Chapter 6

Specific inventory of marine mammals and sea turtles in the Touho to Ponérihouen area

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SUMMARY

- Species diversity of cetaceans in the Touho to Ponérihouen consists of nine of the 24 species reported in New Caledonia. None are endemic.
- Only one species is known only from this area, the narrow beaked dolphin (*Steno bredanensis*) identified during a stranding.
- The lagoon area between Touho and Ponérihouen is likely to harbor resident populations of Indo-Pacific bottlenose dolphins (*Tursiops aduncus*) and/or spinner dolphins (*Stenella longirostris*).
- This area is not a breeding ground for humpback whales (*Megaptera novaeangliae*), but could serve as a transit area towards other sites.
- No dugong (*Dugong dugon*) was sighted in the area but its presence is likely and in low density.
- Three of the four turtle species known to New Caledonia were identified in the area. These are the green turtle (*Chelonia mydas*), the logger head turtle (*Caretta caretta*) and the hawksbill turtle (*Eretmochelys imbricata*). For the first two, nesting sites have been detected on some islets.
- No specific threats to marine mammals or to sea turtles were identified in the area.

INTRODUCTION

Sea turtles and marine mammals are often seen as emblematic species, particularly in the South Pacific where their cultural importance is recognized (SPREP 2008). In New Caledonia, several species such as the green turtle (*Chelonia mydas*), the dugong (*Dugong dugon*) and the humpback whale (*Megaptera novaeangliae*) are part of the lives of Melanesian populations where they have an important symbolic and cultural role. Beyond this aspect, these species have a fundamental influence in the structure and functioning of marine ecosystems. Thus, more and more studies show that the significant decrease in populations of top predators has a large scale negative impact on the entire marine system in which they live (Myers *et al.* 2007; Heithaus *et al.* 2008). It is therefore important to establish and to take into account the status of these populations in environmental assessment programs.

In New Caledonia, the study of marine mammals has long focused on humpback whales, this is why a large number of data is available on these species (Garrigue *et al.* 2001; Garrigue