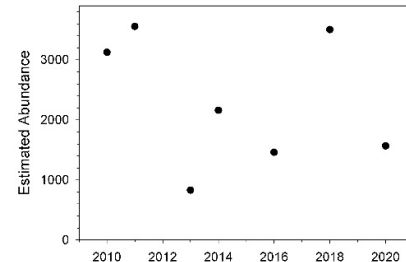


## Response by NABR to Hansen et al. (2024) Justification Statement

The main theme of the response by Hansen et al. (2024) to the NABR petition challenging the IUCN listing of the long-tailed macaque (LTM; *Macaca fascicularis*) is essentially the same as that contained in the original (Hansen et al. 2022) assessment: “We are the experts; trust us.” To be clear, NABR does not dispute that, collectively, authors of the 2022 assessment have considerable experience in primatology. NABR also recognizes that professional judgement can play an important role in species’ risk assessments. But (as documented by NABR 2024) the 2022 IUCN assessment of LTMs is an example of professional judgement run amok, with personal opinions (and biases; Jenkins 2023) compensating for a nearly total absence of empirical data. Collen et al. (2016) clarify that Red List categories should not be assigned directly by unstructured expert opinion and should account for uncertainty. The LTM assessment deviates from both standards.

Regardless how many times Hansen et al. contact Nuttall, the simple fact remains that the figure to the right represents a non-significant trend in a short and highly-variable time series, with the two highest estimates being the second and the next to last. That this is the most rigorous trend data reported in the 2022 assessment underscores the vast uncertainties associated with the true status of LTMs.



Much of the Hansen et al. justification is devoted to presenting new information not included in the 2022 report. This is problematical in two regards. First, new information is irrelevant to the focus of the dispute, which is seriously flawed methodology in the 2022 IUCN assessment. Second, although new information (esp. actual data!) is of course very relevant to determining the true status of *M. fascicularis*, authors of the 2022 report have demonstrated that they cannot be relied upon to provide a balanced account of such information. Further evidence for this is the failure of the justification to cite publications with conclusions at odds with their 2022 assessment (e.g., Iqbal et al., 2023; Sulistyadi et al., 2023). Choosing not to cite Sulistyadi et al. 2023 is a particularly glaring omission, as that report used a systematic approach to evaluate the status of LTMs throughout Indonesia, the country with by far the largest fraction of native range. Sulistyadi et al. concluded that the overall status of *M. fascicularis*, was ‘positive,’ meaning that it can support managed levels of exploitation, but merits regular monitoring in the future.

After reviewing the Hansen et al. (2024) justification, the conclusions by NABR remain unchanged: (1) the assessment provides empirical data for a tiny fraction of the species’ range and makes no attempt to integrate key risk metrics up to the species level; (2) there is no attempt to estimate net effects of losses in primary habitat and gains in secondary habitat; (3) there is no attempt to evaluate whether rates of exploitation are either unsustainable or a cause for the inferred reductions; (4) the projected future 50% decline is based on no quantitative analysis whatsoever; (5) the authors cite trade statistics without adequately accounting for the dominant role played by captive-bred animals; and (6) use of a generation length more relevant to wild populations would not support an Endangered classification.

NABR continues to urge the IUCN to aside the flawed Hansen et al. (2022) assessment, along with the previous species’ assessment which suffers from the same flaws and conduct a new assessment using an independent group of scientists with more expertise in population dynamics and risk assessment.

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