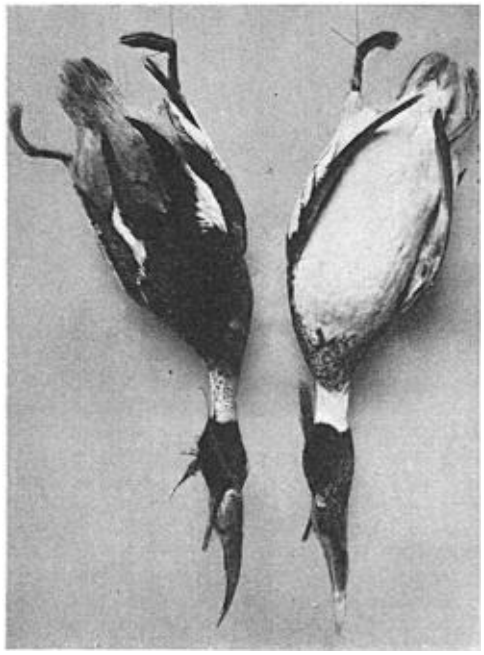

Fig. 93. ADULT RED-BREASTED MERGANSERS WHOSE DEATH HAD BEEN CAUSED IN EACH CASE BY THE ATTEMPT TO SWALLOW A SCULPIN.

Water Fowl and Sculpins.—Two instances of water fowl dying as the result of attempting to swallow large sculpins have been brought to my attention recently and are herewith recorded.

In the first instance (figure 93) two male Red-breasted Mergansers (*Mergus serrator*), each with a large sculpin wedged in the throat, were picked up in the sea near Victoria, British Columbia. This was early in May, 1928. I was informed by Mr. W. N. Lenfesty of Victoria, who photographed the subjects, that the spines of the fish, in each case, had passed through the cheeks of the bird.

The second instance, a female Pied-billed Grebe (*Podilymbus podiceps*), was picked up on Quamichan Lake, Vancouver Island, and brought to me by Game Warden Marshall, of Duncan. In this case the sculpin (*Cottus asper*) measured 130 mm. and about half this length protruded from the grebe's mouth. The sharp spines on the preopercula had lodged so securely in the lining of the bird's throat that considerable force was required to remove the fish.—J. A. MUNRO, *Okanagan Landing, British Columbia, May 15, 1930.*

Under-water Behavior of Red-throated Loons.—Authorities seem to be divided on the question of whether or not the Red-throated Loon (*Gavia stellata*) employs its wings as an aid to propulsion under water. For example, Forbush (Birds of Massachusetts, I, p. 29) states: "Like the Loon, it uses its wings under water when necessary to increase its speed;" and he quotes Dr. George Suckley to the effect that "the bird used the wings as in flying in addition to the ordinary motions of the feet." On the other hand, Hoffmann (Birds of the Pacific States, p. 3) writes: "Propelled by powerful strokes of its webbed feet, it follows every dart or winding of its victim."

An exceptionally favorable opportunity which I had for watching the under-water behavior of two Red-throated Loons, on April 3, 1930, convinced me that in this instance, at least, they positively did *not* use their wings. The observations were made from the pier of the San Diego Yacht Club, at Roseville, San Diego Bay. The morning was clear and bright, the tide medium. At the time, the deck of the pier was about seven feet above the water. The beach at this point is almost flat and for 100 feet off-shore the water does not reach a depth of over four feet. The bottom is a hard, muddy sand and, as there was no wind, the water was calm, making conditions perfect for visibility.

Two Red-throated Loons in winter plumage were observed fishing close to the pier and I watched them for fully half an hour. There were numerous schools of small fish from two to four inches in length feeding in the neighborhood. The loons would dive, swim slowly in a large arc until they had driven the fish into shallow water, then each would suddenly put on a remarkable burst of speed, apparently single out an individual fish and, two times out of three, succeed in catching it. As my eyes were only twelve to thirteen feet above the water and as the loons were never over 100 feet away, and at times immediately under me, their every move was noticeable.

The loons did not use their wings while under water but swam entirely with their feet. The speed they developed when they came within striking distance of their quarry was truly remarkable. The head was stretched to the full length of the neck, and the body was compressed until it seemed about one-half of its natural size—in fact the loon became a living projectile offering a minimum resistance and seemed fairly to shoot through the water. The legs were moving at such speed that it was impossible to see their motion. A bird would turn and twist at full speed, without any noticeable disturbance of the water, except when extremely close to the surface. These bursts of speed were of comparatively short duration and whether the fish was caught or not, the loon usually came to the surface immediately thereafter. On several occasions, however, when the first dash failed to net results and the fish was still within striking distance the bird put on a second, though much shorter, dash. The most interesting thing in the actions of these loons under water was their total dependency upon their feet for motive power. The wings were not used at any time but were folded tightly against the body.

Invariably when the loon came to the surface with a fish, the fish was held by the middle, indicating that the strike was from the side and made while the fish was making a turn. The birds, on emerging, always preened themselves and shook the loose water from their feathers. Apparently while on the surface they did not see the fish, but located them only after diving.—J. W. SEFTON, JR., *San Diego Society of Natural History, San Diego, California, April 26, 1930.*

Do Gray Squirrels Destroy Eggs or Young Birds?—During the nesting seasons of 1929 and 1930, I have been observing the attitude of nesting birds to gray squirrels and *vice versa.* I have two squirrels on my place, tame enough to feed from my hand, but otherwise wild. One day last spring (1929), hearing some very noisy House Finches (*Carpodacus mexicanus*) outside my window, I looked out and saw a squirrel leaning over the eaves looking into a nest containing eggs, from which it was distant a few inches and within easy reach. It paid no attention to me and after a few minutes, during which the birds were evidently much alarmed, it went off without touching the eggs. Later on, when the young birds were a few days old, the squirrel came again and after examining the nest went off without touching the young birds. The same thing happened this year with a nest in the same place, which is close to a regular route used by the squirrels over the roof. There are other nests close by, easily accessible to the squirrels.

A short time ago, upon hearing grosbeaks (*Zamelodia melanocephala*) crying excitedly, I went out and found them trying to drive a squirrel away from their nest which had two eggs in it. I drove the squirrel off and next day it was back at the same nest. This time I did not disturb it. After a few minutes it went away and the female bird returned to the nest. About a week ago, not having seen the birds about the nest for several days, I examined it and found two dead young in it about one-third grown, not mutilated in any way. I have at other times seen birds trying to drive squirrels from nests but have not been able to ascertain whether they took eggs or young. In the above mentioned cases they did neither.—WALTER I. ALLEN, *Altadena, California, June 30, 1930.*

The Rocky Mountain Pine Grosbeak in Arizona.—It is the purpose of this note to place on record the occurrence of the Rocky Mountain Pine Grosbeak (*Pinicola enucleator montana*) in Arizona. Apparently there is no previous record in the literature of such occurrence.

In June, 1929, the University of Arizona summer field class in Ecology spent a week on the Kaibab plateau, north of the Grand Cañon. Water for animals was available there only in occasional pools and small ponds, one of these being all that then remained of "Jacob Lake". Our camp was alongside of Jacob Lake Ranger Station, altitude about 7500 feet, overlooking the remnant of the "Lake", where birds came in considerable numbers to drink. Mr. D. Irvin Rasmussen, then Ranger at this station, asked me to verify his observation that Rocky Mountain Pine Grosbeaks were among these visitors to the water. This I was able to do, recording the