# **90-DAY FINDING PETITION REVIEW FORM** LISTING AS AN ENDANGERED SPECIES

#### Federal Docket No. FWS-HQ-ES-2023-0034

# 90-DAY FINDING ON A PETITION TO LIST THE BORNEAN EARLESS MONITOR LIZARD (*Lanthanotus borneensis*) AS THREATENED OR ENDANGERED UNDER THE ENDANGERED SPECIES ACT

#### Petitioned action being requested:

- List as an endangered or a threatened species
- □ Reclassify (uplist) from a threatened species to an endangered species
- $\Box$  Other

#### **Petitioned entity:**

- $\boxtimes$  Species
- □ Subspecies
- □ DPS of vertebrates

# Background

Section 4(b)(3)(A) of the Endangered Species Act (Act) requires that we make a finding on whether a petition to list, delist, uplist (reclassify the species from a threatened species to an endangered species), or downlist (reclassify the species from an endangered species to a threatened species) a species presents substantial scientific or commercial information indicating that the petitioned action may be warranted. Our regulations provide that, for a petition to meet the "substantial scientific or commercial information" standard, we must determine in the 90-day petition finding that the petition includes "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" (50 CFR § 424.14(h)(1)(i)).

The Act and our regulations are clear that the responsibility is squarely on the petitioner to present the requisite level of information to meet the substantial information test to demonstrate that the petitioned action may be warranted. This means that the petitioner must not only present credible information that threats may be present; they also need to present credible information concerning a species' documented or likely response to that threat, and <u>that the species' response is to such a level that listing or uplisting may be warranted</u>. Where the petitioner has failed to do so, we should make a not-substantial finding on the petition -- we should not augment their petition with our own knowledge or other information we are aware of. If we are aware of species that may be in danger

of extinction, we should undertake a status review on our own accord, regardless of the receipt of a petition.

Our regulations further state that we will consider whether a petition presents a complete and balanced representation of the relevant facts when making our finding of whether a petition presents substantial information that the requested action may be warranted. Thus, if we find that a petition cherry-picked information, ignored relevant and readily available information, and presented a biased and incomplete representation of facts, we should consider whether the petition has met the requirement to present substantial information (see instructions below for more information).

We note that designating critical habitat is not a petitionable action under the Act. Petitions to designate critical habitat (for species without existing critical habitat) are reviewed under the Administrative Procedure Act and are not addressed here. See 50 C.F.R. § 424.14(j). To the maximum extent prudent and determinable, any proposed critical habitat will be addressed concurrently with a proposed rule to list a species, if applicable.

# **Petition History**

On November 2, 2022, we received a petition from Center for Biological Diversity, requesting that Bornean Earless Monitor Lizard be emergency listed as a threatened species or an endangered species under the Act. The petition clearly identified itself as such and included the requisite identification information for the petitioner, required at 50 CFR 424.14(c). Because the Act does not provide for petitions to emergency list, we are considering it as a petition to list the Bornean Earless Monitor Lizard. Listing a species on an emergency basis is not a petitionable action under the Act, and the question of when to list on an emergency basis is left to the discretion of the Service. If the Service determines that the standard for emergency listing in section 4(b)(7) of the Act is met, the Service may exercise that discretion to take an emergency listing action at any time. This finding addresses the petition.

# Evaluation of a Petition to List the Bornean Earless Monitor Lizard as an Endangered Species Under the Act

# Species and Range

Does the petition present substantial information that the petitioned entity may be a listable entity (i.e., a species, subspecies, or distinct population segment)?

⊠Yes □No

Bornean earless monitor lizard (*Lanthanotus borneensis*) Historical range: Sarawak, Malaysia and Kalimantan, Indonesia Current range: Sarawak, Malaysia and Kalimantan, Indonesia This is recognized species by Steindachner, 1878.

Statutory and Regulatory Standards for Evaluation of the Petition

Section 4 of the Act (16 U.S.C. 1533) and its implementing regulations (50 CFR part 424) set forth the procedures for determining whether a species is an "endangered species" or a "threatened species." The Act defines an endangered species as a species that is "in danger of extinction throughout all or a significant portion of its range," and a "threatened species" as a species that is "likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." The Act requires that we determine whether any species is an "endangered species" or a "threatened species" or a "threatened species" as a species is an "endangered species" or a "threatened species" because of any of the following factors:

- (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; or
- (E) Other natural or manmade factors affecting its continued existence.

These factors represent broad categories of natural or human-caused actions or conditions that could have an effect on a species' continued existence. In evaluating these actions and conditions, we look for those that may have a negative effect on individuals of the species, as well as other actions or conditions that may ameliorate any negative effects or may have positive effects.

In accordance with 50 CFR 424.14(d), the Service's determination as to whether the petition provides substantial scientific or commercial information indicating that the petitioned action may be warranted will depend in part on the degree to which the petition includes the following types of information: (1) Information on current population status and trends and estimates of current population sizes and distributions, both in captivity and the wild, if available; (2) Identification of the factors under section 4(a)(1) of the Act that may affect the species and where these factors are acting upon the species; (3) Whether and to what extent any or all of the factors alone or in combination identified in section 4(a)(1) of the Act may cause the species to be an endangered species or threatened species (i.e., the species is currently in danger of extinction or is likely to become so within the foreseeable future), and, if so, how high in magnitude and how imminent the threats to the species of conservation activities by States as well as other parties, that have been initiated or that are ongoing, that may protect the species or its habitat; and (5) A complete, balanced representation of the relevant facts, including information that may contradict claims in the petition.

# **Evaluation of Information in the Petition**

When evaluating a petition, we assess the information in the petition and the sources that it includes as references. While we may use any readily available information (e.g., in our files or published literature that we are aware of) to determine the credibility of the information presented in the petition, we do not use readily available information to bolster the petition, should the petitioner fail to provide substantial information, because the Act requires that we make a finding as to whether the petition itself presents substantial information indicating that the petitioned action may be warranted. Our implementing regulations at 50 CFR 424.14(h)(1)(i) state that conclusions drawn in the petition without the support of credible scientific or commercial information will not be considered "substantial information." "Credible scientific or commercial information" may include all types of data, such as peer-reviewed

literature, gray literature, traditional ecological knowledge, etc. Thus, we first must determine whether the information provided in the petition is credible. In other words, the Service must evaluate whether the information in the petition is substantiated and not mere speculation or opinion. Any claims that are not supported by credible scientific or commercial information do not constitute substantial information and will not be further evaluated. Next, we determine whether the conclusions drawn in the petition are reasonable (i.e., actually supported by that credible information).

After identifying the claims in the petition that are supported by credible information, we consider those claims in the context of the factors in section 4(a)(1) of the Act. When evaluating information presented in the petition, we consider factor D in light of the other factors, not independently. In other words, we consider whether the petition presents substantial information indicating that existing regulatory mechanisms may be inadequate to address the magnitude or imminence of threats identified in the petition related to the other four factors; therefore, we consider existing regulatory mechanisms in conjunction with each relevant claim presented in the petition.

To complete our analysis for a 90-day petition finding to list or uplist, we first identify the claims in the petition that are supported by credible information indicating that a potential threat is occurring or is likely to occur within the species' range. After identifying the claims that are supported by credible information that a threat is occurring or likely to occur, we next determine whether the petition has presented credible information that those threats affect the species at a population or species level, after taking into account any mitigating actions or conditions that may ameliorate those threats, such that the petitioned action may be warranted. If we find that the petition does not present substantial information that the petitioned action may be warranted based on the information provided regarding the status and trends of the species or on one or more factors, we consider the cumulative impact of all of the threats that are supported by credible information. Based on these steps, we draw our conclusion and petition finding based on the standard for 90-day findings, which is whether the petition presents "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." Our evaluation assesses the extent to which the credible information in the petition indicates that a reasonable person would conclude that the petitioned action may be warranted.

# Claims Addressing Threats

We first assess whether the petition supported its claims with credible information (i.e., whether the petition has presented credible information that the threat is occurring or is likely to occur and that the species may be exposed to the threat) (Table 1). If the supporting information indicates that the threat is occurring or is likely to occur in the future and that the species may be exposed to it, we then assess whether the petition presented credible information that reasonably indicates the presence of negative effects on the species as a whole.

If the petition did not present credible information indicating population-level effects, our analysis of that individual threat presented in the petition is complete, as there would be no species-level

effects; we may then analyze that threat later if we need to evaluate cumulative effects. If the credible information about the particular threat indicates species-level effects, our analysis of that individual threat presented in the petition is complete. If the credible information about the particular threat does not indicate species-level effects but does indicate population-level effects, we assess the extent to which the credible information in the petition indicates that the scale of the effects of that threat are such that a reasonable person would conclude that listing or uplisting may be warranted.

If we find that there is credible information indicating that threats are having or are likely to have a negative effect on the species as a whole, such that a reasonable person would conclude that listing may be warranted, we can stop and make a positive "substantial information" finding. We would then evaluate all of the threats in detail based on the best scientific and commercial data available when we conduct the status assessment and make the 12-month finding. A positive 90-day petition finding does not indicate that the petitioned action is warranted. Such a finding indicates only that the petition presents substantial information that the petitioned action may be warranted and that a full review should occur.

**TABLE 1:** Evaluation of claims in the petition. Assessment of the credibility of scientific and commercial information in the petition and the extent to which claims supported by credible scientific or commercial information in the petition corroborates the presence of negative impacts to populations, or the species.

Threat or Activity	Exposure. Is the claim of the threat in the petition supported by credible scientific and commercial information? Does the petition support the claim that there is a potential threat and it is occurring or is likely to occur within the range of the species? If no, explain. If yes, include brief summary statement	Response (Populations/Species). Do the claims and the supporting information indicate negative effects such that listing or uplisting may be warranted? Yes or no. Explain and describe below.
	and citations to the credible information.	
Deforestation (Factor A)	Yes. The petition presents credible information that forest clearing for plantations and logging is occurring and increasing within the species range and within locations where the species is likely to occur (Gaveau et al. 2014; Gaveau et al. 2016; Das and Auliya 2021).	Yes. Loss of forest cover and associated degradation of freshwater ecosystems would be detrimental for all populations of the lizards and its assumed prey. The petition states that impacts are known to directly impact one subpopulation currently (ongoing) and are likely impacting all other subpopulations (ongoing) as deforestation is occurring rapidly throughout the lizard's entire known range (Gaveau et al. 2014; Gaveau et al. 2016). Although protected areas exist within the species range in Indonesia and Malaysia, they are not permanently protected (Tong 2021) and illegal logging is likely occurring in such protected areas (Curran et al. 2004).
Disease (Factor C)	No. The petitioners acknowledge that there are no known diseases that may impact earless lizards given the limited studies on the species. However, they express concern over human encroachment leading to increasing disease risk (no citations) and lizards being susceptible to disease in captivity. Citations point to a potential threat of disease for earless lizards in captivity, but not for earless lizards in the wild (Mendyk et al. 2012; Mendyk et al. 2015).	NA

# Cumulative Effects of Claims Supported by Credible Information

Because we have found that the petition presented substantial information that one or more threats are having an impact on the species to the point that the species' status may have changed, the petition presents substantial information indicating that the species may warrant listing. We do not need to assess cumulative effects at the 90-day finding stage because we will address cumulative effects of all threats in the 12-month finding.

# Evaluation of Information Summary

The petitioner provided credible information indicating potential threats to the species within multiple populations due to habitat destruction and alteration (Factor A). The petition did not provide credible information to support the potential threats of disease of the species in the wild (Factor C).

#### **Petition Finding**

We reviewed the petition, sources cited in the petition, and other readily available information (within the constraints of the Act and 50 CFR 424.14(h)(1)). We considered the credible information that the petition provided regarding effects of the threats that fall within factors under section 4(a)(1) as potentially ameliorated or exacerbated by any existing regulatory mechanisms or conservation efforts. Based on our review of the petition and readily available information regarding deforestation for logging and plantations (Factor A), we find that the petition presents substantial scientific or commercial information indicating that listing the Bornean earless monitor lizard (*Lanthanotus borneensis*) as an endangered species may be warranted. The petitioners also presented information suggesting trade (Factor B) and climate change (Factor E), including shifting weather regimes and sea level rise, may be threats to the Bornean earless monitor lizard. We will fully evaluate these potential threats during our 12-month status review, pursuant to the Act's requirement to review the best scientific and commercial information available when making that finding.

#### Author

The primary authors of this notice are the staff members of the Branch of Delisting and Foreign Species, U.S. Fish and Wildlife Service.

**FOR FURTHER INFORMATION CONTACT:** Rachel London, Manager, Branch of Delisting and Foreign Species, 703–358–2171.

# **Regional Outreach Contact: NA**

Date:

Gary Frazer Assistant Director for Ecological Services, U.S. Fish and Wildlife Service

#### References

- Curran, L. M., Trigg, S. N., McDonald, A. K., Astiani, D., Hardiono, Y. M., Siregar, P., Caniago, I., & Kasischke, E. (2004). Lowland forest loss in protected areas of Indonesian Borneo. Science, 303(5660), 1000-1003.
- Das, I. and M. Auliya. (2021). *Lanthanotus borneensis*. The IUCN Red List of Threatened Species 2021: e.T102342572A102342580. https://dx.doi.org/10.2305/IUCN.UK.2021-2.RLTS.T102342572A102342580.en
- Gaveau, D. L., Sheil, D., Salim, M. A., Arjasakusuma, S., Ancrenaz, M., Pacheco, P., & Meijaard, E. (2016). Rapid conversions and avoided deforestation: examining four decades of industrial plantation expansion in Borneo. Scientific reports, 6(1), 1-13.
- Gaveau, D. L., Sloan, S., Molidena, E., Yaen, H., Sheil, D., Abram, N. K., Ancrenaz, M., Nasi, R., Quinones, M., Wielaard, N., & Meijaard, E. (2014). Four decades of forest persistence, clearance and logging on Borneo. PloS one, 9(7), e101654.
- Mendyk, R. W., Newton, A. L., & Baumer, M. (2013). A retrospective study of mortality in varanid lizards (Reptilia: Squamata: Varanidae) at the Bronx Zoo: Implications for husbandry and reproductive management in zoos. Zoo Biology, 32(2), 152-162.
- Mendyk, R., Shuter, A., & Kathriner, A.(2015). Historical notes on a living specimen of Lanthanotus borneensis (Squamata: Sauria: Lanthanotidae) maintained at the Bronx Zoo from 1968 to 1976. Biawak, 9(2), 44-49.
- Tong, Sheryl Lee Tian. (2021). Fate of Malaysian forests stripped of protection points to conservation stakes. Mongabay.Available at: https://news.mongabay.com/2021/10/fate-of-malaysian-forests-stripped-of-protection-points-to-conservation-stakes/

# **BATCHED NOTICE LANGUAGE**

#### Evaluation of a Petition to List Bornean earless monitor lizard

#### **Species and Range**

Bornean earless monitor lizard (*Lanthanotus borneensis*) Historical range: Sarawak, Malaysia and Kalimantan, Indonesia Current range: Sarawak, Malaysia and Kalimantan, Indonesia This is recognized species by *Steindachner*, 1878.

#### **Petition History**

On November 2, 2022, we received a petition from Center for Biological Diversity, requesting that Bornean Earless Monitor Lizard be emergency listed as a threatened species or an endangered species under the Act. The petition clearly identified itself as such and included the requisite identification information for the petitioner, required at 50 CFR 424.14(c). Because the Act does not provide for petitions to emergency list, we are considering it as a petition to list the Bornean Earless Monitor Lizard. Listing a species on an emergency basis is not a petitionable action under the Act, and the question of when to list on an emergency basis is left to the discretion of the Service. If the Service determines that the standard for emergency listing in section 4(b)(7) of the Act is met, the Service may exercise that discretion to take an emergency listing action at any time. This finding addresses the petition.

#### Finding

We reviewed the petition, sources cited in the petition, and other readily available information (within the constraints of the Act and 50 CFR 424.14(h)(1)). We considered the credible information that the petition provided regarding effects of the threats that fall within factors under section 4(a)(1) as potentially ameliorated or exacerbated by any existing regulatory mechanisms or conservation efforts. Based on our review of the petition and readily available information regarding deforestation for logging and plantations, we find that the petition presents substantial scientific or commercial information indicating that listing the Bornean earless monitor lizard (*Lanthanotus borneensis*) as an endangered species may be warranted. The petitioners also presented information suggesting trade (Factor B) and climate change (Factor E), including shifting weather regimes and sea level rise, may be threats to the Bornean earless monitor lizard. We will fully evaluate these potential threats during our 12-month status review, pursuant to the Act's requirement to review the best scientific and commercial information available when making that finding.

The basis for our finding on this petition and other information regarding our review of the petition can be found as an appendix at *https://www.regulations.gov* under Docket No. **FWS-XX**-**ES-2023-0034** under the Supporting Documents section.