees (15%) are kept in high-risk settings with limited third-party oversight, under the categories of exhibition, dealer/pet and entertainment. Although biomedical laboratories do have third-party oversight, their missions require them to

**FIGURE 8.2**

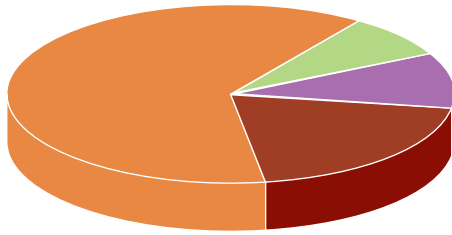
US States that Ban, Allow or Do Not Regulate the Keeping of Primates as Pets, 2014



Data source: Paquette (2014)

**FIGURE 8.3**

Apes in Captivity, by Taxon, 2012



Legend:

- Orangutan (246 = 8%)
- Gorilla (310 = 10%)
- Gibbon\* (624 = 20%)
- Chimpanzee (1,926 = 62%)

Notes: \* Includes all gibbons and siamangs.

Data source: Durham and Phillipson (2014, p. 292, table 10.6)

carry out biomedical experiments that, in spite of being legally authorized, inevitably inflict pain and suffering. The welfare of the 50 chimpanzees the government plans to keep, as well as of the privately owned chimpanzees who are in laboratories, remains a cause for concern. Table 8.4 lists the number of chimpanzees in different forms of captivity.

As of September 2014, more than 600 chimpanzees were in sanctuaries in the United States (see Table 8.5). In contrast to the EU figures presented above, a larger proportion of chimpanzees are in sanctuaries in the United States. The number of chimpanzees in sanctuaries has grown since the publication of the first edition of *State of the Apes*, although this increase did not result from the abovementioned NIH policy regarding experiments on chimpanzees. Indeed, a recent news report indicates that fewer than 2% of 310 eligible chimpanzees have been released from research facilities to sanctuaries, even though “dozens” have reportedly died in the 18 months since the policy was announced (Bonifield and Cohen, 2015). To date, federal authorities have not declared a timetable for releasing the surviving chimpanzees affected by the policy and thus, these individuals are still accounted

**TABLE 8.4**

Reported Number of Chimpanzees in Different Forms of Captivity in the United States, as of September 2014

Captivity type	Number of chimpanzees	Percentage of total
Biomedical labs	794	43%
NAPSA sanctuaries	525	28%
Zoos accredited by the Association of Zoos and Aquariums	258	14%
Exhibition*	196	11%
Dealer or pet	52	3%
Entertainment	18	1%
<b>Total</b>	<b>1,843</b>	<b>100%</b>

Notes: \* Includes individuals who are in sanctuaries that are not NAPSA members.

Data source: ChimpCARE (n.d.)

for in laboratory census figures (Bonifield and Cohen, 2015).

Changes in the figures were largely a consequence of transfers from a single laboratory in Louisiana, which had already planned to transfer approximately 100 chimpanzees to Chimp Haven, the national sanctuary system (A. Truitt, personal communication, 2014). The remaining changes in the population

**TABLE 8.5**

Number of Chimpanzees in Selected US Sanctuaries, 2013 and 2014

Sanctuary Name	2013	2014
Center for Great Apes	29	30
Chimp Haven	123	207
Chimpanzee Sanctuary Northwest	7	7
Chimps Inc.	8	7
Cleveland Amory Black Beauty Ranch	3	2
Primarily Primates	47	47
Primate Rescue Center	11	11
Save the Chimps	267	261
Wildlife Waystation	48	48
<b>Total</b>	<b>543</b>	<b>620</b>

Data source: ChimpCARE (n.d.); A. Truitt, personal communication, 2014

are the result of a small number of rescues and deaths. Since the federal government announced divestment of the chimpanzees it owns, this number is expected to decrease, accompanied by a corresponding increase in the number at sanctuaries (NIH, 2013). From 2013 to 2014, there were no changes in the number of orangutans in sanctuaries. For gibbons in US sanctuaries, there was one reported death and the addition of four adults from rescues (data not shown).

## Discussion

This chapter has explored some of the most recent trends regarding apes in captivity, such as the increasing number of apes in sanctuaries in range countries across Asia and Africa, as well as some of the complex causes for this growth. Laws that regulate the trade in apes and market demand for the use of live, captive apes are part of the backdrop for understanding the number of apes in captivity outside of range states, as illustrated by the abovementioned figures of apes in captivity in the EU and the United States.

A number of other countries also house apes in captivity. For example, a handful of sanctuaries located in Brazil care for apes who have been retired from zoos and circuses (Projeto GAP, n.d.). Kumamoto Sanctuary, the sole ape sanctuary in Japan, houses 59 chimpanzees and six bonobos (Morimura, Idani and Matsuzawa, 2011; GAIN, n.d.). While the bonobos were transferred to Kumamoto from a zoo in the United States, the chimpanzees had been used in biomedical research until the law mandated their retirement (Morimura *et al.*, 2011; Kumamoto Sanctuary, 2013, 2014).

The exact number and global distribution of apes brought into captivity illegally is far harder to document. Regarding the trade in live apes and ape parts, a recent CITES report noted “Very limited information on this trade is available, and its impact on wild

populations is currently unknown” (CITES, 2013, p. 8). The estimates that do exist suggest that the trade could exceed 3,000 apes per year (Stiles *et al.*, 2013).

There is a dearth of information on how many apes survive capture and transport, and on where survivors end up. Indeed, many experts agree that relatively few trafficked apes are ever confiscated and most traffickers commit crimes that go undetected (Ammann, 2011; Drori, 2012; Stiles *et al.*, 2013). In addition to buyers who seek private pets or performers, the demand for live apes by unscrupulous zoos in China and the Middle East accounts for hundreds of illegally trafficked apes (Stiles *et al.*, 2013). Surveys of enforcement officers and other research conducted by the Great Apes and Integrity (GAPIN) initiative also suggest that the detection and seizure of live apes is rare and that the lack of documentation and other evidence for illegal transactions represents a considerable challenge for law enforcement (CITES, 2013; WCO, 2013).

The laws governing the trade and captivity of apes vary and can change unpredictably. Whether international treaties or local rules agreed at town hall meetings, regulations on apes in captivity can impact the welfare of individual apes near and far in terms of their welfare and vulnerability to trafficking, exploitation and injury. In the same vein, legislation can affect the likelihood that apes will be captured and enter captivity, and subsequently, if they will be rescued, placed in a sanctuary and re-released.

This chapter considers a number of changes in the legal landscape concerning apes in captivity. Despite a plethora of laws, regulations and standards, sweeping changes regarding the treatment of apes in captivity—and, more importantly, regarding the well-being of the apes themselves—have yet to materialize. While there have been small steps in the right direction through collaborations among certain organizations and individuals, practices and attitudes do not

appear to be catching up with science. What are the barriers to change and where are the opportunities?

While policy often plays an important role in change because it institutionalizes practices before the ideas or the behaviors are absorbed into the public consciousness, it is not the only option for advancing social change on behalf of apes. To identify areas in which targeted strategies might accelerate change, it is useful to consider human behavior and resistance to change. As science has revealed, people process information and make decisions in ways that can generate cognitive bias—which can lead to irrational decisions while also acting as a barrier to change.

Technology and science can be a tool for social change. The Institute of Medicine determined that chimpanzee experiments were largely unnecessary in view of advances in scientific knowledge and the availability of new and superior methods (Altevogt *et al.*, 2011). Meanwhile, movie studios and advertising agencies have shunned the use of apes as actors in favor of cutting-edge animatronics and CGI (Powell, 2014). Research that advances our understanding of apes and informs practice may further accelerate social change on behalf of apes, particularly through education and outreach.

Effective decision-making is dependent on access to complete and accurate information.

**Photo:** There is a dearth of information on how many apes survive capture and transport, and on where survivors end up. Relatively few are rescued. Mwanda kissing and grooming Lomela as a sign of welcome on her arrival at the Lola ya Bonobo sanctuary. © Vanessa Woods/Lola ya Bonobo



Incomplete information and misinformation can lead reasonable people to misguided conclusions about apes and ape protection, which can result in harmful behaviors or suppress positive ones. Box 8.3 examines three organizations in Japan that illustrate how science, education and outreach can advance positive change on behalf of apes in captivity.

### BOX 8.3

#### Effecting Positive Change for Apes in Captivity: Spotlight on Japanese Organizations

In Japan, there are more than 570 apes in zoos and sanctuaries (GAIN, n.d.). New policies and shifting social attitudes have effected a number of important changes for ape welfare, including zoo transparency and educational and scientific support for ape welfare and captive care. The work of three Japanese organizations that are working on behalf of apes is briefly discussed below.

The Great Ape Information Network (GAIN) is a cooperative project between universities and the Japanese government. In promoting the conservation and welfare of great apes, GAIN places emphasis on transparency and robust data (GAIN, n.d.). The scope, level of detail and accessibility of the GAIN database are exemplary. Not only is the database a valuable service for scientists and other stakeholders, but it is also a model for other countries and regulatory authorities.

Japan has had a small number of well-known ape performers in the past, but this practice has come under increased scrutiny in recent years. In 2006, Support for African/Asian Great Apes (SAGA), a primatological association, formally declared opposition to the use of apes in entertainment (SAGA, 2006). Following an incident in late 2012, during which a chimpanzee named Pan-kun bit a person, the association issued a position statement. SAGA has used its scientific expertise and authority to call out inaccurate media portrayals of apes and highlight the harmful effects of misguided beliefs about apes (SAGA, 2012).

The non-governmental organization Sanctuary Project has also initiated a program to raise awareness and promote change on behalf of captive apes, and particularly solitary chimpanzees. The organization's analysis points to a number of historical, practical and logistical factors that influence the prevalence of solitary apes. Among these, small size, aging or otherwise limited infrastructure and a poor legacy of husbandry practices are seen to play a role. The Sanctuary Project promotes enhanced enrichment and care practices at sites with solitary individuals alongside their efforts to advocate for long-term solutions (Sanctuary Project, n.d.).

GAIN, SAGA and the Sanctuary Project are examples of organizations that have been active in promoting the welfare of apes in captivity, supporting better practice and highlighting the need for improvement and change.

## Conclusion

This chapter summarizes current information on apes in captivity in range states and surrounding regions as well as in some consumer countries of the global North. Zoos and sanctuaries account for most apes in captivity. In some jurisdictions, apes may be used in entertainment, kept as private pets or kept in laboratories.

This study reveals considerable variation in legal protections within and across countries. Such disparities can leave apes vulnerable to welfare risks and act as barriers to enforcement as well as the development of new legal protections for apes.

Agricultural expansion, extractive industries and other development activities in and near ape range states can impact ape sanctuaries. Land conversion, infrastructure development and the influx of people to live and work in previously remote areas can lead to increased levels of human-wildlife contact, conflict and zoonotic disease transfer, as well as greater hunting pressure; at the same time, these dynamics can reduce the availability of appropriate release sites, which are critical for ape sanctuaries and their residents. These factors have a direct impact on arrival and release rates, alongside other less obvious and indirect impacts. In seeking to mitigate the effects of development activities on apes and ape habitats, stakeholders and policy-makers have to consider the impacts on ape sanctuaries.

A number of factors can influence social attitudes and effect social change. With respect to efforts on behalf of apes, science, technology, education and outreach can be important instruments of change.

The illicit trade in apes is a global concern that is driven in part by the demand for captive apes in consumer countries. Policies and social attitudes about apes in captivity can affect all apes, both in their natural habitats and in captivity. Desensitization or misinformation about the urgency of ape



**Photo:** Agricultural expansion, extractive industries and other development activities in and near ape range states can impact ape sanctuaries. Land conversion, infrastructure development and the influx of people to live and work in previously remote areas have a direct impact on arrival and release rates. Rescued Grauer's gorilla, DRC. © Gorilla Rehabilitation and Conservation Education (GRACE) Center/ Deni Bechard

conservation and sanctuary care could hamper efforts aimed at decreasing demand in consumer countries or increasing support for conservation in range states. An ethical framework that acknowledges the value of apes regardless of their provenance or residence status could contribute both to stronger laws and to more public support for ape conservation and welfare programs.

## Acknowledgments

**Principal author:** Debra Durham

**Reviewers:** Meredith Bastian and Kay Farmer

*Author acknowledgments:* The author is grateful for the information provided by the International Species Information System regarding the number of apes housed in its member institutions. Additional thanks are owed to A. Brulé, S. Speede and D. van Gennepe for detailed interviews and facilitating access to data that were essential to the case studies; and also to the European Alliance of Rescue centres and Sanctuaries, In Defense of Animals–Africa, NAPSA and individual sanctuaries that provided information about rescues and their facilities.