

Foraging flatbacks in Roebuck Bay : local studies for regional understanding.
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Early results (2018-2020) are presented for a foraging study of flatback turtles in the Yawuru Nagulagun / Roebuck Bay Marine Park, Kimberley, Western Australia. We sampled 92 turtles (including two within season recaptures) by dip netting or rodeo jumping, including posthatchlings, juveniles, sub-adults and adult males and females in 25 days of field work (sampling summer, early and late winter). We deployed 26 satellite telemetry tags (5 juvenile, 2 sub-adults, 11 females, 9 males). Females included tagged individuals from 3 rookeries in Pilbara and Kimberley rookeries, and unknown stocks to the north before transmitters ceased. Adult males and females were tracked on round trips to rookery, departing by mid-October to known rookeries south and north of Roebuck Bay. The revised genetic stocks and telemetry clarify that YNRBMP hosts a mixture of genetic stocks to be clarified by further sampling. Investigations of diving and foraging behaviour use underwater video camera and daily diary accelerometers. Blood collection and health examinations of foraging and nesting flatback turtles are the first haematological and biochemical blood reference values for this species. Stable isotope signatures are validated for this aggregation of foraging flatbacks with half the collected animals feeding on jellyfish. The identification of YNRB Marine Park as a flatback foraging area is nationally and globally significant. The Park provides a first opportunity to study flatback turtles at a life stage other than the nesting beach. Other species within the Park include green, hawksbill, loggerhead and olive ridley turtles. This study will furnish novel information that can be fed directly into the management of the Western Australian Marine Parks that are jointly managed by state government and the local indigenous organization.