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## Recent Literature

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Compiled by C. John Ralph (If you would like to help review articles of interest to banders, please contact cjr2 "at" humboldt.edu, and feel free to mention if you have a particular journal or geographic area of interest).

### Contributors to this issue:

ATC = Allen T. Chartier; CJR = C. John Ralph; WHS = Walter Sakai

### IDENTIFICATION, MOLTS, PLUMAGE, WEIGHTS, AND MEASUREMENTS

**Morphometric differences between sexes in the White-faced Ibis (*Plegadis chihi*).** D.V. Fuchs, V.S. Berrios, and D. Montalti. *The Wilson Journal of Ornithology* 129:317-322.

The objective of this work was to quantify morphometric differences between sexes in adults of this species. Using museum specimens from Argentina, the following variables from 83 individuals (41 males and 42 females) were measured: culmen length, bill height and width, tarsus length, middle toe (with claw) length, wing chord, tail length, and body mass. Males were larger than females in all these variables, and presented statistically significant differences for six out of eight parameters. Three discriminant classification functions were obtained with an accurate total classification rate in >85% of the cases. The length of the culmen, tarsus, middle toe with claw, and wing chord were among the most useful variables to discriminate between sexes.

ATC

### EQUIPMENT, TECHNIQUES, AND REPORTS

#### One-in-a-million banding milestone.

S. Mackenzie. 2017. *OFO (Ontario Field Ornithologists) News* 35(2):8.

Established in 1960, Long Point Bird Observatory is the Western Hemisphere's oldest bird observatory. It has been a model for the development of many observatories in Canada, and it led to the creation of Bird Studies Canada. After nearly 60 years of research, training, and education, LPBO passed an incredible milestone in

spring with its one millionth bird banded, a female Tennessee Warbler on 29 May 201

ATC

#### A Record Owl Banding Season at WPBO. C. Neri. 2017. *Jack Pine Warbler* 94:9-10.

Spring owl banding was conducted by the Whitefish Point Bird Observatory from 15 Mar – 31 May 2017, with nets open using previously established protocols on 66 out of a possible 79 nights, with 1375 new owls banded, plus 54 recaptures of previously banded owls, representing 5 species. The 942 Northern Saw-whet Owls represented the second highest season total for that species at Whitefish Point, and the 423 Long-eared Owls was not only a new record high total for the site, but for any North American banding station.

ATC

#### Novel tracking and reporting methods for studying large birds in urban landscapes. A.

Davis, R.E. Major, C.E. Taylor, and J.M. Martin. 2017. *Wildlife Biology*. <http://www.bioone.org/doi/full/10.2981/wlb.00307>

The authors present a novel use of livestock ear-tags to mark Sulphur-crested Cockatoos (*Cacatua galerita*), a bird found in the urban setting of Sydney, Australia. A size-2 yellow plastic livestock ear-tag with black three-digit numbers was attached to each wing, using a livestock ear-tag applicator. The patagial tags were easily visible on this white bird, as shown in photographs. Tags were placed so that they would be visible when the bird is perched. A standard band was also placed on the birds. Reports of sightings by the public (citizen scientists) were facilitated by collaborating with partner institutions through a dedicated phone or email, aided by the use of social media including Facebook and an app. Reporters were expected to provide the tag number, location, date and time of the sighting, and ancillary information (photo). All 100 birds were resighted, with 68% reported over 100 times. One tag was lost in 17% of the birds over four years, and five birds lost both tags. Five birds were reported to have died; none due to the tags. No adverse effects due to the tags

were noted. There were 24 birds unaccounted for after four years (five died, five lost both tags, and 14 were unknown).

There were 15,282 reports coming from 1252 individuals over the four years with 3.8% considered erroneous. The apps received 69% of the reports, email 22%, and Facebook 4%. The remainder came from other forms of communication. The nature and limitations of each reporting method was discussed.

WHS

#### NORTH AMERICAN BANDING RESULTS

**Passage dates, energetic condition, and age distribution of irruptive pine siskins during autumn stopovers at a reclaimed landfill in the New Jersey Meadowlands.** C.L. Seewagen and M. Newhouse. 2017. *Northeastern Naturalist* 24:201-208. Cseewagen@greathollow.org

The autumn stopover during the 2012 irruption of Pine Siskins (*Spinus pinus*) was studied at the reclaimed Erie Landfill in North Arlington, NJ. Nine 12-m mist nets were used in the landfill, along with seven more in an adjacent meadow from 30 Aug to 20 Nov 2011 to 2013. During a 3-week period, 402 Pine Siskins were captured during the 2012 irruption compared to 2010, 2011, and 2013, when 20 birds were captured in total. The peak of the irruption was from 9-12 Oct, when 253 birds were caught. Similar numbers were reported in other stations in the East.

There was no relationship between body mass and capture time, indicating birds were not gaining mass. Only one recapture was made within a time indicating a short stopover period. Juvenile-to adult ratio was 54:46, with juveniles weighing significantly more than adults. Body mass ranged from 9.6 to 17.6 g, with a mean of 12.9 g. This was below the fat-free mass reported by others. The fat score was 2, indicating birds were not in poor energetic condition.

The authors suggest other stations that experience irruptive behavior can help fill in the knowledge gap in the understanding of this behavior.

WHS

**Counterintuitive roles of experience and weather on migratory performance.** A.I. Russ, A.E. Duerr, T.A. Miller, J.R. Belthoff, and T.E. Katzner. 2017. *The Auk Ornithological Advances* 134:485-496.

Golden Eagles (*Aquila chrysaetos*) were captured on wintering grounds during 2008-2015 and fitted with GPS telemetry units. Spring migrant eagles traveled 139.75 +/-82.19 km/d (n=57) and 25.59 +/-11.75 km/h (n=55). Autumn migrant eagles traveled 99.14 +/-59.98 km/d (n=26) and 22.18 +/-9.18 km/h (n=28). In spring, migratory performance was influenced most strongly by downward solar radiation, and older birds benefited less from tailwinds. In autumn, migratory performance was influenced most strongly by south-north winds and tailwinds, again less strongly for older birds. Although daily speed of travel was similar for all age classes, younger birds traveled at faster hourly speeds than did adults.

ATC

**Environmental cues used by Greater Sage-Grouse to initiate altitudinal migration.** A.C. Pratt, K.T. Smith, and J.L. Beck. 2017. *The Auk Ornithological Advances* 134: 628-643.

Greater Sage-Grouse (*Centrocercus urophasianus*) were captured by spotlighting and hoop netting near leks in northern and central Wyoming during spring 2011-2014, and additional grouse were located and captured during summer at night-roosting locations of previously tagged birds. Grouse were tagged with GPS PTT (Platform Transmitter Terminal) transmitters. Grouse were direct indicators of resource quality, especially temperature, when timing movements between seasonal ranges. Timing was also dependent on individual characteristics including location, reproductive status, and habitat use. For the summer and fall transitions, migratory grouse experienced more stimulatory migration cues because of differences in elevation of seasonal ranges. Migratory birds were more likely avoiding more rapid plant desiccation in warmer breeding ranges and avoiding higher snow accumulation in colder summer ranges with more precipitation. Altitudinal migrants are likely to use direct indicator cues because they have great utility

when migration distances are relatively short. In addition, landscapes with altitudinal migrants have sharp environmental gradients creating conditions conducive for partially migratory behavior in a population.

ATC

**Variation in early-successional habitat use among independent juvenile forest breeding birds.** A.D. Burke, F.R. Thompson III, and J. Faaborg. 2017. *The Wilson Journal of Ornithology* 129:235-246.

Birds were captured at four sites in southeastern Missouri using constant-effort mist-netting from 1 Jun to 3 Aug 2012. Radio transmitters were placed on 29 hatch-year individuals of three species – Ovenbird (*Seiurus aurocapilla*), Worm-eating Warbler (*Helmitheros vermivorum*), and Red-eyed Vireo (*Vireo olivaceus*) – captured in clearcuts. They were relocated over 24 days and all three species had a greater relative probability of use of clearcut forest stands with smaller trees than older forests. Ovenbirds and Worm-eating Warblers remained in the early-successional habitat where initially captured, whereas Red-eyed Vireos used both late and early successional habitat. The post-breeding period could be equally important as the breeding period for management efforts of migratory songbirds.

ATC

#### NON-NORTH AMERICAN BANDING RESULTS

**Notes on display behavior, breeding, and fledging care of the Wedge-billed Woodcreeper (*Glyphorhynchus spirurus*) in Eastern Ecuador.** A.J. Darrah and K.G. Smith. 2017. *The Wilson Journal of Ornithology* 129:382-386. Fitting 23 adults with radio transmitters allowed previously undescribed display behavior and data on fledgling feeding rates to be observed.

ATC

**Recapture probability, flight morphology and microorganisms** Zaid Al Rubaiee, Haider Al-Murayati and Anders Pape Moller. 2017. *Current Zoology*, 1-7 doi: 10.1093/cz/zox032. Advance Access Publication. 16 May 2017 Ecologie Systématique Evolution, Université Paris-Sud, Orsay Cedex, France (anders.moller@u-psud.fr)

Microorganisms on and within organisms are ubiquitous and interactions with their hosts range from mutualistic, over commensal to pathogenic. The authors hypothesized that microorganisms might affect the ability of Barn Swallows (*Hirundo rustica*) to escape from potential predators, with positive associations between the abundance of microorganisms and escape ability implying mutualistic effects, while negative associations would imply antagonistic effects. They quantified escape behavior as the ability to avoid capture in a mist-net and hence as a small number of recaptures. Because recapture probability may also depend on timing of reproduction and reproductive success, they also tested whether the association between recapture and microorganisms was mediated by an association between recapture and life history. Amazingly, they found intermediate to strong positive relationships between recapture probability and abundance of *Bacillus megaterium*, but not abundance of other bacteria or fungi. The abundance of *B. megaterium* was associated with an advance in laying date and an increase in reproductive success. However, these effects were independent of the number of recaptures. This interpretation is supported by the fact that there was no direct correlation between laying date and reproductive success on one hand and the number of recaptures on the other. These important findings have implications for predator-prey interactions, but also for capture-mark-recapture analyses of vital rates such as survival and dispersal.

CJR



Pine Siskin  
by George West