

BEFORE THE SECRETARY OF COMMERCE

EMERGENCY PETITION TO LIST THE BLUE TREE MONITOR LIZARD (*Varanus macraei*) AS ENDANGERED UNDER THE ENDANGERED SPECIES ACT



Blue Tree Monitor
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CENTER FOR BIOLOGICAL DIVERSITY

April 15, 2022

Notice of Petition

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The Center is a non-profit, public interest environmental organization dedicated to the protection of native species and their habitats. The Center works through science, law, and creative media to secure a future for all species, great or small, hovering on the brink of extinction. The Center is supported by more than 1.7 million members and activists throughout the United States. The Center and its members are concerned with the conservation of endangered species and the effective implementation of the Endangered Species Act. The Center's International Program works to protect global biodiversity by using U.S. and international law to hold governments accountable for threatening imperiled species wherever they are found.

Submitted this 15th Day of April, 2022

Pursuant to Section 4(b) of the Endangered Species Act (ESA), 16 U.S.C. § 1533(b), Section 553(e) of the Administrative Procedure Act, 5 U.S.C. § 553(e), and 50 C.F.R. § 424.14(a), Petitioner, the Center for Biological Diversity, hereby Petitions the Secretary of the Interior and the U.S. Fish and Wildlife Service (FWS or the Service) to protect the blue tree monitor lizard (*Varanus macraei*) as an endangered species under the Endangered Species Act, 16 U.S.C. §§ 1531-1544.

We further petition the Service to use its emergency listing authority to protect the blue tree monitor lizard as soon as possible. Under ESA Section 1533(b)(7), a listing may “take effect immediately upon publication of the regulation in the Federal Register” prior to notice and comment, if the Service finds there is an “emergency posing a significant risk to the well-being” of the species. 16 U.S.C. § 1533(b)(7); 50 C.F.R. § 424.20. The Service must publish detailed reasons why such emergency regulation is necessary. *Id.* The regulation remains in effect for 240 days, and during that time, the Service is to conduct notice and comment rulemaking procedures. *Id.*

As described in this petition, the blue tree monitor lizard is an island endemic species with a small population and limited range, making it particularly susceptible to the threats it faces. Most notably, the species is threatened by overexploitation for the wildlife trade where one individual is worth an average of US \$736. Almost all trade is sourced from the wild and the United States is the top importer globally. The blue tree monitor lizard was assessed as Endangered by the International Union for Conservation of Nature in 2017, less than 20 years after it was first described by science. Experts have stated that the conservation status of the blue tree monitor lizard is “of severe concern.” Given the species’ decline, its limited range, and its vulnerability to and high demand in the pet trade, there is a significant, immediate risk to species’ survival, and the blue tree monitor lizard warrants emergency listing authority under the ESA. 16 U.S.C. § 1533(b)(7).

This Petition presents substantial scientific and commercial information indicating that the blue tree monitor lizard is in danger of extinction throughout all of its range. *See* 50 C.F.R. § 424.14(h)(1)(i) (“substantial scientific or commercial information” refers to credible scientific or commercial information in support of the Petition’s claims such that a reasonable person conducting an impartial scientific review would conclude that the action proposed in the Petition may be warranted). Therefore, the Secretary of the Interior, through the Service, must make an initial finding “that the petitioned action may be warranted” within 90 days of receiving this Petition and make a subsequent finding that listing is warranted within 12 months of receiving this Petition. 16 U.S.C. §1533(b)(3)(A), (B).

The best available information indicates that the blue tree monitor lizard is rare throughout its range and likely extirpated from at least one islet following decades of overexploitation for the pet trade. The Service has a duty to protect the blue tree monitor lizard by listing the species as endangered under the Endangered Species Act, which would meaningfully contribute to conservation of the blue tree monitor lizard by strictly regulating the import, export, and

interstate commerce of the species. *See* 16 U.S.C. § 1538(a)(1) (prohibiting the import, transport, and sale of endangered species).

Respectfully submitted,

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Executive Summary

The blue tree monitor lizard, *Varanus macraei*, is endemic to one small island, Batanta, and surrounding islets in the Raja Ampat Archipelago off the island of New Guinea in Indonesia's Papua province. The species inhabits the islands' lowland rainforests where it can be found climbing through the forest canopy. The blue tree monitor lizard is recognized by its mostly gray-to-black body with striking blue spots and markings along its head, body, and tail. The species has the smallest range of all 84 currently known varanids, extending over no more than 455 km², making it particularly vulnerable to anthropogenic threats.

The biggest threat to the blue tree monitor lizard is the international pet trade. The species' rarity in the wild and distinctive blue hue have made it particularly popular and expensive in the trade. For a species with such a small range, the blue tree monitor lizard has been traded at an alarming rate. The CITES trade database reports imports of 2,619 blue tree monitor lizards and exports of 5,329 blue tree monitor lizards between the first record in 2003 and 2020. Almost all the trade is sourced from the wild, with only an estimated 1 percent being captive-bred individuals. The United States is the biggest importer of the blue tree monitor lizard, importing more than the following top three importers combined, and is therefore the major driver of the trade.

Among pet trade species, the blue tree monitor lizard is particularly vulnerable to overexploitation. The species likely rarely visits the forest floor, but individuals may jump or fall to the forest floor when they are detected, making them easier to capture. Once captured, there is high mortality along the trade chain as they are kept in unhygienic conditions, often waiting weeks before being sold and then longer before they are exported to the United States. Once they reach their destination, varanids do not appear to reach their full lifespan in captivity in North America, thus likely leading to more pressure on the wild population. Moreover, as a small island endemic species, the blue tree monitor lizard has the potential to be exploited throughout most of its range if the trade continues.

In addition to being threatened by the trade, the rainforests that the blue tree monitor lizard depends on are at risk. Rainforests in Indonesia are increasingly threatened by deforestation and land conversion, and most lowland forests throughout Papua and West Papua, which includes Batanta, have been designated for logging and agriculture. Illegal logging has been observed on Batanta, including within the island's protected area.

Following decades of overexploitation for the pet trade and habitat loss, the blue tree monitor lizard is now rare in places where it was once commonly sighted and extirpated from an area where it was once collected for the trade. The International Union for Conservation of Nature (IUCN) assessed the species as Endangered in 2017, finding it is facing a very high risk of extinction in the wild. The scientific literature supports this assessment, with experts stating that the conservation status of the blue tree monitor lizard is "of severe concern."

Under the Endangered Species Act, the Service is required to list a species as "endangered" if it "is in danger of extinction throughout all or a significant portion of its range." 16 U.S.C. § 1532(6). There are five statutory listing factors that the Service must analyze for the species: (A) the present or threatened destruction, modification, or curtailment of its habitat or range; (B)

overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; and (E) other natural or manmade factors affecting its continued existence. *Id.* § 1533(a)(1). Based upon the following analysis of these factors, we petition the Service to list the blue tree monitor lizard as an endangered species under the Endangered Species Act.

I. Introduction

We are in the midst of a spiraling wildlife extinction crisis, and reptiles are declining globally (Gibbons et al., 2000 pp. 653-655). The International Union for Conservation of Nature (IUCN) has identified 433 Critically Endangered, 783 Endangered, and 623 Vulnerable reptile species. However, this assessment likely underestimates the actual number of imperiled reptiles (Gibbons et al., 2000 p. 653). Other papers suggest about 19 percent (range 15-36 percent) of reptiles are estimated to be threatened with extinction while another 7 percent (range 5-26 percent) are likely to become threatened if anthropogenic threats continue (Böhm et al., 2013 p. 20). An additional 21 percent have not been researched enough to make an assessment (Böhm et al., 2013 p. 20). Gibbons et al., (2000 p. 655) states that given the global declines in reptiles, if there is no intervention, species will continue to face declines, extirpations, and extinctions.

The blue tree monitor lizard (*Varanus macraei*) is an arboreal monitor lizard that is endemic to Batanta Island, Indonesia, and surrounding islets (Bennett, 2015 p. 50; Del Canto, 2013 p. 19). The species is expected to have the smallest distribution of any varanid lizard, as Batanta Island spans only about 455 km² (Shea et al., 2017 p.1). Although the blue tree monitor lizard is collected often for the pet trade, it has rarely been studied in the wild, and little is known about its natural history. This is a common trend among monitor lizards, particularly those found on the island of New Guinea and offshore islands (here specifically the arboreal species in the subgenus *Hapturosaurus*) and in the remote Pacific Island groups (Koch et al., 2013 p. 2).

The threats that the blue tree monitor lizard faces in the wild are exacerbated by its limited range and island endemism (Koch et al., 2013 pp. 27-28, 46). The leading threat to the species is the international pet trade, primarily to meet the demand of the U.S. market (Shea et al., 2017 p. 1). Habitat loss is also a major threat to the species, with much of its habitat designated for logging and agriculture (Mangubhai et al., 2012 p. 2292). Following decades of overexploitation and habitat loss, the available research indicates that the blue tree monitor lizard is rare throughout its range (Philipp and Philipp, 2007, as cited in Shea et al., 2017 p. 3).

The blue tree monitor lizard has been identified by researchers as one of the monitor lizards most likely to face extinction (Koch et al., 2013 pp. 27-28, 46). As the leading importer of the blue tree monitor lizard, the United States must intervene to protect the species from further extirpations and extinction by listing it as an endangered species under the Endangered Species Act.

II. Natural History

A. Taxonomy

The blue tree monitor lizard is an arboreal monitor lizard belonging to the family Varanidae. The closest living relatives of varanids are the Bornean earless monitor lizard (*Lanthanotus borneensis*) and the Chinese crocodile lizard (*Shinisaurus crocodilurus*), both assessed by IUCN as Endangered (Ast, 2001 p. 215; Hedges et al., 2009 p. 384; Vidal et al., 2012 p. 854).

The blue tree monitor lizard was first described in 2001 by Böhme & Jacobs from a specimen that was imported to the United States (Arida et al., 2021 p. 11). The species is most closely related to the green tree monitor (*Varanus prasinus*) and is considered part of the *V. prasinus* species complex (Pyron et al., 2013 p. 18). The blue tree monitor lizard is also called the blue speckled monitor lizard and is known locally as “Soa soa,” a name that is also used for other arboreal monitor lizards in the area (Del Canto, 2013 p. 19).

Table 1. Taxonomy of *Varanus macraei*.

Kingdom	<i>Animalia</i>
Phylum	<i>Chordata</i>
Class	<i>Reptilia</i>
Order	<i>Squamata</i>
Family	<i>Varanidae</i>
Subgenus	<i>Hapturosaurus</i>
Genus	<i>Varanus</i>
Species	<i>Macraei</i>

B. Description

Unlike the closely related *V. prasinus*, the blue tree monitor lizard is mostly gray to black with blue spots and markings along its head, body, and tail. The blue tree monitor lizard is also recognizable by its distinctive prehensile tail with a round cross section and alternating blue and black bands (Ziegler et al., 2007 p. 14, 24). The species’ dorsal pattern includes transversal rows of blue ocelli (Ziegler et al., 2007 p. 14). Its throat is light with fine dark blotches and its neck consists of smooth neck scales (Ziegler et al., 2007 p. 14, 24).

Based on available information, females may have a snout-vent length (SVL) between 27.5 cm and 39.5 cm, and a total length of 85-113 cm (Del Canto, 2014 p. 19; Ziegler et al., 2009 p. 123). For males, SVL may range from 29-34 cm while total length may be between 44.5-96 cm (Arida et al., 2021 p. 115; Ziegler et al., 2009 p. 123). It is likely that blue tree monitors may have SVLs and total lengths beyond these parameters as there is very little limited information about the size of the species in the literature (Table 2). Sexual dimorphism has been observed in the blue tree monitor lizard with differences in head size and tail base swelling (Ziegler et al., 2009 p. 127).

Table 2. Sizes of captive blue tree monitor lizard adults sourced from the wild that have been recorded in the scientific literature.

Year Collected	Male/Female	Snout-Vent Length (SVL) (cm)	Total Length (cm)	Citation
2004	F	30	92	Ziegler et al., 2009 p. 123
2004	F	27.5	85	Ziegler et al., 2009 p. 123
2007	F	28	113	Del Canto, 2013 p. 19
2009	F	27.5	85	Ziegler et al., 2009 p. 123
2019	F	31	89.5	Arida et al., 2021 p. 115
2019	F	29	87	Arida et al., 2021 p. 115
2019	F	39.5	88	Arida et al., 2021 p. 115
2009	M	29	93	Ziegler et al., 2009 p. 123
2019	M	31	44.5	Arida et al., 2021 p. 115
2019	M	32	93.2	Arida et al., 2021 p. 115
2019	M	34	96	Arida et al., 2021 p. 115



“Blue Tree Monitor” by Sibylle Stofer, CC BY-NC-SA 2.0

C. Life Cycle

Little is known about the life cycle of blue tree monitor lizards in the wild, but some information is available about the species’ life cycle in captivity. Sexual maturity appears to be reached around age two (Ziegler et al., 2009 p. 131). Ziegler et al. (2009 pp. 124, 130) found that most

copulations occurred from November until May and that the time between copulation and egg deposition for may range from 25 to 35 days. Most clutches were deposited from October to March, which is aligned with a period of reduced rainfall in the native habitat of blue tree monitor lizards (Ziegler et al. 2009 p. 130). Clutch sizes may range from 2-7 eggs (Ziegler et al., 2009 p. 130). Dizygotic twinning has been observed in captive-bred blue tree monitor lizards, though none of the embryos in the clutch survived (Mendyk, 2007 p. 26).

D. Behavior

Arboreal monitor lizards such as the blue tree monitor lizard likely rarely visit the forest floor (Koch et al., 2013 p. 1). In 2007, one blue tree monitor lizard was observed climbing through the forest canopy around 1100 h in a section of dense forest with steep slopes that was 124 m above sea level (Del Canto, 2013 p. 19). The individual fled, moving from tree to tree when it was spotted (Del Canto, 2013 p. 19). The species has been known to jump or fall to the forest floor when detected, making them easier to capture (Del Canto, 2013 p. 19).

The blue tree monitor lizard is diurnal (Philipp and Philipp, 2007, as cited in Shea et al., 2017 p. 3). Villagers in Mandui, Batanta reported that the blue tree monitor lizard is active starting around 0900 to 1000 h and retires by 1300 h as temperatures reach a daily high (Del Canto, 2013 p. 19). A guide and former collector found that blue tree monitor lizards are difficult to find in the afternoon and are rarely seen at elevations below 50 m along the coast (Del Canto 2013, p. 20).

Most species of monitor lizards are either carnivores or scavengers (Koch et al., 2013 p. 1). Grasshoppers (Orthoptera) are expected to be the primary food source for the blue tree monitor lizard (Del Canto 2013, p. 20). Del Canto (2013, p. 20) reported that grasshoppers were abundant and commonly seen in the forests around Mandui, Batanta. In captivity, blue tree monitor lizards have been known to eat live insects, primarily, as well as dead baby mice, chopped up chicken, and fish (Thomas et al., 2019 p. 41; Ziegler et al., 2009 p. 124).

E. Habitat

The blue tree monitor lizard inhabits the lowland rainforests of Batanta Island, West Papua Province, Indonesia (Del Canto, 2019 p. 19; S.J. Richards pers. comm. 2015, as cited in Shea et al., 2017 p. 4). Batanta has many areas with steep slopes, with the highest point on the island being 1,184 m (Del Canto, 2013 p. 18; Pócs and Kovács, 2019, p. 5). There are many water sources throughout the island including bogs, swamps, and open lakes (Pócs and Kovács, 2019, p. 5).

The region experiences high precipitation, with a period of reduced rainfall from October to March (McKenna et al., 2002 p. 18; Pócs and Kovács, 2019, p. 5; Ziegler et al., 2009 p. 130). The period with the highest rainfall is typically between April and September, with June and July being the wettest months (McKenna et al., 2012 p. 18). Rainfall averages about 27 cm per month during the wet season and 17 cm per month during the dry season (McKenna et al., 2012 p. 18).

In 2007, Del Canto (2013 pp. 18-19) found that over a four-day period the lowest temperature recorded at Mandui village on the north shore of Batanta was 22° C, while the highest temperature recorded in the shade at 124 m was 37° C.

III. Distribution

A. Historic Distribution

The blue tree monitor lizard appears to be endemic to one small island in West Papua Province, Batanta Island, as well as some nearby offshore islets (Bennett, 2015 p. 50). This limited range amounts to about 430-455 km² (Bennett, 2015 p. 50; Shea et al., 2017 p. 1). Batanta Island is part of the Raja Ampat Archipelago.

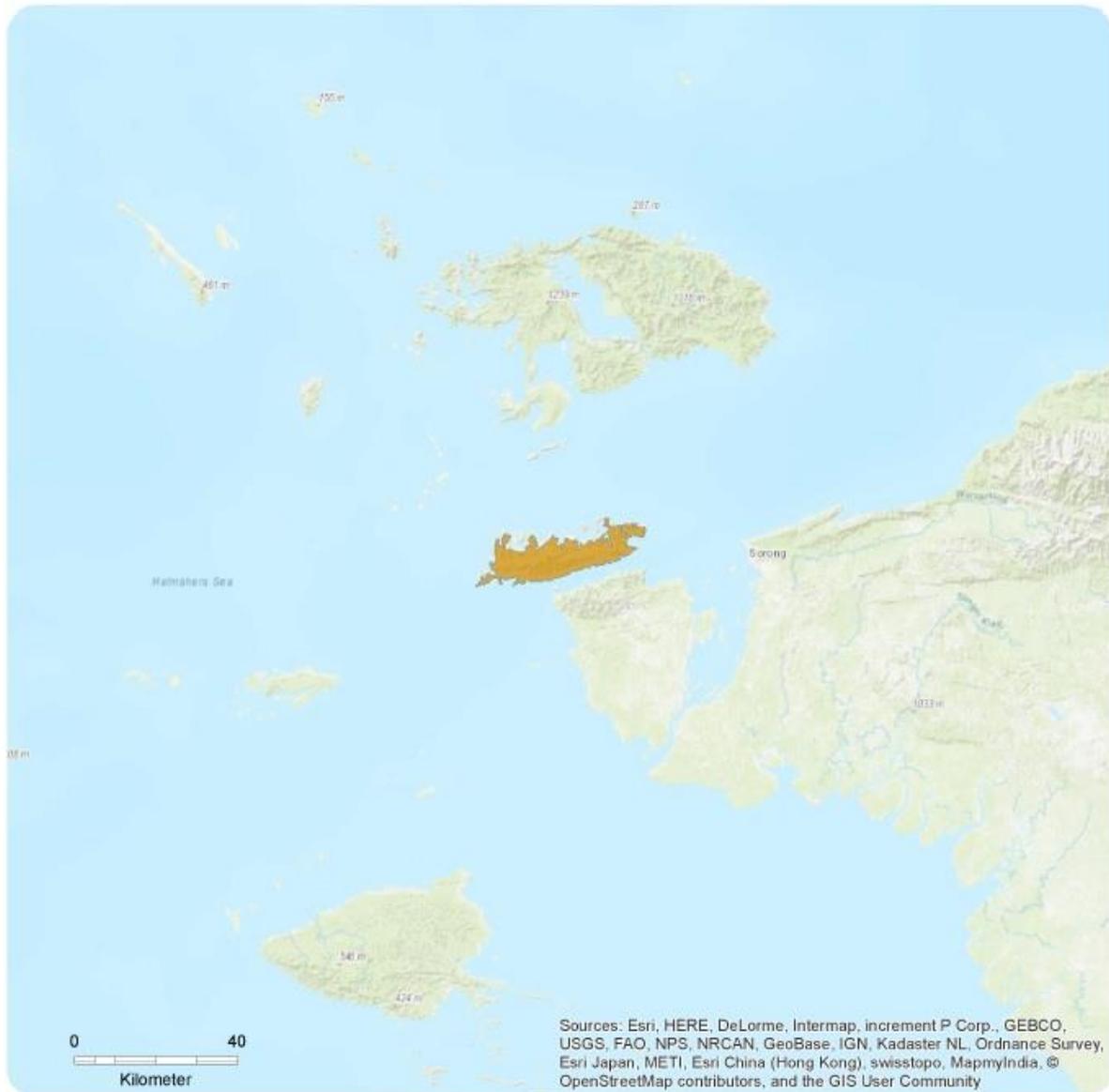


Figure 1. Range of the blue tree monitor lizard on Batanta Island, West Papua Province, Indonesia. Extracted from Shea et al. (2017 p. 2).

B. Current Distribution

More research is needed to determine the current distribution of the blue tree monitor lizard, but the best available information indicates that the species is rare throughout its range (Philipp and Philipp, 2007, as cited in Shea et al., 2017 p. 3). Arida et al. (2021 p. 113) interviewed hunters on Batanta Island who reported that fewer blue tree monitor lizards were found during a recent, week-long hunting session than historically. The hunters could find blue tree monitor lizards in

the vicinity of their homes in the early 1990s when hunting first began (Arida et al. (2021 p. 116). By 2007, blue tree monitor lizards were difficult to find near hunters' homes. Del Canto (2013 p. 19) spent three days searching areas around Mandui village, Batanta in 2007 with a former collector as a guide and found one blue tree monitor lizard 4 km east of Mandui.

As the blue tree monitor lizard began to disappear in the vicinity of hunters' homes, the hunt moved to the small offshore island of Pulau Ayem which is located off the southeast coast of Batanta (Arida et al., 2021 p. 114; Reisinger, 2014, as cited in Shea et al., 2017 p. 1). In 2000, blue tree monitor lizards were reported on Pulau Ayem, but the density of the species was very low (Reisinger, 2014, as cited in Shea et al., 2017 p. 1). Seven years later, there were no blue tree monitor lizards observed during one day of searching on Pulau Ayem where local animal collectors said the species occurs (Del Canto, 2013 p. 19). The guide reported that this population had been nearly extirpated due to heavy collection for the pet trade (Del Canto, 2013 p. 19).

Hunters have now moved to other parts of Batanta which they travel to by boat (Arida et al., 2021 p. 114). In 2019, hunters reported that under perfect weather conditions they expect to catch 20 lizards in a week-long hunting trip (Arida et al., 2021 p. 114). Given the species decline and near extirpation in areas where the population has been overexploited for the trade, it is likely that populations of blue tree monitor lizards are rapidly declining in the new hunting areas.

IV. Conservation Status and Warranted Endangered Species Act Protection

The Endangered Species Act (ESA) is a “comprehensive scheme with the ‘broad purpose’ of protecting endangered and threatened species.” *Ctr. for Biological Diversity v. U.S. Bureau of Land Mgmt.*, 698 F.3d 1101, 1106 (9th Cir. 2012) (quoting *Babbitt v. Sweet Home*, 515 U.S. 687, 698 (1995)). Congress’ plain intent in enacting the ESA was “to halt and reverse the trend toward species extinction” *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 184 (1978). In doing so, the ESA requires that “all Federal departments and agencies shall seek to conserve endangered species and threatened species and shall utilize their authorities in furtherance of [these] purposes.” 16 U.S.C. § 1531(c)(1). Endangered and threatened species are “afforded the highest of priorities” *Tenn. Valley Auth.*, 437 U.S. at 174. Endangered species are species that are “in danger of extinction throughout all or a significant portion of its range,” and threatened species and species that are “likely to become endangered species within the foreseeable future” throughout all or a significant portion of range and are listed for protection pursuant to section 4 of the ESA 16 U.S.C. §§ 1532(6), (20), 1533. As demonstrated by the best available science on the species, the blue tree monitor lizard meets the definition of endangered.

Several leading experts have assessed the blue tree monitor lizard as a species that is at risk of extinction. The species is listed as Endangered on the International Union for Conservation of Nature (IUCN) Red List (Shea et al., 2017). It is also listed under Appendix II of CITES, which is reserved for species that may become threatened with extinction without controls on trade. Koch et al. (2013 p. 47) identified the blue tree monitor lizard as one of five monitor lizard species whose conservation status appears to be “of severe concern.” Additionally, the blue tree monitor lizard is an island endemic species with a restricted range, making it particularly

susceptible to overexploitation for the wildlife trade, habitat degradation and loss, and the other threats discussed herein.

V. Current Threats

Under the ESA, the Service is required to list a species as “endangered” if it “is in danger of extinction throughout all or a significant portion of its range” or as “threatened” if it “is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range” based upon one or more threats or factors. 16 U.S.C. § 1532(6), (20). There are five statutory listing factors that the Service must analyze for the species: (A) the present or threatened destruction, modification, or curtailment of its habitat or range; (B) overutilization for commercial, recreational, scientific, or educational purposes; (C) disease or predation; (D) the inadequacy of existing regulatory mechanisms; and (E) other natural or manmade factors affecting its continued existence. *Id.* § 1533(a)(1). Based upon an analysis of these factors, the blue tree monitor lizard should be protected as an endangered species under the ESA.

A. The Present or Threatened Destruction, Modification, or Curtailment of its Habitat or Range

Habitat degradation and loss is one of the leading threats to the blue tree monitor lizard, as the forested areas that the species depends on are increasingly threatened by deforestation and land conversion (McKenna et al., 2002 p. 77; Shea et al., 2017 p. 1). Globally, a total of 2.3 million km² were lost from 2000 to 2012 (Hansen et al., 2013 p. 850). Indonesia has experienced the highest deforestation rate in the world (Newman and Valentinus, 2005 p. 1). From 2000 to 2012, the country is estimated to have lost 157,850 km² of tree cover (Hansen et al., 2013 supplementary text, Table S1). Most lowland forests throughout Papua and West Papua have been designated for logging and agriculture (Mangubhai et al., 2012 p. 2292). Additionally, the Indonesian government is expected to establish an additional 5.6 million ha of oil palm plantations to supply the global demand for biofuel (GRM International, 2009 p. 12).

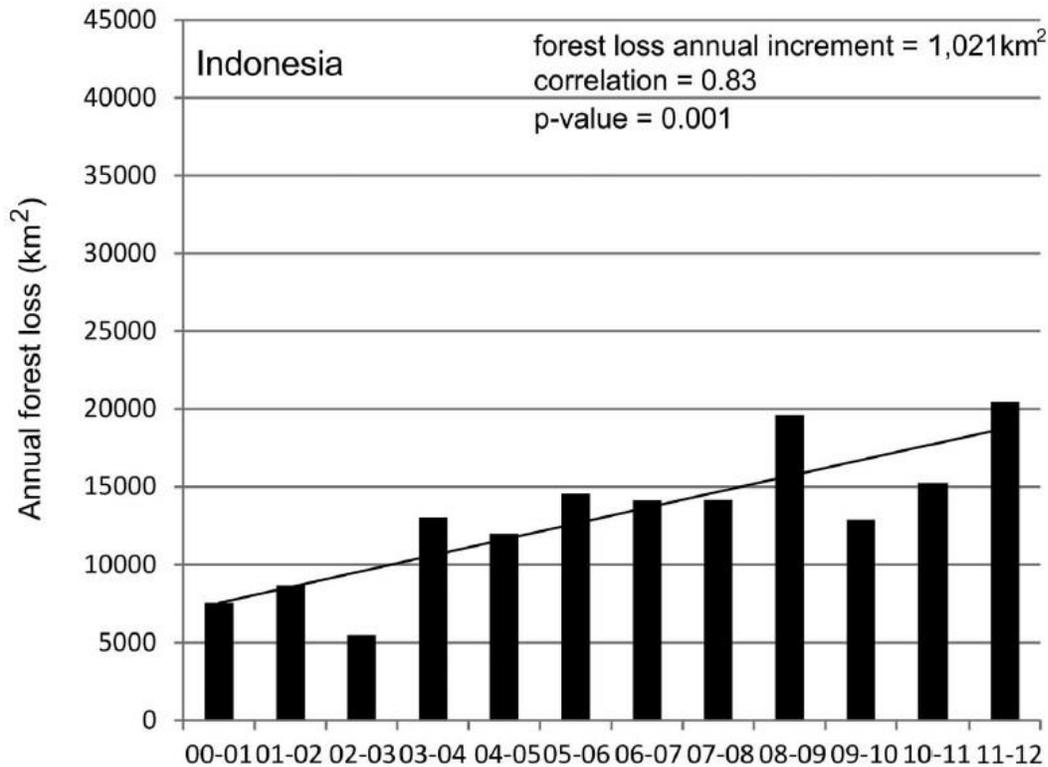


Figure 2. Annual forest loss totals and the forest loss trend in Indonesia from 2000 to 2012. Extracted from Hansen et al. (2013 p. 852).

High intensity logging has been reported on Batanta Island in Yenanas village (McKenna et al., 2002 p. 83). Furthermore, in October of 2002, investigators from the Environmental Investigation Agency (EIA) and Telapak found a logging site on Batanta Island within a protected area and an accompanying barge along the site waiting to load Merbau (*Instia spp.*) logs (Newman and Valentinus, 2005 p. 19). Five years later, in 2007, Del Canto (2013 p. 18) also found evidence of illegal logging, observing illegal logging vehicles in Mandui village, Batanta. In 2014, Batanta Island was determined to be the source of a major illegal timber operation that was financed and coordinated by an Indonesian police officer (Shetty, 2019 p. 23). At least 1,500 logs from Batanta were seized and linked to this operation (Shetty, 2019 p. 23).

From January 2015 to December 2021, Global Forest Watch reported more than 78 million high-confidence deforestation reports within Indonesia (Global Forest Watch, 2022 unpaginated). From 2001 to 2020, the Raja Ampat Archipelago lost 14.5 kha of tree cover and 11 kha of humid primary forest. Logging not only destroys monitor lizard habitat, but it also makes the ecosystem more susceptible to subsequent disasters including fires, landslides, and floods (Newman and Valentinus, 2005 p. 2). Global Forest Watch reported 34 high confidence fire alerts within Indonesia in January and February of 2022 (Global Forest Watch, 2022 unpaginated).

While the impact of habitat loss on the blue tree monitor lizard has not been documented, terrestrial reptiles are known to experience population declines from habitat alteration, and illegal logging has driven many species to the edge of extinction (Gibbons et al., 2000 p. 656; Newman and Valentinus, 2005 p. 2).

B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

1. Trade of Blue Tree Monitor Lizards

Overutilization for the international pet trade threatens the blue tree monitor lizard with extinction. Arboreal monitor lizards have been hunted for the global wildlife trade for at least 30 years (Arida et al., 2021 p. 112). Like many of these monitor lizards, the blue tree monitor lizard was in trade before it was described by science (Arida et al., 2021 p. 112). Blue tree monitor lizards are primarily sought after for the international pet trade (Shea et al., 2017 p. 3), though there is also a demand for monitor lizards for other purposes including using their skins to make handbags and wallets (Auliya, 2006; Gannon, 2013 unpaginated.), human consumption, and traditional medicine (Baird, 1993, as cited in Koch et al., 2013 p. 3; Klemens and Thorbjarnarson, 1995 p. 292). The blue tree monitor lizard's limited population and striking blue color garners a high value in the wildlife trade, with an average retail price of US \$736 per animal (range US \$475-2499) (Bennett, 2015 p. 51; Appendix I). Today, harvest for the trade is the biggest threat to the species' existence (Shea et al., 2017 p. 1).

The CITES Trade Database shows levels of trade have remained consistent over time (Figure 3; Appendix II). The CITES trade database reports imports of 2,619 blue tree monitor lizards and reported exports of 5,329 blue tree monitor lizards between the first record in 2003 and 2020. An average of 146 imports of blue tree monitor lizards have been reported annually, while reported exports average about 296 animals per year. All but three reported trade incidents of blue tree monitor lizards were of live animals, and more than 97 percent of the trade reported was for commercial purposes. To supply the trade, it is estimated that the species is harvested from the wild at a rate of 3.6-6.6 individuals per km² throughout its range (Bennett, 2015 p. 56).

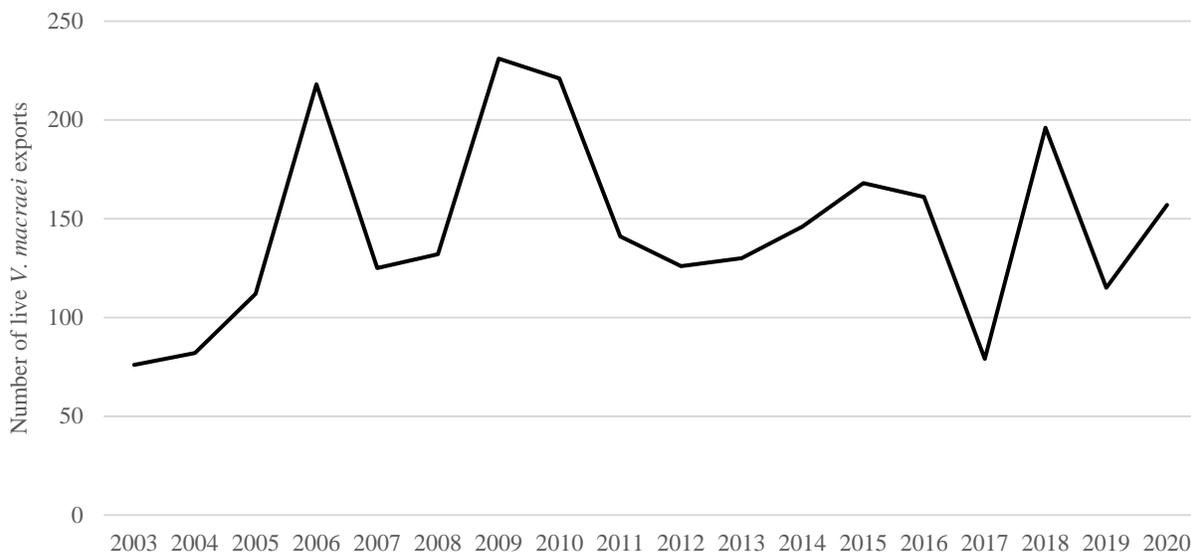


Figure 3. The total number of blue tree monitor lizards in trade, reported by exporting nations in the CITES Trade Database.

The U.S. is the top importer of blue tree monitor lizards according to the CITES trade database, followed by Japan and France (Figure 4). The United States reported imports of 1,119 blue tree monitor lizards from 2003-2020, which is more than the following three top importers combined. U.S. imports have been consistent over time, averaging about 62 individuals per year (Figure 5). Trade of blue tree monitor lizards was reported by 34 different import countries and territories and 12 different export nations.

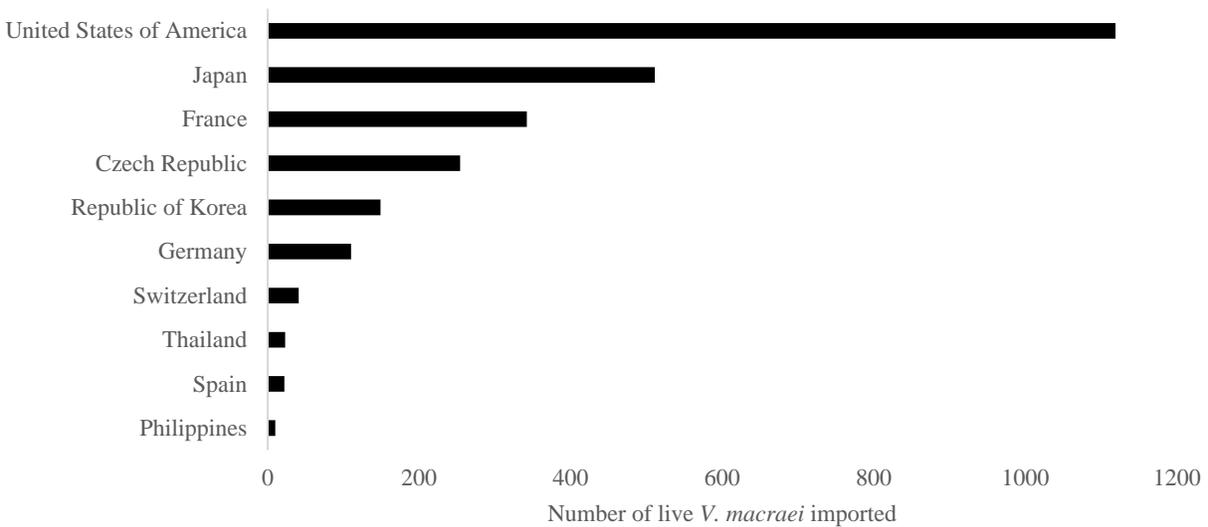


Figure 4. The total number of blue tree monitor lizard imports in the top ten import countries, reported by importers in the CITES Trade Database from 2003 to 2020.

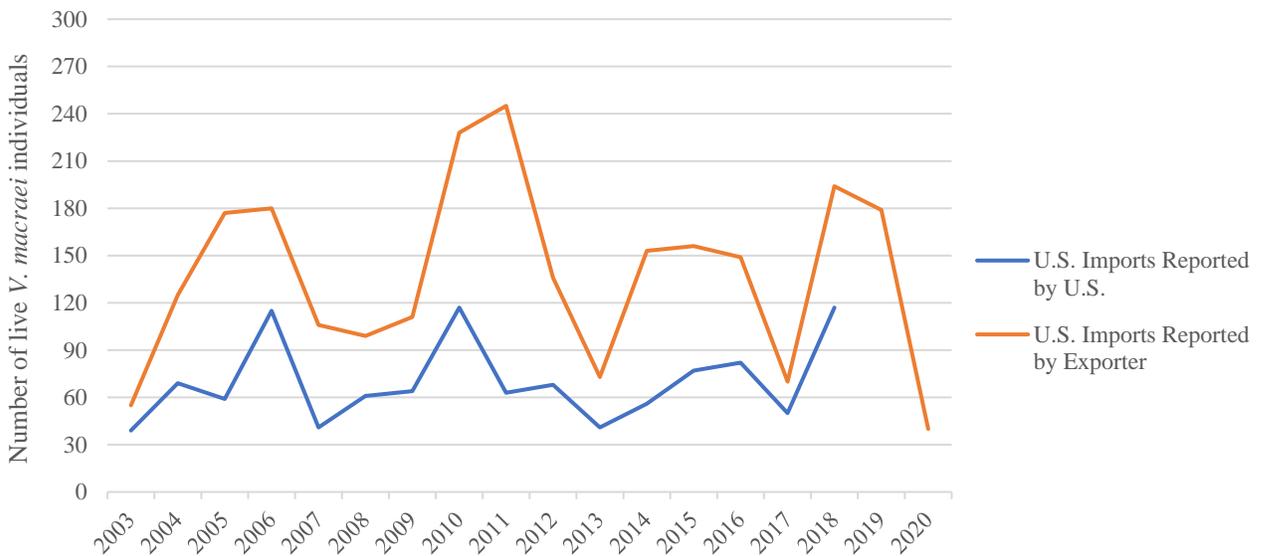


Figure 5. The number of blue tree monitor lizard imports to the United States reported by the United States (blue) and by export nations (orange) according to the CITES Trade Database.

Indonesia is the biggest exporter of the blue tree monitor lizard, exporting more than 97 percent of the animals in trade from 2003-2020. This amounts to a staggering 5,175 individuals exported. Trade of the species from Indonesia is valued at about US \$1.15-2.01 million per year (Bennett, 2015 p. 56). Indonesia reports that none of its exports are wild-sourced: 76 percent of all exports from Indonesia in the CITES Trade Database were labelled as animals born in captivity that do not fulfill the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), while 24 percent were listed as being bred in captivity in accordance with Resolution Conf. 10.16 (Rev.) of the Convention. However, as discussed below, most of the trade is likely sourced from the wild population.

a) Impact of Trade on the Wild Population

Among species in the pet trade, monitor lizards are particularly vulnerable to overexploitation (Mendyk, 2013 p. 9). First, the number taken from the wild is likely to be much higher than reported in trade due to high mortality along the trade chain. Data from the Forestry Office of Papua Province in 1998 showed that 35 percent of reptiles captured from the wild were traded (Marshall and Beehler, 2007, as cited in Koch et al., 2013 p. 48). This aligns with Natusch and Lyons (2012 p. 2902) who witnessed large numbers of monitor lizards that could not be exported from Indonesia as a result of injury and death. This is likely due to unsuitable living conditions along the trade chain. Hunters on Batanta Island keep blue tree monitor lizards in their homes for about two weeks before they are sold (Arida et al., 2021 p. 115), and Koch et al. (2013 pp. 4, 48) stated that the conditions that monitor lizards are kept in are often unsuitable and unhygienic.

Along with high mortality rates in the trade chain, monitor lizards seem to have high mortality rates once they reach their destination and are kept as captive animals. A 2014 study found that varanids have not been reaching their full lifespan in North American zoos (Mendyk, 2015 p. 10). Close to 10 percent of wild-caught varanids died within the first 90 days of captivity, increasing to 17 percent by the first year, and 26.4 percent by year two (Mendyk, 2015 p. 3). This trend may be exacerbated for the blue tree monitor lizard, as the species may be less likely to live as long as larger monitor lizards in captivity because there is a positive correlation between monitor lizard body size and lifespan in captivity (Mendyk 2015 p. 9). Additionally, members of the *V. prasinus* group of monitor lizards, including the blue tree monitor lizard, are susceptible to chronic dehydration when taken out of their humid, tropical lowland habitat and require particular care (Mendyk et al., 2015 pp. 8-10; Ziegler et al., 2009 pp. 123-124).

In addition to monitor lizards generally being particularly vulnerable to overexploitation and trade, the blue tree monitor lizard has several characteristics that likely make it more vulnerable than some other monitor lizard species. With its limited range as a small island endemic, blue tree monitor lizards may have the potential to be exploited throughout most of their range. Additionally, key members of the wild population, including young blue tree monitor lizards and reproducing females, may be more highly targeted for trade. Newly hatched blue tree monitor lizards are worth the most money to hunters, particularly if the umbilical cord is still attached, and female blue tree monitor lizards are worth more money than males (Arida et al., 2021 p. 114). During a four-day trip to Mandui village, Batanta, Del Canto (2013 p. 19) reported collection of a gravid female by locals.

High demand for the blue tree monitor lizard and the species' unsuitability for trade has likely led to declines and local extirpations. As mentioned previously, hunters could once capture blue tree monitor lizards in their own garden (Arida et al., 2021 pp. 116). Now they must travel by boat to other parts of Batanta where the species has not yet been exploited to the point that it is undetectable (Arida et al., 2021 p. 114). Hunters also mentioned that fewer blue tree monitor lizards are found now during a week-long hunting session than historically (Arida et al. 2021 p. 113), a clear indication that the current levels of exploitation and trade are causing population-level impacts and are not sustainable.

b) Trade Remains Sourced from the Wild

As noted above, almost all of the trade in blue tree monitor lizards documented in the CITES Trade Database is reported as captive-bred. Blue tree monitor lizards have been successfully bred in captivity, with the first successful breeding in a zoo occurring in 2007 using a wild-caught pair (Ziegler et al., 2009 pp. 124-125). However, according to the literature, most captive-bred individuals in trade come from the F1 generation, meaning that the parents were sourced from the wild (Bennett, 2015 p. 56). Evidence of F2 or subsequent generations is limited (Bennett, 2015 p. 56). Bennett (2015 p. 56) noted particularly that "evidence of captive breeding exists only for animals maintained in Europe and North America, and reports of captive-bred, ranched or 'farmed' animals from Indonesia remain unsubstantiated." Bennett (2015 p. 56) concluded "it is likely that all animals originating from Indonesia are harvested from the wild and declared sources [from captive-breeding facilities] are inaccurate."

Blue tree monitor lizards exported from Indonesia may be sourced from the wild but labeled as captive-bred, a trend that has been observed in several reptile species exported from Indonesia (Lyons and Natusch, 2011 pp. 3-4, Natusch and Lyons, 2012 p. 2902; Sy & Lorenzo, 2020 pp. 40-41). In a 2011 study, Lyons and Natusch (2011, p. 6) confirmed that most green pythons exported annually from Indonesia as captive-bred are wild caught. Natusch and Lyons (2012 p. 2906) found that many protected species of amphibians and reptiles are laundered, with traders stating that collected wildlife was being sent to licensed captive breeding facilities where they would then be exported as captive-bred or sold to domestic pet shops (Natusch and Lyons, 2012 p. 2902).

Laundering and other illegal activities are common along the trade chain in Indonesia. Natusch and Lyons (2012 p. 2905) stated that despite Indonesia having restrictions and guidelines in place to regulate the wildlife trade, "few actors abide by these laws." Another study found that 92 percent of green python traders who were interviewed said that they could "easily circumvent laws and regulations by paying off officials" (Lyons and Natusch, 2011 p. 3), which is a common method for trading protected species and species without harvest quotas in Indonesia (Natusch and Lyons, 2012 p. 2902).

All blue tree monitor lizards exported from Indonesia in the CITES Trade Database are listed as having been born in captivity (76 percent) or bred in captivity (24 percent). Despite this, there is no substantial evidence of successful captive breeding operations in Indonesia (Koch et al., 2013 p. 27). A survey of registered reptile breeding farms in Indonesia was unable to identify any successful farming and captive breeding of the species and found that some facilities only had

wild stock (Auliya, 2009, as cited in Koch et al., 2013 pp. 27-28). Furthermore, many registered reptile captive breeding facilities in Indonesia appear unsuitable for captive breeding and are rarely used for this purpose (Nijman and Shepherd, 2009 p. 7). Additionally, staff at captive breeding facilities often lack the knowledge to breed reptiles (Nijman and Shepherd, 2009 p. 7). Given the lack of successful captive breeding operations, pressure to supply the trade likely remains on the wild population of blue tree monitor lizards. Bennett (2015 p. 50) found that almost all trade is sourced from the wild population on Batanta Island, estimating that captive-bred individuals represent less than 1 percent of the global trade.

c) Illegal Trade is an Ongoing Threat to the Blue Tree Monitor Lizard

In addition to laundering wild-caught individuals by labeling them as captive-bred as suggested by Bennett (2015) and others, there are several documented cases of smuggling of blue tree monitor lizards. There are 14 live blue tree monitor lizards in the CITES trade database that were confiscated, including recent reports of seven confiscated individuals from 2019-2020. In 2019, additional blue tree monitor lizards were confiscated from smugglers traveling from Malaysia to India (Biawak 13.2 p. 78). This incident is not included in the CITES trade database. In 2017, two blue tree monitors were confiscated from smugglers traveling to Hong Kong (Robin Des Bois, 2017 p. 22). In 2004, a subadult pair of blue tree monitor lizards sent from Jakarta were confiscated at Prague airport (Ziegler et al., 2009 p. 123). This incident is also not included in the CITES trade database.

C. Disease

Little is known about the risk of disease to the wild population of blue tree monitor lizards, but varanids are known to carry and be susceptible to disease in captivity. Mendyk et al. (2013 p. 2) found that leading causes of death among captive varanids at the Bronx Zoo were infection-related, including bacterial infections and endoparasitism. Bacteria-related deaths resulted from bacterial sepsis, salpingitis, meningitis, enteritis, and pneumonia (Mendyk et al., 2013 p. 2). Neoplasia was another leading cause of death and was most common among wild-caught females (Mendyk et al., 2013 p. 3). While this study did not include blue tree monitor lizards specifically, it did include the species' closest relative, *V. prasinus*.

Another study of disease in 333 varanids, including 39 different species, found that varanids are susceptible to cardiac fibrosis, chronic renal disease, chronic hepatopathies, gout, hepatocellular lipidosis, metastatic mineralization, inanition, soft tissue sarcomas, squamous cell carcinoma, lymphoma, bacterial diseases, parasitic diseases, inflammatory diseases of unknown causes, and reproductive diseases such as yolk coelomitis, oophoritis, and follicular degeneration/rupture (Garner, 2008 p. 1). The study also identified *V. prasinus*, the closest relative of the blue tree monitor lizard, as exhibiting higher than average cases of sepsis (Garner, 2008 p. 1).

While not a direct threat to the wild population, disease in trade and captivity may increase mortality of blue tree monitor lizards, therefore requiring more capture of the species from the wild to reach the demand. As mentioned previously, the conditions in which monitor lizards are

kept in the trade are unsanitary (Koch et al. 2013 pp. 4, 48), providing the potential for increased disease transmission.

D. Other Natural or Manmade Factors

1. Climate Change

While comprehensive research on the effects of climate change on blue tree monitor lizards is lacking, it is likely to be a threat to the species' existence. Reptiles are likely more susceptible to climate change than other taxa due to their limited ability to disperse to new habitats and reliance on ambient temperature to regulate body temperature (Root and Schneider, 2002 pp. 20-21). This is particularly true for the blue tree monitor lizard as an island endemic with a range limited to 430-455 km². Temperature increases, precipitation changes, and increases in natural disasters are expected within the range of the blue tree monitor lizard during this century (Christensen et al., 2007 p. 879; Measey, 2010 p. 38). Any of these changes has the potential to impact the blue tree monitor lizard throughout the entirety of its range.

Global surface temperature is projected to continue increasing until at least mid-century under all IPCC *Climate Change 2021* report scenarios (IPCC 2021). In Southeast Asia there is an expected median warming of 2.5°C by the end of the 21st century (Christensen et al., 2007 p. 883). As mentioned previously, blue tree monitor lizards rely on ambient temperature to regulate body temperature, making them particularly vulnerable to these changes.

In addition to changes in temperature, changes in precipitation are expected to occur within the range of the blue tree monitor lizard. Summer precipitation is expected to increase in South and Southeast Asia during this century and intense precipitation events are expected to occur more frequently (Christensen et al., 2007 p. 879). Changes in precipitation could have implications for the reproductive cycle of the blue tree monitor lizard, as Ziegler et al. (2009 p. 130) found that most clutches were deposited from October to March, which is aligned with a period of reduced rainfall in the native habitat of the blue tree monitor lizard. However, research is needed to determine whether changes in precipitation impact clutch deposition.

Another potential impact on the blue tree monitor lizard resulting from climate change is loss of habitat due to sea level rise and increased natural disasters. Sea level rise of 1 m is expected to have a high impact on Papua, Indonesia, leading to land loss, including the loss of some protected areas (Legra et al., 2008 pp. 193-194). Additionally, an increase in the intensity and frequency of natural disasters poses a threat to the blue tree monitor lizard given the species' very limited range. Extreme rainfall and winds from tropical cyclones are expected to increase in South and Southeast Asia during this century (Christensen et al., 2007 p. 879).

E. The Inadequacy of Existing Regulatory Mechanisms

Existing Indonesian and global regulatory mechanisms are inadequate to protect the blue tree monitor lizard from the threats it faces. Demand for the international pet trade is the biggest threat to the blue tree monitor lizard, and existing regulatory mechanisms have not been sufficient in regulating the trade. As discussed below, despite regulatory measures that are in

place, blue tree monitor lizards have been and likely are harvested from the wild at an unsustainable rate. Additionally, there is a lack of enforcement of regulations throughout the trade chain in Indonesia. The United States is the largest importer of the blue tree monitor lizard and is currently complicit in the overexploitation of this endangered species. Endangered Species Act protections, including a ban on imports of blue tree monitor lizards to the United States, are necessary to protect this species from extinction given the inadequacy of the regulatory mechanisms discussed below.

1. Domestic Protections

Indonesian domestic law appears to offer wild blue tree monitor lizards some protection from take and trade; however, these laws lack enforcement and are therefore inadequate to protect the species from its threats, including trade and habitat destruction.

a. Government Regulation No. 7/1999 on Preserving Flora and Fauna Species

Government Regulation of the Republic of Indonesia No. 7/1999 on Preserving Flora and Fauna Species protects several of Indonesia's species recognizing that "flora and fauna are parts of invaluable natural resources" and "its conservation should be maintained through an effort of species preserving" (Natusch & Lyons, 2012 p. 2902).¹ According to the literature, species that are fully protected under this legislation cannot be taken from the wild or traded (Natusch & Lyons, 2012 p. 2902; Nijman et al., 2022 p. 4; Shepherd et al., 2020 p. 2). While there are exceptions, delivery or transportation of protected species "shall be conducted on the basis of Minister permit."²

However, the blue tree monitor lizard is not listed under Government Regulation of the Republic of Indonesia No. 7/1999 (Natusch & Lyons, 2012 p. 2903). In 2018, Indonesia amended the list of protected plants and animals through Regulation No. 20/2018.³ While six additional *Varanus* spp. were included in this list, the blue tree monitor lizard was not added. The blue tree monitor lizard remains unprotected and therefore is not adequately protected by these regulations.

b. Regulation of the Minister of Forestry No. 447/Kpts-11/2003

For species not protected under Regulation No. 7/1999 on Preserving Flora and Fauna Species, Regulation of the Minister of Forestry No. 447/Kpts-11/2003 Concerning Administration

¹ Government Regulation of the Republic of Indonesia No.7/1999 on Preserving Flora and Fauna Species. Available at:

http://www.flevin.com/id/lgso/translations/JICA%20Mirror/english/27.PP_NUMBER%207%20OF%201999.eng.html (Last visited April 8, 2022)

² Government Regulation of the Republic of Indonesia No.7/1999 on Preserving Flora and Fauna Species. Available at:

http://www.flevin.com/id/lgso/translations/JICA%20Mirror/english/27.PP_NUMBER%207%20OF%201999.eng.html (Last visited April 8, 2022)

³ Regulation of the Minister of Environment and Forestry Republic of Indonesia, UU Nomor P.20/MENLHK/SETJEN/KUM.1/6/2018. Available at:

http://ksdae.menlhk.go.id/assets/news/peraturan/P.20_Jenis_TSL_.pdf (last visited April 8, 2022).

Directive of Harvest or Capture and Distribution of the Specimens of Wild Plant and Animal Species requires hunters and traders to register with regional offices of the Indonesian natural resources conservation agency (BKSDA) (Natusch & Lyons, 2012 p. 2902). The Decree further requires that hunters and traders obtain permits for capturing, transporting, and selling wildlife within Indonesia (Natusch & Lyons, 2012 p. 2902) and request a harvest or capture quota (Nijman et al., 2022 p. 4) from the BKSDA.⁴ Non-protected species can only be traded once this quota has been issued (Nijman et al., 2022 p. 4); trade in species without a quota is illegal (*see* Nijman et al., 2022 p. 4; Latinne et al., 2020 p. 10). These quotas are typically reported to CITES (Shepherd, 2006 p. 16; Resolution Conf. 12.3 (Rev. CoP18) IX(17)) and are published on the CITES Export Quota website.⁵

We were unable to identify an Indonesian quota for the blue tree monitor lizard. Indonesia's 2020 official quotas list several varanids, but no quota for the blue tree monitor lizard is included.⁶ Similarly, while the CITES website lists quotas for several varanids, it does not list a quota for the blue tree monitor lizard. Accordingly, it appears to be illegal to capture and trade wild-sourced blue tree monitor lizards.

While there is legislation in place in Indonesia to regulate trade in some species, there is evidence suggesting that laws are not enforced and therefore are not effectively managing trade or protecting endangered species (Freund et al., 2016 p. 8; Maulany et al., 2021 p. 284; Natusch & Lyons, 2012 p. 2902; Nijman, 2019 p. 203; Nijman et al., 2012 p. 88; Shepherd et al., 2020 p. 8). A lack of awareness of conservation laws and policies and limited species identification skills among law enforcement officials are major problems (Lee et al., 2005 p. 478; Natusch & Lyons 2012 p. 2906). Natusch and Lyons (2012 p. 2906) found that when protected reptile species were included in a shipment, BKSDA officers did not have the species identification skills to properly identify them. As a result, protected species were traded under the guise of color variants of other non-protected species (Natusch & Lyons, 2012 p. 2906). Additionally, Nijman et al. (2012 p. 88) found that despite Indonesia having regulations and guidelines in place to regulate reptile trade, few collectors, middlemen, and smaller traders act in accordance with these rules. In fact, illegal trade was conducted openly (Nijman et al., 2012 p. 88). Other authors have frankly concluded that “[m]ost wildlife trade in Indonesia is illegal, yet enforcement is almost non-existent” (Eaton et al. 2015 p. 8). Given these shortcomings in enforcement of trade regulations, the blue tree monitor lizard is not adequately protected by this regulation.

c. Ministerial Declaration on Forest Law Enforcement and Governance (FLEG)

In 2001, Ministers from East Asia, Europe, and North America came together in Bali and agreed that there was an urgent need to tackle illegal logging in Southeast Asia. Through the resulting

⁴ Decree of the Ministry of Forestry 447 of 2003, *Tata Usaha Atau Penangkapan Dan Peredaran Tumbuhan Dan Satwa Liar*. . Available at: http://178.128.117.95/admin-absch/assets/media/uploads/doc_peraturan/ddc15-kepmen_447_2003_pengambilan_atau_penangkapan_dan_peredaran_tsl-min.pdf (last visited Mar. 16, 2022).

⁵ CITES Export Quotas, Indonesia (2021). Available at: https://cites.org/eng/resources/quotas/export_quotas?field_country_target_id=78&field_species_target_id=&field_date_value%5Bmin%5D=2022-01-01&field_date_value%5Bmax%5D=2022-12-31 (last visited Mar. 16, 2022).

⁶ Indonesian Ministry of Environment and Forestry, *Kuota Pengambilan Tumbuhan Dan Penangkapan Satwa Liar*, p. 4 (2020). Available at: http://178.128.117.95/admin-absch/assets/media/uploads/doc_publikasi/KUOTA%202020.pdf.

Bali Declaration, countries committed to strengthen national, regional, and bilateral efforts to address forest crime. While promising, the follow up process was stalled and follow up meetings did not occur as planned (Newman and Valentinus, 2005 p. 2). The effort has since shifted toward regional efforts and projects (World Bank, 2003 p. 6).

d. Timber Legality Assurance System (SVLK)

In 2009, Indonesia instituted the Timber Legality Assurance System (SVLK) requiring all timber supply chain operators to harvest from forests that are managed sustainably. The system was unlikely to be fully protecting blue tree monitor lizard habitat, as it allowed for some loopholes. In 2018, the World Resources Institute reported that SVLK certification bodies were issuing certificates without conducting proper assessments (Chitra & Cetera, 2018 unpaginated). In 2020, Indonesia eliminated the timber legality rule and no longer requires Indonesian timber companies to have export licenses verifying that the wood comes from legal sources (Jong, 2020 unpaginated). This is thought to be a result of lobbying from the furniture industry. Given the shortcomings and then termination of this program, the SVLK is not adequately protecting Indonesia's forests and the habitat of the blue tree monitor lizard.

e. Protected Areas: Palau Batanta Barat Nature Preserve

Palau Batanta Barat is a nature preserve covering 170.95 km² of Batanta Island (European Commission Digital Observatory for Protected Areas, 2022 unpaginated). It is managed by the West Papua Natural Resources Conservation Center. As mentioned previously, illegal logging has been observed within the preserve. Therefore, it is unlikely that this habitat provides adequate protection for the blue tree monitor lizard.



Figure 6. Palau Batanta Barat Nature Preserve (orange outline) on Batanta Island. Extracted from Digital Observatory for Protected Areas (DOPA) Explorer. Accessed February 28, 2022.

2. International Protections

a. Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

All species under the genus *Varanus* were listed under Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in 1975, including the blue tree monitor lizard. Indonesia became a party to CITES in 1979. Under Article IV of CITES, in order to trade an Appendix II species, exporting countries must issue an export permit, make a finding that “export will not be detrimental to th[e] species,” and be satisfied that the specimen was not obtained illegally. CITES Art. IV(2)(a), (b).

While regulation under CITES can be a powerful conservation tool, the shortcomings in its implementation for the blue tree monitor lizard demonstrate that additional protections in the United States, the species’ largest importer, are needed. For monitor lizards generally, Koch et al. (2013 p. 48) states that there is no science-based socio-economic model in place for generating adaptive management plans that ensure take of many species of monitor lizards is not detrimental. Additionally, the quotas that are set are likely not followed. There is evidence that the amount of wild harvest of reptiles in Indonesia is far exceeding the species’ quotas (Nijman et al., 2012 pp. 87-88).

Once blue tree monitor lizards are collected from the wild, Koch et al. (2013 p. 48) cites a lack of capacity building programs, training materials, and guides in countries within the Indo-Australian Archipelago to control the trade. Without sufficient training it is unlikely that monitor lizards are properly identified in the trade. As described above, officers with BKSDA do not have the identification skills to properly identify protected reptile species (Natusch & Lyons, 2012 p. 2906). Therefore, CITES-listed species are unlikely to be managed and tracked in the trade in accordance with CITES requirements.

Moreover, the CITES Trade Database is missing some imports and exports of the species, further indicating that the Appendix II listing under CITES is not sufficiently monitoring the trade of the blue tree monitor lizard. Bennett (2015 pp. 51-52) found that 10 out of 16 countries with fewer than 50 blue tree monitor lizards recorded in trade did not report any imports. Additionally, South Africa reported six imports of blue tree monitor lizards in 2009, but Indonesia did not report any exports to the nation (Bennett, 2015 p. 51). Bennett (2015 p. 52) also found that there was no systemic recording of seized animals that were not accompanied by CITES certification, so much of the illegal trade is likely undocumented.

Finally, although trade of the blue tree monitor lizard has been regulated under CITES since it was first identified by scientists in 2001, the species has suffered likely declines and is now considered endangered by the IUCN due to international pet trade (Shea et al., 2017 p. 43). CITES' regulations have not adequately controlled the species' trade.

VI. Conclusion

The blue tree monitor lizard is at risk of extinction throughout its range. The species has faced decades of overexploitation for the international pet trade. In addition to demand for the pet trade, the species is threatened by habitat loss as the rainforests it relies on face illegal logging. On top of these threats, climate change is likely to have a major impact on the blue tree monitor lizard because it is an island endemic with limited dispersal potential. Current regulatory mechanisms are not adequate to protect the blue tree monitor lizard or its habitat, as researchers have reported population declines and a local extirpation.

The United States is the primary driver of the market for the blue tree monitor lizard. The U.S. demand for exotic pets is a prominent force in the live wildlife trade, involving hundreds of millions of animals each year (Smith et al., 2017 p. 32). Some of the most imported species are reptiles, with close to 4,000 species of reptiles in the trade between 2000 and 2019 (Marshall et al., 2020 p. 2; Smith et al., 2017 pp. 32-33). The demand for the live wildlife trade has been connected to the extirpation of reptile species from their type localities (Stuart et al., 2006 p. 1137). Experts believe the blue tree monitor lizard is one species at risk of extinction, and that intervention is needed to protect reptiles from further declines, extirpations, and extinctions.

We are in a global extinction crisis with one million species headed toward extinction and millions more declining. Every time we lose a species, we lose the critical processes it maintains in its ecosystem and our natural systems unravel, impacting the wildlife and humans that depend on them. To lose the blue tree monitor lizard would mean losing a key part of Indonesia's rainforests on Batanta Island. As the leading importer of the blue tree monitor lizard, the United

States must act to protect the species from extinction. We strongly urge the Service to swiftly list the blue tree monitor lizard as endangered under the Endangered Species Act using its emergency listing authority.

VII. References

Please note that all references have been submitted on a jump drive and can also be found in this [Google Drive folder](#).

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Appendix I

Table 1. Blue tree monitor lizards for sale online in the United States.

<p>BackwaterReptiles.com (Accessed April 9, 2022)</p>	<div data-bbox="444 348 812 384"> <h3>Blue Tree Monitor for Sale</h3> </div> <div data-bbox="444 396 604 422"> </div> <div data-bbox="444 541 1003 791"> </div> <div data-bbox="1036 430 1185 478"> <p>Blue Tree Monitor <i>Varanus macraei</i></p> </div> <div data-bbox="1036 520 1334 695"> <p>We have some incredible Blue Tree monitors for sale at fantastic prices. This lizard is found on a remote Indonesian island and reaches a length of just over three feet. When you buy a lizard from us, you automatically receive our 100% live arrival guarantee.</p> </div> <div data-bbox="1036 716 1105 737"> <p>Sold out</p> </div> <div data-bbox="1036 764 1230 789"> <p>Choose: <input type="text" value="Pair - \$1,799.99"/></p> </div> <div data-bbox="1036 808 1175 831"> <p>Options: <input type="text" value="No Pref"/></p> </div> <div data-bbox="1036 852 1211 877"> <p>Quantity: <input type="text" value="1"/></p> </div> <div data-bbox="1036 898 1230 947"> <p>+ Add To Cart</p> </div> <div data-bbox="1036 968 1218 1016"> <p>View Cart</p> </div>
<p>Underground Reptiles (Accessed April 9, 2022)</p>	<div data-bbox="407 1045 708 1064"> <p>Home / Animals / Lizards / Monitors / Blue Tree Monitors</p> </div> <div data-bbox="423 1089 518 1144"> </div> <div data-bbox="407 1220 980 1650"> </div> <div data-bbox="1019 1077 1242 1104"> <h3>Blue Tree Monitors</h3> </div> <div data-bbox="1019 1113 1130 1134"> <p>From: \$2,499.99</p> </div> <div data-bbox="1019 1138 1360 1352"> <ul style="list-style-type: none"> • <i>Varanus macraei</i> • Farm Bred • Pair Available • Approximately 33 – 36 Inches In Length From Head To Tail • Very Bright Sapphire Blue Monitors That Are Absolute Eye Candy • Would Make Some Great Breeders Or Even Better Pets • Feeding On Vitamin Dusted Crickets, Roaches, Monitor Diet, And Pinky Mice </div> <div data-bbox="1019 1375 1263 1430"> <p>ADD FEEDER CRICKETS TO YOUR ORDER</p> </div> <div data-bbox="1019 1436 1266 1474"> <p>Frozen Pinky Feeder Mice for Sale - Snake, Lizard, Reptile Food</p> </div> <div data-bbox="1019 1509 1263 1564"> <p>ADD ISOPODS TO MAKE YOUR SETUP BIOACTIVE!</p> </div> <div data-bbox="1019 1568 1045 1585"> <p>Sex</p> </div> <div data-bbox="1019 1587 1101 1606"> <p>Pair sold out?</p> </div> <div data-bbox="1019 1619 1360 1640"> <p><input type="text" value="Pair"/></p> </div> <div data-bbox="1019 1650 1045 1669"> <p>Clear</p> </div>

[Reptile Pets Direct](#)
– [Female](#)
(Accessed April 9, 2022)



BLUE TREE MONITOR

\$1,499.99

SEX	QUANTITY
female	- 1 +

SOLD OUT

We have a few flawless adult and sub adult blue tree monitors in stock at the moment. This species as become almost impossible to get a hold of and only a few dozen are available every year in the US. The ones we have available now are eating well and establishing well to captivity.

Standard FedEx Overnight Express Shipping: **\$39.99**

As with all of our animals live healthy arrival and your satisfaction are **100% guaranteed!**

Share



[Reptile Pets Direct](#)
– [Male](#) (Accessed
April 9, 2022)



BLUE TREE MONITOR

\$1,299.99

SEX	QUANTITY
male	- 1 +

SOLD OUT

We have a few flawless adult and sub adult blue tree monitors in stock at the moment. This species as become almost impossible to get a hold of and only a few dozen are available every year in the US. The ones we have available now are eating well and establishing well to captivity.

Standard FedEx Overnight Express Shipping: **\$39.99**

As with all of our animals live healthy arrival and your satisfaction are **100% guaranteed!**

Share



[LLL Reptile and Supply Company, Inc.](#) (Accessed April 9, 2022)

Blue Tree Monitors



VERY difficult to find nowadays. These are long term captives, and besides a few very common on most of these guys, these are spectacular, feeding great and in g

Available to ship after Tuesday, May 5th, so do not schedule your arrival date!
Thanks!

Size: 27 - 34"

Species: *Varanus macraei*

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\$2,499.99

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- 1 +

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Quality Reptiles & Reptile Products

Secure Payments

SOLD OUT



**BLUE TREE MONITOR
ADULT**
VARANUS MACRAEI

The Blue Tree Monitor inhabit the Aru Islands of New Guinea, living in an arboreal habitat. Their skin color is completely black, lending the monitor its name.

\$1999.99

Adults

Select Sex

- Any Sex
- Female
- Male

This item is out of stock and cannot be purchased at this time. We apologize for this inconvenience. If you would like to receive a notification of when they come back in stock please enter your email below.

Appendix II

Table 1. Trade in live blue tree monitor lizards in the CITES Trade Database from the first recorded trade in 2003 to 2020. Accessed March 31, 2022.

Year	Importer	Exporter	Origin	Importer reported quantity	Exporter reported quantity	Purpose	Source
2003	France	Indonesia		21	46	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2003	Japan	Indonesia		16	10	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2003	Taiwan Province of China	Indonesia			3	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2003	United States	Indonesia		39	55	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2004	United States	Indonesia		14		Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2004	Canada	United States	Indonesia		4	Commercial	Animals born in captivity (F1 or subsequent

							generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2004	France	Indonesia			42	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2004	United Kingdom	Indonesia			10	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2004	Japan	Indonesia		13	22	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2004	Malaysia	Indonesia			5	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2004	Thailand	Indonesia			10	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2004	Taiwan Province of China	Indonesia			7	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of

							'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2004	United States	Indonesia		45	125	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2004	United States	Indonesia		10		Commercial	Specimens taken from the wild.
2005	Germany	Indonesia		6	6	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2005	Spain	Indonesia			2	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2005	France	Indonesia		27	33	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2005	Japan	Indonesia		20	45	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2005	Russian Federation	Indonesia			13	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of

							'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2005	Taiwan Province of China	Indonesia			10	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2005	United States	Indonesia		59	177	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2006	Germany	Indonesia		7		Scientific	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2006	Costa Rica	United States	Indonesia		4	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2006	Germany	Indonesia			7	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2006	Spain	Indonesia			10	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16

							(Rev.), as well as parts and derivatives thereof.
2006	France	Indonesia		49	64	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2006	United Kingdom	Indonesia			4	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2006	Japan	Indonesia		37	21	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2006	Republic of Korea	Indonesia		1	1	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2006	Russian Federation	Indonesia			2	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2006	Thailand	Indonesia		4	4	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.

2006	Taiwan Province of China	Indonesia			10	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2006	United States	Indonesia		115	180	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2006	Costa Rica	United States		4		Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2006	Indonesia	New Zealand	Indonesia	1		Zoo	Confiscated or seized specimens
2007	Japan	Indonesia		1		Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2007	Russian Federation	Indonesia			4	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2007	United States	Indonesia		4		Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the

							provisions of Article VII, paragraph 5, of the Convention
2007	Czech Republic	Indonesia		4	6	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2007	Germany	Indonesia		6	12	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2007	Spain	Indonesia			4	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2007	France	Indonesia		42	41	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2007	Japan	Indonesia		27	21	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2007	Thailand	Indonesia		4		Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16

							(Rev.), as well as parts and derivatives thereof.
2007	Taiwan Province of China	Indonesia			4	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2007	United States	Indonesia		29	106	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2007	United States	Indonesia		8		Commercial	Specimens taken from the wild.
2008	Switzerland	Germany	Indonesia		2	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2008	Norway	United States	Indonesia	2	2	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2008	Czech Republic	Indonesia		4	4	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2008	Germany	Indonesia		21	21	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16

							(Rev.), as well as parts and derivatives thereof.
2008	France	Indonesia		15	38	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2008	United Kingdom	Indonesia			5	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2008	Japan	Indonesia		20	31	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2008	Russian Federation	Indonesia			3	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2008	Thailand	Indonesia		9	9	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2008	Taiwan Province of China	Indonesia			8	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.

2008	United States	Indonesia		61	99	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2009	South Africa	Indonesia		6		Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2009	Switzerland	Czech Republic		2	2	Zoo	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2009	Czech Republic	Indonesia		15		Breeding in captivity or artificial propagation	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2009	Germany	Indonesia		4		Scientific	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2009	Switzerland	Germany	Indonesia	4	5	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.

2009	United Arab Emirates	Indonesia			7	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2009	Czech Republic	Indonesia		11	12	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2009	Germany	Indonesia		27	29	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2009	Spain	Indonesia		4	4	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2009	France	Indonesia		82	60	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2009	United Kingdom	Indonesia		3	3	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2009	Georgia	Indonesia			3	Commercial	Animals born in captivity (F1 or subsequent

							generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2009	Japan	Indonesia		9	41	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2009	Republic of Korea	Indonesia			2	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2009	Russian Federation	Indonesia			4	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2009	Slovakia	Indonesia			15	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2009	Taiwan Province of China	Indonesia			17	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2009	United States	Indonesia		59	111	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of

							'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2009	United States	Indonesia		5		Commercial	Confiscated or seized specimens
2010	Switzerland	Germany	Indonesia	2	2	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2010	Switzerland	Germany		3	3	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2010	Canada	Indonesia			4	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2010	Czech Republic	Indonesia		17	19	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2010	Japan	Indonesia		5	5	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII,

							paragraph 5, of the Convention
2010	United States	Indonesia		60	71	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2010	Switzerland	Germany	Indonesia		4	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2010	Canada	United States	Indonesia		5	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2010	Germany	Indonesia		13	13	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2010	Spain	Indonesia		4	4	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2010	France	Indonesia		60		Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16

							(Rev.), as well as parts and derivatives thereof.
2010	Japan	Indonesia			30	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2010	Republic of Korea	Indonesia			10	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2010	Russian Federation	Indonesia			5	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2010	Thailand	Indonesia			6	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2010	Taiwan Province of China	Indonesia			14	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2010	Ukraine	Indonesia			30	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.

2010	United States	Indonesia		57	157	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2011	Czech Republic	Indonesia		2		Breeding in captivity or artificial propagation	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2011	United Arab Emirates	Indonesia			30	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2011	Austria	Indonesia			9	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2011	Canada	Indonesia			5	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2011	Czech Republic	Indonesia		6	45	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the

							provisions of Article VII, paragraph 5, of the Convention
2011	Germany	Indonesia			9	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2011	Spain	Indonesia			4	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2011	France	Indonesia			2	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2011	Japan	Indonesia			62	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2011	Republic of Korea	Indonesia		5	7	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2011	Malaysia	Indonesia		1	6	Commercial	Animals bred in captivity in accordance with

							Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2011	Russian Federation	Indonesia			8	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2011	Taiwan Province of China	Indonesia			8	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2011	Ukraine	Indonesia			10	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2011	United States	Indonesia		9	245	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2011	Switzerland	Germany	Indonesia	2	2	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16

							(Rev.), as well as parts and derivatives thereof.
2011	Czech Republic	Indonesia		32		Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2011	Germany	Indonesia		4		Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2011	France	Indonesia		2		Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2011	Japan	Indonesia		14	3	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2011	Republic of Korea	Indonesia		10		Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2011	United States	Indonesia		44		Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.

2011	United States	Indonesia		10		Commercial	Specimens taken from the wild.
2012	Switzerland	Germany	Indonesia	1	1	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2012	Austria	Indonesia			4	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2012	Canada	Indonesia			7	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2012	Switzerland	Indonesia			6	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2012	Czech Republic	Indonesia		18	28	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2012	United Kingdom	Indonesia			5	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16

							(Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2012	Japan	Indonesia			36	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2012	Republic of Korea	Indonesia			5	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2012	Malaysia	Indonesia		3	3	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2012	Pakistan	Indonesia			6	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2012	Taiwan Province of China	Indonesia			22	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII,

							paragraph 5, of the Convention
2012	United States	Indonesia		43	38	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2012	Switzerland	Germany	Indonesia	5	5	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2012	United Arab Emirates	Indonesia			10	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2012	Austria	Indonesia			4	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2012	Bahrain	Indonesia			10	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2012	Canada	Indonesia			1	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16

							(Rev.), as well as parts and derivatives thereof.
2012	Czech Republic	Indonesia		5	5	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2012	Germany	Indonesia		5	5	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2012	Japan	Indonesia		18	61	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2012	Malaysia	Indonesia		3		Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2012	Oman	Indonesia			10	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2012	Pakistan	Indonesia			10	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.

2012	Russian Federation	Indonesia			4	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2012	United States	Indonesia		25	98	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2013	Germany	Switzerland			2	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2013	Switzerland	Indonesia		6		Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2013	Czech Republic	Indonesia		7		Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2013	Japan	Indonesia		2		Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII,

							paragraph 5, of the Convention
2013	Republic of Korea	Indonesia		5		Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2013	United States	Indonesia		10		Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2013	Spain	Switzerland		6	14	Zoo	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2013	France	Indonesia		5		Breeding in captivity or artificial propagation	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2013	Switzerland	Germany	Indonesia		2	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2013	Austria	Indonesia			3	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in

							Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2013	Canada	Indonesia			9	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2013	Switzerland	Indonesia		7	10	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2013	Czech Republic	Indonesia		16	22	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2013	Germany	Indonesia		8	8	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2013	Spain	Indonesia		4	4	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2013	France	Indonesia		2	18	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16

							(Rev.), as well as parts and derivatives thereof.
2013	Japan	Indonesia		1	20	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2013	Kyrgyzstan	Indonesia			2	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2013	Republic of Korea	Indonesia		20	21	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2013	Russian Federation	Indonesia			6	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2013	Taiwan Province of China	Indonesia			13	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2013	United States	Indonesia		31	73	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.

2014	Germany	Switzerland		2		Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2014	Czech Republic	Indonesia		7	11	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2014	Germany	Indonesia		1	2	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2014	Spain	Indonesia			4	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2014	Japan	Indonesia		6	16	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2014	Republic of Korea	Indonesia		6		Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof,

							exported under the provisions of Article VII, paragraph 5, of the Convention
2014	United States	Indonesia			29	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2014	France	Switzerland	Germany	3	3	Zoo	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2014	Turkey	France	Indonesia		2	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2014	Canada	United States	Indonesia		4	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2014	Canada	Indonesia			3	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2014	Switzerland	Indonesia		2		Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of

							'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2014	Czech Republic	Indonesia		16	31	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2014	Germany	Indonesia			4	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2014	France	Indonesia		24	29	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2014	United Kingdom	Indonesia			31	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2014	Japan	Indonesia		1	5	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2014	Kyrgyzstan	Indonesia			1	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16

							(Rev.), as well as parts and derivatives thereof.
2014	Republic of Korea	Indonesia		22	27	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2014	Russian Federation	Indonesia			5	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2014	Slovakia	Indonesia			2	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2014	Taiwan Province of China	Indonesia			12	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2014	United States	Indonesia		56	124	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2014	Norway	Sweden	Indonesia		2	Zoo	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.

2015	Switzerland	Germany		2	2	Personal	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2015	Switzerland	Germany		1	1	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2015	Czech Republic	Indonesia		4		Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2015	Spain	Indonesia		4		Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2015	Japan	Indonesia		10	27	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2015	United States	Indonesia		9	45	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof,

							exported under the provisions of Article VII, paragraph 5, of the Convention
2015	Austria	Switzerland			1	Zoo	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2015	Croatia	Switzerland		1	1	Zoo	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2015	Philippines	Indonesia		2		Breeding in captivity or artificial propagation	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2015	Germany	United States	Indonesia	2		Personal	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2015	Switzerland	Germany	Indonesia	2	4	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2015	Canada	United States	Indonesia		2	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of

							'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2015	Germany	United States	Indonesia		2	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2015	Canada	Indonesia			12	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2015	Czech Republic	Indonesia		26	36	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2015	United Kingdom	Indonesia			32	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2015	Japan	Indonesia		5	13	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2015	Republic of Korea	Indonesia		28	25	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16

							(Rev.), as well as parts and derivatives thereof.
2015	Philippines	Indonesia			2	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2015	Slovakia	Indonesia			2	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2015	Thailand	Indonesia		4	4	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2015	Taiwan Province of China	Indonesia			21	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2015	United States	Indonesia		66	111	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2015	Turkey	France	Indonesia		1	Zoo	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.

2015	United States	Indonesia		2		Commercial	Specimens taken from the wild.
2016	Germany	Switzerland	Indonesia	2	2	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2016	Canada	Indonesia			10	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2016	Czech Republic	Indonesia		8		Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2016	United Kingdom	Indonesia			15	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2016	Hong Kong	Indonesia			15	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2016	Japan	Indonesia		27	34	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16

							(Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2016	Republic of Korea	Indonesia		2	5	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2016	United States	Indonesia		32	74	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2016	South Africa	Indonesia			28	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2016	Germany	Switzerland			1	Zoo	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2016	Croatia	Switzerland			1	Zoo	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII,

							paragraph 5, of the Convention
2016	Philippines	Indonesia		5		Breeding in captivity or artificial propagation	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2016	Canada	Indonesia			4	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2016	Czech Republic	Indonesia		20		Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2016	Japan	Indonesia		4	9	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2016	Kyrgyzstan	Indonesia			1	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2016	Republic of Korea	Indonesia		11	9	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.

2016	Philippines	Indonesia			5	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2016	Russian Federation	Indonesia			2	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2016	United States	Indonesia		50	75	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2016	South Africa	Indonesia			20	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2017	Germany	Switzerland		1		Breeding in captivity or artificial propagation	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2017	United States	Canada		3	8	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention

2017	Switzerland	Germany		2	2	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2017	Czech Republic	Indonesia		10	32	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2017	United Kingdom	Indonesia			4	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2017	Japan	Indonesia			15	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2017	United States	Indonesia			10	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2017	Czech Republic	Indonesia		8	16	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in

							Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2017	Japan	Indonesia		8	36	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2017	Russian Federation	Indonesia			2	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2017	United States	Indonesia		47	52	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2018	Poland	Switzerland		2		Breeding in captivity or artificial propagation	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2018	Germany	Switzerland	Germany	1	1	Personal	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2018	United States	Canada		4	10	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof,

							exported under the provisions of Article VII, paragraph 5, of the Convention
2018	United States	Germany		6	6	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2018	Czech Republic	Indonesia		10		Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2018	Japan	Indonesia		18		Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2018	United States	Indonesia		8	55	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2018	Canada	Indonesia			3	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2018	Czech Republic	Indonesia		8	25	Commercial	Animals born in captivity (F1 or subsequent

							generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2018	Japan	Indonesia		28	60	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2018	Republic of Korea	Indonesia		12	12	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2018	Taiwan Province of China	Indonesia			9	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2018	United States	Indonesia		94	123	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2018	United States	Indonesia		5		Commercial	Specimens taken from the wild.
2019	United States	Canada			6	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention

2019	Switzerland	Germany		4		Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2019	Switzerland	Germany			4	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2019	Japan	Indonesia			19	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2019	Republic of Korea	Indonesia			6	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2019	United States	Indonesia			34	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2019	Switzerland	Netherlands		1		Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof,

							exported under the provisions of Article VII, paragraph 5, of the Convention
2019	Switzerland	Netherlands			1	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2019	Philippines	Indonesia		3		Breeding in captivity or artificial propagation	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2019	Canada	Indonesia			6	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2019	France	Indonesia		10	10	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2019	Japan	Indonesia		94	104	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2019	Republic of Korea	Indonesia		2		Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in

							Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2019	Republic of Korea	Indonesia			6	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2019	Philippines	Indonesia			3	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2019	Thailand	Indonesia			2	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2019	Taiwan Province of China	Indonesia			4	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2019	United States	Indonesia			139	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2019	Indonesia	Philippines	Indonesia	5		Reintroduction or introduction into the wild	Confiscated or seized specimens
2019	Republic of Korea	Indonesia		1		Commercial	Specimens taken from the wild.

2020	Spain	Canada			8	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2020	Netherlands	Canada			6	Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2020	Netherlands	Canada		2		Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2020	Japan	Indonesia		10		Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2020	Republic of Korea	Indonesia		6		Commercial	Animals bred in captivity in accordance with Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof, exported under the provisions of Article VII, paragraph 5, of the Convention
2020	Spain	Canada			8	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in

							Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2020	Netherlands	Canada			2	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2020	United States	Canada			2	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2020	Canada	Indonesia			2	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2020	China	Indonesia			3	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2020	Czech Republic	Indonesia			16	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2020	France	Indonesia			20	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16

							(Rev.), as well as parts and derivatives thereof.
2020	Japan	Indonesia		117		Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2020	Japan	Indonesia			226	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2020	Republic of Korea	Indonesia		18		Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2020	Republic of Korea	Indonesia			24	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2020	Thailand	Indonesia		2		Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2020	Taiwan Province of China	Indonesia			31	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.

2020	United States	Indonesia			38	Commercial	Animals born in captivity (F1 or subsequent generations) that do not fulfil the definition of 'bred in captivity' in Resolution Conf. 10.16 (Rev.), as well as parts and derivatives thereof.
2020	Indonesia	Philippines			1	Law enforcement /judicial/forensic	Confiscated or seized specimens
2020	Indonesia	Philippines	Indonesia	2		Reintroduction or introduction into the wild	Confiscated or seized specimens