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THE TYPE SPECIMEN OF THE WATER BUFFALO,
ANOA MINDORENSIS STEERE

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THE late Professor Joseph B. Steere published several descriptions of the water buffalo, or tamaron, collected by him or his associates on Mindoro Island, Philippine Islands. His first formal description of the species, in which he applied the name *Anoa mindorensis*, appeared in a letter to P. L. Selater published in August, 1888 (Steere, 1888). This description, itself adequate enough to outline the characters of a new species, was followed by more detailed accounts several months later (Steere, 1889). Characteristics of the species were again listed in abbreviated form in 1890 (Steere), but no information not presented previously was given. The most complete account published by Steere appeared in 1891 (Steere); in this account he described in some detail not only certain morphological features of the species, supporting his description with figures of an entire animal and of a skull, but also the habits and habitat of the species and the circumstances surrounding the collection of the first, and apparently the type, specimen. Interesting and amusing is his tale of the capture of a paratype of the Mindoro Island crocodile on a piece of the type specimen of the Mindoro Island tamaron (see also Schmidt, 1938).

In none of these accounts, or elsewhere to my knowledge, is the type of *Anoa mindorensis* Steere specifically designated or its location and condition of preservation mentioned. After a reading of the above-cited papers, it is apparent to me that the specimen which served principally for Steere's initial description, and the one for which he gave measurements in that description, was the first specimen obtained. This was an adult male, collected by Mateo Francisco some time in June prior to the eighteenth day, 1888, on the Catuiran River, Mindoro Island, two days' travel afoot and by boat up the river from Calapan. The specimen was preserved as a skin with skeleton. This specimen bore marks of battle as follows: "One rib had been broken and mended, and the old fellow was just recovering from a horn thrust clean through one of his fore legs" (Steere, 1891: 1049).

In the University of Michigan Museum of Zoology there is a mounted skin, and a disarticulated skeleton, of the Mindoro Island tamaron collected by the Steere party (U.M.M.Z. No. 84106). This specimen possesses the peculiarities mentioned by Steere and may well be considered the type specimen. The measurements and other distinguishing features in Steere's initial description fit the specimen in the Museum of Zoology as well as could be expected, particularly when measurements taken in the flesh are applied to those of a mounted specimen. In addition, one rib (the right tenth, apparently, on our specimen) shows the unmistakable signs of having been broken and subsequently partly mended, and a hole about one and one-half inches in diameter is present on the posterolateral side of the radial segment of the right foreleg. Medially, opposite the outer hole, an even larger lesion of the skin is present, now, however, covered with plaster.

Certain measurements, in millimeters, of the specimen follow. Those of the skin were taken from the mounted skin. Cord length of head and body, 2200; tail, 600; hind foot from hock to distal tip of hoof, 445; height at shoulder, 945; height at hind quarters, 983; girth behind shoulder, 1655; approximate length of ear, from notch, 135; length of left horn on

outside curve, 420; circumference of base of left horn, 335; distance between tips of horn cores, 271; greatest length of skull, 380; basal length, 354; palatal length, 237; breadth across zygomata, 162; breadth across mastoids, 185; distance from anterior border of orbit to tip of rostrum, 202; width of skull across lateral alveolar border of M², 108; alveolar length of upper cheek-teeth, 101; alveolar length of lower cheek-teeth, 114.

The specimens collected by Steere or his associates are now deposited in the following museums: University of Michigan Museum of Zoology: 1 adult male, skin and skeleton (the type). Field Museum of Natural History: 3 skins, male, female, and female calf, 1 skeleton and 2 skulls only (C. C. Sanborn, *in litt.*). British Museum of Natural History (probably): 1 skin.

The Mindoro Island tamaron is currently recognized (Taylor, 1934: 528) under the name *Bubalus mindorensis* Heude. It was described by Heude and Steere separately at about the same time, and, strikingly, by both under the name *mindorensis*. Steere's account appeared "certainly . . . [on] Thursday, August 16," 1888 (*in litt.*, editors of *Nature*, Nov. 1, 1940). The publication in which Heude's original description is contained (Heude, 1888) bears no specific date—only the year, 1888. Taylor (1934: 528–29) indicated that it appeared in August. Meyer (1896: 13), however, stated that certain book-dealer's catalogues demonstrate that it was available *before* August. Thus Heude, and not Steere, must be given credit for the species.

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