leucopyrrhus, and white or white grading into rufous for L. melanophaius); strongly barred, black-and-white inner secondaries, upper wing coverts, and scapulars (barring on coverts is occasionally found in the other species); black tail (vs. dark brown); black under-tail coverts (vs. rufous in melanophaius and white lateral and black central coverts in leucopyrrhus); short, stout bill with bluish lower mandible (vs. greenish in the other two species); and grayish or horn-colored legs (vs. salmon for leucopyrrhus and sand-colored for melanophaius). Measurements (in mm) of the type (a female, measured by R. W. Storer), and a female and two males from Curuguaty are as follows: wing (arc), 85, 87, 91, 83; tail,—, 52.8, 55.0, 42.6; tarsus, 28.3, 29.5, 30.5, 30.6; middle toe minus claw, 28.3, 27.4, 28.9, 28.8; bill from nostril, 7.5, 7.9, 7.9, 8.7.

We gratefully acknowledge the advice and encouragement of R. W. Storer in the preparation of this report. Field work by Myers was supported by National Science Foundation Grant DEB 77-04887 and by the Rackham Foundation of the University of Michigan. Hansen was sponsored by the Brasilian National Park Service and employed as a member of the Peace Corps-Smithsonian Environmental Program.

Received 31 March 1980, accepted 9 June 1980.

## First Record of the Gadwall from the Philippines

ROBERT S. KENNEDY<sup>1, 2</sup> AND EDWARD C. DICKINSON<sup>3</sup>

<sup>1</sup>F.R.E.E. Ltd., Suite 1735, 201 N. Wells Street, Chicago, Illinois 60606 USA and

<sup>3</sup>Chemin du Chano 8, 1802 Corseaux Switzerland

Gadwall (Anas strepera) are known as migrants or as wintering birds in Japan, China (Johnsgard 1978, Ducks, geese, and swans of the world, Lincoln, Nebraska, Univ. Nebraska Press: 195), Burma, Thailand, and Hong Kong (King and Dickinson 1975, A field guide to the birds of south-east Asia, London, Collins: 60). The species is not listed by duPont (1971, Philippine birds, monograph No. 2. Greenville, Delaware, Delaware Mus. Nat. Hist. 480) as occurring in the Philippines.

On 25 November 1978, John Morris, Ernest Kuhn, and the authors saw two Gadwall in an impounded freshwater marsh adjacent to the Pampanga River about 9 km north of Baliuag in Pampanga Province on the island of Luzon, Philippines. Dickinson and Morris flushed a flock of nearly 100 ducks composed of Garganey (Anas querquedula), Philippine Mallards (Anas luzonica), Northern Pintail (Anas acuta), and the two Gadwall. The authors were about 150 m apart when the flock rose, and we independently sighted and identified the Gadwall by their plumage (at least one was gray) and medium large size and by the diagnostic white patch in the speculum.

We first saw the Gadwall between 100-200 m from our positions. With our binoculars, we watched them fly about 300 m and then land out of view. We did not see them again after they landed. Both authors have had previous experience with this species in the field; Kennedy in North America and Dickinson in England, France, and Switzerland.

We call the freshwater marsh where the sightings were made "Candaba Marsh." It is approximately 2-4 km² in area and is a mixture of open shallow water, small islands, and rafts of floating vegetation. During our observations from 0900-1230, we saw the following species of waterfowl and numbers of individuals: Dendrocygna arcuata, 25; Anas acuta, 500; Anas strepera, 2; Anas luzonica, 2,500; Anas penelope, 10; Anas querquedula, 3,000; Anas clypeata, 20; Aythya ferina, 20; and Aythya fuligula, 30.

Dickinson has observed this marsh periodically since January 1975, and the numbers above represent the greatest concentration seen. Although good estimates are lacking, he feels that numbers have climbed steadily during these years, perhaps partly due to the scarcity of firearms since the imposition of martial law.

Kennedy is most grateful to the Marcos Foundation, the National Geographic Society, Philippine Airlines, the New York Zoological Society, the Rare Animal Relief Effort, and the Cincinnati Museum of Natural History for support of his field work in the Philippines.

Received 21 March 1980, accepted 9 June 1980.

<sup>&</sup>lt;sup>2</sup> Present address: Department of Zoology, Washington State University, Pullman, Washington 99164 USA.