

Though this paper deals with the period down to 1949, banding has been carried out, on and off, by myself and others, since then. The latest was on 27th July, 1960, when Messrs D. Stirling and W. J. Merrilees banded 300, and ran out of bands with much of the island uncovered. Merrilees estimated that half was left, but from his written description, rough map, and my own knowledge, I would say that two-thirds of the young were banded, so results would compare well with earlier full years. No signs of predation were seen, though the Cormorants had increased.

*Comox, British Columbia, Canada*

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## THE NATAL PTERYLOSIS OF TANAGERS

BY CHARLES T. COLLINS

In recent years a great deal of information has been collected on the natal pteryloses of passerine birds (Wetherbee, 1957, 1958). However such information on the tanagers (Thraupidae), a large and diverse assemblage of mostly tropical birds, is limited to but one temperate region species, *Piranga olivacea* (Wetherbee, 1958: 236). In the course of field work in Trinidad it was possible to obtain additional data on two tropical species, *Thraupis palmarum* and *Tanagra violacea*.

A single specimen of *Tanagra violacea* was collected from a brood of five which hatched on August 6, 1962 (age at collection < 24 hrs.: weight 1 1/8 grams). This species possesses a very reduced number of blackish neossoptiles as compared with the other two species of tanagers (Table 1). The distribution of these neossoptiles is given in Table 2.

TABLE 1. TOTAL NUMBER OF NEOSSOPTILES IN TANAGERS

Species	Total number of neossoptiles
<i>Tanagra violacea</i>	32
<i>Thraupis palmarum</i>	184 - 224
<i>Piranga olivacea</i> *	227

\*from Wetherbee, 1958:236

Two nestlings of *Thraupis palmarum* were collected on July 27, 1962. These nestlings were of an unknown age but on the basis of their weights (4 and 6 grams) were judged to be but a few days old (Stage A, Wetherbee, 1957: 356). As the weight of evidence supports the view that neossoptiles are entirely prenatal in development, the data from these nestlings may be used along with those from newly hatched young of the other species. The amount of variation, if any, due to abrasion in these specimens cannot be accurately determined.

As recorded in Table 1, nestlings of *Thraupis palmarum* exhibit a good deal of variation in the number of neossoptiles. The distribution of these neossoptiles is given in Table 2.

TABLE 2. DISTRIBUTION OF NEOSSOPTILES IN TANAGERS

Tract	Species			
	<i>Tanagra violacea</i>	<i>Thraupis palmarum</i> # 1 (4 g.) # 2 (6 g.)		<i>Piranga olivacea</i> *
Coronal (right)	1	16	17	6
(left)	1	17	14	6
Occipital (right)	4	4	4	4
(left)	4	4	4	4
Spinal	12	32	36	35
Scapular (right)	5	10	10	8
(left)	5	10	10	8
Femoral (right)	0	17	21	13
(left)	0	18	23	13
Abdominal (right)	0	9	3	12
(left)	0	12	16	12
Crural (right)	0	1	3	7
(left)	0	1	4	7
Rectrices (right)	0	6	6	6
(left)	0	6	6	6
Primary (right)	0	0	6	10
(left)	0	0	6	10
Greater Primary Covert (right)	0	0	0	8
(left)	0	0	0	8
Secondary (right)	0	0	2	2
(left)	0	0	2	2
Greater Secondary Covert (right)	0	9	10	9
(left)	0	9	8	9
Middle Secondary Covert (right)	0	7	8	8
(left)	0	6	10	8
Lesser Secondary Covert (right)	0	0	3	0
(left)	0	0	2	0
Carpal Remex Covert (right)	0	0	0	1
(left)	0	0	0	1

\*from Wetherbee, 1958:236

From these data it is clear that no one pattern of natal down distribution characterizes the Thraupidae. The occipital tract is the only one which has a uniform complement of neossoptiles (four) in these three species. *Piranga* and *Thraupis* show but slight variation in the scapular and spinal tracts, two of the only four tracts present in *Tanagra*. This observed diversity in neossoptile number and distribution supports the view that the family Thraupidae is an extremely heterogeneous assemblage of birds. *Tanagra violacea* builds a compact domed nest unlike the open nest of most other tanagers. Thus there is an interesting correlation between "cavity" nesting site and a substantial reduction in number and distribution of

neossopiles in this species. However in view of the numbers of exceptions to the generality that lack of natal down accompanies the hole nesting habit, it does not seem wise at present to attribute too great a significance to this. The Thraupidae seem to offer a particularly interesting opportunity for further work on the natal pteryloses and the taxonomic and evolutionary implications of this plumage.

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## LITERATURE CITED

- WETTERBEE, D. K. 1957. Natal plumages and downy pteryloses of passerine birds of North America. *Bull. Am. Mus. Nat. Hist.*, **113**: 339-436.  
 ———. 1958. New descriptions of natal pterylosis of various bird species. *Bird-Banding*, **29**: 232-236.

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## GENERAL NOTES

**Song Sparrow Possibly Nests 75 Miles from Birthplace.**—A Song Sparrow (*Melospiza melodia*) banded as an independent immature at Prince of Prussia, Pa., on July 19, 1960, was found in Baltimore, Md., on July 24, 1962, with its banded leg caught in a split pipe (not a result of the banding): the leg had to be cut off to free it. Mrs. Robert W. Trout, the bander, states that the sparrow never repeated for her. Marvin J. Yiengst, the finder, had not to his knowledge seen the bird before its mishap, and through the following October I had not seen it again. The July dates suggest that it was on or near its natal territory when banded and on its nesting territory when recovered; it may, then, have been breeding about 75 airline miles southwest of its birthplace.—Hervey Brackbill, 2620 Poplar Drive, Baltimore 7, Maryland.

**Two New Bird Records for Interior Alaska.**—On August 12, 1961, while mist-netting in the Minto Lakes area, 50 miles west of Fairbanks, I captured and banded an immature Yellow Wagtail (*Motacilla flava*). A second bird was netted and banded on August 17 and four others were seen in the area on August 18. According to Gabrielson and Lincoln (*Birds of Alaska*, 1959: 691-694) these are the first records for this species from the interior.

On September 17, 1961, while banding Common Redpolls (*Acanthis flammea*) in the vicinity of Fairbanks, I netted and banded a Pine Siskin (*Spinus pinus*). Gabrielson and Lincoln (*Birds of Alaska*, 1959: 765-767) have no records for this species from interior Alaska.—Willett T. Van Velzen, 432 W. Allegan St., Otsego, Mich.

**A Mutual Display of the Catbird.**—At dusk on 25 May, 1959, I observed a mutual display of the Catbird, *Dumetella carolinensis*. I was in the "Hellcat Swamp" area on Plum Island, Parker River National Wildlife Refuge, Newburyport, Massachusetts. The display was witnessed for about ten minutes from 1950 hours, E. S. T., in very poor light conditions (sunset, 1909 hours, E. S. T.; civil twilight, 31 minutes). The birds were about twenty meters from the point of observation.

At first, only one individual was noted. Its action was confined to an area of a dirt road, within three meters of dense brush along the road. The "pattern of