Notes on the Habits of an Old-squaw (Harelda hyemalis) and two Lesser Scaup Ducks (Aythya affinis).— December 14, 1913, I found on a a section of the lagoons of Jackson Park, Chicago, Ill., a male Old-squaw and two female Lesser Scaup Ducks after a change in the weather from unusually warm and pleasant to cold with a brisk northeast wind. The Old-squaw remained until December 28; the Scaups were last seen December 22 when ice had formed over a greater part of the lagoon. All of the birds were tame, and continued about their affairs even when one was standing on the shore, providing he remained quiet, thus affording an unusual opportunity for observations on their habits.

It was not possible to watch the birds continuously throughout a day's time, but they were observed at varying intervals, which taken together come close to constituting a day's time from daybreak to dark and it was possible to check some observations by a few repeated periods. The following account, therefore, should give a fair idea of their general behavior.

The section of the lagoon on which they alighted is about 275 feet long and 125 feet wide in its broadest portion, extending in an east and west direction, at the east end opening on Lake Michigan and connecting on the west with the long river-like chain of lagoons which traverse the greater part of Jackson Park mainly from north to south.

The following is a summary of my observations. The Old-squaw was a quiet, totally silent bird, in contrast to the active Scaups, one of these at least, being very noisy. In feeding, the Old-squaw remained in deep water, never coming in so near shore as did the Scaups. The food, with the possible exception of the algae about the piling, could not be ascertained. Whatever it is, it would seem to be swallowed under water, always in the case of the Old-squaw, and with only one exception in the case of the Scaups. One of these was once seen to be engaged with food of some sort on coming to the surface after diving. In all probability the food was mainly animal. On January 13 an immense swarm of sluggish minnows, extending nearly across the lagoon, was noted at the west bridge, and these fish would have fallen an easy prey to an expert diver. That the Old-squaw is more expert in diving than the Scaups is indicated by its choice of the deeper water, and the much less time occupied in feeding. The male Scaup which appeared December 27 was once seen to go in close to shore where the water was too shallow for diving and feed by immersing its head only.

Whether the birds are active at night is an interesting question. Judging by their quiet behavior at dusk and their alertness at dawn one would say so.

Presumably the occurrence of the Old-squaw with the Scaups was due to a gregarious instinct rather than to sexual attraction. In general in the various activities the Scaups took the initiative, and paid little attention to the Old-squaw, finding sufficient company in themselves, while the Old-squaw followed them about through sheer loneliness. In

going to a feeding ground the Scaups followed the Old-squaw only when they themselves were thoroughly hungry, judging by their actions, and would probably have gone even if he had not. Even when the Old-squaw did precede, the Scaups were the first to dive. It is not improbable that the Old-squaw is a faster swimmer than the Scaups, and this may account for his preceding them at times. It has been noted that when the birds were thoroughly alarmed, the Old-squaw first tried to escape by swimming, while the Scaups took wing at once. More often the Old-squaw followed the Scaups a little way and then turned about, due no doubt to a gregarious instinct which was quickly overcome by an impulse to sleep, or the fact that he was satiated with food. Occasionally he completely ignored them, and this was at a time when satiety or the sleep impulse or both were strongest. Almost invariably the Old-squaw would not allow the Scaups to come too near, and remained about twice as far from them as they were from each other, at least while inactive, and all were scattered somewhat while feeding. Generally the Old-squaw moved away when a Scaup approached him too closely; in one instance he was seen to wake suddenly and rush at the nearest Scaup with open bill, a phenomenon I have seen among the ducks in the big flying cage at Lincoln Park, Chicago.

How strong the gregarious instinct is in ducks is shown in the behavior of the solitary individuals of different species which alighted on the lagoon after the Scaups had left, both river ducks and sea ducks. There is little likelihood of sexual attraction between the members of different subfamilies, indeed, a Black Duck generally kept to itself at the western end of the lagoon, being at one period of observation close to a Mallard, a member of its own subfamily, just on the other side of the bridge, but separated by a flood-gate.

The gregarious instinct would seem to be further confirmed in the case of the Old-squaw twice following a gull for a short distance during the absence of the Scaups, as if mistaking it for a duck. Herrick ¹ cites a case of a shrike attempting to impale prey in a maple, under the pressure of a strong impulse not being able to distinguish the maple from a thorn bush. This author also states that all intelligence gives way under the presence of stronger instincts. The case of the Old-squaw and the gull, it seems to me, is somewhat analagous to that of the shrike.— Edwin D. Hull, Chicago, Ill.

American Egret (Herodias egretta) in Rhode Island.—Seeing Mr. Noble's record of the American Egret on Martha's Vineyard reminds me to record the following observation. In August, either on the 15th or 16th, 1913, while crossing the road that skirts the salt marsh just after crossing Stone Bridge, Tiverton, on to the Island of Rhode Island, I noticed from

¹ Herrick, F. H. Instinct and Intelligence in Birds. III. Pop. Sci. Mo. 77:82-97, 1910.