

BEHAVIOR-WATCHING FIELD NOTES

by Donald and Lillian Stokes, Carlisle

Bill Harris, of Chelmsford, wrote us about a White-Breasted Nuthatch at his feeder. "It was sitting on a perch above the feeder, and when other birds came to the feeder, it would immediately roll over to a hanging position and open its wings wide. It swung from side to side with mouth open and no doubt was making some sound."

Comment: Some people might dismiss this as just one of the weird things birds do, but this would be a disservice to both nature and evolution. Many people have seen this same posture used by other nuthatches; we saw it once given at a tree hole when House Sparrows were trying to usurp a nuthatch nest. It is clearly an instinctive reaction passed on in the genetic make-up of the bird; it is part of the bird's "language," part of its repertoire of actions and sounds used to communicate with other birds. From the situations in which this display occurs, we can guess that it is aggressive or competitive in meaning.

We were looking for sparrows one day in November, and were interested to hear three different sounds given by Song Sparrows. We heard bits of song, a high-pitched drawn-out call, and a short, lower-pitched call. The song was heard least often; the low-pitched call was heard more frequently and was given by birds that had risen to exposed perches after being disturbed; and the high-pitched call was heard most and produced by small flocks of birds that stayed hidden.

Comment: Simply counting the numbers of different sounds a species gives at a certain time of year is the first step to delineating its communication system. The number of different sounds used can be a key to the bird's social life and social needs. A large repertoire suggests more complexity; a small repertoire suggests a simpler structure. The frequency of each type of call is an important clue to its significance and should be noted. The most frequently used sound is for the most frequent need. A little used sound is probably for a special, infrequent need. The function of each of the Song Sparrow sounds can only be guessed at. Our best guess is that the high, thin note is a "contact" call used by birds in a flock to keep in aural contact when they are visually isolated. The low-pitched call, the one most often given when you spish near Song Sparrows, is a response to danger or disturbance and, keeping in line with new theories, may be a predator communication which says in effect, "I see you, so don't bother to try to catch me." Most wintering Song Sparrows in our area are males, and as far as we know, only males produce song. Some males remain on their summer territories in winter and may resume some singing in fall. The song we heard is probably a continuation of this behavior.

Please send us any information on the number and frequency of calls of any species you are interested in and we will publish the information in this column. Send it to Don and Lillian Stokes, 52 Nowell Farm Road, Carlisle, MA 01741.

Behavior-Watching in the Months Ahead. Tufted Titmice are gregarious and engaging birds that offer the behavior-watcher some interesting opportunities in the months ahead.

Right now, you will find titmice in groups. Banding studies have shown that these winter groups are composed of family members: either parents and their offspring from the previous breeding season, a mated pair, or a group of siblings. The birds maintain contact by giving their short "tseep" call. Occasionally you will see behavior that indicates the order of dominance among members of the group. When one bird displaces another on the perch, it is obviously the dominant bird. Another dominance display is the head-forward display. The bird leans forward with bill slightly open and lunges towards another bird. Titmice give two calls in aggressive encounters; one sounds like "see-jwee," and the other is a rasping "jway" call. Males are generally dominant over females at feeders. Although titmice groups have been studied, there is still much that remains to be discovered about them: how do groups form; what is the relationship between different groups of titmice, i.e., do they tolerate one another or are they antagonistic; and is there a fixed winter range for these groups? There is some evidence to suggest that there is.

On a sunny day starting in late winter you will begin to hear the "peter, peter, peter" song of the male titmouse. This signifies the beginning of the breeding season. Family flocks will gradually disperse, and birds that are not already paired will seek mates. Among mated pairs, the male will feed the female bits of food as part of their courtship behavior. She may follow him around and wing-quiver giving the "see-jwee" call. You may hear in early spring an extremely high-pitched, piercing, extended call that you may not have associated with titmice. Locate the caller, and you may see mating take place. Both male and female give this call, often accompanied by wing-quivering, just before or during copulation. This call is also produced, along with wing-quivering, when two males are in intense conflict. This usually occurs after they have been calling back and forth and have come close together. If you witness any of these or other features of titmouse behavior, send us a card with your observation, and we will share it with others through this column.

DONALD and LILLIAN STOKES regularly contribute this column and have just published the second volume of A Guide to Bird Behavior. This includes an introductory section on the behavior of birds at feeders, a checklist of nests and displays, and the complete life history of twenty-five birds.