
The Banders' Forum

"Sex Reversal" in Banded Cardinal (Reverted)

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The above title, referring to a dramatic change in plumage of Northern Cardinal 891-50186, appeared (less final word) in the Jan.-Mar. 1986 issue of NABB, p. 11. Although I have been reminded that the title is an overstatement, since true sex reversal can be determined only by examination of gonads, I still regard this encounter an unusual and interesting experience in the life of a bird bander.

The condition, even though misnamed, aroused so much speculation among readers, that I offered the opportunity to collect and examine my bird — should it ever be recaptured — to the zoology staff of two of our state universities. Neither responded, and since the bird was presumably in poor health, the episode appeared a closed subject.

However, as of August 9, 1986, my Cardinal reappeared in the same trap, a R-5, almost a year to the day since the last encounter. She was in a curious state of molt, midway between male and female plumages, but definitely reverting to her original sex pattern. She was vigorous and appeared in good physical condition, and we were glad no one had accepted our invitation to terminate her checkered life.

My husband, Frederick M. Baumgartner, bears witness. Together we compared the plumage, tract by tract, with the written description in Bent's Life Histories, and with color plates of a dozen reference books. Though she had not lost all of her red male feathers, she was predominantly a fawn-colored female again.

When released at our front door, this bird flew directly and purpose-fully downslope to the edge of the woods a quarter-mile distant, paralleling one of our wooded hollows. She has reappeared at our traps on November 25, 1986, and January 10 and 13, 1987. Each time she followed precisely the same route as in 1985, and we firmly expect to find a Cardinal nest in that area after the leaves have fallen.

Interesting Recoveries

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"Ringing and flinging" conducted on isolated occasions does little more than satisfy the bander or onlookers and does not provide the standardized data needed for scientific interpretation. However, three of my most interesting recoveries have been from occasional bandings, conducted primarily for public education with no long-range study goals in mind. The birds recovered were an Ovenbird, Cardinal, and Black Skimmer.

The Ovenbird had been banded during a demonstration at an Ecology Fair in suburban Baltimore, Maryland, on September 23, 1978. Parents and children watched as bird #870-76940 was pronounced an HY with a 5 fat, and released at 11:30 a.m. Four years later in May 1982, this bird was found by Dorothy Westhafer of Burt, New York. When contacted, Mrs. Westhafer wrote that she found the bird, "on our steps, close to the shrubbery." She went on to say that they lived in a wooded area on the shore of Lake Ontario. When she tried to find out what to do with a dead banded bird, she experienced a lot of difficulty. Oddly enough, I heard from Mrs. Westhafer the following July 1983, informing me she had found another Ovenbird, almost the same date and same spot, however, this one was not banded.

The second recovery, Cardinal #851-53511, was banded as an AHY female at a bird banding demonstration for Junior Nature Camp at Huntingtown, Maryland, on June 4, 1977. Banding was conducted there one weekend a year, and various banders had contributed to the educational effort. Almost six years later, on January 1, 1984, this Cardinal was found dead on the deck of Mrs. Duggee Hatry's weekend home on the shore of the Patuxent River near Huntingtown. When I wrote Mrs. Hatry, she replied that she often found stunned or dead birds that had collided with her large windows, but this was the first banded one.

The third recovery was a Black Skimmer, #634-52551, banded during a summer survey of the Ocean City/Assateague Island nesting areas. It was one of 28 flightless young banded on July 9, 1977, in Sinepuxent Bay. Eight years later, on the night of August 19, 1985, John Weske and John Buckalew were mist netting near Chinoteague Inlet where they captured the Skimmer, an adult male, rebanded and released it.

Here I have three widely isolated instances of banding involving a very small number of birds with unexpected recoveries. Such findings always stir my admiration for the birds and gratitude toward the people who report them.

The Bander's Forum

In response to A. Marguerite Baumgartner's request for information on the phenomenon of sex reversals in wild birds "Sex Reversal in Banded Cardinal", (*North American Bird Bander* 11(1):11, 1986) I would like to report a similar experience and a plausible explanation offered by Dr. Kenneth Parkes of the Carnegie Museum, Pittsburgh, Pennsylvania.

This year (1986) marks the fifteenth year (1972-1986) that I and a colleague (Dr. John Faaborg, of the University of Missouri-Columbia) have sampled a dry forest bird community each winter in the Guanica State Forest located in western Puerto Rico. We have placed special emphasis on North American migrants (mostly parulinae). On January 27, 1981, I recaptured an American Redstart (*Setophaga ruticilla*) banded (122-63961) by Faaborg on February 3, 1974. The bird was at least 7 years old when I recaptured it and had made a minimum of 15 trips (Fall of 1973 to the Fall of 1980) with 7 return flights to the mainland (Spring of 1974 to the Spring of 1980).

I was impressed with this recapture, marveling that a 7 g bird could have survived the rigors of migration and so many long-distance flights over the years. However, there was a glaring inconsistency with this record. Faaborg had banded it as an adult FEMALE. I had recorded it as an adult MALE because it exhibited a large patch of black feathers on the throat and upper breast. I changed the sex determination to "adult female" after comparing Faaborg's and my mensural data (weight: 6.8 g and 6.7 g, respectively; chord: 61 mm and 62.1 mm, respectively). Chandler Robbins' guide to "Ageing and Sexing Wood Warblers in the Fall" (EBBA News 27 (5): 199-215) supported the probability that this individual was a female. I surmised that the plumage must have been aberrant and decided to write to Dr. Parkes for an explanation. He responded immediately, stating that this was a good example of the effects of natural aging in birds. Female birds retain "female characteristics" through high levels of estrogen. However, with natural ageing, estrogen levels drop and females begin to show "male characteristics", i.e., male plumage in dimorphic species, male song, male behavior, etc. Mrs. Baumgartner's 4-yr-old Cardinal appears to be additional proof of this common (Parkes, in litt.) occurrence. I suspect that if more banders would review their longevity records of female birds (i.e., repeats of female birds over many years), we would find many more examples of sex reversal in wild birds.

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To those who have taken issue with the adjective chosen to describe my Downy Woodpecker plumage, I submit the dictionary definition of aberrant: "differing from the normal or usual". He was unusual for the observers, certainly, though apparently not for the bird involved.

However, I have examined both photos at the nest, and slides of a young bird definitely declared a Downy. My bird showed far more red than an oversize patch at the back of the head. The feathers of the entire crown were heavily tipped with red, as compared with half or less as shown on photos and slides. My bird also exhibited other plumage markings very similar to descriptions of the Ladderback in Bent and our arsenal of field guides.

The most enlightening comments came from Kathy Klimkiewicz, who remarked that this juvenile plumage is of very short duration, and therefore is seldom seen except at a nest.

Though between us (AMB - FMB) we have spent over a hundred years in field ornithology and window watching where this species is commonplace, we have never seen a Downy with so even a blend of characteristics of two species, and this is certainly unusual, if not aberrant.

Written descriptions seem to lack the fine lines of distinction; better seen than described. I made no bid for a new bird for our area, or for a hybrid. But it seemed worthy of comment as a cautionary note for over-zealous birders. In the western part of Inland's region, of which we are a part, one could easily misidentify such a bird in the field.

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The Bander's Forum

The "Aberrant" Downy Woodpecker Plumage Was a Normal Juvenile

I write with regard to the piece in North American Bird Bander 11:106 concerning a possible hybrid Downy-Ladderback Woodpecker in northeastern Oklahoma described by Mrs. Baumgartner. We have noted in our collection of Downy Woodpeckers from nearby Arkansas that the species can be either buffy or white underneath, and this is confirmed by Ridgway's description "under parts plain pale brownish gray or dull grayish white" (1914, Birds of North and Middle America, Part 6, U.S. National Museum Bull. No. 50). Also, we have often noted the "aberrant plumage" described in the article and called them young birds. Ridgway confirms this too in describing young male Downy Woodpeckers as having "the occiput and more or less the crown tipped with red . . . under parts sometimes more or less streaked on chest and flanks." We have seen these young birds with most of the crown red. I feel the bird Mrs. Baumgartner described fits the characteristics of a juvenile male Downy Woodpecker.

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A Black-capped Chickadee Note

Here is an interesting record on a Black-capped Chickadee that has been living in my area for many years. I banded it as a HY on September 26, 1975 and the following is my record of him?/her?

Retrapped on March 14, 1976; April 30, 1977; December 24, 1977; April 5, 1978; December 13, 1978; February 11, 1979; April 25, 1980; March 24, 1981; April 30, 1982; May 11, 1983; February 24, 1984; and April 26, 1986 — 11 YEARS OLD! He/she was alive and well the last time trapped.

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Dr. Marguerite Baumgartner described (NABB: 106, 1986) a woodpecker she netted at her backyard station in Oklahoma that puzzled her, as it did not appear to be a typical Downy Woodpecker. Some aspects of its plumage she considered to be reminiscent of the Ladder-backed Woodpecker, but she discounted the possibility of her bird's being a hybrid between these two species, as the Ladder-backed is not found in her part of Oklahoma. She attributed the Ladder-backed-like characters to plumage aberrations.

After describing the Downy-like characters of her bird, she listed the following as Ladder-backed-like: "Feathers of entire crown boldly red-tipped on black base, not remotely like the Downy's red nape patch, and sides buffy with a liberal sprinkling of faint dark pin stripes."

This is not anything aberrant, but is an excellent description of the *juvenal* plumage of male Downy Woodpeckers. Both sexes in juvenal plumage typically exhibit the buffy flanks, more or less streaked, as described by Dr. Baumgartner, but the crowns of juvenile females are normally black or spotted lightly with white. The amount and intensity of red on the crowns of juvenile males is quite variable, and it is often mixed with white. The literature is conflicting on the subject of crown color of juvenile female Downy Woodpeckers, with some descriptions alleging that red crowns may be present in some females. I am currently investigating this question. In any case, the description of the Oklahoma bird is that of a normal juvenile male Downy Woodpecker.

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