

TOP 10 NOMINATION FORM

2020 Topic: Illegal wildlife (plants and animals) trafficking and unsustainable trade

Species must meet these qualifications:

- Must be native U.S. species or international species with significant U.S. demand
- Must be experiencing substantial decline (do not have to be threatened/endangered listed)
- Must be directly or indirectly impacted
 - Direct: exploited as trophies, pets, medicines, etc.
 - Indirect: impacted by imported exotics or imported disease vectors (e.g., chytrid)

Your Name: Kate Wall

Organization: International Fund for Animal Welfare

Email: kwall@ifaw.org

Phone: 240.780.6769

Nominated Species (Common Name & Scientific Name): Bats; Chiroptera (order) 1275 extant species, 83 of which are endangered or critically endangered

Question 1: Threat to the Species

How is the species and/or its habitat threatened by illegal wildlife trafficking and/or unsustainable trade? Note the extent of the threat and whether it is direct or indirect. Include references to relevant scientific studies. Does the species face any associated political threats?

The International Union for the Conservation of Nature (IUCN) lists 1,275 extant bat species; currently 23 bat species are listed as Critically Endangered, meaning they face an imminent risk of extinction. Sixty others are Endangered, and 109 bat species are considered Vulnerable. The IUCN lists a further 244 bat species as “Data Deficient” – there is simply too little information available to determine their conservation status. Of the 1275 extant species, only nine have populations that are increasing, and 263 have stable populations. Two-hundred seventy-seven bat species are experiencing known population decline. For most bat species - 726 species – the current population trend is simply unknown. IUCN Red List. Available at <https://www.iucnredlist.org/search?taxonomies=100012&searchType=species>

“Because bats reproduce slowly, with females of most species giving birth to only one pup per year, recovery from serious losses is painfully slow and tenuous at best. It is often difficult to spot significant declines in such species until their situation is dire.

“Loss of habitat remains the most widespread peril worldwide. The forests many bats use for roosting and/or foraging for food are disappearing at a frightful rate – shrunken by timber harvests or cleared to make room for farm crops, mining operations, cattle pastures or cities. This is especially critical in the tropical rainforests, with both a rich diversity of bats species and a precipitous loss of woodlands.

“Countless bats are being driven out of roosts in caves and abandoned mines because of inappropriate guano mining (bat droppings, or guano, are a valuable fertilizer). During the winter months, large numbers of bats hibernate in caves and mines. If roused from hibernation, often by human disturbance, bats can burn through the stores of fat they need to survive the winter.

“In regions such as Southeast Asia and the Pacific islands bats are hunted, both as bush meat for local consumption and commercially for markets and restaurants. Large, fruit-eating bats are the primary targets. Bats are also used in some folk medicines.” Bat Conservation International <http://www.batcon.org/why-bats/bats-are/bats-are-threatened>

Question 2: Role of the Species

What is the ecological and/or scientific importance of the species? Note if it is a keystone species and describe its role in its environment. Include references to relevant scientific studies.

“Many of the more than 1,390 bat species consume vast amounts of insects, including some of the most damaging agricultural pests. Others pollinate many valuable plants, ensuring the production of fruits that support local economies, as well as diverse animal populations. Fruit-eating bats in the tropics disperse seeds that are critical to restoring cleared or damaged rainforests. Even bat droppings (called guano) are valuable as a rich natural fertilizer. Guano is a major natural resource worldwide, and, when mined responsibly with bats in mind, it can provide significant economic benefits for landowners and local communities.

“Bats are often considered “keystone species” that are essential to some tropical and desert ecosystems. Without bats’ pollination and seed-dispersing services, local ecosystems could gradually collapse as plants fail to provide food and cover for wildlife species near the base of the food chain. Consider the great baobab tree of the East African savannah. It is so critical to the survival of so many wild species that it is often called the “African Tree of Life.” Yet it depends almost exclusively on bats for pollination. Without bats, the Tree of Life could die out, threatening one of our planet’s richest ecosystems.” Bat Conservation International <http://www.batcon.org/why-bats/bats-are/bats-are-important>

Question 3: Message

What is the most important message about this species for decision-makers and the public?

In the wake of COVID-19, thought to have emerged from bats and jumped into humans through an intermediate host, bats may face even further persecution. But the emergence of COVID-19 isn’t the fault of bats: it is due to human activities that include hunting and consuming bat species.

Bats are critically important to healthy ecosystems around the world. They also protect human health and safety by, among other things, eating mosquitoes responsible for spreading diseases such as malaria, Zika, and West Nile virus.

Final Selections

If my nomination is selected for inclusion in the report, I would like the first draft of the species profile for the report to be written by (choose one):

You (ESC), and then my NGO will edit the profile and approve the final draft.

Me (my NGO). I understand that I (and other participating writers) will need to adhere to ESC's writing guidelines.

Deadline: May 8, 2020

Send to: top10@endangered.org