

Annex IV

Ape population abundance estimates

In this annex, ape abundance estimates are presented at site level, where “site” is a protected area and its buffer zone, or a logging concession or group of concessions, or any discrete area where a survey has taken place in the last two decades (a few sites were last surveyed in the 1980s). Most of the abundance estimates presented come from documented material (both peer-reviewed publications and gray literature); some have been reconfirmed by experts in the field. Records of absolute ape numbers rarely exist; therefore, providing absolute figures in this report would be misleading. Instead, abundance classes covering a population range are given unless otherwise stated (for example, actual estimates for orangutan populations are taken from Wich *et al.*, 2008). Abundance classes are defined in Table 1. The list of ape sites in these tables is not in any way exhaustive and updates (to both sites and survey data) will be made available in digital format via the A.P.E.S. Portal (<http://apesportal.eva.mpg.de>).

TABLE 1

Abundance class definitions

Abundance class	Class definition
<50	<50 individuals
50–100	50–100 individuals
100–300	101–300 individuals
300–500	301–500 individuals
500–1000	501–1000 individuals
1000–5000	1001–5000 individuals
5000–10000	5001–10000 individuals
>10000	>10000 individuals
Present	Confirmed present, total population not estimated
Extirpated	Population “possibly extinct” (IUCN, 2013) or extirpated locally
?	Confirmation needed or precise information not available*

* Where there is a “?” and a source, this indicates there has been some preliminary study that indicates there may be apes present but this has not been confirmed. Where there is a “?” but no source, this indicates an assumption that apes may be present.

Acronyms used in the tables of abundance estimates:

CAR	Central African Republic
DRC	Democratic Republic of Congo
Lao PDR	Lao People’s Democratic Republic
NP	National Park
NPA	National Protected Area

TABLE 2**Western chimpanzee (*Pan troglodytes verus*) abundance estimates**

Country	Site name	Abundance class	Year estimated	Source
Benin	Nationwide	Extirpated	2013	IUCN (2013)
Burkina Faso	Nationwide	Extirpated	2013	IUCN (2013)
Ghana	Ankasa Conservation Area	?	2009	Danquah (2009)
Ghana	Atewa Forest Reserve	Present	2007	McCullough <i>et al.</i> (2007)
Ghana	Bia National Park	Present	2009	Danquah (2009)
Ghana	Boi-Tano Forest Reserve	Present	2006	Oates (2006)
Ghana	Cape Three Points Forest Reserve	Extirpated	2009	Gatti (2009)
Ghana	Draw River Forest Reserve	Present	2003	McCullough <i>et al.</i> (2007)
Ghana	Krokosua Forest Reserve	Present	2009	Gatti (2009)
Ghana	Mamiri Forest Reserve	?		
Ghana	Tano Nimiri	?		
Ghana	Bonsam Bepo Forest Reserve	Present	2009	Danquah <i>et al.</i> (2012)
Ghana	Ayum Forest Reserve	Present	2009	Danquah <i>et al.</i> (2012)
Ghana	Subim Forest Reserve	Present	2009	Danquah <i>et al.</i> (2012)
Guinea	Badiar National Park	<50	2011	WCF (2012)
Guinea	Dieke Classified Forest	50–100	2011	WCF (2012)
Guinea	Foutah Djallon	>10000	2011	WCF (2012)
Guinea	Gadha Woudou Classified Forest	<50	2011	WCF (2012)
Guinea	Kankan Faunal Reserve	?	2011	WCF (2012)
Guinea	Koumbia	100–300	2011	WCF (2012)
Guinea	Nimba Mts Strict Reserve	100–300	2011	WCF (2012)
Guinea	Oure Kaba Classified Forest	50–100	2011	WCF (2012)
Guinea	Pic de Fon Classified Forest	50–100	2002	Herbinger (2002)
Guinea	PNH Kouyah NP	100–300	2011	WCF (2012)
Guinea	PNH Mafou NP	100–300	2011	WCF (2012)
Guinea	Sangaredi	100–300	2011	WCF (2012)
Guinea	Ziama Strict Reserve	<50	2011	WCF (2012)
Guinea-Bissau	Lagoas de Cufada Natural Park	100–300	2013	Carvalho, Marques, and Vicente (2013)
Ivory Coast	Azagny NP	<50	2007	WCF (2007)

Country	Site name	Abundance class	Year estimated	Source
Ivory Coast	Banco NP	<50	2007	WCF (2007)
Ivory Coast	Bossematié Classified Forest	Present	1990	Marchesi <i>et al.</i> (1995)
Ivory Coast	Cavally Classified Forest	<50	2010	Normand <i>et al.</i> (2010)
Ivory Coast	Comoé NP	Present	2009	WCF (2009)
Ivory Coast	Dassiekro Classified Forest	Extirpated	2007	Campbell <i>et al.</i> (2008)
Ivory Coast	Duekoue Classified Forest	Extirpated	2007	Campbell <i>et al.</i> (2008)
Ivory Coast	Go Bodienou Classified Forest	Extirpated	2007	Campbell <i>et al.</i> (2008)
Ivory Coast	Goin Dèbé Classified Forest	<50	2010	Normand <i>et al.</i> (2010)
Ivory Coast	Mabi Classified Forest	Present	2007	Campbell <i>et al.</i> (2008)
Ivory Coast	Marahoué NP	<50	2006	N'Goran (2007)
Ivory Coast	Monogaga Classified Forest	Extirpated	2007	Campbell <i>et al.</i> (2008)
Ivory Coast	Mt Peko NP	100–300	2001	Herbinger (2001)
Ivory Coast	Mt Peko NP	100–500	2001	Herbinger (2001)
Ivory Coast	Mt Nimba Strict Reserve	100–300	2009	WCF (2009)
Ivory Coast	Mt Kope	Present	2007	Campbell <i>et al.</i> (2008)
Ivory Coast	Mt Sângbé NP	100–300	2002	Herbinger (2001)
Ivory Coast	Niouniourou Classified Forest	Extirpated	2007	Campbell <i>et al.</i> (2008)
Ivory Coast	Nizoro Classified forest	Extirpated	2007	Campbell <i>et al.</i> (2008)
Ivory Coast	Okromodou Classified Forest	Extirpated	2007	Campbell <i>et al.</i> (2008)
Ivory Coast	Port Gautier Classified Forest	Extirpated	2007	Campbell <i>et al.</i> (2008)
Ivory Coast	Taï NP	100–300	2013	Kuehl <i>et al.</i> , In review)
Ivory Coast	Tamin Classified Forest	Extirpated	2007	Campbell <i>et al.</i> (2008)
Liberia	Grebo National Forest	300–500	2007	Hoke, Demey, and Peal (2007)
Liberia	Sapo NP	500–1000	2010	WCF (2010)
Mali	Bafing Biosphere Reserve	Present	2008	Duvall (2008)
Senegal	Fongoli	<50	2007	Pruetz and Bertolani (2007)
Senegal	Nathia	Present	2010	Gašperšič and Pruetz (2011)
Senegal	Niokolo Koba NP	Present	2002	Pruetz <i>et al.</i> (2002)
Sierra Leone	Gola Forest Reserve	100–300	2010	Brcic <i>et al.</i> (2010)

Country	Site name	Abundance class	Year estimated	Source
Sierra Leone	Kambui Forest Reserve	Present	2010	Brncic <i>et al.</i> (2010)
Sierra Leone	Kangari Forest Reserve	Present	2010	Brncic <i>et al.</i> (2010)
Sierra Leone	Kilimi NP	50–100	2010	Brncic <i>et al.</i> (2010)
Sierra Leone	Lake Sonfon Proposed NP	Present	2010	Brncic <i>et al.</i> (2010)
Sierra Leone	Loma Forest Reserve	500–1000	2010	Brncic <i>et al.</i> (2010)
Sierra Leone	Moyamba	Present	2010	Brncic <i>et al.</i> (2010)
Sierra Leone	Nimini Forest Reserve	Present	2010	Brncic <i>et al.</i> (2010)
Sierra Leone	Outamba NP	500–1000	2010	Brncic <i>et al.</i> (2010)
Sierra Leone	Tingi Forest Reserve	50–100	2010	Brncic <i>et al.</i> (2010)
Sierra Leone	Tonkoli Forest Reserve	Present	2010	Brncic <i>et al.</i> (2010)
Sierra Leone	WAPFR Forest Reserve	50–50	2010	Brncic <i>et al.</i> (2010)
Togo	Nationwide	Extirpated	2013	IUCN (2013)

TABLE 3

Nigeria-Cameroon chimpanzee (*Pan troglodytes ellioti*) abundance estimates

Country	Site	Abundance class	Year	Source
Cameroon	Ako-Mbembe Forest Reserve	Present	2005	Morgan <i>et al.</i> (2011)*
Cameroon	Assaka Forest	Present	2006	Ekinde and Ashu (2006)
Cameroon	Bafut-Ngamba Forest Reserve	Extirpated	2011	Morgan <i>et al.</i> (2011)
Cameroon	Bakossi NP	50–100	2011	Morgan <i>et al.</i> (2011)
Cameroon	Banyang-Mbo Wildlife Sanctuary	500–1000	2007	Greengrass and Maisels (2007)
Cameroon	Tofala Hills (formerly Bechati-Fossimondi-Bechali)	100–300	2008	Ekinde and Khumbah (2006)
Cameroon	Ebo (proposed NP)	500–1000	2011	Morgan <i>et al.</i> (2011)
Cameroon	Ejagham Forest Reserve	<50	2003	Nku (2003a)
Cameroon	Etinde Wildlife Reserve	50–100	2003	Nku (2004a)
Cameroon	Fungom Forest Reserve	<50	2004	Morgan <i>et al.</i> (2011)
Cameroon	Kom-Wum Forest Reserve	<50	2011	Morgan <i>et al.</i> (2011)
Cameroon	Korup NP	50–100	2007	Morgan <i>et al.</i> (2011)
Cameroon	Lake Barombi Mbo Forest Reserve	Present	2004	Nku (2004a)

Country	Site	Abundance class	Year	Source
Cameroon	Mak-Betefou-Nkingkuoe	50–100	2011	Morgan <i>et al.</i> (2011)
Cameroon	Makombe Forest	Present	2011	Morgan <i>et al.</i> (2011)
Cameroon	Manbra	Present	1997	Morgan <i>et al.</i> (2011)
Cameroon	Mbam et Djerem NP	500–1000	2009	Maisels <i>et al.</i> (2009)
Cameroon	Mbulu Forest	100–300	2007	Warren and Bila (2007)
Cameroon	Mone Forest Reserve	100–300	2007	Warren and Ekinde (2007)
Cameroon	Mt Cameroon NP	Present	2007	Nku and Ekobo (2007)
Cameroon	Mt Kupe	<50	2006	Morgan <i>et al.</i> (2011)
Cameroon	Mpen & Njim NP	Present	2011	Morgan <i>et al.</i> (2011)
Cameroon	Mt Nlonako Wildlife Reserve	50–100	2005	Morgan <i>et al.</i> (2011)
Cameroon	Nkwende Hills	50–100	2002	Nku (2003b)
Cameroon	NtaAliForestForestReserve	?	2005	Morgan <i>et al.</i> (2011)
Cameroon	Rumpi Hills	?	2005	Morgan <i>et al.</i> (2011)
Cameroon	Southern Bakundu Forest Reserve	Extirpated	2004	Nku (2004a)
Cameroon	Takamanda NP	50–100	2007	Mboh and Warren (2007)
Cameroon	Tubah-Awing Forest	<50	2011	Morgan <i>et al.</i> (2011)
Cameroon	UFA 00–004 Logging Concession	50–100	2007	Morgan <i>et al.</i> (2011)
Cameroon	UFA 11–002 Logging Concession	Extirpated	2003	Nku (2003b)
Cameroon	Vome Forest	Present	2008	Morgan <i>et al.</i> (2011)
Nigeria	Afi Mountain Wildlife Sanctuary	Present	2009	Imong, Mengnjo, and Okeke (2009)
Nigeria	Afi River Forest Reserve	Present	2009	Imong <i>et al.</i> (2009)
Nigeria	Ago-Owu Forest Reserve	Present	2011	Ogunjemite (2011)
Nigeria	Akure-Ofosu Forest Reserve	Present	2011	Ogunjemite (2011)
Nigeria	Ala Forest Reserve	Present	2011	Ogunjemite (2011)
Nigeria	Cross River NP, Oban Division	Present	2009	Imong <i>et al.</i> (2009)
Nigeria	Cross River NP, Okwangwo Division	Present	2009	Imong <i>et al.</i> (2009)
Nigeria	Eba Forest Reserve	Present	2011	Ogunjemite (2011)
Nigeria	Eti-Oni Forest Reserve	?	2011	Ogunjemite (2011)

Country	Site	Abundance class	Year	Source
Nigeria	Gashaka-Gumti NP	500–1000	2011	Morgan <i>et al.</i> (2011)
Nigeria	Idanre Forest Reserve	Present	2011	Ogunjemite (2011)
Nigeria	Ifon Forest Reserve	?		
Nigeria	Ila Forest Reserve	?		
Nigeria	Ise-Ekiti Forest Reserve	Present	2011	Ogunjemite (2011)
Nigeria	Mbe Mountains	<50	2003	Morgan <i>et al.</i> (2011)
Nigeria	Oba Hills Forest Reserve	Extirpated	2006	Greengrass (2006)
Nigeria	Ogbesse Forest Reserve	Extirpated	2006	Greengrass (2006)
Nigeria	Ogotun Forest Reserve	?		
Nigeria	Ohosu Forest Reserve	?		
Nigeria	Okeluse Forest Reserve	Present	2011	Ogunjemite (2011)
Nigeria	Okomu NP	<50	2006	Greengrass (2006)
Nigeria	Oluwa Forest Reserve	Present	2011	Ogunjemite (2011)
Nigeria	Omo Forest Reserve	Present	2006	Greengrass (2006)
Nigeria	Onisere Forest Reserve	?	2011	Ogunjemite (2011)
Nigeria	Owo Forest Reserve	?		
Nigeria	Shasha Forest Reserve	Present	2011	Ogunjemite (2011)

* Morgan *et al.* (2011) is the Regional Action Plan for *Pan troglodytes ellioti* conservation, which is a compilation from various other sources provided by participants during a regional workshop. An original spreadsheet for these estimates is published on <http://www.elliotti.org> (Accessed 1 October 2013).

TABLE 4
Western lowland gorilla (*Gorilla gorilla gorilla*) abundance estimates

Country	Site	Abundance class	Year	Source
Angola	Mayombe Forest	?		IUCN (2013)
Cameroon	Boumba-Bek	5000–10000	2012	MIKE (2013)
Cameroon	Campo Ma'an	500–1000	2008	Etoga and Foguekem (2008)
Cameroon	Deng Deng NP	300–500	2012	Maisels <i>et al.</i> (2013a)
Cameroon	Deng Deng UFA	300–500	2012	Maisels <i>et al.</i> (2013a)
Cameroon	Dja Biosphere Reserve	1000–5000	2009	Latour (2010)
Cameroon	Mengame Gorilla Sanctuary	Present	2003	Halford <i>et al.</i> (2003)
Cameroon	Nanga-Eboko forest	Present	2002	Fotso, Nku, and Groves (2002)

Country	Site	Abundance class	Year	Source
Cameroon	Nki NP	Present	2005	Nzooch Dongmo <i>et al.</i> (2006)
Cameroon	Sanaga-Yong	Present	2002	Fotso <i>et al.</i> (2002)
Cameroon	UFA 09–024	Present	2008	Eyebe (2008)
Cameroon	UFA 10038	Present	2001	Etoga (2001)
Cameroon	UFA 10039	Present	2001	Etoga (2001)
Cameroon	ZICGS 9	Present	2007	Mahop (2007)
CAR	Dzanga NP	500–1000	2012	Princee (2013)
CAR	Ndoki NP	1000–5000	2012	Princee (2013)
CAR	Dzanga Special Reserve	500–1000	2012	Princee (2013)
Congo	Bailly Swamps	>10000	2011	Maisels <i>et al.</i> (2012)
Congo	Batanga	1000–5000	2012	Iyenguet <i>et al.</i> (2012)
Congo	Conkouati-Douli NP	1000–5000	2010	Vanleeuwe (2010)
Congo	Dimonika	100–300	2009	Pintea and Latour (2012)
Congo	Impfondo	500–1000	2008	Iyenguet <i>et al.</i> (2008)
Congo	Kabo	1000–5000	2010	Maisels <i>et al.</i> (2012)
Congo	Lac Télé	>10000	2011	Maisels <i>et al.</i> (2012)
Congo	Lossi	Present	2005	Bermejo <i>et al.</i> (2006)
Congo	Loundougou	5000–10000	2010	Maisels <i>et al.</i> (2012)
Congo	Mokabi	300–500	2006	Stokes <i>et al.</i> (2010)
Congo	Ngombe	>10000	2007	Malonga (2008)
Congo	Nouabalé-Ndoki NP	1000–5000	2010	Maisels <i>et al.</i> (2012)
Congo	Ntokou	5000–10000	2007	Malonga (2008)
Congo	Odzala-Koukoua NP north	1000–5000	2005	Blake (2006)
Congo	Odzala-Koukoua NP	>10000	2012	Maisels <i>et al.</i> (2013b)
Congo	Pikounda	>10000	2007	Malonga (2008)
Congo	Pokola	>10000	2010	Maisels <i>et al.</i> (2012)
Congo	Tanga	500–1000	2009	Malanda, Iyenguet, and Madzoke (2010)
Congo	Batéké Forest	1000–5000	2012	Tolisano <i>et al.</i> (2013)
DRC	Maiombe	Extirpated		IUCN (2013)
Equatorial Guinea	Nationwide	1000–5000	2012	Murai <i>et al.</i> (2013)

TABLE 5
Central chimpanzee (*Pan troglodytes troglodytes*) abundance estimates

Country	Site	Abundance class	Year	Source
Angola	Mayombe	?		IUCN (2013)
Cameroon	Campo Ma'an	500–1000	2008	Etoga and Foguekem (2008)
Cameroon	Boumba-Bek	1000–5000	2012	MIKE (2013)
Cameroon	Dja Biosphere Reserve	1000–5000	2009	Latour (2010)
Cameroon	Deng Deng NP	100–300	2012	Maisels <i>et al.</i> (2013a)
Cameroon	Deng Deng UFA	100–300	2012	Maisels <i>et al.</i> (2013a)
Cameroon	Nanga-Eboko forest	Present	2002	Fotso <i>et al.</i> (2002)
Cameroon	Sanaga-Yong	Present	2002	Fotso <i>et al.</i> (2002)
Cameroon	UFA 00–004	Present	2007	Ekobo (2007)
Cameroon	UFA 09–024	100–300	2003	Nku (2004b)
Cameroon	UFA 10038	Present	2001	Etoga (2001)
Cameroon	ZICGS 9	Present	2007	Mahop (2007)
CAR	Dzanga NP	<50	2012	Princee (2013)
CAR	Ndoki NP	100–300	2012	Princee (2013)
CAR	Dzanga-Sangha Special Reserve	100–300	2012	Princee (2013)
Congo	Bailly Swamps	1000–5000	2011	Maisels <i>et al.</i> (2012)
Congo	Batanga	100–300	2012	Iyenguet <i>et al.</i> (2012)
Congo	Conkouati-Douli NP	500–1000	2010	Vanleeuwe (2010)
Congo	Impfondo	500–1000	2008	Iyenguet <i>et al.</i> (2008)
Congo	Kabo	500–1000	2010	Maisels <i>et al.</i> (2012)
Congo	Lac Télé	500–1000	2011	Maisels <i>et al.</i> (2012)
Congo	Lossi	Present	2006	Bermejo <i>et al.</i> (2006)
Congo	Loundougou	1000–5000	2010	Maisels <i>et al.</i> (2012)
Congo	Mokabi	100–300	2006	Stokes <i>et al.</i> (2010)
Congo	Ngombe	500–1000	2007	Malonga (2008)
Congo	Nouabalé-Ndoki NP north	500–1000	2010	Maisels <i>et al.</i> (2012)
Congo	Nouabalé-Ndoki NP south	1000–5000	2012	Maisels <i>et al.</i> (2012)
Congo	Ntokou	500–1000	2007	Malonga (2008)
Congo	Odzala-Koukoua NP north	1000–5000	2005	Blake (2006)
Congo	Odzala-Koukoua NP	1000–5000	2012	Maisels <i>et al.</i> (2013b)

Country	Site	Abundance class	Year	Source
Congo	Pikounda	500–1000	2007	Malonga (2008)
Congo	Pokola	1000–5000	2010	Maisels <i>et al.</i> (2012)
Congo	Tanga	<50	2009	Malanda <i>et al.</i> (2010)
Congo	Batéké Forest	300–500	2012	Tolisano <i>et al.</i> (2013)
DRC	Lac Tumba	?		Inogwabini <i>et al.</i> (2012)
DRC	Maiombe	Present		IUCN (2013)
Equatorial Guinea	Nationwide	5000–10000	2012	Murai <i>et al.</i> (2013)

TABLE 6**Bonobo (*Pan paniscus*) abundance estimates**

Country	Site	Abundance class	Year	Source
DRC	Beminyo (Salonga NP)	100–300	2000–2002	Reinartz <i>et al.</i> (2006)
DRC	Bilya Hotspot-Iyondje	Present	2009	IUCN and ICCN (2012)
DRC	Biondo-Biondo (Salonga NP)	?	2000–2002	Reinartz <i>et al.</i> (2006)
DRC	Bolobo	50–100	?	IUCN and ICCN (2012)
DRC	Bonima (Salonga NP)	Present	2000–2002	Reinartz <i>et al.</i> (2006)
DRC	Bosango (Lac Tumba-Lediima Reserve)	50–100	2004	IUCN and ICCN (2012)
DRC	Boseka-Bokungu	50–100	2008	IUCN and ICCN (2012)
DRC	Botuali-Ilombe	Present	?	IUCN and ICCN (2012)
DRC	Botwali	50–100	2004	IUCN and ICCN (2012)
DRC	Cadjobe (Djolu-Befale)	300–500	2006	IUCN and ICCN (2012)
DRC	Cadjobe CBNRM	300–500	2009	Reinartz and Guislain (2010)
DRC	Estate core area (Salonga NP)	<50	2006–2009	Guislain and Reinartz (2010–11)
DRC	Estate Extended Sector (excl. core area)	500–1000	2006–2009	Guislain and Reinartz (2010–11)
DRC	Ikela-Bokungu Region	Present	2008	IUCN and ICCN (2012)
DRC	Ikolo (Salonga NP)	?	2005	Guislain and Reinartz (2010–11)
DRC	Isaka-Bekongo (Salonga NP)	?	2000–2002	Reinartz <i>et al.</i> (2006)
DRC	Isanga (Salonga NP)	<50	2000–2002	Reinartz <i>et al.</i> (2006)
DRC	Iyondji forest block	Present	2009	IUCN and ICCN (2012)

Country	Site	Abundance class	Year	Source
DRC	K7	Present	2010	IUCN and ICCN (2012)
DRC	Kenia	?	?	IUCN and ICCN (2012)
DRC	Kinki (Salonga NP)	?	2000–2002	Reinartz <i>et al.</i> (2006)
DRC	Kokolopori Bonobo Reserve	300–500	2004–2005	IUCN and ICCN (2012)
DRC	Kutu region	Present	2009–2010	IUCN and ICCN (2012)
DRC	Lilungu	50–100	2005	IUCN and ICCN (2012)
DRC	Lingomo	50–100	2008	IUCN and ICCN (2012)
DRC	Lokoro-Lukenie	Present	2006–2007	IUCN and ICCN (2012)
DRC	Lomako-Yokokala	500–1000	2010	IUCN and ICCN (2012)
DRC	Lonua	Present	2006	IUCN and ICCN (2012)
DRC	Lotoi-Lokoro	Present	2006–2007	IUCN and ICCN (2012)
DRC	Lotulo (Salonga NP)	?	2000–2002	Reinartz <i>et al.</i> (2006)
DRC	Lubefu	Present	2010	IUCN and ICCN (2012)
DRC	LuiKotale study area (Salonga NP)	50–100	2003–2004	IUCN and ICCN (2012)
DRC	LuiKotale-Bompusa (Salonga NP)	<50	2012	IUCN and ICCN (2012)
DRC	Lukenie-Sankuru	Present	2006–2007	IUCN and ICCN (2012)
DRC	Lukuru	50–100	1994–1995	IUCN and ICCN (2012)
DRC	Malebo region	Present	2005–2008	IUCN and ICCN (2012)
DRC	Mampoko (Bolombo-Losombo)	Present	2005–2008	IUCN and ICCN (2012)
DRC	Maringa-Lopori-Wamba 1 K7	Present	2004	IUCN and ICCN (2012)
DRC	Maringa-Lopori-Wamba 2 K7	Present	2004	IUCN and ICCN (2012)
DRC	Maringa-Lopori-Wamba 3 K7	Present	2004	IUCN and ICCN (2012)
DRC	Maringa-Lopori-Wamba 4 K7	Present	2004	IUCN and ICCN (2012)
DRC	Mbala-Ndongese	Present	2005	IUCN and ICCN (2012)
DRC	Mbie Mokele	50–100	2006	IUCN and ICCN (2012)
DRC	Mompono-Bekumolokole	50–100	2008	IUCN and ICCN (2012)
DRC	Mompono-Yaama	50–100	2008	IUCN and ICCN (2012)
DRC	Monieke-Bokote	Present	2006	IUCN and ICCN (2012)
DRC	Mpoka (Mompulenge-Mbanzi)	Present	2009	IUCN and ICCN (2012)

Country	Site	Abundance class	Year	Source
DRC	Mushi	?	?	IUCN and ICCN (2012)
DRC	Ngombe-Botuali	50–100	2005	IUCN and ICCN (2012)
DRC	Nkosso	Present	2006	IUCN and ICCN (2012)
DRC	Salonga corridor	300–500	2008	Maisels, Nkumu, and Bonyenge (2009)
DRC	Salonga NP east	500–1000	2008	Maisels <i>et al.</i> (2010)
DRC	Salonga NP north	1000–5000	2004	Grossmann <i>et al.</i> (2008)
DRC	Salonga NP south	1000–5000	2004	Grossmann <i>et al.</i> (2008)
DRC	Salonga-Iyaelima	1000–5000	2006	Grossmann <i>et al.</i> (2008)
DRC	Salonga-Lokofa	100–300	2002	Reinartz <i>et al.</i> (2006)
DRC	Salonga-Lokofa	300–500	2005	IUCN and ICCN (2012)
DRC	Salonga-Lokofa	100–300	2010	Liengola <i>et al.</i> (2010)
DRC	Salonga-Lomela	1000–5000	2006	IUCN and ICCN (2012)
DRC	Samba	50–100	2007	IUCN and ICCN (2012)
DRC	Sankuru	Present	2009	Liengola <i>et al.</i> (2009)
DRC	Sankuru-Lomela	?	2007	IUCN and ICCN (2012)
DRC	Tshuapa-Lomami-Lualaba	5000–10000	2008–2010	IUCN and ICCN (2012)
DRC	Wamba	50–100	2003–2005	IUCN and ICCN (2012)
DRC	Yetsi-Ikela	50–100	2008	IUCN and ICCN (2012)
DRC	Yongo (Salonga NP)	<50	2000–2002	Reinartz <i>et al.</i> (2006)

TABLE 7

Eastern chimpanzee (*Pan troglodytes schweinfurthii*) abundance estimates

Country	Site	Abundance class	Year	Source
Burundi	Bururi	Present		Plumptre <i>et al.</i> (2010)
Burundi	Kibira	300–500	2007	Barakabuye <i>et al.</i> (2007)
Burundi	Rumonge	Present		Plumptre <i>et al.</i> (2010)
Burundi	Vyanda	Present		Plumptre <i>et al.</i> (2010)
CAR	Zemongo	Present	2007	Roulet <i>et al.</i> (2007)
DRC	Bili-Uere	>10000		Plumptre <i>et al.</i> (2010)
DRC	Itombwe	5000–10000		Plumptre <i>et al.</i> (2010)
DRC	Kahuzi-Biéga NP highland sector	500–1000		Plumptre <i>et al.</i> (2010)

Country	Site	Abundance class	Year	Source
DRC	Kahuzi-Biéga NP lowland sector	500–1000		Plumptre <i>et al.</i> (2010)
DRC	Maganja Hills	100–300		Plumptre <i>et al.</i> (2010)
DRC	Maiko	500–1000		Plumptre <i>et al.</i> (2010)
DRC	Misotshi-Kabogo	500–1000		Plumptre <i>et al.</i> (2010)
DRC	Okapi	5000–10000	2011	Vosper, Masselink, and Maisels (2013)
DRC	Rubi-Tele	300–500		Plumptre <i>et al.</i> (2010)
DRC	Rwenzori (Virunga NP)	300–500		Plumptre <i>et al.</i> (2010)
DRC	Tayna	500–1000		Plumptre <i>et al.</i> (2010)
DRC	Usala Forest	100–300		Plumptre <i>et al.</i> (2010)
DRC	Watalinga Forest	500–1000		Plumptre <i>et al.</i> (2010)
Rwanda	Gishwati	<50		Chancellor <i>et al.</i> (2012)
Rwanda	Nyungwe NP (incl. Cyamudongo)	300–500	2007	Roulet <i>et al.</i> (2007)
South Sudan		Present		Plumptre <i>et al.</i> (2010)
Tanzania	Greater Gombe Ecosystem	110	2013	Piel <i>et al.</i> (2013)
Tanzania	Greater Mahale Ecosystem (incl. Ugalla-Masito)	1000–5000	2013	Piel <i>et al.</i> (2013)
Tanzania	Loasi	50–100	2013	Davenport <i>et al.</i> (2010)
Uganda	Budongo NP	500–1000	2003	Plumptre, Cox, and Mugume (2003)
Uganda	Bugoma	500–1000	2003	Plumptre <i>et al.</i> (2003)
Uganda	Bugoma-Budongo	50–100	2003	Plumptre <i>et al.</i> (2003)
Uganda	Bwindi Impenetrable NP	100–300	2003	Plumptre <i>et al.</i> (2003)
Uganda	Echuya	Extirpated	2003	Plumptre <i>et al.</i> (2003)
Uganda	Ibambaro	Extirpated	2003	Plumptre <i>et al.</i> (2003)
Uganda	Itwara	50–100	2003	Plumptre <i>et al.</i> (2003)
Uganda	Kagombe	50–100	2003	Plumptre <i>et al.</i> (2003)
Uganda	Kagorra region	<50	2003	Plumptre <i>et al.</i> (2003)
Uganda	Kalinzu	100–300	2003	Plumptre <i>et al.</i> (2003)
Uganda	Kasato	<50	2003	Plumptre <i>et al.</i> (2003)
Uganda	Kasyoha-Kitomi	300–500	2003	Plumptre <i>et al.</i> (2003)
Uganda	Kibale NP	1000–5000	2003	Plumptre <i>et al.</i> (2003)

Country	Site	Abundance class	Year	Source
Uganda	Kibego	<50	2003	Plumptre <i>et al.</i> (2003)
Uganda	Kitechura	Extirpated	2003	Plumptre <i>et al.</i> (2003)
Uganda	Kyambura	<50	2003	Plumptre <i>et al.</i> (2003)
Uganda	Maramagambo	100–300	2003	Plumptre <i>et al.</i> (2003)
Uganda	Matiri	Extirpated	2003	Plumptre <i>et al.</i> (2003)
Uganda	Muhangi	<50	2003	Plumptre <i>et al.</i> (2003)
Uganda	Otzi	<50	2003	Plumptre <i>et al.</i> (2003)
Uganda	Ruwenzori NP	300–500	2003	Plumptre <i>et al.</i> (2003)
Uganda	Semuliki NP	<50	2003	Plumptre <i>et al.</i> (2003)
Uganda	Semuliki Wildlife Reserve	50–100	2003	Plumptre <i>et al.</i> (2003)
Uganda	South Bugoma	<50	2003	Plumptre <i>et al.</i> (2003)
Uganda	Wambabya	100–300	2003	Plumptre <i>et al.</i> (2003)

TABLE 8**Grauer's gorilla (*Gorilla beringei graueri*) abundance estimates**

Country	Site	Abundance class	Year	Source
DRC	Itombwe Forest	300–500		Nixon <i>et al.</i> (2012)
DRC	Kahuzi-Biéga NP highland sector	100–300		Nixon <i>et al.</i> (2012)
DRC	Kahuzi-Biéga NP lowland sector	1000–5000		Nixon <i>et al.</i> (2012)
DRC	Kasese	500–1000		Nixon <i>et al.</i> (2012)
DRC	Kisimba-Ikoba	100–300		Nixon <i>et al.</i> (2012)
DRC	Maiko NP North	100–500*		Nixon <i>et al.</i> (2012)
DRC	Maiko NP South	300–1000*		Nixon <i>et al.</i> (2012)
DRC	Masisi	Extirpated		Nixon <i>et al.</i> (2012)
DRC	Mt Tshiaberimu (Virunga NP)	<10	2013	http://gorillacd.org/
DRC	North Lowa	Extirpated		Nixon <i>et al.</i> (2012)
DRC	Tayna	100–300		Nixon <i>et al.</i> (2012)
DRC	Usala	100–500*		Nixon <i>et al.</i> (2012)
DRC	Walikale	100–1000*		Nixon <i>et al.</i> (2012)

Note: *The wide ranges of some of these estimates do not fit into the classes given in Table 1.

TABLE 9**Mountain gorilla (*Gorilla beringei beringei*) abundance estimates**

Country	Site	Abundance	Year	Source
DRC	Virunga NP	200	2010	Gray <i>et al.</i> (2013)
Rwanda	Volcanoes NP	230	2010	Gray <i>et al.</i> (2013)
Uganda	Bwindi Impenetrable NP	400	2009	Robbins <i>et al.</i> (2011)
Uganda	Mgahinga Gorilla NP	50	2010	Gray <i>et al.</i> (2013)

TABLE 10**Cross River gorilla (*Gorilla gorilla diehli*) abundance estimates**

Country	Site	Abundance class	Year	Source
Cameroon	Ebo Proposed NP	15-25	2010	Morgan 2010
Cameroon	Kagwene Mountains	20-25	2013	Dunn, Bergl and Imong <i>et al.</i> (in press)
Cameroon	Mone River Forest Reserve	<50	2013	Dunn <i>et al.</i> (in press)
Cameroon	Mbulu region	<50	2013	Dunn <i>et al.</i> (in press)
Cameroon	Takamanda NP	<50	2013	Dunn <i>et al.</i> (in press)
Cameroon	Tofala Hills	<50	2013	Dunn <i>et al.</i> (in press)
Nigeria	Afi Mountain Wildlife Sanctuary	<50	2013	Dunn <i>et al.</i> (in press)
Nigeria	Cross River NP, Okwangwo Division	<50	2013	Dunn <i>et al.</i> (in press)
Nigeria	Mbe Mountains	<50	2013	Dunn <i>et al.</i> (in press)

TABLE 11**Sumatran orangutan (*Pongo abelii*) abundance estimates**

Country	Site	Abundance	Year	Source
Indonesia	East Leuser Ecosystem	1052	2008	Wich <i>et al.</i> (2008)
Indonesia	East Middle Aceh Ecosystem	337	2008	Wich <i>et al.</i> (2008)
Indonesia	East Sarulla	150	2008	Wich <i>et al.</i> (2008)
Indonesia	East Singkil swamps	160	2008	Wich <i>et al.</i> (2008)
Indonesia	Sidiangkat	134	2008	Wich <i>et al.</i> (2008)
Indonesia	Tripa Swamp	280	2008	Wich <i>et al.</i> (2008)
Indonesia	Trumon-Singkil	1500	2008	Wich <i>et al.</i> (2008)

Country	Site	Abundance	Year	Source
Indonesia	West Batang Toru	400	2008	Wich <i>et al.</i> (2008)
Indonesia	West Leuser Ecosystem	2508	2008	Wich <i>et al.</i> (2008)
Indonesia	West Middle Aceh Ecosystem	103	2008	Wich <i>et al.</i> (2008)

Note: Some of the orangutan abundance estimates are likely no longer accurate due to deforestation since the estimate was made. This is in particular the case for the Tripa Swamp and East Singkil Swamps.

TABLE 12

Northeast Bornean orangutan (*Pongo pygmaeus morio*) abundance estimates

Country	Site	Abundance	Year	Source
Malaysia	Bongayya Forest Reserve	111	2008	Wich <i>et al.</i> (2008)
Malaysia	Crocker Range NP	181	2008	Wich <i>et al.</i> (2008)
Indonesia	Kelai watershed (incl. Gunung Gajah, Wehea and logging concessions)	2500	2008	Wich <i>et al.</i> (2008)
Malaysia	Kinabatangan	1125 (691–1807)	2008	Wich <i>et al.</i> (2008)
Malaysia	Kuamut	313 (80–860)	2008	Wich <i>et al.</i> (2008)
Malaysia	Kulamba Wildlife Reserve	500 (182–1369)	2008	Wich <i>et al.</i> (2008)
Indonesia	Kutai NP	600	2008	Wich <i>et al.</i> (2008)
Indonesia	Lesan watershed (incl. Sungai Lesan protected area)	400	2008	Wich <i>et al.</i> (2008)
Malaysia	Lingkabau Forest Reserve	100 (75–100)	2008	Wich <i>et al.</i> (2008)
Malaysia	Pinangah	223 (77–644)	2008	Wich <i>et al.</i> (2008)
Indonesia	Samarinda, Muara Badak, Marang Kayu	200	2008	Wich <i>et al.</i> (2008)
Indonesia	Sangatta-Bengalon & Muara Wahau	175	2008	Wich <i>et al.</i> (2008)
Indonesia	Sangkulirang/Mangkalihat karst area	750	2008	Wich <i>et al.</i> (2008)
Indonesia	Sebuku/Sembakung swamps	100	2008	Wich <i>et al.</i> (2008)
Indonesia	Segah watershed	100	2008	Wich <i>et al.</i> (2008)
Malaysia	Segama	4584 (2064–11064)	2008	Wich <i>et al.</i> (2008)

Country	Site	Abundance	Year	Source
Malaysia	Tabin	1401 (517–3796)	2008	Wich <i>et al.</i> (2008)
Malaysia	Trus Madi forests	282 (126–736)	2008	Wich <i>et al.</i> (2008)
Malaysia	Ulu Kalumpang Forest Reserve	144 (54–408)	2008	Wich <i>et al.</i> (2008)
Malaysia	Upper Kinabatangan	1716 (1016–3403)	2008	Wich <i>et al.</i> (2008)
Malaysia	Sepilok	200 (100–300)	2008	Wich <i>et al.</i> (2008)

Note: Confidence intervals taken from Ancrenaz *et al.* (2005)

TABLE 13

Southwest Bornean orangutan (*Pongo pygmaeus wurmbii*) abundance estimates

Country	Site	Abundance	Year	Source
Indonesia	Arut Belantikan	6000	2008	Wich <i>et al.</i> (2008)
Indonesia	Bukit Baka	175	2008	Wich <i>et al.</i> (2008)
Indonesia	Bukit Raya	500	2008	Wich <i>et al.</i> (2008)
Indonesia	Bukit Rongga & Parai	1000	2008	Wich <i>et al.</i> (2008)
Indonesia	Cagar Alam B. Spt	>500	2008	Wich <i>et al.</i> (2008)
Indonesia	Cagar Alam Pararaum	>500	2008	Wich <i>et al.</i> (2008)
Indonesia	Gunung Palung	2500	2008	Wich <i>et al.</i> (2008)
Indonesia	Kahayan Kapuas	300	2008	Wich <i>et al.</i> (2008)
Indonesia	Ketingan	3000	2008	Wich <i>et al.</i> (2008)
Indonesia	Lamandau	1200	2008	Wich <i>et al.</i> (2008)
Indonesia	Mawas	3500	2008	Wich <i>et al.</i> (2008)
Indonesia	Rungan Kahayan	1000	2008	Wich <i>et al.</i> (2008)
Indonesia	Sebangau NP [#]	6900	2008	Wich <i>et al.</i> (2008)
Indonesia	Sebangau Kahayan	700	2008	Wich <i>et al.</i> (2008)
Indonesia	Sei Kahayan & Sei Sambah	1000	2008	Wich <i>et al.</i> (2008)
Indonesia	Sei Sambah & Sei Katingan	500	2008	Wich <i>et al.</i> (2008)
Indonesia	Seruyan	1000	2008	Wich <i>et al.</i> (2008)
Indonesia	Tanjung Keluang	200	2008	Wich <i>et al.</i> (2008)
Indonesia	Tanjung Puting NP	6000	2008	Wich <i>et al.</i> (2008)

[#] There are 2 different spellings of Sebangau/Sabangau, in each case we have used the one that appears in the original report.

TABLE 14Northwest Bornean orangutan (*Pongo pygmaeus pygmaeus*) abundance estimates

Country	Site	Abundance class	Year	Source
Indonesia	Betung Kerihun	1330–2000	2008	Wich <i>et al.</i> (2008)
Indonesia	Danau Sentarum	500	2008	Wich <i>et al.</i> (2008)
Indonesia	Upper Kapuas swamps	Present	2008	Wich <i>et al.</i> (2008)
Malaysia	Batang Ai (Sarawak)	119–580	2008	Wich <i>et al.</i> (2008)
Malaysia	Lanjak Entimau (Sarawak)	1028–1181	2008	Wich <i>et al.</i> (2008)

TABLE 15Bornean white-bearded gibbon (*Hylobates albibarbis*) abundance estimates

Country	Site	Abundance class	Year	Source
Indonesia	Mungku Baru Forest	5000–10000	2010	Harrison <i>et al.</i> (2010)
Indonesia	Block C Ex-Mega Rice Project	5000–10000	2011	Cheyne (2011)
Indonesia	Bukit Baka Bukit Raya NP	5000–10000	2004	Cheyne unpublished data
Indonesia	Bawan Forest	5000–10000	2012	Harrison <i>et al.</i> (2012)
Indonesia	Sabangau NP	>10000	2007	Cheyne <i>et al.</i> (2007)
Indonesia	Gunung Palung NP	?		

TABLE 16Müller's Bornean gibbon (*Hylobates muelleri*) abundance estimates

Country	Site	Abundance class	Year	Source
Indonesia	Sungai Wain Protection Forest	500–1000	2012	Gilhooly (2012)
Indonesia	Murung Raya District	>10000	2012	Cheyne <i>et al.</i> (2012)
Indonesia	Danau Sentarum, Betung Kerihun	?		
Indonesia	Sankulirang karst area	?		
Malaysia	Danum Valley	?		

TABLE 17Yellow-cheeked gibbon (*Nomascus gabriellae*) abundance estimates*

Country	Site	Abundance class	Year	Source
Viet Nam	A Yun Pa PNR	Present	2000	Rawson <i>et al.</i> (2011)
Viet Nam	Bi Dup-Nui Ba NR	<50	2010	Rawson <i>et al.</i> (2011)
Viet Nam	Bu Gia Map NP	100–300	2010	Rawson <i>et al.</i> (2011)
Viet Nam	Cat Tien NP	300–500	2010	Rawson <i>et al.</i> (2011)
Viet Nam	Chu Yang Sin NP	<50	2009	Rawson <i>et al.</i> (2011)
Viet Nam	Cu Jut District	Present	2007	Rawson <i>et al.</i> (2011)
Viet Nam	Dong Nai NR	<50	2010	Rawson <i>et al.</i> (2011)
Viet Nam	Ea So NR	Present	2006	Rawson <i>et al.</i> (2011)
Viet Nam	Ea Sup/Ea H'leo District	Present	1998	Rawson <i>et al.</i> (2011)
Viet Nam	Ea Trang Commune, M'drak	Present	1998	Rawson <i>et al.</i> (2011)
Viet Nam	Hon Ba NR	Present	2005	Rawson <i>et al.</i> (2011)
Viet Nam	Khanh Hoa SFE and Tram Huong Forestry Co.	Present	2009	Rawson <i>et al.</i> (2011)
Viet Nam	Krong No District	Present	1998	Rawson <i>et al.</i> (2011)
Viet Nam	Loc Bac SFE	<50	2004	Rawson <i>et al.</i> (2011)
Viet Nam	Nam Nung NR	<50	2010	Rawson <i>et al.</i> (2011)
Viet Nam	Ninh Son SFE	<50	2007	Rawson <i>et al.</i> (2011)
Viet Nam	Nui Ong NR	<50	2010	Rawson <i>et al.</i> (2011)
Viet Nam	Phuoc Binh NP	<50	2009	Rawson <i>et al.</i> (2011)
Viet Nam	Quang Truc Commune, Dak Rlap District	Present	2010	Rawson <i>et al.</i> (2011)
Viet Nam	Ta Dung NR	<50	2010	Rawson <i>et al.</i> (2011)
Viet Nam	Yok Don NP	Present	2007	Rawson <i>et al.</i> (2011)

* Yellow-cheeked gibbon estimates are groups not individuals.

TABLE 18Eastern black-crested gibbon (*Nomascus nasutus*) abundance estimates

Country	Site	Abundance class	Year	Source
Viet Nam	Cao Vit Gibbon Conservation Area, Trung Khanh	100–300	2011	Rawson <i>et al.</i> (2011)
Viet Nam	Kim Hy NR	Extirpated	2009	Rawson <i>et al.</i> (2011)
Viet Nam	Lung Ri	Extirpated	2009	Rawson <i>et al.</i> (2011)

Country	Site	Abundance class	Year	Source
Viet Nam	Than Sa-Phuong Hoang NR	Extirpated	2009	Rawson <i>et al.</i> (2011)
Viet Nam	Thanh Hen Lake	Extirpated	2009	Rawson <i>et al.</i> (2011)

TABLE 19

Northern buffed-cheeked gibbon (*Nomascus annamensis*) abundance estimates

Country	Site	Abundance class	Year	Source
Lao PDR	Bolaven Northeast	Present	1995	Duckworth (2008)
Lao PDR	Bolaven Southwest	Present	1995	Duckworth (2008)
Lao PDR	Dakchung plateau	Present	1994	Duckworth (2008)
Lao PDR	Dong Ampham NPA	Present	2007	Duckworth (2008)
Lao PDR	Dong Hua Sao NPA	Present	2008	Duckworth (2008)
Lao PDR	Dong Kapho production forest	Present	2005	Duckworth (2008)
Lao PDR	Dong Nathat conservation area	Present	pre-1990	Duckworth (2008)
Lao PDR	Dong Phou Vieng NPA	Present	2008	Duckworth (2008)
Lao PDR	Dong Sithouan production forest	Present	2005	Duckworth (2008)
Lao PDR	Laongam production forest	Present	2002	Duckworth (2008)
Lao PDR	Muang Kaleum	Present	2008	Duckworth (2008)
Lao PDR	Muang Lamam	Present	2008	Duckworth (2008)
Lao PDR	Muang Nong	Present	2007	Duckworth (2008)
Lao PDR	Muang Paksong	Present	2007	Duckworth (2008)
Lao PDR	Muang Pathoumphon	Present	2005	Duckworth (2008)
Lao PDR	Muang Samakhixai	Present	2007	Duckworth (2008)
Lao PDR	Muang Sanamxai	Present	2007	Duckworth (2008)
Lao PDR	Muang Somoy	Present	2008	Duckworth (2008)
Lao PDR	Muang Taoy	Present	2007	Duckworth (2008)
Lao PDR	Nam Ghong Provincial Protected Area	Present	2007	Duckworth (2008)
Lao PDR	Phou Ahyon	Present	1996	Duckworth (2008)
Lao PDR	Phou Khathong proposed NPA	Present	2008	Duckworth (2008)

Country	Site	Abundance class	Year	Source
Lao PDR	Phou Talava production forest	Present	2005	Duckworth (2008)
Lao PDR	Phou Theung proposed NPA	Present	2006	Duckworth (2008)
Lao PDR	Phou Xiang Thong NPA	Present	2008	Duckworth (2008)
Lao PDR	Silivangveun production forest	Present	2002	Duckworth (2008)
Lao PDR	Thateng	Present	1989	Duckworth (2008)
Lao PDR	Xe Bang-Nouan NPA	Present	2008	Duckworth (2008)
Lao PDR	Xe Khampho proposed NPA	Present	1995	Duckworth (2008)
Lao PDR	Xe Kong Pine Forest	Present	1992	Duckworth (2008)
Lao PDR	Xe Pian NPA	Present	2008	Duckworth (2008)
Lao PDR	Xe Sap NPA	Present	2008	Duckworth (2008)
Lao PDR	Xonbuly Eld's Deer Sanctuary	?	2008	Duckworth (2008)
Viet Nam	A Luoi Watershed	<50	2008	Rawson <i>et al.</i> (2011)
Viet Nam	Ba Na-Nui Chua NR	Present	2006	Rawson <i>et al.</i> (2011)
Viet Nam	Ba Nam Commune, Ba To District	<50	2011	Rawson <i>et al.</i> (2011)
Viet Nam	Bach Ma NP	<50	2010	Rawson <i>et al.</i> (2011)
Viet Nam	Chu Mom Ray NP	<50	2007	Rawson <i>et al.</i> (2011)
Viet Nam	Dak Rong NR	50–100	2010	Rawson <i>et al.</i> (2011)
Viet Nam	Dakroong and Tam Lap SFEs	<50	2008	Rawson <i>et al.</i> (2011)
Viet Nam	Kon Cha Rang NR	<50	2010	Rawson <i>et al.</i> (2011)
Viet Nam	Kon Ka Kinh NP	<50	2010	Rawson <i>et al.</i> (2011)
Viet Nam	Kon Plong SFE	<50	2009	Rawson <i>et al.</i> (2011)
Viet Nam	Nam Dong Watershed Forest	<50	2007	Rawson <i>et al.</i> (2011)
Viet Nam	Ngoc Linh NR	Present	2006	Rawson <i>et al.</i> (2011)
Viet Nam	Ngoc Linh PNR	<50	2005	Rawson <i>et al.</i> (2011)
Viet Nam	Phong Dien NR	<50	2010	Rawson <i>et al.</i> (2011)
Viet Nam	Quang Nam Saola NR	?	2005	Rawson <i>et al.</i> (2011)
Viet Nam	Que Son Proposed SHCA	Present	2009	Rawson <i>et al.</i> (2011)
Viet Nam	Song Thanh NR	<50	2004	Rawson <i>et al.</i> (2011)
Viet Nam	Thua Thien Hue Saola NR	<50	2010	Rawson <i>et al.</i> (2011)

TABLE 20**Southern white-cheeked gibbon (*Nomascus siki*) abundance estimates***

Country	Site	Abundance class	Year	Source
Lao PDR	Dong Phousoi production forest	Present	2005	Duckworth (2008)
Lao PDR	Hin Namno NPA	Present	2008	Duckworth (2008)
Lao PDR	Muang Boulapha	Present	1998	Duckworth (2008)
Lao PDR	Nakai plateau	Present	2008	Duckworth (2008)
Lao PDR	Nakai-Nam Theun NPA	Present	2008	Duckworth (2008)
Lao PDR	Nam Kading NPA	Present	2010	Thinh <i>et al.</i> (2010)
Lao PDR	Nam Theun Corridor	Present	2004	Duckworth (2008)
Lao PDR	Nam Theun Extension	Present	2007	Duckworth (2008)
Lao PDR	Nongkapat production forest	Present	2005	Duckworth (2008)
Lao PDR	Phou Hinpoun	Present	2008	Duckworth (2008)
Lao PDR	Xe Bang Fai headwaters	Present	1998	Duckworth (2008)
Viet Nam	Bac Huong Hoa NR	<50	2009	Rawson <i>et al.</i> (2011)
Viet Nam	Giang Man PNR	<50	2004	Rawson <i>et al.</i> (2011)
Viet Nam	Khe Giua SFE	<50	2006	Rawson <i>et al.</i> (2011)
Viet Nam	Khe Net PNR	Extirpated	2010	Rawson <i>et al.</i> (2011)
Viet Nam	Phong Nha - Ke Bang NP	50–100	2009	Rawson <i>et al.</i> (2011)
Viet Nam	Truong Son SFE	<50	2009	Rawson <i>et al.</i> (2011)

*Southern white-cheeked gibbon estimates are numbers of groups not individuals.

TABLE 21**Black-crested gibbon (*Nomascus concolor*) abundance estimates***

Country	Site	Abundance class	Year	Source
Lao PDR	Houay Nam Loi	Present	1991	Duckworth (2008)
Lao PDR	Louang-Namtha	Present	2006	Duckworth (2008)
Lao PDR	Nam Ha NPA	Present	2007	Duckworth (2008)
Lao PDR	Nam Kan NPA	Present	2008	Duckworth (2008)
Lao PDR	Nam Kong Provincial Protected Area	Present	1997	Duckworth (2008)
Viet Nam	Hoang Lien-Van Ban NR	<50	2009	Rawson <i>et al.</i> (2011)
Viet Nam	Hoang Lien NR and vicinity	?	2009	Rawson <i>et al.</i> (2011)

Country	Site	Abundance class	Year	Source
Viet Nam	Mu Cang Chai SHCA	<50	2010	Rawson <i>et al.</i> (2011)
Viet Nam	Muong La Watershed Protection Forest	<50	2010	Rawson <i>et al.</i> (2011)
Viet Nam	Pan Village, Muong Do Commune, Phu Yen District	Extirpated	2005	Rawson <i>et al.</i> (2011)
Viet Nam	Tram Tau	Extirpated	2005	Rawson <i>et al.</i> (2011)
Viet Nam	Xuan Son NR	Extirpated	2005	Rawson <i>et al.</i> (2011)

*Black-crested gibbon estimates are numbers of groups not individuals.

TABLE 22

Northern white-cheeked gibbon (*Nomascus leucogenys*) abundance estimates*

Country	Site	Abundance class	Year	Source
Lao PDR	M. Feuang	Present	1999	Duckworth (2008)
Lao PDR	M. Kasi	Present	1999	Duckworth (2008)
Lao PDR	M. Met	Present	1999	Duckworth (2008)
Lao PDR	M. Vangviang	Present	1999	Duckworth (2008)
Lao PDR	Muang Bolikhan	Present	2006	Duckworth (2008)
Lao PDR	Muang Hinheup	Present	1999	Duckworth (2008)
Lao PDR	Muang Houamouang	Present	2006	Duckworth (2008)
Lao PDR	Muang Sangthong	Present	1996	Duckworth (2008)
Lao PDR	Muang Viangthong	Present	2008	Duckworth (2008)
Lao PDR	Muang Xanakham	Present	2003	Duckworth (2008)
Lao PDR	Muang Xiangkho	Present	2008	Duckworth (2008)
Lao PDR	Nam Et-Phou Louey NPA	Present	2008	Duckworth (2008)
Lao PDR	Nam Gniap catchment	Present	2008	Duckworth (2008)
Lao PDR	Nam Kading NPA	Present	2010	Thinh <i>et al.</i> (2011)
Lao PDR	Nam Xam NPA	Present	2000	Duckworth (2008)
Lao PDR	Northern Xiangkhouang	Present	2008	Duckworth (2008)
Lao PDR	Phou Dendin NPA	Present	2005	Duckworth (2008)
Lao PDR	Phou Khaokhoay NPA	Present	2007	Duckworth (2008)
Lao PDR	Phou Phanang NPA	Present	1983	Duckworth (2008)
Lao PDR	Southern Xiangkhouang	Present	1996	Duckworth (2008)
Viet Nam	Ben En NR	Extirpated	1998	Rawson <i>et al.</i> (2011)

Country	Site	Abundance class	Year	Source
Viet Nam	Hang Kia-Pa Co NR	Extirpated	2009	Rawson <i>et al.</i> (2011)
Viet Nam	Huong Son Forest	<50	2011	Rawson <i>et al.</i> (2011)
Viet Nam	Ke Go NR	<50	2010	Rawson <i>et al.</i> (2011)
Viet Nam	Khe Ve PNR	<50	2004	Rawson <i>et al.</i> (2011)
Viet Nam	Long Luong Commune	<50	2011	Rawson <i>et al.</i> (2011)
Viet Nam	Muong Nhe NR	<50	2010	Rawson <i>et al.</i> (2011)
Viet Nam	Ngoc Son-Ngo Luong	Extirpated	2007	Rawson <i>et al.</i> (2011)
Viet Nam	Pu Hoat NR	<50	2010	Rawson <i>et al.</i> (2011)
Viet Nam	Pu Hu NR	Extirpated	2003	Rawson <i>et al.</i> (2011)
Viet Nam	Pu Huong NR	<50	2009	Rawson <i>et al.</i> (2011)
Viet Nam	Pu Luong NR	Extirpated	2008	Rawson <i>et al.</i> (2011)
Viet Nam	Pu Mat NP	100–300	2011	Rawson <i>et al.</i> (2011)
Viet Nam	Sop Cop	<50	2011	Rawson <i>et al.</i> (2011)
Viet Nam	Thach Tuong Commune	?	post 2000s	Rawson <i>et al.</i> (2011)
Viet Nam	Vu Quang NR	<50	2011	Rawson <i>et al.</i> (2011)
Viet Nam	Xuan Lien NR	<50	2007	Rawson <i>et al.</i> (2011)
Viet Nam	Xuan Nha NR	Extirpated	2011	Rawson <i>et al.</i> (2011)

*Northern white-cheeked gibbon estimates are numbers of groups not individuals.

Acknowledgments

Principal authors: Neba Funwi-Gabga, Hjalmar S. Kuehl, Fiona G. Maisels, Susan M. Cheyne, Serge A. Wich and Elizabeth A. Williamson

Contributors: Genevieve Campbell, Andrew Dunn, Maryke Gray, Ilka Herbing, Jessica Junker, Bethan J. Morgan, Stuart Nixon, Emmanuelle Normand, Alex Piel, Lilian Pintea, Andrew Plumptre, Benjamin M. Rawson, Sebastian Regnaut, Gay Reinartz, Ian Singleton, Emma Stokes, and Suci Utami Atmoko

We gratefully acknowledge all organizations and individuals who have contributed data to the IUCN/SSC A.P.E.S. database, and from whose publications and survey reports some of the ape abundance estimates have been extracted.

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