**Recent Literature**

**DEFINITIONS**

Definitions for migrant birds: what is a Neotropical migrant? F. E. Hayes. 1995. *Auk* 112:521-523. Dept. Biol., Caribbean Union College, Box 175, Port of Spain, Trinidad and Tobago (The author proposes a more precise terminology for migratory species. Definitions are provided for altitudinal, Austral, Australian, boreal, Ethiopian, intratropical, Nearctic, Neotropical and Palearctic migrants. The author defines Neotropical migrant as "any species of bird or population of the species breeding in South America that regularly migrates northward during the non-breeding season." Definitions are based on the biogeographic realm [or geographic area] in which the species breeds.) GAS [Editor's note: Although most western hemisphere ornithologists in the last couple of decades have been applying the term "Neotropical migrant" to Nearctic-breeding birds that migrate to the Neotropics, the principle of defining migrants on the basis of breeding area proposed by Hayes is a long established tradition. -MKM]

**BIBLIOGRAPHIES AND LITERATURE LISTS**


**BANDING HISTORY AND BIOGRAPHY**

Early banding of the Great Horned Owl in Alberta and Saskatchewan. C. S. Houston. 1996. *Alta. Nat.* 26:71-72. 863 University Dr., Saskatoon, Sask. S7N 0J8 (Tabulates recoveries of 18 pre-1955 bandings in Alberta and seven in Saskatchewan and discusses prominent contribution of banders from these two provinces both then and currently to studies of longevity and movements of Great Horned Owls.) MKM


**BANDING EQUIPMENT AND TECHNIQUES**

A saline-flushing technique for determining the diet of seed-eating birds. J. P. Gionfriddo, L. B. Best and B. J. Giesler. 1995. *Auk* 112:780-782. Dept. Animal Ecol., Iowa State Univ., Ames, IA 50011. (A new technique for flushing the contents of gizzards is discussed. The technique was tested in the lab. on House Sparrows, but minor modifications should make it applicable to many species in the field. Anesthetizing the birds is necessary, but mortality rate was low. Diet studies could benefit from this technique if sufficient time is available to perform the procedure.) GAS

Capturing Common Ravens *Corvus corax* in Greenland. M. Restani, R. E. Yates and J. M. Marzluff. 1996. *Dansk Orn. Foren. Tidsskr.* 90:153-158. Dept. Biol., Utah State Univ., Logan, UT 84322-5305 (Although ravens are often difficult to capture, the authors caught 359 from 1993-1995 in a West Greenland landfill by using a large box trap with a manually operated door baited with bags of garbage. About 40 ravens were retrapped, while over 100 fitted with color bands with alpha-numeric codes were resighted at the landfill. Subadults and juveniles were more likely to be recaptured than adults. Although trapping success declined over the period of operation, it remained higher than in previous studies. Seasonal patterns and other factors affecting success are discussed.) MKM

from medial metatarsal vein in the leg rather than the commonly used brachial vein of the wing.)

Swallow trapping with tape lures. B. van den Brink. 1994. *Saltair News* 23:20-21. Zomerdijk 86, 8079 TL Noordeinde, The Netherlands (Recorded calls of Barn Swallows are helpful in capturing birds in mist nets as they enter roosts for the night or depart from them early in the morning. Trapping during the day is best when rainy or windy conditions cause them to fly low, but is generally less successful than trapping birds en route to or from roosts.) MKM

**IDENTIFICATION, MOLTS, PLUMAGES, WEIGHTS AND MEASUREMENTS**


*Recognizable forms* black-crested and white-crested Double-crested Cormorants. R. Pittaway and P. Burke. 1996. *Ont. Birds* 14:124-128. Box 619, Minden, ON K0M 2K0 (Review of plumages, molts and age differences in Double-crested Cormorants, including instances of white-crested occurrences in Ontario. Notes that bands on flying Double-crested Cormorants have caused some observers to mistakenly identify them as Great Cormorants.) MKM

Molts and plumages of Orange-breasted Buntings (*Passerina lecancheri*): implications for theories of delayed plumage maturation. C. W. Thompson and M. Leu. 1995. *Auk* 112:1-19. Washington Dept. Fish & Wildl., Wildl. Res. Div., 600 Capitol Way North, Olympia, WA 98195 (The sequence of molts and plumages is reported for this southwestern Mexican endemic. Data were obtained from 418 study skins and 11 wild, mist-netted individuals. Data support the status signalling hypothesis for the evolution of delayed plumage maturation.) GAS

Intraspecific and interspecific variation in molt pattern of some tropical hummingbirds. F. G. Stiles. 1995. *Auk* 112:118-132. Instituto de Ciencias Naturales, Museo de Historia Natural, Universidad Nacional de Colombia, Apartado 7495, Bogotá, D.C., Colombia (The sequence of flight feather replacement in 13 species of Costa Rican hummingbirds is described, based upon capture-recapture data. Five to sixty individuals of each species were marked with either aluminum or acetate leg tags. Each marked bird was captured at least twice during molt at intervals of two to six weeks.) GAS

**Variation in male plumage and behavior of the Hawaii Akepa.** J. K. Lepson and L. A. Freed. 1995. *Auk* 112:402-414. Dept. Zool., Univ. Hawaii at Manoa, Honolulu, HI 96822 (A system of aerial mist-nets was used to capture 158 individuals. Each was marked uniquely with a U.S. Fish & Wildlife Service band and three plastic color bands. Several morphometric measurements and notes on molt and breeding condition were taken on each bird. The authors suggest that observed variation in male plumage is a result of a two-year delay in plumage maturation in young males.) GAS


Estimation of lean and lipid mass in shorebirds using total-body electrical conductivity. J. E. Lyons and S. M. Haig. 1995. *Auk* 112:590-602. Dept. Biol., Virginia Polytechnic Inst. and State Univ., Blacksburg, VA 24061 (Semipalmated Sandpipers, Dunlin and Short-billed Dowitches were captured in mist-nets in South Carolina. Each individual was scanned with an EM-SCAN...
Model SA-2 Small Animal Body Composition Analyzer to create total-body electrical conductivity (TOBEC) scores. The authors found TOBEC scores to be accurate measures of lean mass, but not lipid [fat] mass. Models of body size and fat content are discussed.) GAS

(A technique for determining sex of Cory’s Shearwater by voice [call] is presented. The technique may be applicable to other species that exhibit sexual dimorphism in call.) GAS

(Nestlings, fledglings and adults can be distinguished and sexed. The same criteria work for Costa’s Hummingbird.) RCT

The effects of disturbance on growth rate and survival of young Razorbills Alca torda. P. Lyngs. 1994. Seabird 16:46-49. Mollegade 23, 2tv, DK-2200, Copenhagen, Denmark
(Chicks were weighed and measured daily in part of a Razorbill colony in Denmark, whereas other parts of the colony received only moderate or slight disturbance, with chicks handled less frequently. Nesting success was significantly lower in the highly disturbed area, but growth rates, weights and age of fledging did not differ with level of disturbance. Banding recoveries and returns showed no difference in post-fledging survival and longevity of chicks from areas of different levels of disturbance.) MKM

The practiced eye/ Western Kingbird identification. K. Kaufman. 1992. Amer. Birds 46:323-326. c/o Audubon Field Notes, 700 Broadway, New York, NY 10003 (Discusses features that distinguish Western, Cassin’s, Tropical and Couch’s kingbirds with emphasis on problems posed by age and molt to otherwise reliable tail features. Bill size and shape, wing pattern, face patterns, head shape and calls can all be helpful, but silent Couch’s and Tropical kingbirds remain an “open challenge.”) MKM

(Data on weights and wing lengths from 15 unsexed adults, six full-grown immatures and 121 chicks caught and banded in Malawi are summarized. Primary development data from 23 recaptured chicks are also documented and comments on molt are included.) MKM

(The capture of a Whitethroat, Sylvia communis, in Orange Free State caused the author to re-examine some previously caught birds tentatively identified as Karoo Chat, and conclude that these, too, were actually Whitethroats. A table of measurements and mass of Whitethroats banded in Orange Free State to date is included.) MKM

(Observations, including photograph, of nearly white Great Gary Owl observed on various dates between 1990 and 1992 with normal colored adult and fledglings.) MKM

(Photograph of grey and white Black-billed Magpie in Saskatchewan.) MKM

NORTH AMERICAN BANDING RESULTS


North American Bird Bander Vol. 22 No. 1
Warbler, Prairie Warbler, Yellow-breasted Chat, Western Tanager, Varied Bunting and Lark Bunting.) MKM


Survival of Great Horned Owls in relation to the Snowshoe Hare cycle. C. S. Houston and C. M. Francis. 1995. *Auk* 112:44-59. 863 University Dr., Saskatoon, Sask. S7N 0J8 (From 1958 through 1987, 4713 Great Horned Owls were banded in Saskatchewan. 371 recoveries from these were used to calculate survival estimates. Owl survival was greatest in abundant hare years, apparently because of increased dispersal and decreased fecundity in years of low hare abundance. The use of recovery data in probability and survival models is discussed.) GAS

Age-specific costs of first-time breeding. A. Viallefont, F. Cooke and J.-D. Lebreton. 1995. *Auk* 112:67-76. C.E.F.E./C.N.R.S., 34033 Montpellier cedex, France (Capture-recapture data were used to study breeding costs of Lesser Snow Geese at La Perouse Bay, Manitoba. Between 1500 and 7000 individuals have been banded each year since 1969. The authors used a sample of 2616 recaptured females. Birds were banded with Monel Canadian Wildlife Service bands and individually recognizable color bands. Individuals were less likely to nest successfully the year following their first successful nesting. Birds first nesting as two-year olds had similar lifetime reproductive success to that of birds that first bred as three-year olds.) GAS

Importance of dominance status and distance from cover to foraging White-crowned Sparrows: an experimental analysis. R. Slotow and S. I. Rothstein. 1995. *Auk* 112:107-117. Dept. Biol. Sci., Univ. California, Santa Barbara, CA 93106 (Color-banded individuals were observed during controlled, “natural” experiments. Plumage is described and discussed in relation to social status of an individual. Foraging decisions are described in relation to cover, flock size, plumage and social status, availability of perches, and time of day.) GAS

Sources of nesting mortality and correlates of nesting success in Yellow-headed Blackbirds. J. Picman and A. Isabelle. 1995. *Auk* 112:183-191. Dept. Biol., Univ. Ottawa, 30 Marie Curie, Ottawa, Ont. K1N 6N5 (Breeding territories of Yellow-headed Blackbirds were mapped by observing color-banded males. Males were captured in a decoy trap baited with an “intruding” male blackbird. Predation was the most important cause of nesting mortality [51% of all nests during two years]. Marsh Wrens were the most frequent nest predators. The authors suggest that Yellow-headed Blackbirds and Marsh Wrens spatially segregate their breeding territories in response to observed predation of blackbird nests by wrens and aggression of blackbirds towards wrens.) GAS

Long-term trends in habitat selection in Kentucky Warblers. W. J. McShea, M. V. McDonald, E. S. Morton, R. Meier and J. H. Rappole. 1995. *Auk* 112:375-381. Dept. Conservation, Natl. Zoo. Park, Front Royal, VA 22630 (Results of long-term study [1979-1992] of habitat selection by Kentucky Warblers. Male territories were mapped and most males were color-banded after being captured in mist-nets "baited" with recordings of male calls. Kentucky Warblers were found most often in forests with cove hardwoods, usually containing a stream and having low White-tailed Deer densities. Warblers were less frequently found in forests with oak/ hickory overstory.) GAS


Importance of dominance status and distance from cover to foraging White-crowned Sparrows: an experimental analysis. R. Slotow and S. I. Rothstein. 1995. *Auk* 112:107-117. Dept. Biol. Sci., Univ. California, Santa Barbara, CA 93106 (Color-banded individuals were observed during controlled, “natural” experiments. Plumage is described and discussed in relation to social status of an individual. Foraging decisions are described in relation to cover, flock size, plumage and social status, availability of perches, and time of day.) GAS

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### NON-NORTH AMERICAN BANDING RESULTS

**Nesting Henderson Reed-Warblers** (*Acrocephalus vaughani taiti*) studied by DNA fingerprinting: unrelated coalitions in a stable habitat? M. L. Brooke and I. R. Hartley. 1995. Auk 112:77-86. Dept. Zool., Univ. Cambridge, Downing St., Cambridge CB2 2EJ, U.K. (This species is confined to Henderson Island in the South Pacific. Individuals were captured on nests or in mist nets placed near nests. Variable partial albinism allowed individual recognition, and sex was determined by presence or absence of a vascularized brood pouch and by shape of the cloacal protuberance. About 1/3 of nesting groups were composed of three adults instead of two. Pairs had slightly higher reproductive outputs than trios, but not at a statistically significant level. The authors suggest that nesting trios may allow younger birds to obtain nesting territories.) GAS

**Polygyny in the Asian Openbill** (*Anastomus oscitans*). T. Datta and B. C. Pal. 1995. Auk 112:257-260. Dept. Zool., North Bengal Univ. 734430, Dist. Darjeeling, West Bengal, India (Members of 37 breeding groups were color-marked with nontoxic textile dye, using a sprayer from above the nest. Openbills are highly polygynous. The authors found only 51 monogamous groups out of 2115 active nests - 2.4%). GAS

**Breeding biology of White-winged Trumpeters** (*Psophia leucoptera*) in Peru. P. T. Sherman. 1995. Auk 112:285-295. Dept. Biol., Univ. Louisville, Louisville, KY 40292 (The breeding biology of this little known member of the family Psophiidae, Order Gruiformes is described. Observations were conducted on 46 banded individuals in Peru from 1983-1987. Sex was determined by laparotomy or by observing copulations.) GAS

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**Immigration in a small population of Snow Geese.** S. R. Johnson. 1995. Auk 112:731-736. LGL Limited, 9768 2nd St., Sidney, B.C. V8L 3Y8 (Population dynamics of the only established U.S. Lesser Snow Goose colony were studied on Howe Island, Alaska. The colony is located near an active oil field. Capture-recapture data from 1980-1993 show that nesting pairs increased from 39 to 412. Immigration rates were 12.8% for females and 60.7% for males.) GAS

**Southward migration of Swainson's Hawks: over 10,000 km in 54 days.** J. K. Schmutz, C. S. Houston and G. L. Holroyd. 1996. Blue Jay 54:70-76. Dept. Biol., Univ. Saskatchewan, 112 Science Place, Saskatoon, SK S7N 5E2 (Locations and dates of 24 autumn recoveries of Swainson's Hawks banded in Alberta and Saskatchewan are mapped from various U.S. states and Central and South American countries. Method of recovery is tabulated for 98 recovered in ten Central and South American countries. Dates of occurrence for two hawks fitted with radio transmitters near their nests in Alberta are mapped as they migrated south through Saskatchewan, the U.S.A. and several Latin American countries to their Argentine wintering areas.) MKM

**Experience with Burrowing Owl nest-boxes in Saskatchewan, with comment on decreasing range.** C. S. Houston, D. G. Hjertaas, R. L. Scott and P. C. James. 1996. Blue Jay 54:136-140. 863 University Dr., Saskatoon, SK S7N 0J8 (Between 1984 and 1993, Hjertaas and Scott banded 556 nesting Burrowing Owls in Saskatchewan, none of which have been recovered on wintering grounds to date.) MKM

**Chickadees.** D. G. Miller. 1996. Blue Jay 54:177-179. 515 Gabriel Rd., Grasswood, SK S7T 1A9 (Color-banding a flock of wintering Black-capped Chickadees at a Saskatchewan feeder helped determine numbers using the feeder and is starting to provide longevity data.) MKM
Social organization of cooperatively polyandrous White-winged Trumpeters (Psophia leucoptera). P. T. Sherman. 1995. *Auk* 112:296-309. Dept. Biol., Univ. Louisville, Louisville, KY 40292 (The social organization of this poorly known species is described. Juvenile and adult birds were captured by using a blow gun and tranquilizing darts, and banded with unique combinations of color bands. Chicks were captured at night roosts. Sex was determined by laparotomy or by observing copulations.) GAS


Survival rates of Puerto Rican birds: are islands really that different? J. Faaborg and W. J. Arendt. 1995. *Auk* 112:502-507. Div. Biol. Sci., 110 Tucker Hall, Univ. Missouri-Columbia, Columbia, MO 65211 (Survival rates of 12 species are reported. Rates were calculated from capture-recapture data with the program JOLLY. Birds were captured in mist-nets operated annually in January or early February from 1973-1990 except for 1977 and 1979. Puerto Rican bird species showed higher survivorship than temperate counterparts, a finding consistent with previously observed patterns of small clutches and long lifespans of tropical species versus large clutches and short lifespans of temperate species. Seemingly paradoxical differences in survivorship between Puerto Rican and Panamanian species are also discussed in terms of life-history trade-offs. The authors suggest that there may be something "distinctly different about island populations that we do not yet understand." ) GAS

Effects of female choice and copulations away from colony on fertilization success of male Montezuma Oropendulas (Psarocolius montezuma). M. S. Webster. 1995. *Auk* 112:659-671. Dept. Biol. Sci., Univ. New York at Buffalo, 109 Cooke Hall, Buffalo, NY 14260 (Sixty-one males and 58 females were captured by mist-nets placed near nests or at foraging sites baited with bananas. Each was banded with a unique combination of colored PVC bands. Alpha males were responsible for 90-100% of observed copulations. However, fertilization success of alpha males was unpredictably low. DNA fingerprinting identified subordinate males, copulating away from colony sites, as the main cause of reduced fertilization success of dominant males.) GAS

Habitat use and selectivity by the Brown Kiwi (Apteryx australis mantelli) in a patchy environment. B. Taborsky and M. Taborsky. 1995. *Auk* 112:680-689. Konrad Lorenz Institut fur Vergleichende Verhaltensforschung, Savoyenstrasse 1a, A-1160 Wien, Austria (Kiwi habitat use was determined by observing radio-tagged individuals. Changes in forest management practices are suggested that the authors believe would allow "survival and propagation" of kiwis.) GAS

Autumn stopover on the isthmus of Tehuantepec by woodland Nearctic-Neotropical migrants. K. Winkler. 1995. *Auk* 112:690-700. Conservation & Res. Center, NZP, Smithsonian Inst., Front Royal, VA 22630 (Eleven passerine species were captured in mist-nets and fat-scored. A new technique for analyzing mass-gain was applied to all birds captured. Previous techniques were applicable only for recaptures. The importance of the Isthmus of Tehuantepec as a migration stop-over for passerines is discussed. The author suggests rethinking of our concepts of Middle American migration routes.) GAS

Age-related changes in the agonistic behaviour of immature Common Guillemots *Uria aalge*. D. J. Halley and M. P. Harris. 1994. *Seabird* 16:8-14. Norsk Institute for Naturforskning, Tungasletta 2, 7004 Trondheim, Norway (Observations on color-
banded Common Murres in Scotland showed that younger birds were more likely to be involved in agonistic encounters and more likely to lose them than older immatures. Older immatures initiated more agonistic encounters than younger birds in one year of the study, but not in another year.) MKM


Audouin’s Gull Larus audouinii in Senegambia. A. J. del Nevo, S. Rodwell, I. M. W. Sim, C. R. Saunders and T. Wacher. 1994. Seabird 16:57-61. RSPB, The Lodge, Sandy, Bedfordshire, SG19 2DL, U. K. (Observations of this globally threatened species wintering along the west coast of Africa showed that a substantial number had been banded. Color bands indicated that at least some of these came from breeding colonies in Spain.) MKM


Editor’s note: Thanks to Marco Restani for sending a reprint of his interesting raven paper. -MKM

MKM = Martin K. McNicholl
GAS = Gregory A. Smith
RCT = Robert C. Tweit