

7. LIVE STRANDINGS AND CARCASSES

Marine turtle stranding/carcass incidents usually involve single individuals, although hundreds have been known to strand after cyclones (Limpus and Reed 1985). The reasons for the marine turtles stranding/dying are not well understood, and are likely to vary. Natural (e.g. disease) and anthropogenic (e.g. pollution) causes have been implicated in some stranding events, but others have shown no obvious contributory factors (QPWS Marine Wildlife Stranding and Mortality Database).

All of these events pose important issues for management for several reasons, including the:

- threatened status of marine turtles,
- effort and resources required to respond to live strandings, entanglements or carcasses,
- high public and media interest in these events,
- possibility of contributing to or prolonging the suffering of animals, and
- risks to humans who try to free entangled or trapped animals and/or return them to deeper waters.

Dead marine turtles are potentially valuable sources of information, and can provide insight into causes of mortality and species distribution. The amount and quality of information that can be retrieved depends to a large extent on how fresh and intact is the carcass. Because of the threatened status of marine turtles occurring in the World Heritage Area, high priority should be placed on responding to reports of dead animals as quickly as possible in order to obtain the maximum amount of information from each carcass, especially for loggerhead, olive ridley and leatherback turtles. Speedy detection and reporting of carcasses facilitates collection of useful data.

In addition, stranded (live) animals can be valuable sources of information, and measurements and samples should be taken whenever possible, without further jeopardising the health of the animals.

Reliable information on marine turtle by-catch in the World Heritage Area would be useful, both to evaluate direct impacts on turtles and to help gather information on their distributions and habits. Further, turtles accidentally killed in fishing, QSCP or aquaculture gear are a very valuable source of basic information about the animals. In contrast to stranded animals, animals caught in nets are more likely to be fresh when discovered and less likely to be diseased. Thus, they can contribute to an understanding of basic biology (e.g. age at sexual maturity). Additionally, levels of contaminants, such as pesticide residues, in incidentally caught animals should be more typical of the population at large.

In the World Heritage Area, the QPWS responds to stranding/carcass incidents that occur in State waters or on State beaches, whereas stranding/carcass incidents that occur in Commonwealth areas (e.g. in reef lagoons) are the responsibility of the Authority. Therefore, joint management of stranding and carcass incidents is essential and is coordinated by the Day to Day Management Coordination Unit.

For both live and dead animals, it is essential that samples and measurements be collected according to agreed, standardised procedures to ensure that the data will be useful and comparable to that collected from other sites. Some information (e.g. pollutant loads) can only be retrieved if samples are properly collected, stored and analysed.

Workshops focussed on other marine wildlife (e.g. live-stranded and dead cetaceans) have produced detailed guidelines for responding to live strandings and carcasses, including guidelines for determining the likelihood of success for possible attempts at rescue or rehabilitation, humane methods of euthanising animals, and proper collection and storage of biological samples. Guidelines have also been developed detailing the appropriate procedures for dead marine turtles, including performing necropsies (Wolke and George 1981), taking of measurements, and collection and storage of samples, etc.