

Figure 1. Abnormal toes of Common Snipe.

Extra toes on the halluces of a Common Snipe.—While banding Common Snipe (*Capella gallinago*) south of Gainesville, Florida, 31 October 1967, I caught in a mist net a specimen with an extra digit on the hallux (toe IV) of each foot. Both digits on each hallux possessed normal claws. The two normal halluces were 10 mm long; the right and left extra digits were 4 mm and 3.5 mm respectively. The claws were included in the measurements. The male bird weighed 98.0 g after being frozen 41 days.

Figure 1 was drawn by Neal Eichholz from the frozen specimen, which was photographed before being deposited in the collection of the Department of Paleontology, University of Florida, Gainesville.—MICHAEL J. FOGARTY, *Florida Game and Fresh Water Fish Commission, 412 N. E. 16th Avenue, Gainesville, Florida 32601.*

Pathological changes associated with birdshot embedded in sandpiper muscle tissue.—While dissecting the thigh musculature of a Red-backed Sandpiper, *Erolia alpina*, collected at Cameron, Louisiana, 15 April 1965, I noticed a small shot embedded in one of the extensors of the thigh (*M. femorotibialis externus*). As the adjoining tissue showed no evidence of hemorrhage or recent injury and the shot was enclosed in a rather discrete capsule, the bird must have been wounded quite some time previously. The presence of freshly embedded shot in nearby muscles provided an opportunity to compare the histological changes that occur in new and presumably healed wounds in birds in the wild.

The fresh wound which came from the final gunshot that killed the bird showed considerable hemorrhage in the surrounding muscle tissue. This was not evident in the microscopic sections as the staining procedure removed the extraneous fluids. No leucocytes accumulated in the area and no tissue discoloration was apparent.

The presumably healed wound (Figure 1), on the other hand, showed no hemorrhage or inflammation, and the shot fitted snugly within a tough, white capsule approximately 2 mm in diameter, which appeared quite firm when dissected grossly. The inner wall was smooth and had a distinctly whitish appearance. The outer wall appeared to fuse with the surrounding muscle tissue.

The capsule was much more obvious grossly than the microscopic preparation indicates. The section represented in Figure 1 is fairly typical of the sections prepared and shows the presence of a limited amount of scar tissue. Apparently the shot is for all practical purposes completely sealed off from the surrounding tissue. We may conclude, in the absence of evidence of any currently active reaction to the wound, that the shot itself was causing no appreciable physiological changes at the time of death. The inorganic material lining the capsule probably came from the shot. This material evidently destroyed some of the adjoining muscle tissue at first, and it now appears incorporated in the muscle tissue nearest the capsule, in a zone 8–15 microns wide. The muscle tissue for about 30–40 microns peripheral to the capsule is highly discolored, appears more granular, and seems to have fewer nuclei than the unaffected tissue surrounding it. Thus the bird apparently compensates for the wound by means of: (1) the formation around the foreign body of a capsule consisting of only a limited amount of scar tissue; (2) the impregnation of adjacent sarcoplasm by inorganic debris; and (3) a decrease and alteration in the metabolic processes of adjacent cells, which probably causes discoloration, decreased mitotic rate, and induration.—MICHAEL KENT RYLANDER, *Department of Biology, Texas Technological College, Lubbock, Texas 79409.*

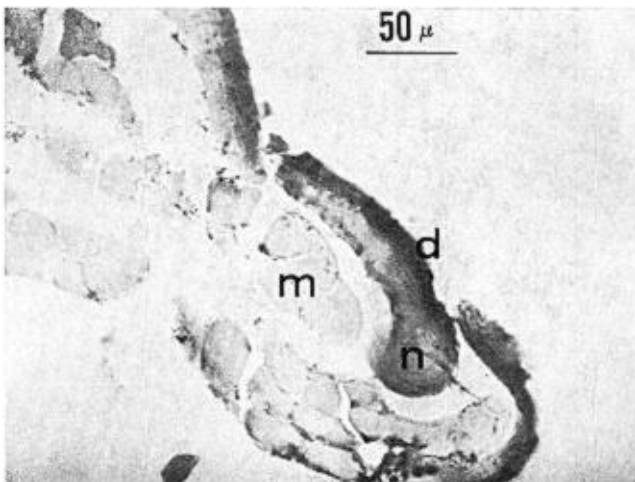


Figure 1. Section through muscle tissue and capsule surrounding birdshot in Red-backed Sandpiper, *Erolia alpina*. *d*, inorganic debris infiltrating adjacent muscle tissue; *m*, unaffected muscle tissue peripheral to capsule; *n*, muscle tissue showing increased granulation and decreased number of nuclei.