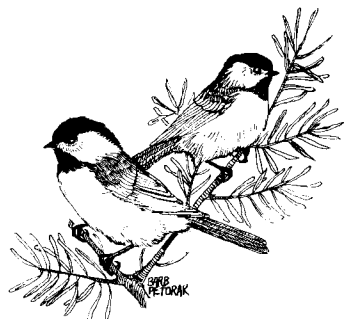


An unusual Black-capped Chickadee at Phoenix, New York

Roy S. Slack



The Black-capped Chickadee (*Parus atricapillus*) is a common bird throughout New York State. Breeding populations are of the nominate race (*P. a. atricapillus*) and, based upon the ranges given in the A.O.U. Check-list (1957), wintering populations should also be composed of this race. This paper reports on the occurrence of a chickadee that was banded in New York and whose measurements were quite different from other chickadees captured at the same location.

The Black-capped Chickadee is divided into nine races by the A.O.U. Check-list. The far-western and northwestern races (*turneri*, *nevadensis*, *garrinus*, *fortuitus*, and *occidentalis*) and the resident race of Newfoundland (*bartletti*) have very little potential for occurrence near New York and therefore are not discussed. The resident race of the Appalachian highlands (*practicus*) may occur in New York State but is not discussed in this paper.

The race that prompted this paper is *P. a. septentrionalis*, known as the Long-tailed Chickadee (Bent 1946). This form is resident from the Yukon to western and central Manitoba, south to eastern Colorado and Central Kansas and has been recorded in winter to Eastern Kansas, Oklahoma, and northern Texas (A.O.U. Check-list 1957).

Although plumage differences have been described by Ridgeway (1904), identification of a single specimen cannot be made by plumage coloration (Taverner 1940). *P. a. septentrionalis* may be more easily separated from *P. a. atricapillus* by measurements (wing, tail, and culmen); however, there is some overlap between races. Table 1 presents the measurements for the two races as given by Ridgeway (1904).

Table 2 presents the measurements taken by the author on twenty live-captured Black-capped Chickadees that were banded at Phoenix, Oswego County, New York (431-0761) between 10 October 1976 and 1 October 1977. Each bird has been given an identification number and the dates of banding and last recapture also indicated.

It is apparent that the measurements for bird 4997 fall closest to those for *septentrionalis* while the remainder of the birds conform more to *atricapillus*. Figure 1 presents the data for tail length and wing chord and further demonstrates the difference between bird 4997 and the others. Measurements for wing, tail, and culmen for bird 4997 are significantly different ($P < 0.05$) from the means of the measurements of the other birds.

Although some of the measurements for several individuals fall outside the ranges given in Table 1, these measurements are of live birds and might be

Table 1. Measurements of *P. a. atricapillus* and *P. a. septentrionalis* (from Ridgeway 1904).

	Measurements in millimeters	
	<i>P. a. atricapillus</i>	<i>P. a. septentrionalis</i>
Wing	60.5—67.5	63.5—73
Tail	56.5—63	61—71
Culmen	8—9.7	8.5—11

Table 2. Measurements and capture dates for twenty Black-capped Chickadees banded at Phoenix, NY

Bird no.	Capture dates		Measurements in millimeters		
	Date banded	Last recapture	Wing chord	Tail	Culmen
4922	10 Oct. 76	17 Sep. 77	64	62	9
4949	27 Oct. 76	17 Sep. 77	66	63	8
4978	29 Nov. 76	4 Dec. 76	65	63	9
4979	4 Dec. 76	15 Jan. 77	67	64	9
4995	5 Jan. 77	9 Feb. 77	68	62	9
4997	9 Jan. 77	9 Feb. 77	71	72	10
7951	23 Jan. 77	6 Feb. 77	63	61	7
7952	23 Jan. 77	9 Feb. 77	62	59	7
7953	23 Jan. 77	9 Feb. 77	61	59	8
7954	5 Feb. 77	9 Feb. 77	67	65	8
7955	6 Feb. 77	9 Feb. 77	67	65	7
8055	21 Aug. 77		69	65	8
8056	21 Aug. 77		64	59	9
8057	21 Aug. 77		68	65	8
8064	27 Aug. 77	29 Aug. 77	66	63	8
8087	4 Sep. 77		68	65	9
8091	17 Sep. 77		67	62	8
8092	17 Sep. 77		65	61	8
8098	21 Sep. 77	24 Sep. 77	65	64	8
8099	21 Sep. 77		64	63	8

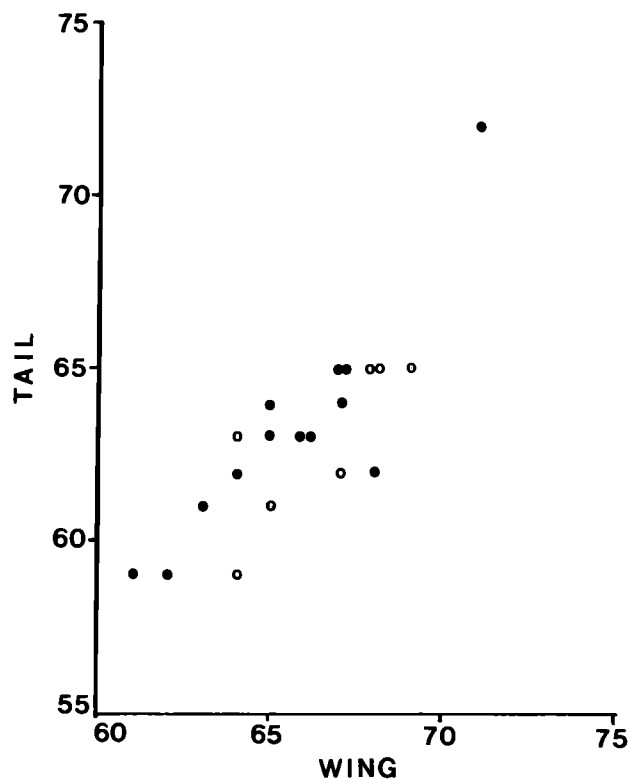



Figure 1. Comparison of tail and wing lengths (mm) for Black-capped Chickadees at Phoenix, NY. Solid circles represent birds measured more than one time.

expected to differ from descriptive measurements based upon museum specimens. I found no differences in the measurements recorded for any of the twelve birds that were remeasured when they were recaptured at a later date. Thus, these measurements are "precise" in that they were repeatable, although no judgement can be made concerning their "accuracy" (see Sokal and Rohlf 1969). Bird 4997, therefore, must be considered as an unusually large *P.a. atricapillus*, if not of the race, *P.a. septentrionalis*.

Considering the harsh weather of the winter of 1976-77, the occurrence of an unusual wintering species or subspecies may not be so unexpected. Other banders are urged to review their records for possible occurrences of unusual birds.

I thank John Bull, Cathie A. Baumgartner, Vincent J. Lucid, and Edward T. Reed for their comments and suggestions concerning these data.

Literature cited

American Ornithologists' Union. 1957. Check-list of North American Birds, fifth ed. Baltimore, Amer. Ornithol. Union.
 Bent, A.C. 1946. Life Histories of North American jays, crows, and titmice. U.S. Nat. Mus. Bull. 191.
 Ridgeway, R. 1904. The birds of North and Middle America. U.S. Nat. Mus. Bull. 50. pt. 3.
 Taverner, P.A. 1940. Canadian status of the long-tailed chickadee. *Auk* 57: 536-541. 
 8398 Oswego Road, Liverpool, NY 13088

Hawk Mountain Research Award

The winner of the first annual Hawk Mountain Research Award was James C. Bednarz of Iowa State University for his studies of the "Status and habitat utilization of the Red-shouldered Hawk in Iowa."

The Board of Directors of Hawk Mountain Sanctuary Association announces its second annual award of \$250 for support of raptor research. The Hawk Mountain Research Award is granted annually to a student engaged in research on raptors (*Falconiformes*).

To apply, students should submit a description of their research program, a curriculum vitae, and two letters of recommendation by October 31, 1978 to Mr. Alex Nagy, Hawk Mountain Sanctuary Assoc., Route 2, Kempton, PA 19529.

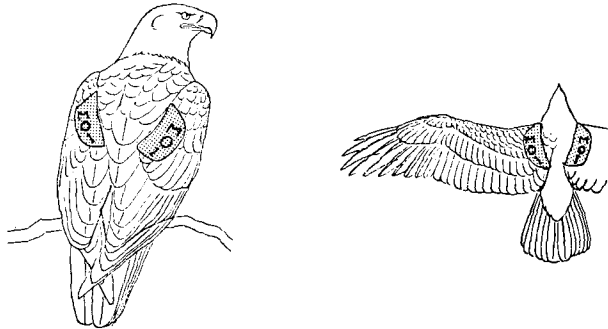
A final decision will be made by the Board of Directors in February 1979.

Only students enrolled in a degree-granting institution are eligible. Both undergraduate and graduate students are invited to apply. Projects will be judged competitively on the basis of their potential contribution to improved understanding of raptor biology and their ultimate relevance to conservation of North American hawk populations.

Raptor Research Foundation meeting

The Raptor Research Foundation will hold its annual meeting in Allentown, PA this year from 3 to 6 November. For information regarding program, registration, etc., please contact Hope A. Carpenter, RD 1, Box 150A, Mt. Bethel, PA 18343.

Information exchange



Wing-tagged Bald Eagles

Bald Eagles are being captured and marked along McDonald Creek, in Glacier National Park, northwestern Montana. This site is a temporary stop for the eagles on their way south to wintering areas.

A bright yellow wing marker (3 x 5-1/2 inches) is placed next to the body on each wing, and a bright yellow marker (3 inches long) is attached to one leg. The sketches show the locations of the markers on the birds, while perched and in flight. All three markers are numbered M01 to M99. It is important to report numbers if possible, particularly the presence of the "M", because birds recently marked in Colorado have similar wing markers, but numbers C01 to C99. The Colorado birds have no leg markers.

Sightings of marked birds will help determine migration routes, wintering areas, and nesting areas.

Information needed

1. Was the eagle an adult (white head and tail) or an immature (various combinations of dark and light body plumage)?
2. Marker number
3. Exact location where eagle was observed
4. Date and time of sighting
5. Activity of the bird
6. Were other eagles nearby, and how many?
7. Observer's name, address, and telephone number.

Please report sightings to Bird Banding Laboratory, Laurel, MD 20811 and **Bald Eagle Project**, Glacier National Park, c/o Riley McClelland or Dave Shea, West Glacier, MT 59936. A.C. 406 888-5441. Or to 1612 Bel Air, Missoula, MT 59801. A.C. 406 728-1780.

Purple Martin color-marking

A large-scale continent-wide Purple Martin color-marking project was initiated in 1977. Observers are asked to look for and report any color-marked (plastic leg bands and/or wing tags) Purple Martins.

Please record the color of the bands or wing tags, which leg (or wing) they are on, age and/or sex (if either is known), where and when observed, and whether the bird was in a roost, staging flock, migratory flock, or at a nest site (scouting or nesting?). We are especially interested in the movements of young birds and their return to the parent colony or nearby colonies.

All reports will be acknowledged and should be sent to Ms. Kathleen Klimkiewicz, Bird Banding Laboratory, Laurel MD 20811.

Poor-wills

Should anyone acquire a dead Poor-will, we would greatly appreciate having arrangements made to send the bird or the stomach to Bev McIntosh, Pat Mulevey, or Dave Bontrager, Box 111, Biology Dept., CSULB, Long Beach, CA 90840.

Color-marked vultures

Turkey and Black Vultures are being marked with orange vinyl patagial wing markers in Walker County, Texas. Each marker carries a black letter and two numbers. The birds were marked on the right wing to determine wintering behavior and movement.

Cooperation in reporting the following information will be appreciated:

Marker letter and numbers (if possible to see)

Geographical location of the bird or birds

Date of sighting

General activity of bird

Condition of bird

Name, address and phone number of observer

Please send the information to the Bird Banding Laboratory, Laurel, MD 20811 and to Ralph R. Moldenhauer, Dept. of Life Sciences, Sam Houston State Univ., Huntsville, TX 77341.

Color-marked Common Ravens

Common Ravens have been banded near Malheur National Wildlife Refuge in Harney County, southeastern Oregon during May, June, and July of 1976. Sighting reports indicate that Ravens may disperse longer distances than originally anticipated.

Each marked Raven has a FWS band on the left leg and colored patagial tags on either or both wings. The colors of the wing tags are: orange, light blue, green, dark blue, yellow (with a black diagonal stripe), red (with a black diagonal stripe), and white. Colors may be pure or have a silver bar on them.

If you have the opportunity to observe any color-marked Ravens, the following information would be appreciated:

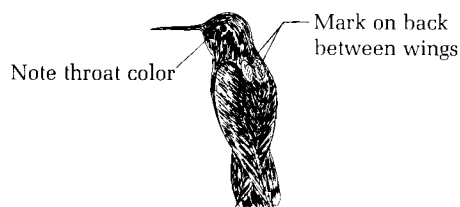
1. Date and time of observation
2. Location of observation
3. Behavior of bird (in a group, flying, etc.)
4. Color(s) and positions(s) (right or left wing) of the marker(s)



Post fledging behavior and dispersal are two of the topics being studied.

Please report sightings to Bird Banding Laboratory, Laurel, MD 20811 and to Dick Stiehl, Malheur National Wildlife Refuge, P.O. Box 113, Burns, OR 97720. A.C. 503 493-2323.

Color-marked hummingbirds



Several hummingbirds have been color-marked in the Three Rivers area of Tulare Co., California.

Please report any observations to the Bird Banding Laboratory with a copy to Frank Baldrige/Lloyd Kiff, Western Foundation of Vertebrate Zoology, 1100 Glendon Ave., Los Angeles, CA 90024.

Request for information

Shorebird colour-marking

In 1978, the Canadian Wildlife Service will be continuing a large-scale program of banding and colour-marking shorebirds in James Bay. During the past three years, over 30,000 shorebirds have been captured, resulting in more than 1,200 "bird-days" of sightings of dyed birds ranging from eastern Canada to South America. Much valuable information on migration routes and strategies is being obtained and observers are again asked to look out for and report any colour-dyed **or** colour-banded shorebirds that they may see.

Reports should include details of species (with age if possible), place, date, colour-marks, and, if possible, notes on the numbers of other shorebirds present. For colour-dyed birds, please record the colour and area of the bird that was dyed. For colour bands and standard metal leg bands, please record which leg the bands were on, whether they were above or below the "knee", the colours involved (yellow or light blue), and the relative position of the bands if more than one was on a leg (e.g. right lower leg, blue over metal, etc.).

All reports will be acknowledged and should be sent to: BBL, Laurel MD 20811 and Dr. R.I.G. Morrison, Canadian Wildlife Service, 2721 Highway 31, Ottawa, Ont K1G 3Z7.

Request for participants

International shorebird surveys 1978

A cooperative International Shorebird Survey scheme has been organized by the Canadian Wildlife Service and the Manomet Bird Observatory since 1974 to obtain information on shorebird migration and to identify and document areas of major importance. This scheme has been highly successful, with much very valuable information on shorebird distribution and migration coming from contributors throughout eastern Canada and the U.S.A., the Caribbean Islands and Central and South America. Information from the scheme will be valuable in assessing requirements for the future protection and conservation of the birds and their habitat.

Information exchange

It is planned to make 1978 the fifth and final year of the project. Any observer who may be able to participate in regular counts of shorebirds during spring and autumn migration periods, as well as during the winter in shorebird wintering areas, is asked to contact one of the undersigned. Occasional counts from observers visiting shorebird areas on an irregular basis would also be most welcome.

Report to BBL, Laurel MD 20811 and, for areas in Canada: Dr. R.I. G. Morrison, Canadian Wildlife Service, 2721 Highway 31, Ottawa, Ont K1G 3Z7;

For areas in U.S.A., Caribbean Islands, Central and South America, report to BBL and Brian A. Harrington, Manomet Bird Observatory, Manomet, MA 02345.

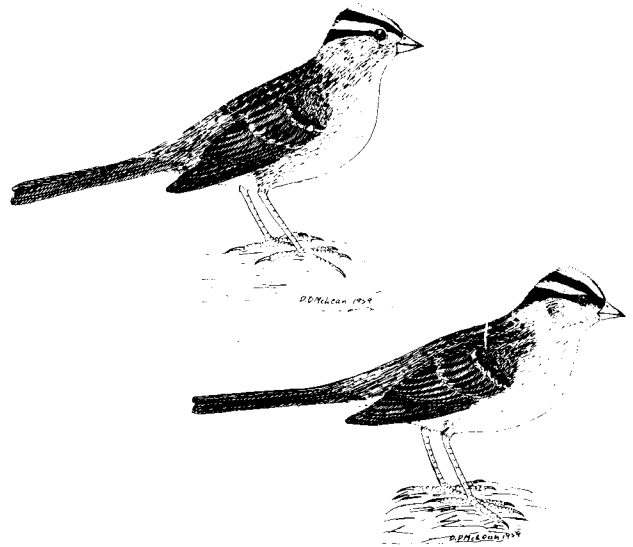
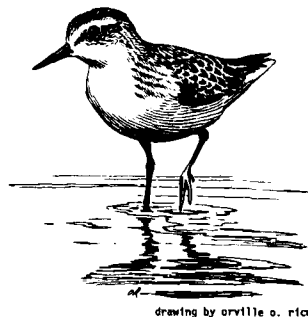
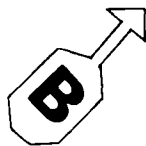
Color-marked sandpipers

From 5 July through 10 October 1978, at Grand Forks, ND, we will be dyeing breast feathers of Semipalmated Sandpipers blue or green. Some birds may also carry unique wing tags.

Breast-dyeing has provided valuable information to the Canadian Wildlife Service in its study of shorebird migration in eastern Canada. We are seeking to complement that study with information on shorebird movements in the center of the continent.

If you spot a bird with green or blue breast feathers, and/or carrying a wing tag, please record date, time, location, and markings of the bird (which wing was tagged, tag color, character on the tag, and character color).

Reports should be sent to the Bird Banding Laboratory, and also send a copy to Shorebird Survey—David Lank, Langmuir Laboratory, Cornell University, Ithaca, NY 14853.



Worksheets for Western Birds

Ageing/sexing worksheets for western birds are mailed with NABB only to Western Bird Banding Association members. They are, however, available to anyone interested. For each worksheet desired, send 25 cents (or \$1.00 for any five worksheets) to Mrs. Donald F. Radke, P.O. Box 446, Cave Creek, AZ 85331.

The following species sheets have been issued: Harris' Hawk, Scaled Quail, California Quail, Gambel's Quail, Mountain Quail, Common Snipe, Band-tailed Pigeon, key to kingbirds, Eastern Kingbird, Tropical Kingbird, Western Kingbird, Cassin's Kingbird, Myarchis flycatchers, Violet-green Swallow, Tree Swallow, Yellow-billed Magpie, Clark's Nutcracker, Verdin, Bushtit, Varied Thrush, gnatcatchers, Orange-crowned Warbler, waterthrushes, Oporornis warblers, Tricolored Blackbird, Western Tanager, Summer Tanager, Black-headed Grosbeak, Lazuli Bunting, Cassin's Finch, American Goldfinch, Lesser Goldfinch, towhees, White-crowned Sparrow.

There is a need for additional worksheets. Members are urged to submit data to the worksheet editor, Dr. Charles T. Collins, Department of Biology, California State University, Long Beach, CA 90840, who can help with the final format write-up. Data need not be original; field testing to prove its reliability is all that is required.

The Snake River Birds of Prey Natural Area

Help requested

(The intensive study of raptors in this area includes banding as a tool. Many of the birds have been banded and color-marked, and recoveries outside the area have been obtained. ED.)

High in the spectacular cliffs of the Snake River Canyon, south of Boise, Idaho, lies the densest known population of birds of prey in the world.

Falcons, eagles, hawks, and owls; 566 known nesting pairs representing 14 species. At least 202 pairs of Prairie Falcons—perhaps over 10% of the entire nesting population of the species—31 pairs of Golden Eagles, as well as Kestrels, Red-tailed Hawks, Ferruginous Hawks, Swainson's Hawks, Cooper's Hawks, Marsh Hawks, Great Horned Owls, Screech Owls, Barn Owls, Burrowing Owls, and Long-eared Owls. The endangered Peregrine Falcon traditionally nested in the canyon and efforts are underway to restore a breeding population to the area.

This extraordinary population of birds of prey relies on a unique habitat found nowhere else in North America. The northwest orientation of the Snake River Canyon, the warm, dry climate created by the rain shadow of the Cascade Range, a rich deep soil ideally suited to a large prey-base of rodents, and volcanic cliffs lining both sides of the river which provide suitably protected nest sites; there is no place like it anywhere.

The threat

The Birds of Prey Natural Area first gained official recognition on 12 October 1971, when then Secretary of the Interior, Rogers C.B. Morton, dedicated 31,976 acres, 26,311 acres of which was in public ownership managed by the Bureau of Land Management. 33 river canyon miles were thus partially protected, but it soon became evident that this provided only for the most important nest habitat and not for the crucial prey base. A much larger area, including over 800,000 acres and 65 river miles, has since been included in a surrounding study area under a "temporary protective withdrawal" by Secretary Cecil D. Andrus. Intensive research is currently being conducted by BLM biologists to determine the precise food and habitat needs of the critical species and to make final recommendations regarding the natural area boundaries.

An important conservation objective has been

defined, but its realization is far from assured. The Birds of Prey Natural Area is threatened by encroaching agricultural and water development, mining, antiquated homesteading provisions of the Desert Land Entry and Carey Acts, and competing recreational and residential uses. In addition, the integrity of the area is potentially compromised by extensive private inholdings along the river.



The campaign

The Nature Conservancy has initially optioned five of the most critical inholdings of private land in the heart of the Birds of Prey Natural Area, almost 900 acres including 14 known nesting sites of birds of prey, the few springs that border the river, marshland, spectacular high volcanic cliffs, Indian caves, an old stone homestead, box canyons, and almost five miles of Snake River frontage for a purchase price of approximately \$285,000. With a management, education, and research fund of \$100,000 and the balance for legal, acquisition, and fund-raising costs, a total initial campaign goal of \$400,000 has been established. An additional \$100,000 in conservation needs has been tentatively identified, so the total campaign may be as large as \$500,000.

Current options expire at the end of 1978, the final deadline for completion of the fund-raising campaign. Preservation of these important lands will help insure the integrity of the natural area, and will also demonstrate the commitment necessary from the private sector to support a permanent protected status for the entire natural area. Once the future of the Birds of Prey Natural Area and its proper management has been secured, the lands may be sold to the BLM for stewardship, and the funds used for other land conservation projects.

The \$500,000 Birds of Prey campaign is one of the largest conservation fund-raising projects in the history of the Northwest. The participation of every interested individual is urgently needed. You can help by writing a check immediately to: **The Birds of Prey Fund, The Nature Conservancy**, 1234 N.W. 25th Ave., Portland, OR 97210. Donations are fully tax-deductible. ♦

Recent Literature

Aging, Sexing, Identification and Anomalies

What to look for: Eskimo and Little Curlew compared. J. Farrand, Jr. 1977. *Amer. Birds*, 31:137-138a. (Features which can be used to separate these two species in the hand and under good conditions in the field.) MM

Banding Equipment and Techniques

Do Eastern Bluebirds and House Sparrows prefer nest boxes with white or black interiors? T.D. Pitts. 1977. *Bird-Banding*, 48:75-76. (Both species utilized significantly more nest boxes with white interiors when boxes with black or white interiors were made available to the birds.) LD

Major North American Banding Results

Implications of recaptures of Broad-tailed Hummingbirds banded in Colorado. N.M. Waser and D.W. Inouye. 1977. *Auk*, 94:393-395. (Of the 92 banded Broad-tails, 10 were recaptured at least one summer after initial banding, giving a mean minimum life-span of 30 months for these individuals. Site fidelity to breeding grounds is also documented.) NC

Demographic features of a Lapland Longspur population near Barrow, Alaska. T.W. Custer and F.A. Pitelka. 1977. *Auk*, 94:505-525. (Lapland Longspurs were captured over a six-year period in Glenhaven four-celled sparrow traps baited with commercial bird seed. Captured birds were banded and marked with unique color combinations. Nestlings were also banded.) NC

Other North American Banding Results

The prairie bluebird trail. C.S. Houston. 1977. *Nature Canada*, 6:3-9. (Banding is an important part of the program of research associated with North America's longest continuous bluebird trail. The late Jack Lane banded no less than 3,475 Mountain Bluebirds, 662 Eastern Bluebirds, and 25 hybrid Eastern X Mountain Bluebirds on his part of the trail alone.) MM

Calgary bluebird trail—1976. H.W. Pinel. 1977. *Blue Jay*, 35:43-44. (In this project's first year of banding, 609 Tree Swallows and 84 Mountain Bluebirds were banded.) MM

The 1975 North American Peregrine Falcon survey. R.W. Fyfe, S.A. Temple, and T.J. Cade. 1976.

Can. Field-Nat., 90:228-273. (Band recoveries of western Canadian Prairie Falcons and Peregrines suggest that adults return to previously used nest sites whenever possible. Trapping data from Assateague Is. suggests approximately 50% trapping efficiency there. If this is true of Atlantic Coast trapping in general, numbers calculated from banding totals correspond fairly well to breeding surveys.) MM

Rationale and success of the Canadian Wildlife Service Peregrine breeding project. R.W. Fyfe. 1976. *Can. Field-Nat.*, 90:308-319. (A Prairie Falcon raised by foster parent Buteos returned to the general area of the nest.) MM

Elevated heptachlor epoxide and DDE residues in a Merlin that died after migrating. C.J. Henny, J.R. Bean, and R.W. Fyfe. 1976. *Can. Field-Nat.*, 90:361-363. (A banded Merlin found dead in New Mexico in 1974 had been banded after its second year in 1970 in Alberta. As it was found just after fall migration, in October, the authors believe high levels of heptachlor oxide picked up on the prairies were mobilized as the bird used up fat reserves for migration.) MM

Present status of the Prairie Falcon in Saskatchewan. L.W. Oliphant, W.J.P. Thompson, T. Donald, and R. Rafuse. 1976. *Can. Field-Nat.*, 90:365-368. (Young at several nests were banded by the authors or C.S. Houston.) MM

Breeding of the Marbled Godwit, *Limosa fedoa*, in James Bay. R.I.G. Morrison, T.H. Manning, and J.A. Hagar. 1976. *Can. Field-Nat.*, 90:487-490. (Three juveniles were trapped and banded on 13 August 1974.) MM

Canada Geese killed during lightning storm. R.D. Glasrud. 1976. *Can. Field-Nat.*, 90:503. (Among six geese that were killed by lightning in southwestern Saskatchewan on 18 August 1975, one was an adult male banded as a young of the year 50 km east in 1965.) MM

Nesting biology of the Sora at Vermilion, Alberta. J.K. Lowther. 1977. *Can. Field-Nat.*, 91:63-67. (Red and yellow airplane dope painted on bands and plumage did not prove useful in providing much data as the color soon wore off. Red on the bands and yellow on the feathers were best for visibility.) MM

Recent Literature

Edited by Susan Kaiser

Osprey nesting records in Saskatchewan. C.S. Houston, J.M. Gerrard, D.W.A. Whitfield, H.A. Stelfox, and W.J. Maher. 1977. *Blue Jay*, 35:38-41. (With several banding locations.) MM

Roosting behavior of the Piñon Jay in autumn and winter. R.P. Balda. 80 individually color-marked Piñon Jays were observed over a five-month period in northern Arizona. The study describes the overt roosting and arousal behavior, associated environmental and biological variables, and possible selective factors.) NC

A quantitative analysis of the incubation behavior of the Adelie Penguin. D.V. Derksen. 1977. *Auk*, 94:552-566. (Incubating birds were banded with aluminum flipper bands. The sex was denoted by spray-painting a black band across the chest of males and the lower sides of females.) NC

Growth and development of the Plain Chachalaca in south Texas. W.R. Marion. 1977. *Wilson Bull.*, 89:47-56. (Chachalacas were live-trapped in 25x50 mm mesh weld-wire traps (1.2 x 1.2 x 0.6 m) with funnel entrances. Traps were baited with fresh cabbage and grain sorghum. All birds were leg-banded and equipped with colored leg streamers.) NC

Social dominance in winter flocks of Cassin's Finch. F.B. Samson 1977. *Wilson Bull.*, 89:57-66. (Cassin's Finches were captured in drop or walk-in traps baited with sunflower seeds and millet; a few were captured in mist nets. Birds were banded and marked with distinctive combinations of plastic leg bands. Plumage color was noted and wing lengths taken in this Utah study.) NC

Breeding biology of year-old and older female Red-winged and Yellow-headed Blackbirds. R.D. Crawford. 1977. *Wilson Bull.*, 89:73-80. (Banding was used to verify aging technique using plumage color. Yearlings began nesting later, laid shorter eggs, and fledged fewer and slightly smaller young.) NC

Characteristics of a wintering population of White-tailed Ptarmigan in Colorado. W. Hoffman and C.E. Braun. 1977. *Wilson Bull.*, 89:107-115. (Ptarmigan were captured with a five or seven m telescoping noose pole and banded.) NC

Breeding avifauna of the South San Francisco Bay. R. Gill, Jr. 1977. *Western Birds*, 8:1-12.

(Includes breeding biology, habitat requirements, and relative abundance of 41 nesting species. Over 2500 young were banded in conjunction with this study.) SK

Dominance in the Florida Scrub Jay, G.E. Woolfenden and J.W. Fitzpatrick. *Condor*, 79:1-12. (Intra- and interfamilial dominance behavior was studied in a color-banded population of Florida Scrub Jays. Results are discussed in the context of the evolution of cooperative breeding behavior.) SK

Winter distribution of juvenile and older Red-footed Boobies from the Hawaiian Islands. B.A. Harrington. 1977. *Condor*, 79:87-90. (Analysis of banding records and observations reveals a differential distribution of adults and young. A significantly higher proportion of immatures than adults travel south of their Hawaiian nesting islands after breeding.) SK



Received for Review

Cities and Birds. W.D. Graul. 1977. Nongame Section, Colorado Division of Wildlife, 6060 Broadway, Denver, CO 80216. 8 p. (Includes feeders, bird houses, habitat improvement, educational opportunities, birds as pests, and a plea for sending in recoveries of banded birds. Free copies may be obtained from the above address.) SK

A partial bibliography on rare and endangered species. N.J. Cutwright and D.P. Kibbe. 1977. Vermont Institute of Natural Science, Woodstock, VT 05091. (This most up-to-date bibliography on rare and endangered plants and animals includes state, regional, national, and international listings as well as general references dealing with the status and protection of rare species. Available as Vermont Institute of Natural Science Publication No. 5 for \$3.00 from the above address.) NC

NC = Noel J. Cutwright
LD = Lawrence R. DeWeese
SK = Susan Kaiser
MM = Martin K. McNicholl