BEHAVIOR-WATCHING FIELD NOTES

by Donald and Lillian Stokes, Carlisle

Denise Braunhardt observed gulls in unusual flight behavior, the birds "zig-zagging, drópping erratically, and teetering from side to side." The birds were in large flocks both on the ice and in the air; no small groups were seen. At the same time a Gyrfalcon was spotted hunting in the area. Squantum Marsh, 2/7/82, 9 A.M.

Comment. Many species of birds display this same type of flight behavior when faced with an aerial predator; in fact, when you see this behavior, you can almost predict the presence of the predator. Flock cohesion may occur through each member trying to get to the center of the flock since this is the safest spot.

Denise Braunhardt also observed a Short-eared Owl for 30 minutes. The owl, after looking around in all directions, "tore up 10-15 beakfuls of semi-decayed grass" and then dropped them in "apparently random spots." Salisbury Campground, 3/10/82, 12 noon.

<u>Comment</u>. As Denise suggested, this may be (1) redirected aggression since there were other owls in the area or (2) some, as yet incomplete, behavior associated with nest-building.

Bill and May Harris observed a White-breasted Nuthatch enter a bird box 8 feet from their house every night through the winter. The same thing happened the following winter until mid-December when the bird was no longer seen. Chelmsford, 1981-82.

<u>Comment</u>. Pairs of White-breasted Nuthatches generally stay on their territories throughout winter, and each bird uses its own roost hole each night. Downy Woodpeckers also do this, and the two species may compete over particular roost holes. In some cases the roost hole of the male is taken over by the female in late winter, and this is then used as the nest site in spring.

Chris Floyd and Lee Taylor heard two Screech Owls in an area also containing a Great Horned Owl or other big owl. The Screech Owls used only their monotone call and seemed to call in response to each other and to imitations of Great Horned and Screech Owls made by the observers. Belmont, 2/8/82. 9:30 P.M.

Comment. The Screech Owl has two common calls: the monotone and the "screech." The latter is used from mid-summer until January and is believed to be a contact note keeping members of a pair or family in touch. The monotone call is heard from February until mid-summer and is a courtship call. Generally the male gives this just after landing as he flies about the female, moving closer and closer. The female is usually silent. Chances are that the observers came upon a courting male and that when he swooped over them, he was considering them a competitor.

Leif Robinson heard a Mockingbird give a "chewk-call" just as a kestrel swooped close to its head. The Mockingbird immediately flew off after the kestrel. Cambridge, 3/13/81, 3 P.M.

<u>Comment</u>. This is a real stumper. In August, breeding is over, and the birds are not territorial. Are Mockingbirds ever really prey for kestrels? Were these juvenile or adult birds?

If you have observations of bird behavior that interest or puzzle you, send them to us for our next column. Behavior Field Notes, 52 Nowell Farm Road, Carlisle, MA. 01741. We look forward to hearing from you.



Snowy Egret Displaying

Photo by David C. Twichell

Behavior Research Articles

Since this issue of <u>Bird Observer</u> deals primarily with herons, we thought it might be helpful to include information on heron displays that would help you interpret some of what you see herons do. The information is drawn from two superb articles: Meyerriecks (1960) and Mock (1976).

Alarm Reactions

Snowy Egret: extends neck, raises crest, and gives "aarg aarg" call.

Great Blue Heron: erects head and neck, sleeks plumage, and freezes or slowly flies away giving "franhnk" call.

Aggressive Displays

Snowy Egret: in mild aggression bird raises crest and pectoral plumes and extends head and neck; during intense aggression, bird holds neck in "S" shape with bill pointed down, erects plumes, and gives harsh "aarg" or " raah" calls.

Great Blue Heron: in mild aggression the bird does the "upright display" holding head and neck at 45° with plumage sleeked; intense aggression involves head, neck, and crest feathers erected, head pointed down, and "rok rok" calls given.

Sexual Displays on Breeding Grounds

Snowy Egret: "Stretch display" is done mostly by male and occurs in several contexts. With head over back and bill pointing up, bird pumps head up and down while giving "wah wah wah" calls.

Great Blue Heron: "Stretch display" is done by male and female especially during pair formation and nest building. Starting from a resting position, the bird extends its neck and head to a vertical position and then slowly lowers it while giving a moan-like call. The whole movement takes about 10 seconds.

References

Meyerriecks, A. J. 1960. <u>Comparative Breeding Behavior of</u> Four Species of North American Herons. Nuttall Ornithological Club Publication, No. 2.

Mock, D. W. 1976. Pair-formation Displays of the Great Blue Heron. Wilson Bulletin 88: 185-230.

Behavior-Watching in the Months Ahead

Most people think that the small flocks of chickadees that roam about territories are just a winter phenomenon, when actually they form as early as mid-August. An interesting feature of these flocks is that other species tend to join them, forming what is commonly known as "mixed flocks." Watch for these by first locating a chickadee flock and then observing all other species that seem to be associated with it. During August and September look for warblers in these mixed flocks. After migrating all night, many warbler species have the tendency to follow chickadee flocks during the day as they feed. They may do this to take advantage of the chickadees' knowledge of local feeding areas. Warblers have been noticed to stop giving their own contact-calls once they joined with chickadees, possibly using the chickadee contact notes to stay together. This may make them less conspicuous and minimize their competition with the chickadees. You might consider keeping track of which warbler species join chickadees and see whether they display any differences in behavior.

Also joining chickadee flocks at this time are the following: creepers, kinglets, woodpeckers, titmice, and nuthatches. As one of these flocks passes you in the woods, watch to see which species tend to lead, which are in the middle, and which typically follow. Also, look for interactions between individuals. Is aggression primarily within species or between species? If between species, which ones in particular?

Many other types of mixed flocks also occur in August and September, so it is a great time for observing. The key question about these flocks has yet to be answered, and that is, why have these associations evolved. What are the benefits from mixed flocks? And do all species in a flock benefit equally? As you watch and record the types of mixed flocks that you see in late summer and fall, keep these questions in mind and see whether you can come up with your own answers.

DONALD and LILLIAN STOKES are naturalists and authors. Don's works include <u>A Guide to Nature in Winter</u>, <u>A Guide to the</u> <u>Behavior of Common Birds</u>, and <u>The Natural History of Wild</u> <u>Shrubs and Vines</u>. He and Lillian are presently working on a second volume of the bird behavior book soon to be published.