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**DISTRIBUTION AND ABUNDANCE OF NESTING MARINE TURTLES IN NORTHWESTERN AUSTRALIA: PAIRING THE LANDSCAPE AND LOCAL PERSPECTIVES**

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An increased demand for knowledge of northwestern Australian marine turtle resources accompanied the newly established Kimberley Marine Parks, the indigenous ranger groups responsible for on-country management, and the 2017 Australian Commonwealth Marine Turtle Recovery Plans. The Western Australia Marine Science Institute Turtle Project 1.2.2 addressed that knowledge gap with comprehensive aerial surveys. Over 44,000 aerial photos included all known rookeries and 91% the remote Kimberley islands and coasts taken in mid-summer and mid-winter seasons of 2014. On-ground surveys were conducted for 37 accessible locations to verify species. The surveys inventoried turtle nesting at scales of 1-10-100-1000s of tracks.

The higher aggregations of tracks (above median of 20 nests) identified significant beaches to management interests. The rookeries with highest track counts and density were winter flatbacks at Cape Domett, summer greens at the Lacepedes and summer flatbacks at Wallal Downs-Eighty Mile Beach. Aerial surveys had low power to detect olive ridley or hawksbill turtles because those species were sparse and isolated in the Kimberley, the tracks of lighter-bodied species did not persist as long and the survey period was not ideally to pick their seasonal phenology. No leatherback or loggerhead tracks were recorded although migrations through the region are known through indigenous knowledge, fisheries bycatch or satellite telemetry.

The surveys give a landscape perspective to Commonwealth and State interests and new detailed data for local management by Traditional Owners through Healthy Country Plans. Pairing landscape and local perspectives identifies the priority turtle beaches and allows strategic recommendations for future studies and monitoring.

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