MERCI project
Managing exotic reptiles on Caribbean islands

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DESCRIPTION OF INVASIVE EXOTIC REPTILE SPECIES FROM THE LESSER ANTILLES

Chelonoidis carbonarius

(Spix, 1824)

Common name: Red-footed tortoise.

Local name: Red-leg, Red-legged, Savanna tortoise, Tortue charbonnière à pattes rouges, Köhlerschildkröte, Jaboti, Jabuti, Jabuti-Piranga, Jabuti-Vermelho, Japuta, Carumbe / Karumbe, Wayapopi, Morrocoy, Kati, Sambo.

Order : Testudines, Family : Testudinidae

Description

Morphology. Medium sized freshwater turtle. The carapace is black, marked with light spots in the middle of each scute. The head and limbs are black, spotted with bright colours from yellow to dark red. Characteristic of the genus Chelonoidis, the nuchal scute is absent and the carapace possess a large, undivided supracaudal scute (Ernst and Leuteritz, 1999).

Standard body size (carapace length). 400 to 600 mm (Ernst et Leuteritz, 1999).

Sexual dimorphism. Males are usually larger than females (Ernst et Leuteritz, 1999).

Variations. The colour of the carapace, head and limbs varies according to a North-South gradient over its native range. Five variants are thus identified.

Possible confusion with other species. Confusion is possible with the Yellow-footed tortoise, *C. denticulatus*, a phylogenetically close species, native to the Amazon basin and also present in Guadeloupe (introduced but not established; INPN, 2021), in Dominica (introduced; IUCN redlist, 2021) and in Trinidad (uncertain status) (Vargas-Ramirez et al., 2010; Wang et al., 2011).

Distribution

Native. Panama, Colombia, Venezuela (Rivas et al., 2012), Guyana (Cole et al., 2013), Surinam, French Guiana, Ecuador, Peru, Bolivia (Montaño et al., 2013; Noss et al., 2013), Brazil (Wang et al., 2011; Santos et al., 2014; de Freitas et al., 2018, 2019; Ferreira, 2021; Shibuya et al., 2021), Paraguay (Vinke et Vinke, 2001; Cacciali et al., 2016), Argentina.

Introduced. Caribbean: Puerto Rico, US and British Virgin Islands, Antigua, Barbuda (Daltry, 2007), Guadeloupe, Dominica, Martinique, Sainte Lucia, Saint Vincent and the Grenadines (Daudin and Silva, 2007), Grenada, Barbados, Trinidad, Tobago.

Uncertain status. Great Corn Island (Nicaragua) (Salazar-Saavedra et al., 2015).

Biology and ecology

Habitat. *Chelonoidis carbonarius* inhabit various habitats, from savannah to wet forests (Vinke et Vinke, 2001; Vargas-Ramirez et al., 2010).

Diet. Omnivore. The species can feed on plants (weeds, fruits and seeds), mushroom, mollusks, curstacean, insects and carrion (Wang et al., 2011; Mourthe and Castro, 2017; Shibuya et al., 2021).

Reproduction. *C. carbonarius* is generally reach maturity at five. The egg-laying period takes place during the wet season (between June and September). Females lay eggs several times during this period, laying two to fifteen eggs per nest.

Behaviour. On its native range, the dry season can lead to the temporary disappearance of water ponds. *C. carbonarius* can then aestivate, buried in mud or sand, while awaiting the return of more favourable conditions.

Impact and management of introduced populations

Impact. Little is known about the impact of *Chelonoidis carbonarius* on native ecosystems in introduced regions.

Management. No targeted control measures have been established in the regions where the species has been introduced.

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