(3) I believe it is unwise to attempt the absolute extermination of any native vertebrate species whatsoever. At the same time, it *is* perfectly proper to reduce or destroy any species in a given neighborhood where sound investigation shows it to be positively hurtful to the majority of interests. For example, coyotes, many rodents, jays, crows, magpies, house wrens, the screech owl and certain hawks may best be put under the ban locally.

(4) I believe it is wrong to permit the general public to shoot crows or any other presumably injurious animals during the breeding season of our desirable species. It is dangerous to invite broadcast shooting of any so-called vermin during the regular closed season, when the successful reproduction of our valuable species is of primary importance and is easily interfered with.

(5) I believe in the collecting of specimens of birds and vertebrates generally for educational and scientific purposes. The collector has no less right to kill non-game birds and mammals, in such places where he can do so consistently with other interests, than the sportsman has right to kill "game" species. A bird killed, but preserved as a study-specimen, is of service far longer than the bird that is shot just for sport or for food.

(6) I believe that it is wrong and even dangerous to introduce (that is, turn loose in the wild) alien species of either game or non-game birds and mammals. There is sound reason for believing that such introduction, if "successful," jeopardizes the continued existence of the native species in our fauna, with which competition is bound to occur.

(7) I believe that the very best known way to "conserve" animal life, in the interests of sportsman, scientist and nature-lover, alike, is to preserve conditions as nearly as possible favorable to our own native species. This can be done by the establishment and maintenance of numerous wild-life refuges, not only as comprised in private and public parks, but in national forests and elsewhere.

(8) In the interests of game and wild life conservation generally, I believe in the wisdom of doing away with grazing by domestic stock, more especially sheep, on the greater part of our national forest territory. A further, and vital, interest bound up in this factor is the conservation of water.

(9) I believe that the administration of our game and wild life resources should be kept as far as possible out of politics. The appertaining problems are essentially biological ones and are fraught with many technical considerations not appreciated or understood by the average politician or sportsman. The resources in question should be handled as a national asset, administered with the advice of scientifically trained experts.

JOSEPH GRINNELL
MUSEUM OF VERTEBRATE ZOOLOGY,
UNIVERSITY OF CALIFORNIA

A WHALE SHARK (RHINEODON) IN THE GULF OF SIAM

IN the early part of the year 1919, a huge shark became wedged in the entrance of a bamboo stake-trap set in water eight to nine fathoms deep off Koh Chik (= Chik Island), on the east side of the Gulf of Siam. The fish remained stuck for seven days, during which time all fishing had to be suspended. It was finally killed with rifle bullets and hauled out of the trap, but the combined efforts of the local fishermen were insufficient to drag it ashore.

The fishermen are quite familiar with sharks, which are caught almost daily in the bamboo traps set in the offshore waters of this section, but none of them had ever before seen or heard of a shark of this size or kind. From the descriptions of its shape, color, mouth and teeth given to me by eye-witnesses, I have no doubt the fish was a *Rhineodon*.

While no measurements of the shark were taken, its actual length was known by its position alongside the leader as it lay wedged in the narrow entrance of the trap. From several independent sources I have learned that the length of the monster was determined by the fishermen to be over 10 *wa*. The *wa* is the Siamese fathom, and originally represented the full stretch of a man's outspread arms; in recent years it has been stabilized and adopted by the royal survey department as the equivalent to two meters. Therefore, whether we regard the *wa* as being the somewhat elastic measure of the Siamese fishermen, with, say, 1.7 to 1.8 meters as an approximate average, or as being a full two meters, it would seem that in the fish in question we have rather more than the maximum length that has heretofore been ascribed to the whale shark.

HUGH M. SMITH
BANGKOK, SIAM,
JULY 8, 1925

SCIENTIFIC BOOKS

A Survey of Physics: A collection of lectures and essays by Max Planck. Translated by R. JONES and D. H. WILLIAMS. E. P. Dutton & Co., New York.

INSTEAD of writing a more or less formal review of this book it seems preferable to set forth its sub-