

50.5 g), 17 October 1963 (male, 43 g) the latest record being 13 November 1968 (Male, 60.5 g). In the northern spring there is a sight record on 15 March 1969, the latest records being two birds collected on 12 May (female, 53 g) and 13 May 1967 (female, 69 g very fat). It is clear from these records that both fall and spring migration is extended over long periods and that the birds seem to be in no hurry.

The Buff-breasted Sandpiper is not yet known from neighboring French Guiana (Berlepsch, Nov. Zool., 15:251, 1909) and there is only a single sight record from Guyana on 20 April 1965 (Snyder, The birds of Guyana, 1966, p. 96).—F. HAVERSCHMIDT, 16 *Wolfskuilstraat, Ommen, Holland, 7 February 1972.*

**Congenital foot abnormality in the Ring-billed Gull.**—During ecological and behavioral studies of Ring-billed Gulls (*Larus delawarensis*) on Granite Island, Ontario (48° 43'N, 88° 27'W), we leg-banded 359 newly-hatched chicks. On 10 June 1971 we found a one-day-old Ringbill chick with a foot abnormality known as polydactyly (Fig. 1). An X-ray photograph (Fig. 2) indicates the extra foot elements on each leg originated distally from the median anterior portion of the tibiotarsus. In that the phalangeal portion of the avian foot normally develops from the distal aspect of the tarsometatarsus, it is conceivable that, with secondary induction, phalangeal elements may arise from the metatarsal elements of the tibiotarsus. Although the abnormality reported here is not bilaterally symmetrical, the middle toe is more fully developed on both sides than the inner or outer toes. No hallux is apparent on either extra foot. The bird did not seem to be handicapped by the abnormality at the time of capture.

Relative to the amount of past and current research using larids, the paucity of reports of congenital abnormalities is somewhat surprising (see Austin, Auk, 86:352, 1969 and Smith and Diem, Auk, 88:435, 1971). It may be that non-passerines are not able to adapt their behavior to abnormalities as well as passerines and thus are eliminated rapidly. This was noted by Pomeroy (Brit. Birds, 55:49-72, 1962) referring to bill abnormalities.

Bellairs (Skeleton. In A new dictionary of birds, A. L. Thomson, Ed. Nelson & Sons, London, 1964) stated that inherited skeletal abnormalities of many types occur in birds. However, only the "fowl" have been studied extensively, presumably because of their economic importance. Napier (Wildfowl Trust Ann. Rept., 14:170-171, 1963) discussed foot malformations in Mallards (*Anas platyrhynchos*) and noted polydactyly can occur from genetically determined increases in mesenchymal plates which later give rise to the foot. Little information is available on effects of secondary inducers which may affect early embryonic development in wild birds. Kear (Wildfowl Trust Ann. Rept., 15:99, 1964) summarized results of studies of congenital malformations in wildfowl bred at Slimbridge, England. She reported an incidence (0.56 per cent) of abnormalities in 1961 which did not occur in the subsequent two seasons and suggested the effects of agricultural chemicals might be investigated.

We do not infer the malformation reported here is necessarily purely genetic in origin. Recently Hays and Risebrough (Auk, 89:19-35, 1972) recorded incidences of 0.1 per cent abnormalities in 1969 and 1.3 per cent in 1970 from a sample of over 4,000 young Common Terns (*Sterna hirundo*) and more than 1,600 young Roseate Terns (*S. dougallii*) at Great Gull Island, New York. The abnormalities reported by Hays and Risebrough (ibid.) resemble those produced experimentally in domestic chickens by the chlorinated dibenzo-p-dioxins and some polychlorinated biphenyls.

In view of a possible important relationship between chemical residues in birds, and congenital abnormalities we ask for increased monitoring and communication of inci-

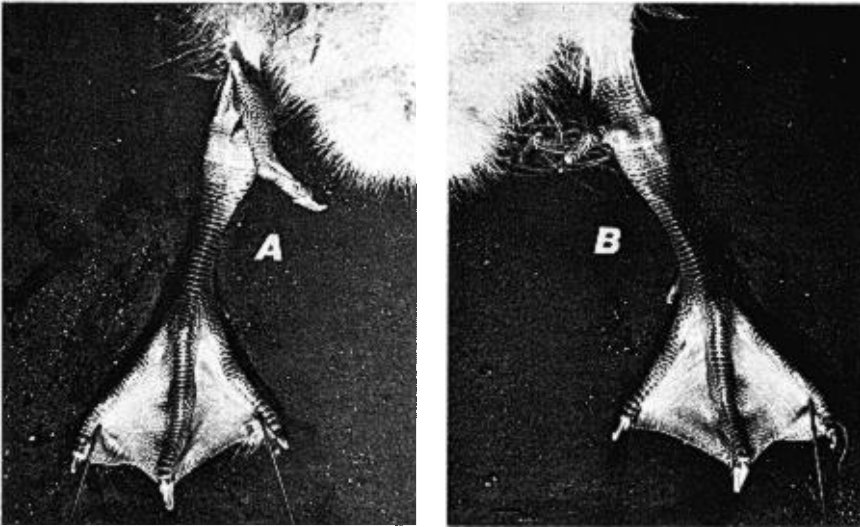


FIG. 1. Extra digits on right (A) and left (B) of one-day-old Ring-billed Gull.

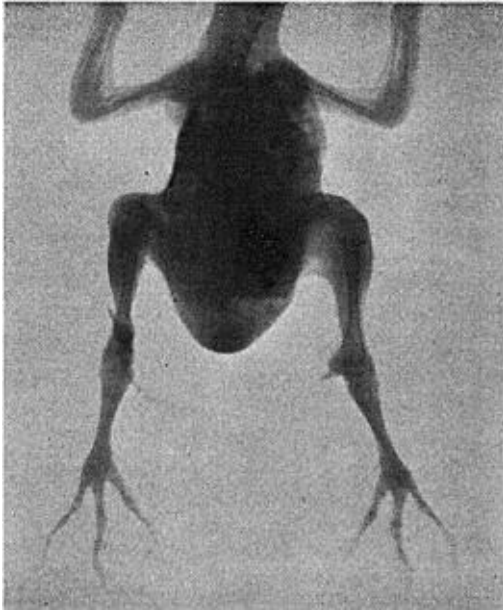


FIG. 2. X-ray showing polydactyly on both feet of one-day-old Ring-billed Gull.

dences of these phenomena.—JOHN P. RYDER AND DAVID J. CHAMBERLAIN, *Department of Biology, Lakehead University, Thunder Bay "P," Ontario, 4 October 1971.*

**Swallow-like behavior in the Rusty-margined Flycatcher, *Myiozetetes cayanensis*, in Colombia.**—On 20 November 1970, while collecting birds near Mitú, Vaupes, Colombia, I noticed a curious swallow-like behavior in a pair of Rusty-margined Flycatchers (*Myiozetetes cayanensis*). During two rainstorms, the flycatchers flew low over the surface of the water (a river), in company with more than a dozen swallows engaged in the same type of behavior. Such behavior is of course typical of feeding swallows, but I find no published description of tyrannids behaving in this manner.

The flycatchers flew like this throughout both rainstorms, each of which lasted approximately fifteen minutes. They sustained glides for two or three seconds, then regained their speed with strong and rapid wing beats before gliding again. At least once every five minutes they rested for about a minute on a branch at the edge of the river, but did not preen while perched at this time. At the termination of each rainstorm, they resumed feeding in a fashion typical of this species.

The pair did not appear to exhibit extraordinary powers of flight, as flycatchers are capable of gliding up to several seconds during routine movements to new perches. Nor did they appear to endure exceptionally long periods of flight.

The purpose of this behavior was not clear, and it could possibly represent bathing. I could not ascertain if the flycatchers obtained food while flying in this fashion, but this possibility cannot be ruled out, as the family exhibits considerable versatility with regard to feeding behavior. The Great Kiskadee (*Pitangus sulphuratus*) is reported to take small fish by "diving just like a kingfisher" (Haverschmidt, *Birds of Surinam*, 1968); *Myiozetetes similis*, in Central America, captures aquatic animals by wading out into shallow water, and picks up food by flying down to the surface of the water (Skutch, *Pacific Coast Avifauna*, 34:428, 1960).

I was unable to remain in the Mitú vicinity for more than one day, so I could not determine if swallow-like behavior was typical of this pair of Rusty-margined Flycatchers. Professor Jose-Ignacio Borrero, at the Universidad del Valle in Cali, had not observed comparable behavior in this or any other flycatcher during his extensive studies of Colombian birds.

One of the specimens is now in the Zoological Collections at Texas Tech University. The study that made this observation possible was supported in part by the International Center for Medical Research and Training, Cali, Colombia.—MICHAEL KENT RYLANDER, *Department of Biology, Texas Tech University, Lubbock, Texas 79409, 12 February 1972.*

**The recent history of Bachman's Warbler.**—The recent history of Bachman's Warbler (*Vermivora bachmanii*) can best be understood against a background of its earlier history (1880–1910). For this purpose, it should suffice to mention the records of only a few observers in Florida—that is, south of the species' known breeding range, but on its chief migration route. In the spring migration, Brewster and Chapman (Brewster, 1891) encountered large, but unspecified, numbers in March, 1890. Of these, 46 specimens were collected! In the same general area, Arthur T. Wayne (1893) collected 50 specimens in 1892 and 1893, but also made no reference to the total number seen. Farther north, he collected eight specimens on the Wacissa River in 1894 (Wayne, 1895).