Preface

Research on marine turtles has recently expanded significantly within the National Marine Fisheries Service (NMFS). All marine turtle populations under the jurisdiction of the United States are listed as threatened or endangered under the Endangered Species Act. NMFS and the U.S. Fish and Wildlife Service (USFWS) have mandates to develop and implement Recovery Plans for marine turtle populations and to conduct research and monitoring in support of recovery. A comprehensive Recovery Plan is being prepared for marine turtles along the U.S. West Coast, Hawaii, Guam, American Samoa, and other Pacific islands under U.S. jurisdiction. An interim Recovery Plan has been implemented for marine turtles in the Hawaiian Islands.

Most Honolulu Laboratory turtle research is focused on the green turtle (Chelonia mydas) population in Hawaii. Studies are underway on the abundance and distribution of juvenile and subadult green turtles in nearshore resting and feeding habitats, the dynamics of green turtle nesting at French Frigate Shoals, and various factors affecting green turtle survival. Recently, particular attention has been given to studying the incidence and epidemiology of green turtle fibropapilloma disease and determining how the disease affects turtle behavior and population recovery. On an opportunistic basis, other research is conducted to describe the pelagic distribution and ecology of marine turtles in the North Pacific Transition Zone and associated oceanic frontal zones, and assess the incidental entanglement of turtles in high-seas pelagic drift gillnets, longline gear, and marine debris. The species involved include the green turtle, the loggerhead (Caretta caretta), the leatherback (Dermochelys coriacea), and the hawksbill (Eretmochelys imbricata).

Data collected in marine turtle research programs are diverse, ranging from isolated observations of incidental encounters with turtles on the high-seas to voluminous, complex behavioral data gathered in systematic surveys of nesting beaches or inshore habitats. Effective management of these data is essential to maximize their research value and enable timely population assessments and recovery monitoring. To provide such capabilities at the Honolulu Laboratory, a comprehensive Marine Turtle Database Management System (MTDMS) was created. The system is written in dBase III and Clipper and implemented on IBM/PC-compatible computers running under MS-DOS. The MTDMS is modular, supporting data of various types. Cross-referencing and multiple-encounter analysis are enabled through a core database file of individual turtle identifications, based on uniquely-inscribed flipper tags.

The documentation for the MTDMS consists of two manuals; this *User's Manual* and a companion *Technical Reference Manual*. The MTDMS was designed to evolve as research opportunities and needs dictate. Accordingly, we welcome comments or suggestions for improvement from all readers.

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USER'S MANUAL

Marine Turtle Database Management System

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