

The manatee in Haiti

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The future looks bleak for the manatee population in the waters around Haiti. Results of a survey conducted by the US Fish and Wildlife Service suggest that numbers have declined drastically over the last 50 years. The best hope for the few remaining is that the hunting expertise will vanish with the older generation.

West Indian manatee *Trichechus manatus* populations have declined in many countries in the Caribbean and Latin America. In order to understand better the extent of the declines, the US Fish and Wildlife Service has been undertaking status surveys in co-operation with interested governments. In May 1982, a 12.5-hour aerial survey of the entire coast of Haiti revealed only eight manatees (Figure 1). Based on replicated flights in Puerto Rico (Powell *et al.*, 1981), one might expect the difference between the lowest and highest counts of an island manatee population to differ by a factor of about four. Assuming the eight manatees counted in Haiti represent a minimum count, then a maximum count of 32 animals might be predicted if we had replicated the survey. According to six surveys completed in 1977, manatees appear to be more numerous in the adjacent Dominican Republic, where the average aerial survey count was 19.8, with a range of 11–41 (Belitsky and Belitsky, 1980). More information on hunting pressures, available habitats, and movements of manatees in Hispaniola are required to explain this possible disparity in numbers between the Dominican Republic and Haiti.

We interviewed residents familiar with coastal Haiti in 1982 and 1983, and were initially disappointed with the results because we seemed to

gather little information about manatees. Fishermen all over the world usually give lucid accounts of how manatee (or dugong) meat has three different consistencies or flavours (pork, fish and beef), depending on which part of the animal it is taken from. Only a very small number of people told us about this in Haiti. In reviewing our interview notes, however, we realized that there was a pattern: young people knew about manatees mostly through discussions with their parents and grandparents. People over 50 years old described first-hand experiences with manatees, including the expected meat story, and told us that manatee meat used to be sold in Haitian markets. One man had eaten manatee meat that his father had caught, some had seen dead or live animals near shore, and another man had seen a manatee while he was swimming. The best explanation for the disparity between information gathered from young versus old people is that manatees in Haiti have declined in numbers over the past 50 years, to the point where few are seen or captured.

Using information from fishermen and from the aerial survey, we plotted the distribution of optimal manatee habitat: areas characterized by shallow and sheltered water, extensive submerged vegetation, and large rivers (Figure 1). The few animals we saw during our aerial survey were either feeding in an area considered to be optimal (such as the mouth of the Riviere de l'Artibonite) or appeared to be travelling in deep, clear water from one area to another (Montrouis).

Currently, manatees are caught in beach seines, but it was our impression that this occurred only opportunistically, and that many fishermen avoided manatees because they damaged their

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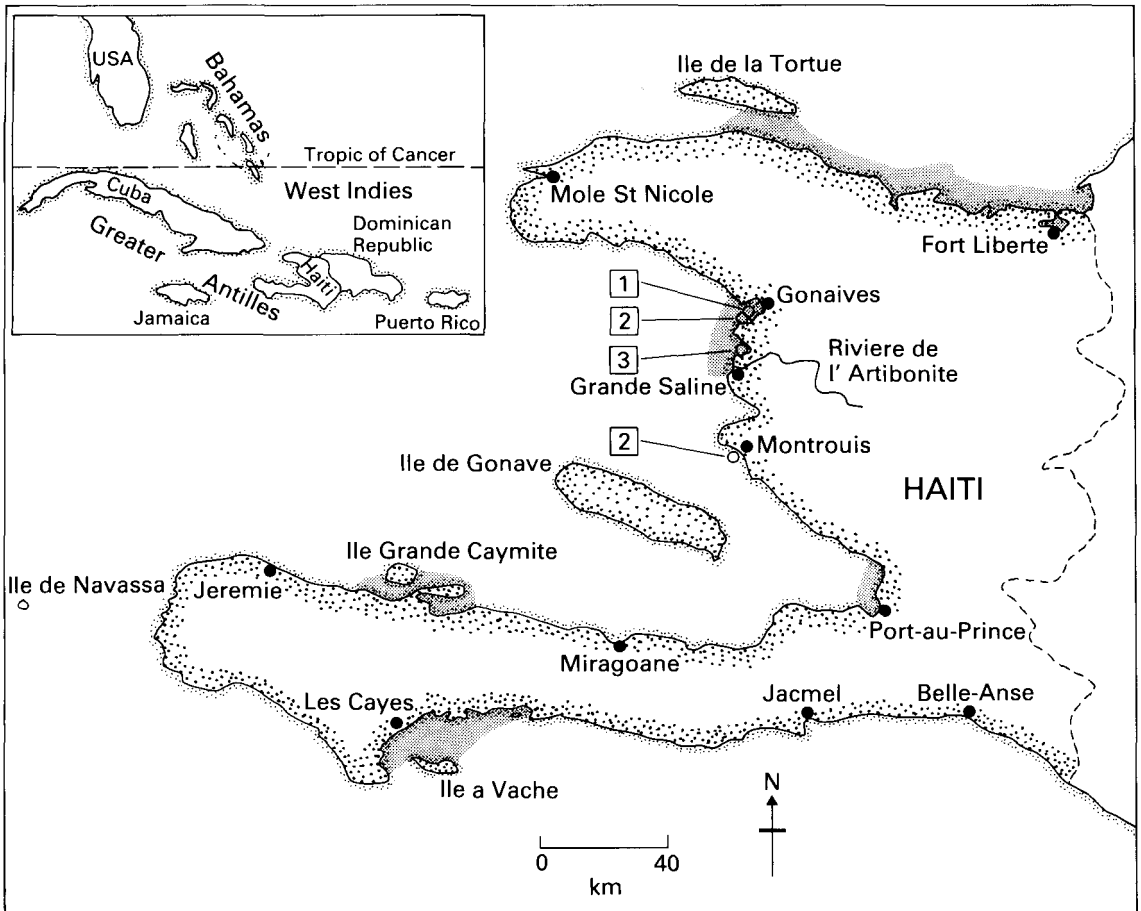


Figure 1. Distribution and number of manatees sighted in Haiti during an aerial survey in May 1982 (□). Shaded areas indicate optimal manatee habitat.

nets. Traditional hunts involved two men stalking manatees from a wooden dugout canoe loaded with large stones. When they got close to an animal, they would spear it, chase it and, as the animal tired, stone it to death. Apparently, animals were butchered on the beach and no use was made of their bones.

There were frequent reports of manatees in the Bay of Jacmel in 1977 and 1978, and meat was occasionally available from fishermen. Manatee meat was seen being dried on the roofs of houses in Belle-Anse in about 1979, but we received no recent reports of manatee meat being sold.

We have no recommendations that will ensure the survival of the few manatees that remain in Haiti. There is little public concern or support for

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manatee conservation, and the government agency responsible for wildlife conservation is neither equipped to patrol the coast nor does it have a conservation education programme. Poverty in Haiti is substantial, and with so many people hungry it is difficult for the Government to do anything that limits potential food-producing activities.

It does not appear feasible to establish a wildlife reserve at the mouth of the Riviere de l'Artibonite, in spite of its great biological potential for manatees and birds, because of the large number of fishermen who use the area from Grande Saline and Gonaives. The best hope for manatees in Haiti is that the hunting expertise will vanish with the older generation, leaving an

opportunity for the remaining animals to slowly re-establish their numbers. This is what appears to have happened in Belize (Charnock-Wilson, 1968), and possibly in Honduras (Rathbun *et al.*, 1983). Most manatees that are captured in Haiti, however, appear to be accidentally caught in fishing nets, which may well be the eventual fate of the few remaining manatees. Manatees in Haiti probably cannot find any sanctuary in the adjacent Dominican Republic, where they are just as vulnerable to fishermen's activities. An education campaign aimed at fishermen might be useful, but more detailed information is needed on the attitudes of fishermen towards manatees, and consideration should be given as to whether such a campaign might have a negative effect in drawing attention to a potential resource that younger people have overlooked.

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Acronyms and abbreviations used in this issue of *Oryx*

AAZPA	American Association of Zoological Parks and Aquariums	GLC	Greater London Council
AERSG	African Elephant and Rhino Specialist Group	ICBP	International Council for Bird Preservation
BBC	British Broadcasting Corporation	IUCN	International Union for Conservation of Nature and Natural Resources
CAR	Central African Republic	NCC	Nature Conservancy Council
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora	NNR	National Nature Reserve
CNPPA	Commission on National Parks and Protected Areas	RSPB	Royal Society for the Protection of Birds
DDT	Dichloro-diphenyl-trichloro-ethane	SSC	Species Survival Commission
EEC	European Economic Community	UNESCO	United Nations Educational, Scientific and Cultural Organization
FAO	Food and Agriculture Organization (of UN)	WWF	World Wildlife Fund