

CORRESPONDENCE.

"Injury Feigning" by Birds.

Editor of 'The Auk':

The recent comment in the correspondence department of 'The Auk' on injury-feigning in nesting birds has interested me considerably. H. S. Swarth's statement in the July, 1935, number that he had never known a passerine species to practice this trickery has brought forth a much smaller volume of contradictory evidence than I expected to see. The behavior of passerine birds in western North America would seem to be somewhat different in this respect from that of similar species in this southeastern corner of the continent, if Swarth's observations represent the true situation in the West.

Pretending injury is a common habit of a good many small passerine birds here in Florida. The Warblers are a notable group. I have found nests of all the species known to breed in the eastern part of the state with the exception of the Yellow-breasted Chat, which is very rare and local in distribution. Of the other eight Warblers that nest here I have seen some individuals of each species feign helplessness. A Pine Warbler here will quite frequently flutter the thirty-five or forty feet from its nest down to the ground after the climber has reached the nest level. The bird will then usually hobble about with wings drooped and tail spread, returning to the tree shortly to make a vocal protest at the intrusion. Even after returning to the nest tree the bird will sometimes flutter along the branches in the same way it did on the ground. I have examined a great many Pine Warbler nests and have known but few birds that did not make such a demonstration.

The Yellow-throated Warbler behaves much the same as the Pine, but I have never known it to continue the injury-feigning after returning to the nest tree. A nest of this species found in April this year was twenty-five feet up and about the same distance out from the trunk of the tree. I climbed a pine that stood ten feet from the nest and with a bamboo pole hooked the festoon of Spanish moss that held the object of my interest, in an attempt to maneuver it into position to determine its contents. When the pole touched the moss, the sitting bird slipped from the nest and dropped to the ground almost as if shot and fluttered off ten yards or more before regaining her composure. Such an observation might easily lead one to believe that the injury-feigning bird "is deliriously excited and has a fit," as A. H. Chisholm says was claimed by an English writer.

The behavior of Swainson's Warbler, on the other hand, gives an entirely different impression. This species is rare here, inhabits only the densest swamps, and probably sees little of man. They are of an unusually confiding nature, or perhaps this lack of fear is evidence of their ignorance of man's ways, in turn due to lack of contact with our species. I have found but four occupied nests. On each of these the mother bird would sit, whether incubating eggs or brooding young, until touched or at least until the fingers were within three or four inches of her. At a nest that held half-fledged young she would flit to the ground and creep along with wings drooped and tail outspread, returning to the nest as soon as the intruder retreated a bit. There was certainly no delirious excitement or "fit" in this bird's actions. But she was wild in comparison with another of her kind that I visited a number of times this spring in making a series of photographs. This bird would not leave her eggs until *pushed* off, and when I held my hand over the nest she straddled my fingers in trying to get back onto it; and yet, as devoid of fear as she seemed to be, when I did drive

her away from the nest she fluttered along on the ground in the manner of a crippled bird, her actions manifestly intended to induce me to follow. This bird certainly was not badly frightened, for within a few minutes she was back on her nest, accepting deerflies from my fingers and swallowing them with apparent relish.

The impression given by the Swainson's Warbler is that the injury-feigning is a deliberate ruse to lure an impostor or potential enemy away from its nest, but I believe it will be difficult for anyone to produce evidence proving conclusively that injury-feigning in nesting birds is anything other than the working of another instinct such as that which causes the newly matured bird in its first breeding year to build a nest much the same in size, form, situation, and materials as the one in which it was hatched. I am in hearty accord with Mr. Chisholm in suspecting scanty observation the grounds for W. H. Hudson's belief that "when a nesting bird flutters to the ground it does so from pain and is for the moment incapable of flight." A bird that has to be pushed off the nest and that a moment later, after feigning injury, returns and accepts food from a man's hand can hardly be said to have pretended injury "from pain." Nor do I believe its conduct could be attributed to fright.

The most consistent performer of pretended injury or helplessness among our eastern Florida Warblers is the Hooded. The sitting bird, whether male or female, almost invariably slips off the nest when it is approached and flutters along with the wings dragging on the ground and tail spread, brightly displaying the white in the the outer feathers. After the young have left the nest, but while they are still incapable of flight, I have had both parents and even a neighbor or two flutter around in this way.

Brief mention might be made of injury-feigning as observed in the other Warblers that breed here, if only for the sake of record.

In marked contrast with the shrub-nesting Hooded Warbler, the strictly arboreal Southern Parula rarely if ever practices the injury ruse upon being flushed from its nest. I have examined between twenty and twenty-five nests of this species and have never known the bird to feign injury when flushed, but this May while I tried to photograph some fledglings just out of the nest the mother bird carried on in the conventional Warbler fashion by drooping the wings and tail, gaping, and creeping and fluttering about.

On two or three occasions I have had Prothonotary Warblers feign injury when surprised at the nest, and the same applies to the Florida Yellowthroat, but in both these birds the performance was short-lived compared with that of the Pine or Hooded. A Florida Prairie Warbler with young on the point of leaving the nest, at Cedar Keys this May 10, went about feeding her offspring without apparent concern while I set up a camera a few feet away, but when I caused the young to leap from the overcrowded nest, the mother bird fluttered to the ground near my feet and groveled in the sand in what truly had the appearances of a delirious fit of anxiety for the safety of her young. This lasted but a moment, the bird resuming her occupation of feeding the fledglings as soon as they became quietly settled in their new surroundings.

Other Florida passerine birds that I have known to feign injury are the Florida Chickadee, Tufted Titmouse (both rarely), Southern Meadowlark (commonly), White-eyed Towhee (rarely), and Pine-woods Sparrow (frequently). Outside that order I have found the practice more or less prevalent with our breeding Ducks (the Florida Duck sharing with the Florida Nighthawk top honors for elaborate performance), the Bobwhite, the Limpkin and King Rail when they have young, the Wilson's Plover, Killdeer, Woodcock, Willet, Black-necked Stilt, Mourning Dove, Ground Dove, Yellow-billed Cuckoo, Chuck-will's-widow, and Nighthawk.

Hudson and Sherman (The Auk, July, 1936, p. 312) found that Mourning Doves at Clemson College in South Carolina feigned injury when young were in the nest, but not when flushed from eggs. My experience in Florida has been somewhat different. The antics of a bird trying to lure me away from her nest brought my attention to the first set of eggs I ever saw. Since that incident years ago I have seen Mourning Doves flush and fly directly away from young and eggs alike and others topple to the ground from either and carry on in the usual injury-feigning manner.

S. A. GRIMES

4661 Attleboro St.,
Jacksonville, Fla.

Editor of 'The Auk':

The numerous discussions in your correspondence columns concerning "Injury feigning" by birds has interested me greatly. It is difficult for me to believe that anyone who has frequently watched such species as Killdeer and Piping Plover on their nesting grounds can feel that the "Injury feigning" bird is not consciously leading the intruder astray in calculated fashion. But I have been chiefly interested in the discussion as to whether or not passerine birds resorted to this deceit for I really can not understand how anyone who has studied birds in the out of doors can have escaped observing this quite frequent and conspicuous action. Why let us take one group of passerine birds such as the Warblers: In the last three months alone I have seen a Yellow Warbler, two Magnolia Warblers, three Black-throated Green Warblers, one Bay-breasted Warbler and one Redstart put on a fine demonstration of "Injury feigning."

To anyone who has photographed Warblers and has seen bird after bird present a very deliberate "injury feigning" exhibition and a few minutes later light on the intruder's hand to feed the young, the excessive fear contention seems to be conspicuously open to question. Of course we can not pigeon-hole the species that do resort to "injury feigning" for not all individuals of a species perform. I have taken photographs at some Magnolia Warbler's, Yellow Warbler's and Redstart's nests without witnessing any action that could be attributed to a deliberate misleading of the intruder. The "injury feigning" act, moreover, is certainly not characteristic of one sex. In some broods only the female will perform, in others only the male and still in others both birds of the disturbed pair.

The most beautiful performance I have ever seen was enacted by a male Black-throated Green Warbler which tumbled off the nesting spruce branch twenty-five feet from the ground and fell fluttering from one branch to the other until he reached the ground whereupon he dragged himself along with drooping wing. I sat amongst the spruce branches a few yards from the nest and saw this performance enacted time after time until *seemingly* the bird sensing it was having no effect ceased the "injury feigning" and came up amongst the spruce branches scolding and at times landing only a few feet from my face.

I do not see how we can expect birds to vary the "injury feigning" act a great deal. It has been essentially but not strictly the same in all passerine birds I have observed giving the performance. This male Black-throated Green Warbler went through approximately the same performance time after time but certainly never impressed me as following a strictly set pattern.

ALLAN D. CRUICKSHANK

Freeport, Long Island, New York.

Editor of 'The Auk':

In 'The Auk' for July, 1936 (Vol. LIII, p. 367) Mr. Lawrence B. Potter adds to the notes on injury-feigning among nesting birds by relating an experience with the Yellow Warbler (*Dendroica aestiva*).

This recalled a note in my journal under date of June 18, 1927, which reads, in part, as follows:

"Visited a nest of the Yellow Warbler and found the birds away, though the three eggs were warm . . . While I lingered there the male warbler appeared and began an interesting performance. With wings hanging loosely as if broken, he crawled about among the berry bushes uttering the usual "chip." When I went toward him he flew to a safe distance but, finding that I stayed near the nest he soon came back and went through his manoeuvres again. The simulation of injury, or sickness, was better, I thought, than with those birds that practice it consistently. Not only the drooping wings and tail but the way in which he climbed feebly about the bushes was admirably acted."

RUSSELL J. RUTTER

51 Belcourt Road,
Toronto, Canada,
September 2, 1936.

Editor of 'The Auk':

In the correspondence column of 'The Auk' there have been numerous references made to the origin, meaning, and description of injury-feigning among various bird species. From these accounts it is apparent that this practice is considered to be extremely uncommon among passerine birds. The late Harry Swarth, for example, stated that he could not recall ever having noted such an example among any of this large assemblage of avian creatures. In the July (1936) 'Auk,' F. H. May and Lawrence B. Potter relate a singular example of injury-feigning of a nesting Ovenbird and a Yellow Warbler.

It may be of interest to report an observation of this habit well developed in the Yellow Warbler on the lawn of the University at Provo, Utah, that was obviously giving her young their first lesson in flight. Two of this brood of five could fly but a few feet and even then with great difficulty. It seemed that unusual intelligence was being shown as the mother would frequently alight on the bark of the tree with an insect, holding the food only a foot or two above the developing young, and apparently encouraging them to come and get the morsel.

When I began to approach and was still a hundred feet away the mother frantically flew close to the ground zig-zagging back and forth ahead of the brood uttering danger or distress calls, seemingly encouraging the young to follow. As I approached still closer the mother-bird suddenly began to flutter as if unable to fly. She then developed the characteristic broken-leg and broken-wing ruse and kept some 20 to 30 feet ahead of me. After I had pursued her for perhaps 50 to 75 yards and it appeared that her young were at a safe distance, she flew in a large circle back to her brood. The injury-feigning seemed as expertly performed as if done by a Killdeer or other species commonly known to perform this act. I cannot say whether this incident was a deliberate attempt to lead the intruder away, or whether it was the result of the blind mixture of conflicting emotions of love for her brood and fear of man.

CLARENCE COTTAM

Biological Survey,
Washington, D. C.

Editor of 'The Auk':

The article and correspondence concerning injury feigning by nesting birds which have been appearing in 'The Auk' have been followed with much interest. I should like to add two recent experiences of mine.

On August 8, 1935, three very young Bobwhite chicks were found in a government Sparrow trap at my home banding station. As they were too small to wear the proper size band, I approached the trap which had been set near a wire fence, intending to release them. Immediately a banded male Bobwhite appeared near the trap. He gave a distress call, feigned injury, circled, and zigzagged as he dragged himself 100 feet across an open lawn, disappearing in a clump of shrubbery. In the meantime, the three young birds darted through the wire fence and away in the opposite direction, lost from view in the tall grass of adjoining vacant property.

On May 21, 1936, the nest of a Kentucky Warbler built on the ground in a wood near one of my sub-banding stations was visited. The brooding bird sat close over the four eggs for a moment as we stopped, but when she left, she dragged one wing as if hurt and ran along the ground away from the nest. On June 3d this nest was again visited in order to band the young. The injury feigning was again noted. She squealed as she hopped off dragging a wing while the two young were banded.

(MRS. F. C.) AMELIA R. LASKEY

Editor of 'The Auk':

On two occasions I have observed the feigning of the broken-winged helplessness of Sparrows.

Some thirty years ago I found the nest of an Eastern Chipping Sparrow (*Spizella passerina passerina*), in a currant bush about two feet from the ground. Every time I approached the nest, the bird would fly off, run a short distance, then it feigned broken-winged helplessness for quite a distance, then rested on the broken wing for a while and then flew away. I approached the nest quite often just to see if its tactics would not be changed but every time the same performance.

On May 18, 1921, in crossing a close-cropped pasture lot two feet from a plowed plot, I flushed an Eastern Vesper Sparrow (*Pooecetes gramineus gramineus*). The soft-cushioned nest contained two small birds and an unincubated egg. The bird flew from the nest between my feet and feigned a broken wing for quite a distance and then flew away.

MYRA KATIE ROADS

463 Vine St.,
Hillsboro, Ohio.

[As this discussion bids fair to fill an entire issue of 'The Auk' if continued, it seems useless to further multiply instances of Passerine birds "feigning injury." The fact that they do so has been abundantly proven, but practically no light has been shed upon the original problem—the nature and origin of the habit. Mere personal opinion does not get us anywhere and the interpretation of animal behavior is more complicated than many persons realize.—Ed.]