

## GENERAL NOTES

**Ring-billed Gull chases Great Blue Heron.**—On March 6, 1950, Mr. and Mrs. L. C. Fievet, Tom Atkeson, William Jernigan and I were observing birds along the sloughs of the Wheeler National Wildlife Refuge about five miles up the Tennessee River from Decatur, Alabama. A Great Blue Heron, *Ardea herodias*, which rose ahead of us, elected to cross the river but was immediately beset by a lone adult Ring-billed Gull, *Larus delawarensis*, which had been flying and resting along the main channel. The gull centered its attack on the heron's back, apparently attempting to pull loose some upper tail coverts. The pursuit lasted about 45 seconds, during which time the heron flew forward perhaps 200 yards. When the heron veered, turning back for the bank, the gull discontinued its harassing and resumed its search for food in the main channel.

Though both fish-eaters, the Great Blue Heron and Ring-billed Gull obtain their food in quite different ways so they can hardly be considered competitors. I am, therefore, at a loss to explain the gull's antagonism to the heron in the case just reported.—THOMAS A. IMHOF, 307 38th St., Fairfield, Alabama.

**Bald Eagles attack crippled gull.**—About 8 o'clock on the morning of January 17, 1943, Louis Brown and I were on the north levee of the Chautauqua National Wildlife Refuge near Havana, Mason County, Illinois. While opening a gate into the Refuge we noticed an unusually large number of Bald Eagles (*Haliaeetus leucocephalus*) flying over the lake and perching in trees along the shore.

Though we did not have binoculars, we soon discovered what appeared to be a center of the eagles' interest—a rather large gull about 75 yards out in the lake and possibly 100 yards from where we were standing. It was dodging the slow, awkward swoop of a low-flying eagle. Immediately after the attack the gull resumed a normal sitting position in the water. Presently several eagles, in rough formation, swooped one after another at the gull, which obviously was too badly injured to fly, though we could not tell just what was wrong with it. It dodged all these attacks, sometimes by diving. When the immediate danger was over and the air about it had cleared, it resumed a resting position. It seemed to be about the right size and color for a Herring Gull (*Larus argentatus*).

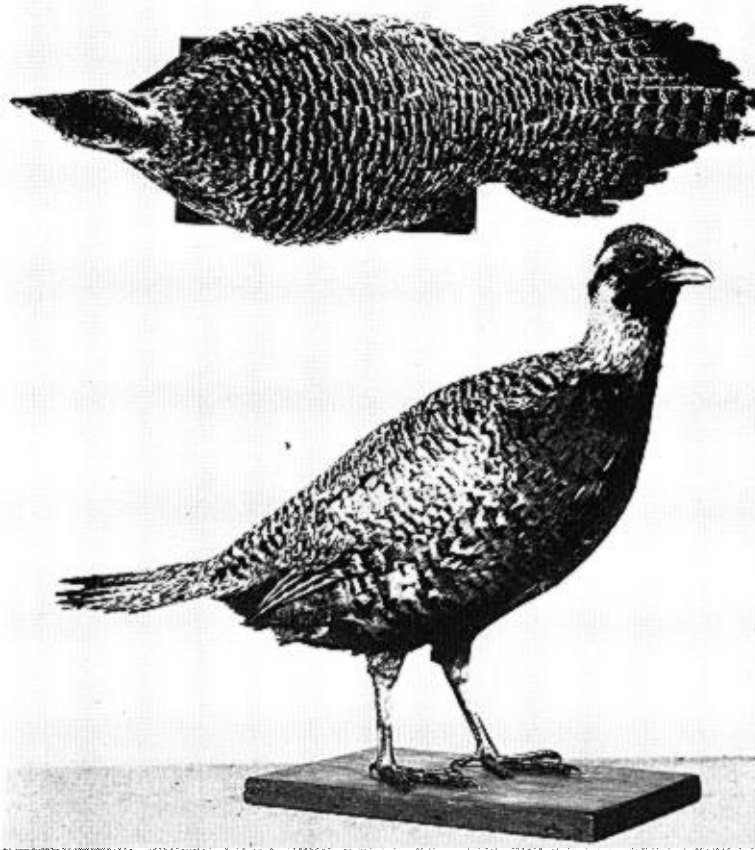
The attacks were not yet over. A total of 12 eagles, including several adults with white heads and tails, circled over the lake at the same time. One after another the great birds swooped down on the gull. The harried bird managed to elude each attack, although two or three times escape was narrow. At least two eagles touched the water with their claws or toes, and another actually settled momentarily, rising ponderously from the surface and flapping away. The whole performance called to mind a squadron of bombers peeling off in sequence in their determination to reach an objective.

After the mass attack the eagles separated somewhat, though some of them continued to swoop at the gull, which by this time was much farther out from shore. Eventually it disappeared from our sight around a promontory. We do not know what happened to it.

The inability of the eagles to capture the gull seemed to us good evidence that they could not be considered very important from the standpoint of primary predation. We were much impressed by the ability of the clumsy, crippled gull to elude their attacks.—LEE E. YEAGER, Colorado Cooperative Wildlife Research Unit, Colorado Agricultural and Mechanical College, Fort Collins.

**A Ring-necked Pheasant × Prairie Chicken hybrid.**—About 1933, near Ellendale, southeastern North Dakota, Burton Brown of Forbes, North Dakota, shot an interesting cross between a Ring-necked Pheasant (*Phasianus colchicus*) and a Prairie Chicken (*Tympanu-*

*chus cupido*). The bird was flushed with a group of pheasants in an area throughout which Prairie Chickens and Sharp-tailed Grouse (*Pedioecetes phasianellus*) were also fairly common. The mounted specimen came into the possession of the State Game and Fish Department. Here it was discovered by Roy N. Bach, coordinator of federal aid for North Dakota. Bach was instrumental in having it forwarded to the Fish and Wildlife Service, in Washington, D. C. It has recently been dismantled and made into a study skin.



A hybrid Ring-necked Pheasant  $\times$  Prairie Chicken from North Dakota. Note especially the tail-shape, the partly feathered tarsi, and the pronounced dorsal barring. Photos by courtesy of the Smithsonian Institution.

I am indebted to Dr. John W. Aldrich of the Service for comments regarding the specimen's species characters, many of which clearly show in the accompanying Smithsonian Institution photographs. The bird (probably an immature male) resembles an adult male Ring-necked Pheasant in the following ways: 1. The bill is large, light yellowish, and shaped like that of a male Ring-neck. 2. The operculum and nostril are large and exposed. 3. The scales of the front toes are without lateral projections or 'snowshoes'. 4. The unfeathered lower half of the tarsus has a rudimentary spur. 5. There is a wattle-like bare area about the

eyes. This area is not, however, so extensive as it is in an adult male Ring-neck. 6. There are distinct black ear tufts (see photo of dorsal surface).

The bird resembles a Prairie Chicken thus: 1. The upper parts, especially the feathers of the upper back, are strongly barred. 2. The flank feathers are strongly and completely barred on at least one web. 3. The tail has a dark brown terminal area on all but the middle pair of rectrices, and the color of this area is similar to that of the Prairie Chicken's tail. 4. The markings of the primary coverts (which do not show in either photograph) are very much like those of the Prairie Chicken. 5. The tarsi are feathered, in front, half way down to the toes.

The bare space on each side of the neck is somewhat larger than in a typical male Ring-neck, but the skin does not seem to have the slightly thickened quality characteristic of the booming sac of the Prairie Chicken. The reddish brown feathers of the underparts are tipped with black more or less as in the adult male Ring-neck, but they lack the brilliant metallic lustre. The tail is moderately graduated (wedge-shaped) but not nearly so long and pointed as that of a Ring-neck. The rectrices are neither square-tipped, as they are in the Prairie Chicken, nor extremely pointed, as they are in the Ring-neck. They are intermediate. The primaries are marked with white on their inner webs as are those of a pheasant, but the markings of the outer webs suggest those of the Prairie Chicken. The dark centers of the feathers of the lower back and rump have a suggestion of metallic sheen, but all these feathers are strongly barred.

The wing, bill, and toe measurements are about those of an average adult male Ring-neck, but the tail and tarsus are much shorter. The measurements, in millimeters, are: wing, 237; tail, 167; culmen from cere, 21; tarsus, 64; unfeathered portion of tarsus, 26; middle toe without claw, 46.

Natural or 'wild' hybrids among galliform birds have been recorded many times. Among the best known are those between the Capercaillie (*Tetrao urogallus*) and the Black Grouse (*Lyrurus tetrix*) (see Handb. Brit. Birds, 5: 210). Anthony (1899. *Auk*, 16: 180) has reported a cross between the Dusky Grouse (*Dendragapus obscurus*) and Ring-necked Pheasant taken near Portland, Oregon. I have reported a cross between *Pedioecetes phasianellus* and *Tympanuchus cupido* (1918. *Wilson Bulletin*, 30: 1-2, plate). Taverner (1932. Annual Report, 1930, National Museum of Canada, p. 89 and plate) has reported a cross between the Willow Ptarmigan (*Lagopus lagopus*) and Spruce Grouse (*Canachites canadensis*). Dr. Aldrich has called to my attention a hybrid between *Dendragapus obscurus* and *Pedioecetes phasianellus* (in the Fish and Wildlife Service collection) taken at Osoyoos, British Columbia, September 15, 1906, by C. deB. Green.—FREDERICK C. LINCOLN, *Fish and Wildlife Service, Washington, D. C.*

**Foot-freezing and arrestment of post-juvenal wing molt in the Mourning Dove.**—Scattered flocks of Mourning Doves (*Zenaidura macroura*) winter throughout south- and west-central Wisconsin. These flocks often suffer considerable mortality. A flock of approximately fifty birds at Menomonie, for example, dwindled to five during the winter of 1949-1950, according to H. M. Mattison. Four of this flock, caught by Mattison and me while live-trapping Bob-white Quail (*Colinus virginianus*), had badly frozen feet. Two more, caught later in that vicinity, as well as a third bird caught by hand in a shed at Horicon when I happened to be present, were caged indoors at Madison and cared for by Fred Wagner and myself. After about six weeks, the feet healed. Almost without exception, however, the frozen distal phalanges dropped off. This loss of bones and claws did not affect locomotion and perching, so far as we could see; but had the doves been obliged to obtain their own food in the wild during the convalescent period, their ground-scratching ability probably would have been seriously impaired. Some of the non-captive birds probably died as a direct result of starvation, but the combination of undernourishment and foot-freezing must have been lethal to many of them.