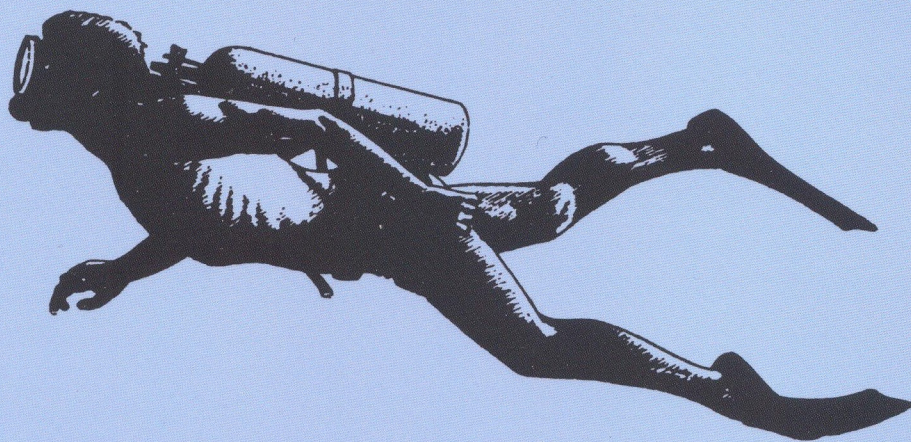


The Physician's Guide to Diving Medicine



Edited by Charles W. Shilling,
Catherine B. Carlston, and Rosemary A. Mathias

THE PHYSICIAN'S GUIDE TO DIVING MEDICINE

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Catherine B. Carlston
and
Rosemary A. Mathias

*Undersea Medical Society
Bethesda, Maryland.*

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The Diving Environment

A. Introduction

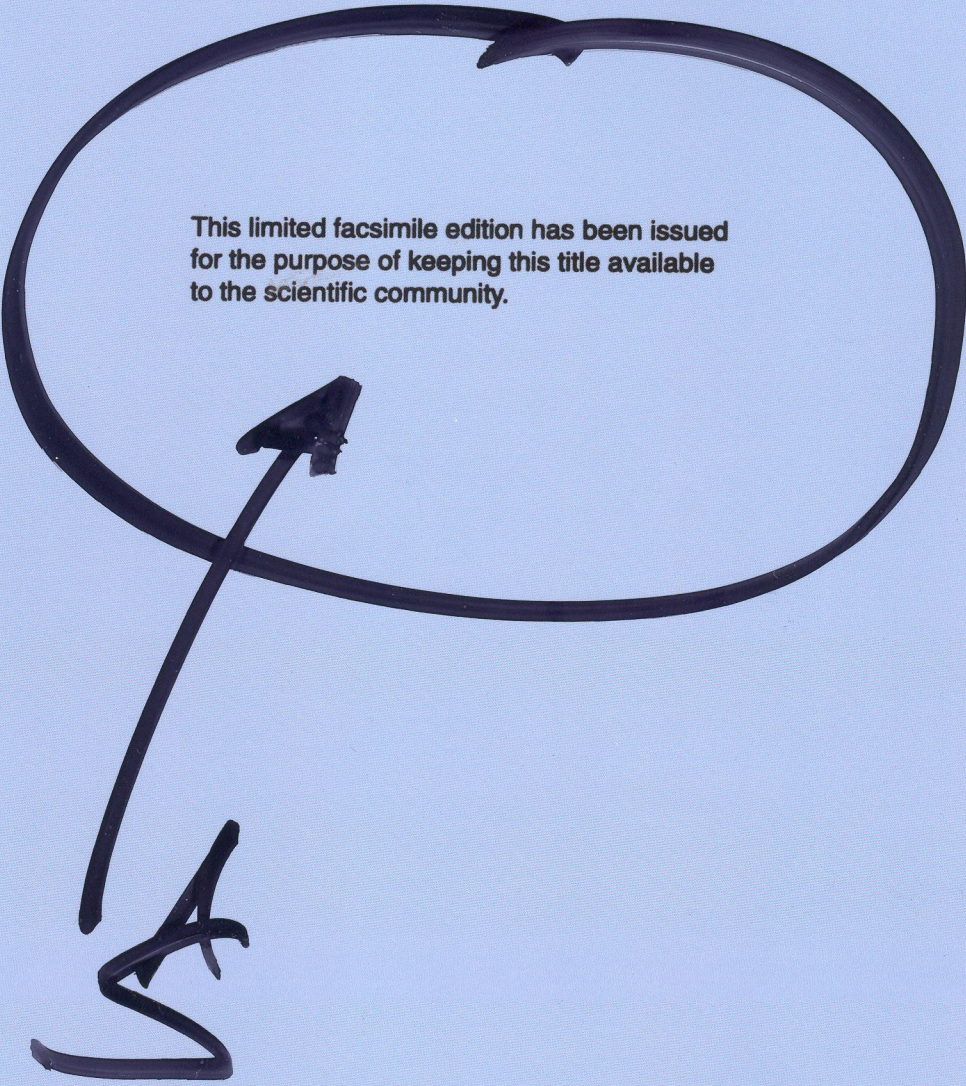
Homo sapiens is a terrestrial being, and moving into and under water requires special knowledge and special equipment. It is possible to descend into the water either as an individual diver exposed to the ambient pressure of the depth to which he goes, or to descend into the "deep" as the occupant of a submarine or other type submersible, where the occupant remains at atmospheric pressure, protected by a shield of unyielding armor. An individual may also be exposed to increased pressure in a hyperbaric dry chamber or wet pot ashore or in a lockout submersible under the water. Whenever or wherever exposed to the hyperbaric or underwater environment, the diver must be prepared to cope with the physical effects of pressure, which are described in Chapter II, "Physics of Diving."

The material in this chapter is divided into three sections: B. *Types of Diving*, C. *Natural Diving Environments*, and D. *Man-Made Diving Environments*. The aim is to cover the material in order to acquaint the reader with the possibilities without exhaustive detail.

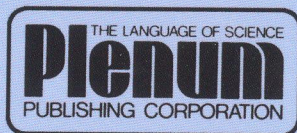
B. Types of Diving

1. General

In discussing diving the ordinary person is thinking of a "plunge into water executed in a prescribed manner," as defined by Webster. That it is well for the physician to remember this is illustrated by an incident seen by this writer in the early days at the U.S. Navy Experimental Diving Unit. The emergency call came for the doctor to report to the Unit at once. Upon his arrival at the Unit it was determined that the injured diver was en route from Annapolis, Maryland, to the Unit at the Washington Navy Yard. When the diver arrived, instead of being rushed into the chamber, as everyone expected, a few questions elicited the information that he had taken a dare to dive from the superstructure of his yacht and that when he hit the surface, "something popped" in his back; he was paralyzed from the waist



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