Turtle Connections: Turtle Identification, Flipper Tags, 'Post-cards' to the Unknown, and Third Party Engagement

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Turtles don't have birth certificates and cannot tell you their name. If you are not familiar with marine turtles, see one, and want to know what species it might be, there are published key documents that will help. 'Saltwater' people for whom turtles are a cultural and economic resource further consider turtles from that perspective.

However, if you want to know more about the turtles' biology, life histories and population dynamics it is necessary to positively identify individuals from the target population and have that association of turtle and identification device or devices persist for the time needed for acquiring the information needed for the study.

Studies involving hatchling or juvenile turtles pose their own special problems due to the size of the turtles in the first instance, and their continuing growth. Adult size turtles pose lesser problems in these respects and have more often been the focus of extended study.

Non-corrodible external flipper tags when properly applied are the longest lasting lower cost means of individual turtle identification in general use. Embossed with unique character combinations of letters and numbers combined with project contact addressing, and applied externally, no special equipment is required to record and report observations wherever the tagged turtle may go and be found away from the project site.

Valuable information on dispersal range, the nature of the observation being reported, and the fate of the turtle involved can be obtained from these third party encounters. It is nevertheless known that people who may be discovering tagged turtles might not be looking out for tags, that some people finding tags might consider them indicators of ownership where reporting a find could be self incriminating, that reporting a particular type of encounter such as fishery bycatch or other industrial activity interaction otherwise unobserved might lead to other perceived detriment. Discoverers who do choose to report finds sometimes misreport necessary detail which cannot be recovered after the event.

The discoverers providing good records do contribute knowledge which adds value to the accumulated case history of the individual turtle involved. Acknowledging and rewarding those contributions is an essential part of any project. Ensuring as far as possible that responses are culturally appropriate is also important where hunter engagement is involved. Distant dispersal interaction records and turtle fate data is one set of information discoverable from studies including individually identifiable turtles readily detectable as such by third parties. This was anticipated at commencement of the Western Australian Marine Turtle Project Advisory leaflets were produced and widely distributed at regional scale from the outset. A Bahasa Indonesia translated version complemented the English language original. These of course anticipated literacy of potential discoverers and reporters and their confidence in making contact with perceived authority.

The first tag discovery report we received was from a green turtle tagged and released from an independent Papua-New Guinea project! The first WA-series tag discovery report was provided from Croker Island, NT, hunters early April 1987 for a green turtle tagged and released with assistance from Bardi community men from the first field program work late November 1986 on the West Island, Lacepede Islands, nesting beach. Since those first reports we have received many more for WA tagged turtles having ranged over a wide geographic area from SW WA to Indonesia and across into Torres Strait. Elapsed times between initial tag and release and encounter reports have ranged from ca 4 months to more than 20 years.

So, how might we visually present and distribute summaries of these data, and what might be made from those? At the first it was only possible to hand draw maps and indicate where turtles of different species and study groups may have been discovered. More recently it has become possible using GIS capabilities to estimate and plot minimum at sea distance dispersal tracks and to aggregate those to show the relative strength of linkages between recovery locations and nesting beaches in particular.