BEHAVIOR-WATCHING FIELD NOTES

by Donald and Lillian Stokes, Carlisle

Nicholas Komar had an interesting observation of a Scarlet Tanager singing outside his house at 10:05 P.M. on May 27 on a clear night. They have never nested near his house so he thought this may have been a migrant.

Comment: Why birds sing at night is still a mystery. Several species have been reported singing at night, including mockingbirds, Ovenbirds, Field Sparrows, Marsh Wrens, Black-billed and Yellow-billed cuckoos. We have not heard of Scarlet Tanagers singing at night, but we suspect that more birds do this than have been reported.

Chris Floyd and George Gove saw an intense fight between two starlings on January 30, 1983. The birds were in the middle of the road and one was on top of the other pecking violently at its head and neck. The victim escaped to a nearby perch but was immediately attacked again. The fight lasted for a minute. After the attacker left, Chris and George approached the attacked bird who had remained on the ground, and it flew up with apparently little injury.

Comment. The interesting feature of this observation is the date. In our area, starlings do not start nest-building and egg-laying until late March and April, but the males do defend nest holes through the winter. Their most intense defense often occurs in midwinter, just when this fight was seen. Chances are that there was a shortage of good nest holes in the area and that these were two males fighting over one. If the dominant bird had been followed, he might have been seen flying off to a nest hole nearby.

Robert Stymeist watched Tree Swallows in August at Parker River N.W.R. "playing" with a feather. One bird of a group of 10-14 birds would take the feather, rise above the group, "then drop the feather and proceed to try and catch it again. The bird who caught the feather rose above the group and dropped it (for others to catch?)."

Comment. Bob points out that Tree Swallows line their nests with white feathers. In our Tree Swallow colony we have also seen nests lined with black, brown, and speckled feathers and have seen the birds compete for feathers during nest-building time, but Bob's incident took place in August - past the nesting time for swallows. Bob wondered whether this was "just a game or a lesson for next spring and the breeding cycle." What we see as "games" or "play" is often functional behavior in animals. Perhaps the sight of the feather triggered a collecting behavior, but the behavior was not complete because it was not the right time of year.

Roger V. Smith witnessed a loon assault an American Wigeon. This occurred on the Maine coast during Labor Day weekend. From under the water the loon popped "right up alongside the

duck with neck tightly arched so that the bill pointed straight down and drove downward on the duck with what looked like a deliberate deadly thrust. Both birds disappeared below the surface, but only the loon surfaced again."

Comment. Though this may seem like strange behavior for a loon, Forbush (Birds of Massachusetts, 1925) cites some similar accounts. In one account, a loon rises from under the surface and attacks a female duck and young and disappears under the water with one of the young ducks.

In April, George Gove was watching shorebirds in Newburyport Harbor when a thunderstorm came from the northwest. About six hundred Pectoral Sandpipers flew from the tide line up to higher ground and crouched in the grasses, apparently to get some protection. They kept making short flights to higher ground and thicker grasses until they were within ten to twenty feet of the road. After the storm they returned to the mudflats.

Comment. What birds do during storms is always interesting to observe. Where did you seek shelter, George?

Behavior-watching in the Months Ahead.

Midsummer is a great time for the behavior-watcher. Not only are many birds starting second broods or still trying to have their first successful brood, but there are also a great many fledgling birds in the woods, fields, and wetlands. You can usually find fledgling birds by listening for their harsh, high-pitched, persistent calling.

Once young birds have hatched there are a variety of strategies that have evolved for caring for them until they are independent. One major adaptation is having precocial young. Precocial birds are able to move about and feed themselves a few hours after hatching; all the parents have to do is protect them from predators and inclement weather. This system seems so good that you may wonder why all birds don't have it. Obviously, two of the main drawbacks are that larger eggs and a longer incubation period are needed to bring the young to this stage of development before hatching. The longer that parents stay on or near the nest, the more obvious it is and the more likely it is that the eggs will be eaten by a predator.

Altricial young are dependent on the parents for warmth at first, food, and protection. Having altricial young means that the eggs are smaller, and there is a relatively short incubation period. But then, increased energy demands are placed on the parents. Typically, this stage, from hatching until independence of the young, is divided into two parts: the nestling stage when the young are in the nest, and the fledgling stage when they are out of the nest but still dependent on the adults for food.

Observation of parental techniques for care of the young reveals interesting adaptations that have evolved in both precocial and altricial species. We have studied three precocial

birds, and each exhibits a different arrangement. In Mallards, the female drives the male away from her during incubation, and during the fledgling stage she cares for the young all by herself. In Killdeer, both parents tend to watch over the young except when a second brood is started. In that case, the female lays eggs and starts incubating while the male continues to care for the first set of young. In Spotted Sandpipers, typically polyandrous, it is often the male that does all of the caring for the young. Where the Spotted Sandpipers are monogamous, both male and female tend the young fledglings.

In altricial birds a similar variety of strategies exists. In grackles, there is a strong tendency for the male to leave the female during incubation and possibly start pairing with another female; then the female does all the caring and feeding of the young. In many other passerines, the female may leave the fledglings of the first brood in the care of the male while she starts a second brood. This is often true of House Wrens. A third possibility is typical of Song Sparrows where both parents care for the young. In this species, it has been observed that the parents actually divide up the young, each parent consistently feeding and caring for certain of the fledglings.

Bird-watching is often considered a little slow in midsummer, for migrants have stopped arriving, and the shorebirds have not yet started south. But midsummer presents endless possibilities for the behavior-watcher to observe and to learn. One of the least studied phases of birds' lives is the fledgling stage, and methods of parental care are only one small area of study. As you watch parent-fledgling interactions this summer, try to determine several things. Do both parents feed and care for the young? Do both perform the same tasks or do they divide up feeding and protection? Do both feed all of the young or do they divide up the brood? Also, when observing parent-young interactions, try to determine the sex of the parent, either by plumage or behavior, for this will add an important dimension to the observations. Almost anything learned about this stage of bird life and behavior can be of interest and value to the scientific community, for this area of bird behavior is still little known.

DONALD AND LILLIAN STOKES contribute this column on behavior-watching regularly. They are authors, naturalists, and teachers. Don's most recent book is A Guide to Observing Insect Lives, and he and Lillian have recently completed a second volume to A Guide to the Behavior of Common Birds, soon to be published. Contributions to the column should be mailed to Behavior Field Notes, 52 Norwell Farm Road, Carlisle, MA 01741 or called in to 369-8488.