

Bugs R All

Newsletter of the Invertebrate Conservation & Information Network of South Asia (ICINSA)

Stop eating the largest land-dwelling marine creatures



Coconut Crab *Birgus latro* Linnaeus, 1767 is the largest land-dwelling marine crustacean.
Photo from Okinawa, Japan. © Chia-Hsuan Hsu.

Coconut Crabs *Birgus latro* Linnaeus, 1767 are the largest land-dwelling marine crustaceans. Although, they live on land and their larval stage is in the ocean, hence termed 'marine creatures on land'. They are distributed on the islands of the tropical Indo-Pacific Ocean (Burggren & McMahon 1988). Their habitats overlap with places of human

activities, where they are threatened with habitat loss because of agriculture and uncontrolled exploitation (Brown & Fielder 1991). In the breeding season, they migrate from the land to the seashore to release the larvae (Reese & Kinzie III 1968) during which they might die due to roadkill (Hsu 2018). Furthermore, the Coconut Crabs are eaten

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by some island residents or served as delicacies to tourists. Because of the slow sexual maturation and low reproductive rate (Schiller et al. 1991; Drew et al. 2010), their populations are slowly declining from human consumption.

The International Union for Conservation of Nature (IUCN) declared the level of Coconut Crabs as Rare in 1983 but changed to Data Deficient in 1996 (Eldredge 1996). We suggest the IUCN committee to re-evaluate the status of Coconut Crabs.

Although, their distribution is restricted to some islands of tropical Indo-Pacific Ocean, the population has reduced considerably in several places such as Taiwan, and hence they must be protected under the Wildlife Conservation Act in Taiwan (Hsu 2018). They have been found to be extirpated in some regions such as Kaohsiung, southern Taiwan (Hsu 2017), and other areas and islands, e.g., Australia, Madagascar, Mauritius (Brown & Fielder 1991; Schiller 1992; Lavery et al. 1996).

Conservation action must be undertaken as early as possible. If we wait any longer, it might lead to a bottleneck effect. Moreover, we must wisely use our natural resources for sustainability. Coconut Crabs are not only sold in traditional markets such as in Indonesia but also online as pets and food in some countries. These crabs are captured from the wild rather than being bred in



Coconut Crabs sold at traditional market from Okinawa, Japan.
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Bugs R All

Newsletter of the
Invertebrate Conservation & Information Network of South Asia (ICINSA)

captivity. I hope the science community, non-governmental organizations, and local governments realize the gravity of the situation and promote strategies for their conservation. Coconut Crabs are one of the special creatures on earth, we are looking forward that our next generation can still appreciate their beauty.

Reese, E.S. & R.A. Kinzie III (1968). The larval development of the coconut or robber crab *Birgus latro* (L.) in the laboratory (Anomura, Paguridea). *Crustaceana Supplement*, 2: 117–144.

Schiller, C. (1992). Assessment of the status of the coconut crab *Birgus latro* on Niue Island with recommendations regarding an appropriate resource management strategy. Consultancy report prepared for The Food and Agricultural Organisation of the United Nations, by University of Queensland. Queensland, Australia.

Schiller, C., D. Fielder, I. Brown & A. Obed (1991). Reproduction, early life-history and recruitment. The Coconut Crab: aspects of *Birgus latro* biology and ecology in Vanuatu. Canberra. *Acia Monographs* 8: 13–34.

References

Brown, I. & D. Fielder (1991). The coconut crab: aspects of *Birgus latro* biology and ecology in Vanuatu. *ACIAR Monograph* 8: 1–11.

Burggren, W.W. & B.R. McMahon (1988). *Biology of the Land Crabs*. Cambridge University Press, 492pp.

Drew, M., S. Harzsch, M. Stensmyr, S. Erland & B.S. Hansson (2010). A review of the biology and ecology of the robber crab, *Birgus latro* (Linnaeus, 1767) (Anomura: Coenobitidae). *Zoologischer Anzeiger-A Journal of Comparative Zoology* 249(1): 45–67.

Eldredge, L.G. (1996). *Birgus latro*, 2008 IUCN Red List of Threatened Species. Retrieved 23 February 2009. www.iucnredlist.org.

Hsu, C.-H. (2017). The introduction of land crabs at Shoushan, Kaohsiung. *Taiwan Museum Quarterly* 36(4): 52–55.

Hsu, C.-H. (2018). The Coconut Crab is in danger of vanishing in Taiwan. *Nature Conservation Quarterly* 102: 36–41.

Lavery, S., C. Moritz & D. Fielder (1996). Indo-Pacific population structure and evolutionary history of the Coconut Crab *Birgus latro*. *Molecular Ecology* 5(4): 557–570.

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