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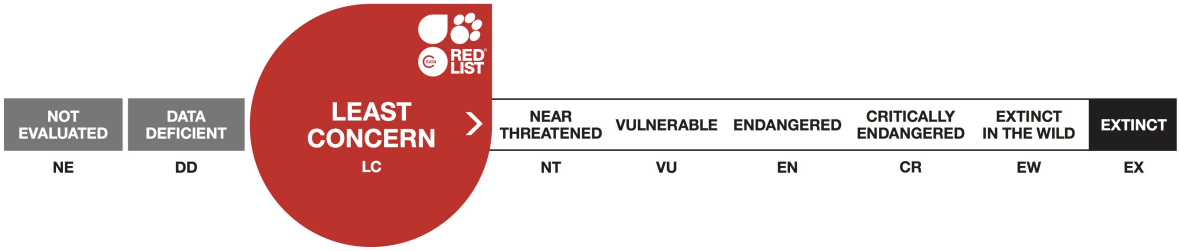
Viverra tangalunga, Malay Civet

Assessment by: Duckworth, J.W., Mathai, J., Wilting, A., Holden, J., Hearn, A. & Ross, J.



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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Mammalia	Carnivora	Viverridae

Taxon Name: *Viverra tangalunga* Gray, 1832

Common Name(s):

- English: Malay Civet, Malayan Civet, Oriental Civet

Taxonomic Notes:

Veron *et al*. (2014) considered that the population on Belitung island (Indonesia) is so distinct genetically that it should be recognised as an evolutionarily significant unit and managed separately from all other populations of the species.

Assessment Information

Red List Category & Criteria: Least Concern ver 3.1

Year Published: 2016

Date Assessed: March 3, 2015

Justification:

Malay Civet is listed as Least Concern because it has a relatively wide geographic distribution, is commonly recorded in much of its range, is tolerant of degraded habitats, and occurs in many protected areas; the very high camera-trapping detection rates in many studies suggest high densities and stable and large populations. Although ongoing forest loss in its range is presumably causing its population to decline, its wide occurrence outside the level lowlands and use of degraded and fragmented areas means that it is implausible that decline rates could be sufficient even for Near Threatened, either in the past or future three generations (taken as 18 years).

Previously Published Red List Assessments

2008 – Least Concern (LC) – http://dx.doi.org/10.2305/IUCN.UK.2008.RLTS.T41708A10538140.en

1996 – Lower Risk/least concern (LR/lc)

Geographic Range

Range Description:

Malay Civet is widespread on the large land-masses of Peninsular Malaysia, Sumatra and Borneo, in all of which it is probably native; on Sulawesi (where it is introduced) and several of the large Philippine islands (where it is evidently introduced on some, but perhaps native on others); and on many smaller islands of the Philippines, on the Sunda shelf and east to Ambon (Indonesia). Although it is evidently native (and genetically distinct) on at least Belitung, the native or introduced status on many of these smaller islands, including Singapore, is not determined, but there is no evidence of natural dispersal east

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of Wallace's line. Overall, human-mediated dispersal has been very important in generating today's geographic range (Jennings and Veron 2011, Lim and Ou Yang 2012, Veron *et al*. 2014). There are several records from Java, but there is no evidence of a native population there (Jennings and Veron 2011); a small level of (presumably imported) trade continues there (Nijman *et al*. 2014). In the Philippines, it has been recorded on Bohol, Busuanga, Camiguin, Catanduanes, Culion, Guimaras, Leyte, Lubang, Luzon, Mindanao, Mindoro, Negros, Palawan, Panay, Samar, Sibuyan and Siquijor (Timm and Birney 1980, Heaney and Tabaranza 1991, Heaney *et al*. 1991, Jennings and Veron 2011). In Malaysia, it is found in Borneo, Banggi Island, Langkawi Island, Penang Island and on mainland Peninsular Malaysia (Corbet and Hill 1992, Nor 1996, Meiri 2005). In Indonesia, it has been recorded on Ambon, Bacan, Bangka, Bauwal, Belitung, Bintan, Borneo, Bunguran, Buru, Halmahera, Karimata, Kundur, Laut, Lingga, Natuna, Panebangan, Rupat, Sangihe, Seram, Siao, Sumatra, Ternate, and Watubela (Jennings and Veron 2011). Wozencraft (2005) listed it, in addition to its known range, for Cambodia and Thailand, and it was mapped for the southern portion of the latter by Veron *et al*. (2014); but there is no evidence that it occurs in either of these countries (Holden and Neang 2009, Chutipong *et al*. 2014). It is perhaps more localised on Sumatra than on Borneo, occurring mainly in the east: J. Holden (pers. comm. 2014) knows of no recent records from the west, and Jennings and Veron (2011) traced only three records ever from this part of the island.

It has been recorded from sea-level to 2,100 m (Jennings and Veron 2011).

Country Occurrence:

Native: Indonesia (Kalimantan, Maluku - Introduced, Sulawesi - Introduced, Sumatera); Malaysia (Peninsular Malaysia, Sabah, Sarawak)

Present - origin uncertain: Philippines; Singapore

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Distribution Map

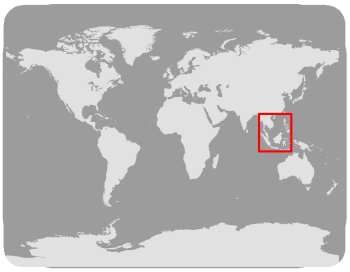
Viverra tangalunga

NE | DD | LC LEAST CONCERN | NT | VU | EN | CR | EW | EX

Range

- Extant (resident)
- Introduced
- Origin uncertain

Compiled by:
IUCN (International Union for Conservation of Nature)



The boundaries and names shown and the designations used on this map do not imply any official endorsement, acceptance or opinion by IUCN.

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Population

Malay Civet is often amongst the most commonly recorded small carnivores in camera-trap and other surveys on Borneo, including those in old-growth forest (e.g., Belden *et al*. 2007, Cheyne *et al*. 2010, Mathai *et al*. 2010, Wilting *et al*. 2010, Brodie and Giordano 2011, Samejima and Semiadi 2012). It also seems to be common in West Malaysia (e.g., Low 2011). By contrast, some high-effort surveys - including several focused on old-growth forest - in Sumatra (e.g., Holden 2006, McCarthy and Fuller 2014, G. Fredriksson pers. comm. 2014, J. Holden pers. comm. 2014) have failed to find it at all. Without a clearer understanding of habitat use - which perhaps varies between land-mass - it is difficult to make firm statements about population trends. Whilst it evidently remains widespread and common in Borneo, there is insufficient information to be sure that this applies also to the other large landmasses to which it is native, peninsular Malaysia and Sumatra.

Current Population Trend: Stable

Habitat and Ecology **(see Appendix for additional information)**

Malay Civet occurs in a variety of habitats including primary and secondary forests, cultivated land and the outskirts of villages (Wemmer and Watling 1986, Colon 2002, Azlan 2003, Jennings *et al.* 2006, Jennings and Veron 2011). It is widely and readily camera-trapped in old-growth forest on Borneo (e.g. Belden *et al*. 2007, Cheyne *et al*. 2010, Mathai *et al*. 2010, Wilting *et al*. 2010, Brodie and Giordano 2011, Samejima and Semiadi 2012). By contrast, the number of reasonably intensive surveys that have not found it in superficially similar habitat on Sumatra suggests some patchiness of occurrence on that island: such surveys include Holden (2006), McCarthy and Fuller (2014), WCS Indonesia (pers. comm. 2008; many thousand camera-trap nights in Bukit Barisan Selatan National Park) and G. Fredriksson (pers. comm. 2014; about 10,000 camera-trap nights in Batang Toru); Holden (2006) had, however, some incidental records from degraded areas outside the camera-trapped old-growth forest of Kerinci Seblat. Similarly, it was recorded in a camera-trap survey of two lowland oil palm plantations in central Sumatra far from extensive old-growth forest; although records were strongly clustered around the plantation edge, indicating a need for microhabitats (perhaps dense undergrowth, fallen wood) absent from the plantations proper (Jennings *et al*. 2015); another oil palm plantation-focussed survey in central Sumatra found it commonly in the landscape but did not record it in the plantation itself (Maddox *et al*. 2007).

In one area of Borneo, Malay Civet density in an unlogged forest was about twice that in a logged forest, perhaps because of lower fruit availability in logged forest; potentially, the species might survive in disturbed habitats only by continued inward dispersal from un- or little-disturbed forest (Colon 2002). Also in Malaysian Borneo, J. Brodie (pers. comm. 2014) found that local conservation status was affected negatively by recent logging, but had recovered somewhat in forests that were logged more than 10 years previously. In Sabah, Malaysia, the Proportion of Area Occupied seemed generally higher in less degraded than in more degraded forests, but other factors (as yet unclear) made this far from a perfect link (Sollmann *et al*. in prep.). In Peninsular Malaysia, radio-tracking of seven Malay Civets in an area of lowland forest abutting plantations found them to use both habitats, concluding that forest was essential, that the civets merely ranged into plantations perhaps primarily for nocturnal feeding, and that suitable day-bed sites might be limiting in them (Jennings *et al*. 2010), a pattern echoed in Sumatra (Jennings *et al*. 2015). Similarly, on Borneo, Malay Civet was commonly found within oil palm plantations near the Danum Valley Conservation Area (J. Brodie pers. comm. 2014) and the Sepilok Forest Reserve

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(A. Hearn pers. comm 2015), mostly fairly close to (within 2 km of; but so were most camera-trap stations) forest or mangrove. These findings suggest that the use by Malay Civet of converted areas - a least of oil palm - may be less than is often assumed.

It has been recorded from sea-level to 2,100 m (Jennings & Veron 2011) but the latter is perhaps exceptionally high; in Borneo, the highest record traced by Payne *et al*. (1985) was only 1,100 m; subsequent records go up only to 1,452 m (Crocker Range), although this was also the upper limit of camera-trapping, so it might occur still higher (J. Ross and A. Hearn pers. comm. 2014). In an area of Sarawak with significant highland survey, Mathai *et al*. (2010) speculated that this species might occur mostly below 900 m. The highest record in the Philippines given by Rabor (1955), Rickart *et al*. (1993) or Heaney *et al*. (in press) was only 1,200 m.
Malay Civet is solitary, omnivorous and primarily ground-dwelling (Kanchanasakha *et al*. 1998). Documented home-range sizes include, on Sulawesi, 24–189 ha, and on Borneo, 27–283 ha (Macdonald and Wise 1979, Nozaki *et al*. 1994, Colon 2002, Jennings *et al.* 2006). Mean home-range size for adults of both sexes was 110 ha in Sabah and 70 ha on Sulawesi (Colon 2002, Jennings *et al.* 2006). Colon (2002) considered that the Malay Civet was not territorial in Sabah but Jennings *et al*. (2006) found low intra-sexual overlap on Buton Island. Malay Civet is mainly nocturnal, although more active during daylight on Buton Island, Sulawesi than in Sabah, East Malaysia (Colon 2002, Azlan 2005, Jennings *et al*. 2006). Day rest sites are typically situated at ground level and associated with some form of cover (Colon 2002, Jennings *et al.* 2006).

Systems: Terrestrial

Use and Trade

Malay Civet is perhaps not specifically sought quarry anywhere in its range, but because much hunting uses non-selective traps, it is part of the general catch of wildlife (e.g. Mathai *et al*. 2010). The extensive introduction of the species in previous centuries outside its native range (Veron *et al*. in press) indicates it was presumably formerly perceived as of value.

Threats (see Appendix for additional information)

As a ground-living species, Malay Civet is exposed to snaring and other forms of ground-level trapping, to hunting with dogs, and to death from feral/stray dogs (e.g. Mathai *et al*. 2010, Azhar *et al*. 2013). Leopard Cats *Prionailurus bengalensis* in oil palm plantations die from haemorrhaging through eating rats poisoned by Warfarin and other anti-coagulant baits (Duckett 1976), and these would presumably affect other mammalian predators such as this civet, if it uses such plantations heavily. However, the limited survey in areas heavily used by people suggests it is rather well able to persist in landscapes retaining some patches of native forest, at general levels of threat. The species is occasionally hunted for food and treated as a pest because it is perceived as raiding poultry. In recent centuries and particularly recent decades, much of its range has been deforested. While the species is frequently recorded in edge and degraded areas, there is no indication that it can survive in non-wooded landscapes, or that oil palm plantations (which have replaced forest in much of its range) can support populations in the absence of forest. Forest conversion rates have considerably slowed in some of its range (e.g. Sabah, Malaysia) but remain high in some other parts (e.g. Sumatra); throughout, the highest losses tend to be in the level lowlands, which comprise part of the core habitat of this species.

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Conservation Actions (see Appendix for additional information)

Malay Civet is found in many protected areas across its range. This species is partly protected in Malaysia under the Wildlife Protection Act of 1972, meaning that anyone found killing this species will be liable to a fine not exceeding three thousand ringgit (Approx. USD 790) or a term of imprisonment not exceeding three years, or both (Azlan, 2003). However, Section 55 of this Act allows farmers to shoot any wild animal that causes damage to their property, as long as reasonable efforts have been made to frighten the animal away, and many civets are considered as pests in Peninsular Malaysia, because they are perceived to prey on small livestock and raid fruit orchards (Azlan 2003). It is not a Totally Protected Species in Indonesia (Shepherd 2008) and neither is it a CITES listed species (CITES 2014). The wide persistence in encroached areas in close proximity to people indicates a lack of immediate conservation measures needed; and while the habitat use remains poorly clarified, there is no evidence that this lack of knowledge is placing the species at risk through obscuring the need for interventions.

Credits

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Bibliography

Azhar, B., Lindenmayer, D., Wood, J., Fischer, J., Manning, A., McElhinny, C. and Mohamed Zakaria. 2013. Contribution of illegal hunting, culling of pest species, road accidents and feral dogs to biodiversity loss in established oil-palm landscapes. *Wildlife Research* 40: 1–9.

Azlan, J. 2003. The diversity and conservation of mustelids, viverrids, and herpestids in a disturbed forest in Peninsular Malaysia. *Small Carnivore Conservation* 29: 8–9.

Belden, G., Stuebing, R. and Nyegang, M. 2007. Small carnivores in mixed-use forest in Bintulu Division, Sarawak, Malaysia. *Small Carnivore Conservation* 36: 35–37.

Brodie, J. and Giordano, A. 2011. Small carnivores of the Maliau Basin, Sabah, Borneo, including a new locality for Hose's Civet *Diplogale hosei*. *Small Carnivore Conservation* 44: 1–6.

Cheyne, S.M., Husson, S.J., Chadwick, R.J. and Macdonald, D.W. 2010. Diversity and activity of small carnivores of the Sabangau Peatswamp Forest, Indonesian Borneo. *Small Carnivore Conservation* 43: 1–7.

Chua, M.A.H., Lim, K.K.P. and Low, C.H.S. 2012. The diversity and status of the civets (Viverridae) of Singapore. *Small Carnivore Conservation* 47: 1–10.

Chutipong, W., Tantipisanuh, N., Ngoprasert, D., Lynam, A.J., Steinmetz, R., Jenks, K.E., Grassman Jr., L.I., Tewes, M., Kitamura, S., Baker, M.C., McShea, W., Bhumpakphan, N., Sukmasuang, R., Gale, G.A., Harich, F.K., Treydte, A.C., Cutter, P., Cutter, P.B., Suwanrat, S., Siripattaranukul, K., Hala-Bala Wildlife Research Station, Wildlife Research Division and Duckworth, J.W. 2014. Current distribution and conservation status of small carnivores in Thailand: a baseline review. *Small Carnivore Conservation* 51: 96–136.

Colon, C.P. 2002. Ranging behaviour and activity of the Malay civet (*Viverra tangalunga*) in a logged and an unlogged forest in Danum Valley, East Malaysia. *Journal of Zoology (London)* 257: 473–485.

Corbet, G.B. and Hill, J.E. 1992. *Mammals of the Indo-Malayan Region: a Systematic Review*. Oxford University Press, Oxford, UK.

Duckett, J.E. 1976. Plantations as habitat for wild life in Peninsular Malaysia with particular reference to the oil palm (*Elaeis guineensis*). *Malayan Naturalists Journal* 29: 176–182.

Holden. J. 2006. Small carnivores in central Sumatra. *Small Carnivore Conservation* 34&35: 35–38.

Holden, J. and Neang T. 2009. Small carnivore records from the Cardamom Mountains, southwestern Cambodia. *Small Carnivore Conservation* 40: 16–21.

IUCN. 2016. The IUCN Red List of Threatened Species. Version 2016-1. Available at: www.iucnredlist.org. (Accessed: 30 June 2016).

Jennings, A.P. and Veron, G. 2011. Predicted distributions and ecological niches of 8 civet and mongoose species in Southeast Asia. *Journal of Mammalogy* 92: 316–327.

Jennings, A.P., Mohd Naim, Advento, A.D., Aryawan, A.A.K., Sudharto Ps, Caliman, J.-P., Verwilghen, A. and Veron, G. 2015. Diversity and occupancy of small carnivores within oil palm plantations in central Sumatra, Indonesia. *Mammal Research* 60: 181–188.

Jennings, A. P., Seymour, A. S. and Dunstone, N. 2006. Ranging behaviour, spatial organization and activity of the Malay civet (*Viverra tangalunga*) on Buton Island, Sulawesi. *Journal of Zoology (London)* 268: 63-71.

http://dx.doi.org/10.2305/IUCN.UK.2016-1.RLTS.T41708A45220284.en

Jennings, A.P., Zubaid, A. and Veron, G. 2010. Ranging behaviour, activity, habitat use, and morphology of the Malay Civet (*Viverra tangalunga*) on Peninsular Malaysia and comparison with studies on Borneo and Sulawesi. *Mammalian Biology* 75: 437–446.

Kanchanasakha, B., Simcharoen, S. and Tin Than, U. 1998. *Carnivores of Mainland South-East Asia*. Endangered Species Unit, WWF-Thailand Project Office, Thailand.

Langham, N. 1977. *A short introduction and field guide to the common mammals of Penang Island (translated in Malay by Ho Sinn-Chye)*. University Sains Malaysia, Penang, Malaysia.

Lim, N.T. and Ou Yang, X. 2012. Occurrence of the Malay Civet, *Viverra tangalunga* (Mammalia: Carnivora: Viverridae) in Singapore. *Nature in Singapore* 5: 79–81.

Low, C.H.S. 2011. Observations of civets, linsangs, mongooses and non-lutrine mustelids from Peninsular Malaysia. *Small Carnivore Conservation* 45: 8–13.

Maddox, T., Priatna, D., Gemita, E. and Salampessy, A. 2007. The conservation of Tigers and other wildlife in oil palm plantations. Jambi province, Sumatra, Indonesia. Zoological Society of London, London (Conservation Report 7).

Mathai, J., Hon, J., Juat, N., Peter, A. and Gumal, M. 2010. Small carnivores in a logging concession in the Upper Baram, Sarawak, Borneo. *Small Carnivore Conservation* 42: 1–9.

McCarthy, J.L. and Fuller, T.K. 2014. Records of small carnivores from Bukit Barisan Selatan National Park, southern Sumatra, Indonesia. *Small Carnivore Conservation* 51: 59–63.

Nijman, V., Spaan, D., Rode-Margono, E.J., Roberts, P.D., Wirdateti and Nekaris, K.A.I. 2014. Trade in Common Palm Civet *Paradoxurus hermaphroditus* in Javan and Balinese markets, Indonesia. *Small Carnivore Conservation* 51: 11–17.

Nor, S. M. 1996. The mammalian fauna on the islands at the northern tip of Sabah, Borneo. *Fieldiana: Zoology* 83: 1-51.

Payne, J., Francis, C.M. and Phillipps, K. 1985. *A field guide to the mammals of Borneo*. The Sabah Society and WWF Malaysia, Kota Kinabalu and Kuala Lumpur, Malaysia.

Rabor, D.S. 1955. Notes on mammals and birds of the central northern Luzon highlands, Philippines. Part 1. *Silliman Journal* 2: 193-218.

Samejima, H. and Semiadi, G. 2012. First record of Hose's Civet *Diplogale hosei* from Indonesia, and records of other carnivores in the Schwaner Mountains, Central Kalimantan, Indonesia. *Small Carnivore Conservation* 46: 1–7.

Shepherd, C.R. 2008. Civets in trade in Medan, North Sumatra, Indonesia (1997-2001) with notes on legal protection. *Small Carnivore Conservation* 38: 34–36.

Sollmann, R., Mohamed, A., Niedballa, J., Bender, J., Ambu, L., Lagan, P., Mannan, S., Gardner, B. and Wilting, A. In prep. Quantifying mammal biodiversity co-benefits in certified tropical forests.

Timm, R.M. and Birney, E.C. 1980. Mammals collected by the Menage Scientific Expedition to the Philippine Islands and Borneo, 1890-1893. *Journal of Mammalogy* 61: 566-571.

Veron, G., Willsch, M., Dacosta, V., Patou, M.-L., Seymour, A., Bonillo, C., Couloux, A., Wong, S.T., Jennings, A.P., Fickel, J. and Wilting, A. 2014. The distribution of the Malay Civet *Viverra tangalunga* (Carnivora: Viverridae) across Southeast Asia: natural or human-mediated dispersal? *Zoological Journal of the Linnean Society* 170: 917–932.

Wilting, A., Samejima, H. and Mohamed, A. 2010. Diversity of Bornean viverrids and other small carnivores in Deramakot Forest Reserve, Sabah, Malaysia. *Small Carnivore Conservation* 42: 10–13.

Wozencraft, W.C. 2005. Order Carnivora. In: D.E. Wilson and D.M. Reeder (eds), *Mammal Species of the World: A Taxonomic and Geographic Reference. Third Edition*, pp. 532-628. Johns Hopkins University Press, Baltimore.

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Appendix

Habitats

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Habitat	Season	Suitability	Major Importance?
1. Forest -> 1.6. Forest - Subtropical/Tropical Moist Lowland	Resident	Suitable	-
1. Forest -> 1.8. Forest - Subtropical/Tropical Swamp	Resident	Suitable	-
1. Forest -> 1.9. Forest - Subtropical/Tropical Moist Montane	Resident	Marginal	-
3. Shrubland -> 3.6. Shrubland - Subtropical/Tropical Moist	Unknown	Suitable	-
14. Artificial/Terrestrial -> 14.3. Artificial/Terrestrial - Plantations	-	Unknown	-
14. Artificial/Terrestrial -> 14.6. Artificial/Terrestrial - Subtropical/Tropical Heavily Degraded Former Forest	-	Marginal	-

Threats

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Threat	Timing	Scope	Severity	Impact Score
2. Agriculture & aquaculture -> 2.2. Wood & pulp plantations -> 2.2.1. Small-holder plantations	Ongoing	Minority (50%)	Negligible declines	Low impact: 4
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
2. Agriculture & aquaculture -> 2.2. Wood & pulp plantations -> 2.2.2. Agro-industry plantations	Ongoing	Majority (50-90%)	Negligible declines	Low impact: 5
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
5. Biological resource use -> 5.1. Hunting & trapping terrestrial animals -> 5.1.1. Intentional use (species is the target)	Ongoing	Minority (50%)	Negligible declines	Low impact: 4
	Stresses:	2. Species Stresses -> 2.1. Species mortality		
5. Biological resource use -> 5.2. Gathering terrestrial plants -> 5.2.2. Unintentional effects (species is not the target)	Ongoing	Minority (50%)	Negligible declines	Low impact: 4
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation		

Conservation Actions in Place

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Conservation Actions in Place
In-Place Land/Water Protection and Management

Conservation Actions in Place
Occur in at least one PA: Yes

Conservation Actions Needed

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Conservation Actions Needed
2. Land/water management -> 2.1. Site/area management

Research Needed

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Research Needed
1. Research -> 1.5. Threats
3. Monitoring -> 3.4. Habitat trends

Additional Data Fields

Distribution
Extreme fluctuations in area of occupancy (AOO): No
Continuing decline in extent of occurrence (EOO): No
Extreme fluctuations in extent of occurrence (EOO): No
Extreme fluctuations in the number of locations: Unknown
Lower elevation limit (m): 0
Upper elevation limit (m): 2100
Population
Population severely fragmented: No
All individuals in one subpopulation: No
Habitats and Ecology
Generation Length (years): 5.9
Movement patterns: Not a Migrant

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