From Puerto Rico to Venezuela: A Twenty-Five-Year Long Distance Recapture of a Hawksbill Turtle (*Eretmochelys imbricata*)

Clemente Balladares^{1,2}, Carlos E. Diez³ & Robert Van Dam⁴

¹Dirección General de Diversidad Biológica, Ministerio del Ambiente, Caracas, Venezuela (E-mail: cballadares86@gmail.com);

²Postgrado de Ecología, Universidad Central de Venezuela (UCV) Caracas, Venezuela;

³Endangered Species Program, Puerto Rico Department of Natural and Environmental Resources, San Juan, Puerto Rico (E-mail: cdiez@drna.pr.gov); ⁴Chelonia de Puerto Rico, San Juan, Puerto Rico (E-mail: rpvandam@yahoo.com)

On September 25, 2023, a hawksbill turtle (*Eretmochelys imbricata*), bearing Inconel tags (X7113, X7114) on its front flippers, was captured during in-water surveys in front of the nesting beach, Los Garzos, Gulf of Paria, Venezuela (Balladares *et al.* 2019; Fig 1). The recovered tags were in good condition (Fig 2). At the time of capture, the turtle's curved carapace length (CCL) was 76 cm and its tail extended beyond the carapace, suggesting it was an adult male (Van Dam & Diez, 1998, Fig 3 & 4). The animal received new Inconel tag (V014M, V015M) on its front flippers.

This turtle had been originally tagged 25 years earlier, on 16 September 1998 during in-water surveys by personnel from Proyecto Carey-Isla de Mona in the feeding grounds of Monito Island (near Mona Island, Diez & Van Dam 2002; Fig 1). At the time of original capture, the turtle measured 30.4 cm CCL and weighed 2.3 kg. According to Diez & Van Dam (2002), this animal was considered a juvenile with undetermined sex due to its size (Fig 5).

The time interval between the tagged date on this turtle in Puerto Rico and when it was found in Venezuela was 25 years, which indicates that the turtle survived for more than two decades bearing the tags and reached its sexual maturity within that time (Van Dam & Diez 1998; Diez & Van Dam 2002). This current report not only confirms the connectivity between different areas in the Caribbean for the hawksbill migrations (Velez-Zuazo *et al.* 2008), but also is the oldest long distance tag recapture for a hawksbill turtle tagged at Monito Island and a record Inconel tag retention duration (Van Dam & Diez 1999). This type of information reinforces the importance of collaborative regional conservation networks.

Acknowledgements. Venezuela: we appreciate the help of our four local assistants of the fishing village of Macuro, including Modesto Garcia, Eduardo Orfila, Oliver Mata and Jose Reinoza, and also our local boaters, including Damaso Urbano and Eleazar Salazar. We gratefully acknowledge funding by Marine Conservation



Figure 1. Geographic locations of Monito Island (Puerto Rico) and Los Garzos (Venezuela).



Figure 2. Condition of the 25 year old Inconel tag on a hawksbill turtle encountered during an in-water study in Venezuela after being initially tagged in Puerto Rico.



Figure 3. Recapture of the tagged adult hawksbill turtle with 76 cm curved carapace length in Venezuela.



Figure 4. Elongated tail of the adult hawksbill turtle encountered during an in-water study in Venezuela.

Action Fund of the New England Aquarium, Boston, USA, and the International Sea Turtle Society (ISTS) Small Grants. Puerto Rico: we thank personnel from the Proyecto Carey-Isla de Mona's 1998 field season. Special thanks to M. Godfrey for reviewing this manuscript and J.Castro-Prieto for the map.

BALLADARES, C. & E. QUINTERO-TORRES. 2019. Is a small sea turtles rookery doomed to local extinction? Decreasing nesting trends at the Paria Gulf, Venezuela. Marine Ecology 40: 1-10.

DIEZ, C.E. & R.P. VAN DAM. 2002. Habitat effect on hawksbill turtle growth rates on feeding grounds at Mona and Monito Islands, Puerto Rico. Marine Ecology Progress Series 234: 301-309.

VAN DAM, R.P & C.E. DIEZ. 1998. Caribbean hawksbill turtle morphometrics. Bulletin of Marine Science. 62. 145-155.

VAN DAM, R.P & C.E. DIEZ. 1999. Differential tag retention in Caribbean hawksbill turtles. Chelonian Conservation & Biology 3: 225-229.

VELEZ-ZUAZO X, W.D., RAMOS, R.P. VAN DAM, C.E. DIEZ, A. ABREU-GROBOIS & W.O. MCMILLAN. 2008. Disperal, recruitment and migratory behaviour in a hawksbill sea turtle aggregation. Molecular Ecology 17: 839-853.

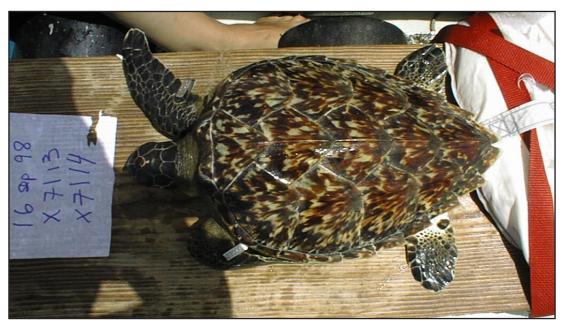


Figure 5. Hawksbill turtle with 30.4 cm curved carapace length when it was first captured in 1998 and given Inconel tags on front flippers