

Inland Regional News

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Inland Bird Banding Association

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Molting into Female

Sequel to the Tale of the Sex-Reverted Cardinal

From time to time a bird behaves in a way contrary to established concepts, and the ornithological world proclaims the incident "unscientific." Such has been the case of Northern Cardinal 891-50186. This is the third chapter in a bizarre life story, ridiculed by some, quietly disbelieved by others, but witnessed by several thoroughly reliable observers.

My files record the following captures of this bird, in traps or nets, over the past seven years. The details have been chronicled in North American Bird Bander, January-March 1986, p. 11, and April-June 1987, p. 76. As of February 1989, I offer this summary and update, which may or may not be the final chapter.

Chronology of Northern Cardinal #891-50186

Ago Cow Dogordad

Dates Captured A	ge-Sex Reco	rded Status
Nov. 12, 1981 (banded)	U-F	Probably HY
Nov. 27, 29, 1981 (5 records winter '81-'82) Jan. 17, 1982 Mar. 7, 1982		
Aug. 3, 1982 (infrequent year-round) Dec. 4, 1982 Jan. 29, 1983 May 10, 1983) R1-F	At least 1 Yr. Old
Feb. 5, 1984 Apr. 7, 1984 June 11, 1984	R2 - F	
Sept. 13, 1984 (very irregular visitor)	R3 - F	Head Molt
Aug. 2, 1985 (net) Aug. 3, 1985 (trap)	R4 - M	

R5 - F Plumage

Nov. 25, 1986

Jan. 10,13, 1987

Absent rest of 1987-1988

----- 1988

No R6

Feb. 1, 1989 (net)

R7 - F

Feb. 20, 1989 (trap)

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Bluebird Hatched and Raised by Chickadee

Since 1981 I have been studying nonmigratory Eastern Bluebirds (*Sialia sialis*) in northeast Texas. The present observation was made while banding adult and nestling bluebirds at the nest box to determine pair bond and nest box fidelity.

The study site contains old fields, pastures and forest edge. In Texas, margins of clearings are known to have 95% more birds, representing 41 percent more species, than comparable areas of the interiors of adjacent woodland (Lay, 1938). Sixty-five next boxes are located in these habitats in parts of Marion, Harrison, and Upshur Counties.

Every year, three to five of these boxes have had nests of Carolina Chickadee (*Parus carolinensis*), Tufted Titmouse (*Parus bicolor*) and in two different breeding seasons, Brownheaded Nuthatch (*Sitta pusilla*). These nestings always occur early in the nesting season, particularly in nest boxes close to trees. On several occasions, bluebirds have built nests over chickadee and titmouse nests, but rarely did a chickadee or titmouse build over a bluebird nest.

Dates Conturad

The following field notes describe what happened in the spring of 1988. March 13, nest box No. 41 was examined and a completed, pine needle bluebird nest was observed. The nest cut was well lined with feathers. March 30th, the nest contained one bluebird egg and one chickadee egg. The nest cup was now lined with fur, probably rabbit hair. April 1st, there were two bluebird eggs and one chickadee egg. A female chickadee flew out of the nest box as I approached.

April 2, 8, 11, and 14, a female chickadee was always on the nest and when I opened the roof, she would fly off the nest and exit through the top opening. She would sit momentarily before exiting and she did not emit the nest defense sounds that I usually encounter with other chickadees. These were the only eggs laid: two bluebird eggs and one chickadee egg. Did the feel of the larger bluebird eggs stop the chickadee from laying her normal clutch of eggs? Even though indeterminate layers can lay more eggs than the normal clutch, under natural conditions they all automatically stop laying when the standard number of eggs has been laid. It is thought that the feel of the "proper" number of eggs against the abdominal skin of the bird is somehow relayed to the endocrine glands that cause cessation of ovulation (Welty and Baptista, 1988).

April 22, one bluebird nestling was present. The other bluebird egg and chickadee egg did not hatch. I monitored this box several times on April 23rd and 24th to determine whether the chickadee would feed the bluebird nestling. After 48 hours, I was confident the nestling was being fed.

April 25th, I affixed a 1-1/8 inch entrance hole restricter on the nest box to eliminate the possibility that a House Sparrow (*Passer domesticus*) would be able to enter the box and destroy the nestling. I have also observed a male bluebird that killed five chickadee nestlings (actually having seen the male bluebird perched on a barbed wire fence with the chickadee nestlings in his beak). The 1-1/8 inch restricter eliminated that possibility also.

April 29th, the nestling was fully feathered and active when I monitored the box. May 1st, I banded one L-F with band number 1271-27917. The nestling was completely feathered and appeared larger than the average nestling. I removed the 1-1/8 inch restricter and one week later, when I check this box, the nestling had fledged. Only the infertile bluebird egg remained in the net. Either the chickadee egg had been broken and the mother bird removed the shell or she removed it intact. When I removed the used nest, I found moss at the bottom of the nest, which indicates a chickadee had initiated the building of the nest and then a bluebird had usurped the nest box and built a pine needle nest over the moss. By lining the nest cup with fur, the chickadee had narrowed the nest cup so she could adequately cover the eggs.

After the bluebird fledged, I returned to the area repeatedly at different times of the day to see if I could observe the juvenile being fed by her adoptive parents, but they were never located. If the juvenile did survive to adulthood, it would be interesting to know if she will be able to mate with another bluebird or will the imprinting on the foster parent be so strong, she will only accept a chickadee mate. Different species of birds show varying degrees of imprintability. In cross-fostering experiments in which the young of one species are reared by foster parents of another species, young are commonly imprinted on their foster parents and later, when mature, will seek out birds of the foster species at mates (Welty and Baptista, 1988).

During the days recorded as monitoring dates, I made multiple visits to the nest box. If the female chickadee was not incubating or brooding, she was in an oak tree nearby, continually scolding me for being near her nest. In all my experiences monitoring bluebird, chickadee, titmouse, or nuthatch nests, I have never encountered a more diligent, concerned parent.

Acknowledgement: I am deeply grateful to Dr. Neil B. Ford, Department of Biology, University of Texas at Tyler, who read this paper and made valid suggestions that improved it.

Literature Cited:

Lay, D. W. 1938. How valuable are woodland clearings to birdlife? *Wilson Bulletin* 50: 234-256.

Welty, J. C. and L. Baptista. 1988. The life of birds. Fourth edition. pgs. 195, 198, and 329. Saunders College Publishing.

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A Few Male American Redstarts Can Be Aged TY

Male American Redstarts (Setophaga ruticilla) resemble females during their first year of life except that they have a few black feathers on their head, neck and breast; adult plumage is acquired during their first post-nuptial molt which occurs in July and August following their first breeding season (Rohwer, et.al., 1983; Pyle, et.al., 1987; and references contained therein). Occasionally, first-year males do have a few black and orange remiges or retrices; these are always asymmetrical and result from feather replacement, not normal molt (Rohwer, et.al., 1983). At Whitefish Point, Chippewa County, Michigan, I captured one first-year male that showed this: a bird banded on 31 May 1985 that had all black and orange retrices but no black and orange wing feathers.

Redstarts (continued)

However, three birds had one or more yellow retrices or remiges and did not appear to be first-year birds because the rest of their remiges and rectrices were entirely black and orange. A bird captured at the Port Huron State Game Area, St. Clair County, Michigan, on 18 May 1985, had one yellow secondary (feather number not recorded) in its right wing. Similarly, right secondary number 2 was yellow on a bird banded at Whitefish Point on 22 May 1985. I believe these individuals were TY males that failed to molt fully into adult plumage during their first post-nuptial molt.

Literature Cited:

Pyle, P., S.N.G. Howell, R.P. Yunick, and D. F. DeSante. 1987. Identification guide to North American passerines. Slate Creek Press, Bolinas, California.

Rohwer, S., W.P. Klein, Jr., and S. Heard. 1983. Delayed plumage maturation and the presumed prealternate molt in American Restarts. *Wilson Bull.* 95:199-208.

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******** Highlights of IBBA Annual Conference, 1989

The meeting was held at the new Raptor Center located on the St. Paul Campus of the University of Minnesota, on the weekend of September 8th through September 10th. The Inland region was well represented by 94 attendees from 12 states.

An informal gathering got things off to a good start Friday evening at the Raptor Center where the Director, Dr. Patrick Redig, gave an excellent talk on the history of the Raptor Center, illustrating with slides some of the treatments developed in the care and rehabilitation of injured birds of prey that have been patients at the Center during the past ten years. Dr. Redigwas assisted by Jean Dunnette, staff member of the Raptor Center, in leading an interesting tour of this new facility.

After an early morning bird hike competently directed by Dr. Thomas Nicholls, USFS, Saturday's paper session got off to a great start. John Tautin, the new Chief of the Bird Banding Laboratory, gave a thorough and in-depth report of the Bird Banding Laboratory's activities, noting changes already in operation and ones planned for the future.

Arden Aanestad talked about "The Map Program" (monitoring avian productivity). Consistent banding of nesting species in a chosen habitat during spring and early summer took place over several years' time.

Drs. Frances and Frederick Hamerstrom reported with video illustration an unusual cross-fostering of a pair of banded American Kestrels and hatchling European Starlings.

Peter Dring's paper demonstrated well how to gather and process banding data and to work one's data to publication levels and qualification. He used his Tree Swallow data as an example.

Dr. Ralph Dexter reported on the composition of roosting flocks of Chimney Swifts at Kent State University, Kent, Ohio.

Dr. Judy McIntyre, Minnesota's own "Loon Lady," now from Utica College, Syracuse University, reported to the membership her continuing research on methods that she has developed on howshe tells the difference between individual Common Loons.

Drs. Dwain Warner and A. R. Weisbrod reported on what they learned about habitat selection of migrating song birds at two sites several miles apart along the St. Croix River (boundary of Minnesota and Wisconsin).

Dennis Meyer, one of Minnesota's most active birders, reported his results of banding song birds near the Hawk Ridge Sanctuary area of Duluth. His second paper concerned his extensive road trapping of American Kestrels and what conclusions he has drawn from this project.

Dave and Carol Fiedler presented an updated report on their continuing Eastern Bluebird project.

Robert Johnson, BC Software, San Jose, California, demonstrated "The Bander," a method of gathering data by computer for wide spread use by researchers.

The final paper of the day was given by Dr. Elizabeth C. Burgess. She reported on her research of Lymes disease infection occurring in wild birds.

The evening banquet speaker was Dr. Judy McIntyre. She gave a synchronized slide-sound presentation of the life history of Common Loons entitled, "Common Loons: From Alaska to Florida, with a Long Stop in Minnesota." She stressed the vital needs of Loons--clean water, fresh food, and privacy--as essential to their survival.

Sunday morning, September 10th, the program moved outdoors for a lively bird banding demonstration and gathering of conference attendees at the Thomas Irvine Dodge Nature Center, which is located at the south edge of the St. Paul Metro area.

Some banders did not want to go home! They went north to Duluth to visit the renowned Hawk Ridge area, which overlooks mighty Lake Superior. They enjoyed themselves immensely is the word.

1989's IBBA Conference in St. Paul was very rewarding to attend and very challenging to participate in.

Jane C. Olyphant, Secretary, IBBA Coordinator, 1989 meeting, St. Paul, Minnesota