GENERAL NOTES

Conjoined twin Darwin's Rhea.—On 20 March 1969, a Darwin's Rhea (*Pterocnemia pennata*) egg was opened at the New York Zoological Park and was found to contain conjoined twin embryos. The egg was laid on 30 January 1969 and six days later, was placed in a forced-air incubator. By 17 March, movement was heard within the shell. Movement continued until noon on 19 March, when no signs of life could be detected. Other Darwin's Rhea eggs incubated under the same conditions (97° F and 85 per cent relative humidity) had an average incubation period of 37 to 39 days. After 43 days of incubation, this egg was opened and the conjoined twins discovered.

FIG. 1. Embryo of conjoined twin Darwin's Rhea.

The embryos are joined and single ventrally from the lower mandible, to the sternum, and yolk sac. Dorsally the embryos are double with two sets of vertebrae, two sets of limbs, and basically, two separate bodies. Two separate upper mandibles fused at their base into one head with only one pair of eyes. At the back of the skull, two sets of vertebrae meet. The cranium was incomplete and 2.5 cm^2 of the brain was exposed. (see Fig. 1.)

The twin embryo weighed 364 g while the yolk and yolk sac weighed approximately 100 g for a total of 464 g. Thirty-five normal newly hatched chicks averaged 426 g but varied from a low of 327 g to a high of 491 g. The eggshell itself weighed 84 g and varied from 0.040 to 0.042 inch in thickness. All of the waste material and the membranes from around the embryos totaled 65 g. The egg had lost 55 g or 8.2 per cent of its weight during development. An 8.2 per cent weight loss is 0.8 per cent above the average weight loss found in 30 Darwin's Rhea eggs, at the New York Zoological Park, but is well below the maximum of 8.8 per cent that occurred in one other Darwin's Rhea egg which hatched successfully.

The specimen is preserved in a buffered formalin solution. I thank W. G. Conway for comments upon the manuscript.—DONALD BRUNING, *New York Zoological Society, Bronx Park, Bronx, New York 10460, 8 May 1969.*

A swimming Bald Eagle.—During my 14-year residence in Alaska I have many times observed Bald Eagles (*Haliaeetus leucocephalus*) plucking floating food from the surface of the water, and have heard reports of them entering the water in pursuit of live fish or ducks. Such incidents may be common, but there are few descriptions in the literature. Bent (Life histories of North American birds of prey, Part I. Dover Publications, Inc., New York, 1961.) referred to several instances, but none of them involved an eagle actually swimming. On the morning of 10 March 1969, at the oceanside laboratory of the U. S. Bureau of Commercial Fisheries at Auke Bay, Alaska, I witnessed an incident which demonstrated that an eagle can land on the water and regain its normal aerial environment after "swimming" to shore wth captured prey.

The incident involved a mature Bald Eagle and its prey, probably a female Barrow's Goldeneye (*Bucephala islandica*). The duck was one of about a dozen in calm water about 25 yards from shore. The eagle was perched in the top of a tall spruce tree at the water's edge, from which it launched itself on a steep glide toward the ducks. The ducks recognized their danger and attempted to escape by flying or diving. The eagle plunged into the water, intercepting one of the ducks that had already dived below the water surface. The eagle then calmly folded its wings and floated on the surface for about 2 minutes before attempting to reach shore. The duck was presumably being drowned during this wait and probably provided some bouyancy to the eagle.

Finally, the floating eagle propelled itself toward shore by slow rhythmic beats of its outstretched wings, much like a human swimmer using the butterfly breast stroke. It rode high in the water, so that on the forward motion of each stroke, both wings were simultaneously lifted almost clear of the water surface. The eagle reached shore, with the dead duck clutched in its talons. After resting for about 30 seconds, the eagle flew across the water carrying the duck, without having relaxed or changed its grip.—THEODORE R. MERRELL, JR., *Bureau of Commercial Fisheries Biological Laboratory, Auke Bay, Alaska 99821, 26 May 1969.*