CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA

Joint sessions of the 33rd meeting of the Animals Committee
and the 27th meeting of the Plants Committee
Geneva (Switzerland), 12 - 13 July 2024

Appendices of the Convention

Periodic review of species included in Appendices I and II

OVERVIEW OF SPECIES UNDER REVIEW

1. The attached information document has been submitted by Indonesia in relation to agenda item 45.1 of AC33 and item 33.1 of PC27 on *Overview of species under review (Periodic review of species included in Appendices I and II)*.*

* *The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat (or the United Nations Environment Programme) concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.*

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19 Juni 2024

Our Ref: S.321/KKHSG/KSA.4.2/B/06/2024

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Subject: Indonesia Response for Periodic Review of the *Chelodina mccordi*

Dear Madam,

Referring to your email dated 7th May 2024 regarding Periodic Review: Species Selected for Review (Indonesia Volunteered to Undertake Review) for *Chelodina mccordi*, we would like to respectfully convey Indonesia`s response as follows:

a. *Chelodina mccordi* is a protected species and since 2008 Indonesia has applied a zero quota from wild for this species. This is in line with conservation efforts for this endangered species in Indonesia.
b. According to the CITES Trade Database, in 2022 Indonesia reported exporting 29 individuals of this species with source code W (wild). After tracing the origin documents for these exports, we confirm that the source code for *Chelodina mccordi* export to Japan is C (F2). This is also a correction to Indonesia's 2022 annual report. Since 2021, the utilisation of *Chelodina mccordi* has been based on the Maximum Utilsation Limit of Captive Breeding.
c. In conclusion, Indonesia has made significant local and national conservation efforts to protect the Rote Island Snake-necked Turtle. We do believe that continued and enhanced participation from all stakeholders is essential for the ongoing protection of this unique species. Therefore, we request the CITES Secretariat to remove *Chelodina mccordi* from the review process. The report periodic review *Chelodina mccordi* is attached to this email.

It is hoped that this information will be of use in preparing for the 33rd meeting of the Animals Committee. Thank you for your kind attention and consideration.

Yours Sincerely,

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cc.:
1. Director General of Natural Resources and Ecosystem Conservation, MoEF;
2. Director of Secretariat of Scientific Authority for Biodiversity, NRIA.

Report of Periodic Review of *Chelodina mccordi* from Indonesia

(Decisions 16.124 and 16.125/Doc AC27 (SR))

Picture by M. As-singkily

Submitted by

Ministry of Environment and Forestry

National Research and Innovation Agency

BRIN
BADAN RISET
DAN INOVASI NASIONAL

1. Executive Summary

Overview: This review reports on the conservation efforts for the critically endangered Rote Island Snake-necked Turtle (*Chelodina mccordi*) and the success of captive breeding initiatives in Indonesia.
Key Points:
Multiple stages of conservation action have been implemented.
Recommendations for stricter conservation regulations and enhanced conservation measures.
Success in ex situ conservation and repatriation of captive populations to the wild.

2. Introduction

Species Overview: The Rote Island Snake-necked Turtle (*Chelodina mccordi*, Rhodin 1994) is an endemic species found on Rote Island, East Nusa Tenggara, Indonesia.
Purpose of Review: To report the conservation efforts for the species in Indonesia.

3. Biological and Ecological Information

Distribution: The Rote Island Snake-necked Turtle is found exclusively in the freshwater habitats of Rote Island, East Nusa Tenggara. A subspecies, *Chelodina mccordi timorensis*, is also found in Timor Leste.
Habitat: The species inhabits lakes, swamps, wetlands, and occasionally rice fields.
Biology Reproduction: Chelodina mccordi lays eggs three times a year, with each adult female producing 5-20 eggs.

4. Conservation Actions

Road Map for Conservation (2023-2038): Long-term sustainable management, involving both in situ and ex situ strategies, community engagement, and partnerships.

Ex situ Strategies: Repatriation, captive breeding, genetic analysis, and educational centers.
Ex situ conservation of this species will provide individuals that will eventually be reintroduced into their natural habitat. The provision of Rote Island Snake-necked Turtle individuals is an effort to collectively obtain turtles from various sources, including international organizations, captive breeding, seizures/donations from the public, insurance colony facilities, and other institutions. The goal of providing these individuals is to obtain valid population data on the Rote Island Snake-necked Turtle and to increase the number of individuals ready for breeding, while also enhancing the genetic diversity of the species.

In situ Strategies: Habitat management, threat mitigation, and ecosystem restoration.
One of the main challenges in the reintroduction program for the Rote Island Snake-necked Turtle (*Chelodina mccordi*) is that its natural habitat on Rote Island is not within a conservation area. Therefore, it is necessary to designate a wetland ecosystem as a conservation area outside the Nature Reserve Areas (KSA), Nature Conservation Areas (KPA), and Hunting Parks (TB) that is ecologically important for biodiversity. Three lakes have been designated as important wetland ecosystems for the reintroduction of the Rote Island Snake-necked Turtle in the wild, including: a. Ledulu Lake in Daiama Village, Landu Leko District; b. Peto Lake in Maubesi Village, Central Rote District; c. Lendo Oen Lake in Daurendale Village, Landu Leko District.

The conservation of the Rote Island Snake-necked Turtle (*Chelodina mccordi*) aims ultimately for these animals to thrive and reproduce in their natural habitat. Therefore, to support the entire conservation process, the condition of the habitat and the release process become one of the most crucial aspects in the conservation strategy for the Rote Island Snake-necked Turtle.

Community Engagement: Awareness programs, livelihood strategies incorporating conservation, and community-based breeding.

The existence of the lakes designated as potential habitats for the Rote Island Snake-necked Turtle (*Chelodina mccordi*) on Rote Island is closely tied to the role of the community, considering that ownership of these lakes belongs to several clans/families residing in the surrounding areas. Social capital refers to a set of social and cultural values that emphasize the importance of cooperation that can advance and develop independently. Strengthening the social capital of the communities around the habitat of the Rote Island Snake-necked Turtle will further ensure the presence of these turtles, as caring for them is an inherent value in communities with strong social capital (Syahra, 2003).

Important aspects of social capital that contribute to improving the quality of life and empowering communities include cultural values, human resource competencies, strong social management and community organization, equitable social structures, strong local leadership, robust moral and legal systems, and effective governance. According to Coleman (1998), there are three pillars of social capital: the first pillar consists of obligations and expectations arising from trust in social environments. The second pillar emphasizes the importance of smooth information flow within social structures to promote community activities. The third pillar involves norms that must be adhered to with clear and effective sanctions. These three pillars of social capital can be encouraged to support conservation efforts for the Rote Island Snake-necked Turtle at the grassroots level.

One way to strengthen social capital is through raising public awareness. Community awareness campaigns focus on advocating the significance of the Rote Island Snake-necked Turtle as an endemic and unique species on Rote Island, highlighting its critical conservation status, even facing extinction in the wild.

Partnerships: Policy development, eco-tourism initiatives, and institutional coordination.

Conservation efforts for the Rote Island Snake-necked Turtle (*Chelodina mccordi*) cannot be carried out by any single entity alone. Collaboration with various stakeholders who synergistically support the conservation efforts for the Rote Island Snake-necked Turtle is key to success. Involvement of the central government, local government, NGOs, communities, and individuals is essential for the success of Rote Island Turtle conservation efforts.

Conservation of the Rote Island Snake-necked Turtle needs support from various aspects, including policy, habitat management, social, economic, and scientific aspects. Research on the Rote Island Snake-necked Turtle since 1994 has been very limited, so each study or research on the species holds novelty or newness value. Research is an essential component that can serve as a basis for decision-making and policy formulation. Decisions and policies based on research findings (scientifically based) have a strong foundation. Research specifically related to Rote Island Turtle conservation efforts needs to be conducted rigorously and adhere to academic standards so that the research findings can be justified for their accuracy.

Listing in the National Protected Species

Indonesian Scientific Authority through recommendation Nomber B.2230/IPH.1/KS.02.04/V/2018 on 4 May 2018 recommended *Chelodina mccordi* with Indonesia name Kura kura rote as national protected species to the Indonesian Management Authority (Ministry of Environment and Forestry), this is following policy zero quota of wild harvest for commercial purposes since 2008. Following the recommendation of Scientific Authority, further The Ministry of Environment and Forestry approved listing of *Chelodina mccordi* with Indonesia name Kura kura rote as national protected species through Ministry of Environment and Forestry Regulation Number P.20/MENLHK/SETJEN/KUM.1/6/2018 year 2018; P.92/MENLHK/SETJEN/KUM.1/8/2018; and P.106/MENLHK/SETJEN/KUM.1/12/2018.

The socialization and training of identification of national protected species was conducted in 19-20 Januari 2020 for all staff in the Ministry of Environment and Forestry including National Park staff, Natural Conservation Agency) throughout Indonesia through E-learning Identification of Protected species of Herpetofauna supported by Ministry of Environment and Forestry, Indonesian Institute of Sciences and USAID.

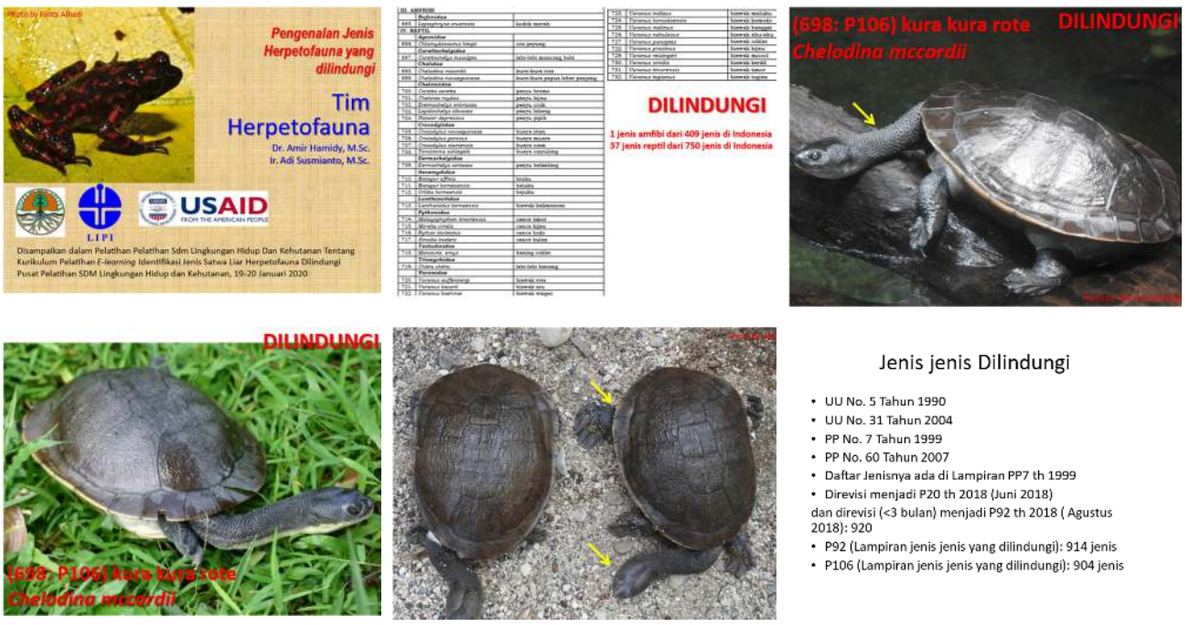
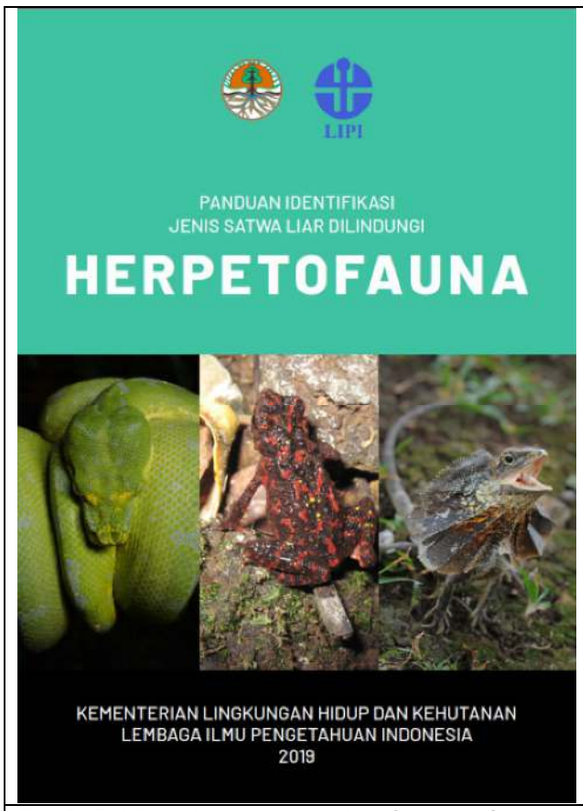


Fig. 1. Some material for E-learning Identification of protected species

Publishing a guide of identification of protected species Herpetofauna.



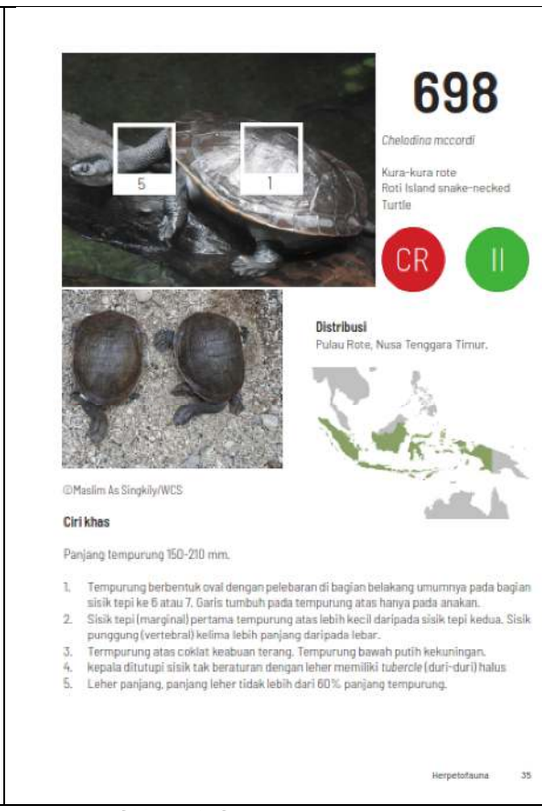


Fig. 2. Published guide book identification of protected species of Herpetofauna

Success of Captive production of *Chelodina mccordi*

Captive Breeding: Two captive facilities, PT. Alam Nusantara Jayatama, jakarta and Oelsonbai Captivity, Kupang have successfully bred the species.

Fig. 3 Breeding facilities and captive individuals of *Chelodina mccordi* in PT Alam Nusantara Jayatama

The Rote Island Snake-necked Turtle requires a permanently aquatic habitat throughout the year, both during the rainy season and the dry season, including mating behavior, which also takes place in water. After mating

between a male and female turtle, the female will carry eggs in her body. When the female turtle is ready to lay eggs, she will climb onto the nesting substrate, and subsequently lay her eggs. Female Rote Island Snake-necked Turtles are observed to become reproductively active starting at the age of 6 years. A female turtle will lay between 5 to 20 eggs per clutch, and she can lay eggs up to three times a year. If there are female Rote Island Snake-necked Turtles that lay eggs, it is advisable to incubate the eggs in an incubator (temperature set at 30±0.5°C) to increase the hatching rate to 75-100%. Turtle eggs will hatch within approximately 60 days, with higher temperatures leading to faster hatching, but eggs will be damaged if the temperature exceeds 32°C (Kayat, 2021; Kayat and Saragih, 2021). In their natural habitat, Rote Island Snake-necked Turtles are known to lay eggs between February and September, with the eggs hatching at the end of November, marking the onset of the rainy season (Rhodin et al., 2008).

Fig. 4 the success of ex-situ conservation efforts through captive breeding.

Repatriation: Captive-bred individuals have been released back into the wild as part of conservation efforts.

First repatriation specimens produced from the captive breeding facility (PT. Alam Nusantara Jayatama) was conducted in 16 July 2009 in Peto Lake by Minister of Forestry.

Fig 5. Repatriation at Peto Lake, Rote Island.

Starting in 2016, the Indonesian government, in collaboration with the Wildlife Conservation Society Indonesia Program (WCS-IP) and other partners, initiated efforts to repatriate Rote turtles from abroad. This initiative involved extensive planning and collaboration with various stakeholders, including local universities (Universitas Nusa Cendana), government bodies, the local community, TNI Angkatan Udara, and the Animal Quarantine Installation of BBKSDA NTT. Field research identified three suitable lakes for habitat: Ledulu, Lendoen, and Peto. In 2019, these lakes were designated as essential wetland ecosystems by the provincial government through Governor's Decree No. 204/KEP/HK/2019.

In 2021, the first repatriation involved 13 turtles from the Mandai Nature-Singapore Zoo. In 2023, the second repatriation brought back 33 turtles (25 males and 8 females). Currently, the turtles are being observed in quarantine before being released into Lake Ledulu. The release will be managed by placing turtles in a fenced area within the lake and monitored via radio tagging to track their movements. The ultimate goal is to ensure the successful recovery and population growth of the Rote snake-necked turtle in its natural habitat. Further repatriations are planned to increase the population more substantially.

The repatriation process of *C. mccordi* from Singapore Zoo, temporarily placed in quarantine before being released into its natural habitat (2023)

6. Trade and Utilization

International Trade: Primarily traded as pets.

Legal Trade: Regulated under CITES Appendix II. Trade from wild sources is prohibited; only captive-bred individuals are traded under national regulations based on evaluation of the captive breeding production capacity quotas: **2021:** 65 individuals; **2022:** 29 individuals; **2023:** 20 individuals; **2024:** 50 individuals

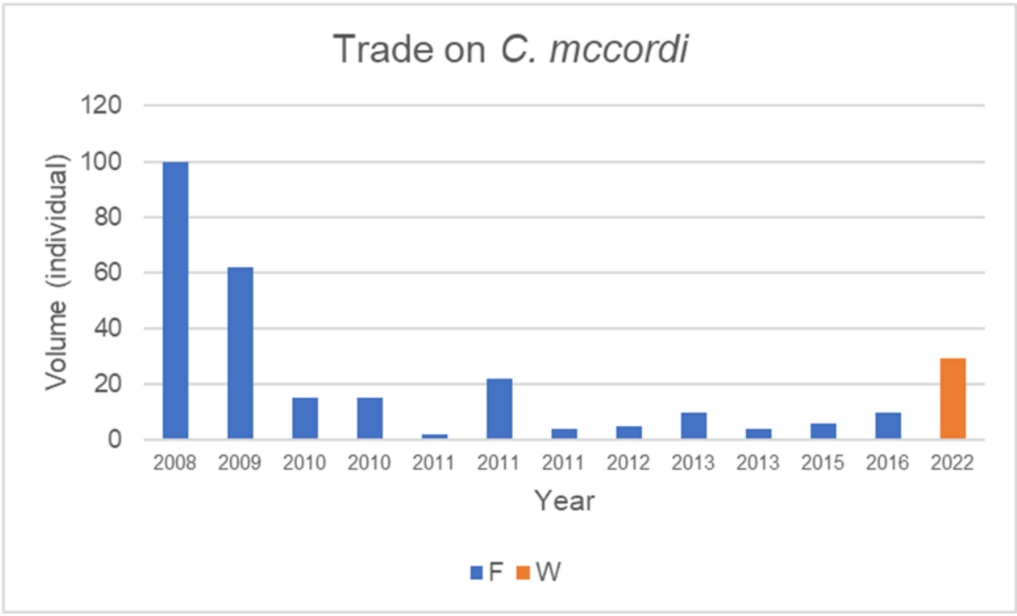


Fig 6. Trade on *C. mccordi* based on CITES trade database. Indonesia reporting trade on wild source (29 individuals) of this turtle on 2022. The source claimed to be from the wild is, in fact, from captivity (miss source code, it is supposed to be F and not W). We acknowledge an oversight in the data entry process.

7. Impact of Trade on Conservation Status

Analysis: The regulated trade of captive-bred individuals helps alleviate pressure on wild populations.
Evidence: Data supports that the controlled trade has provided incentives for captive breeding.

8. Recommendations

Regulatory Actions: Strengthen local law enforcement
Conservation Actions: Continue and expand current conservation efforts, both in situ and ex situ.
Monitoring and Research: Improve population monitoring and conduct further research on the species.

9. Conclusion

Summary of Findings: Indonesia has made significant local and national conservation efforts to protect the Rote Island Snake-necked Turtle. Continued and enhanced participation from all stakeholders is essential for the ongoing protection of this unique species.

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