North American Bird Bander

Volume 27 | Issue 1 Article 6

2002

News, Notes, Comments

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Marking Nestling Crows: an Addendum

Regarding the marking of nestlings: The stated "..approximately 28 days posthatching in both California and Oklahoma" (Caffrey, C. 2002. Marking crows. *N. Amer. Bird Bander* 26:146-150) was misleadingly simple, as well as not quite accurate. Nestling growth rates vary between individuals and across nests. There are 3 to 4 days within their nestling periods when young crows are at the ideal stage of development for marking. Nestlings should be fully feathered, and primary pin feathers approximately half unsheathed (visible when nestlings stretch); primaries should extend at least to rump when wings at sides. Pink gape tissue restricted to base when bill closed, and lower mandible dark (no longer looks pink from underneath, in contrast to associated skin). As nestlings pass through this stage, they soon thereafter acquire a jumping response to "predators" approaching the nest; they must be marked before this response develops. Because of asynchronous hatching, nestlings in the same nest may differ substantially in size; weights have differed by as much as 160 g for individuals that subsequently fledged within a day of each other 5 to 12 d later. Thus a "compromise" in marking date is sometimes necessary. More than 4 to 5 d after nestlings get up on the rim and flap is probably too late.

I have marked appropriately sized nestlings in California in nests where hatching had begun from 26 to 31 d earlier, with a mean of approximately 29 d (n = 5 nests) after the first feeding trip to the nest was observed. In Oklahoma, appropriately sized nestlings were marked in nests where feeding had begun from 24 to 31 d earlier (mean of approximately 26.6 d, n = 13 nests). Easier to determine than the date of first feeding trip to the nest is incubation date; the date females begin sitting on eggs continuously after a couple of days of increasing time in nests. In California, I marked appropriately sized nestlings in nests where incubation had begun 45 to 53 d earlier (mean 49.4 ± 2.4 SD, n = 26 nests). In Oklahoma, the number of days that had passed before nestlings were ready to mark was significantly fewer; appropriately sized nestlings have been marked in nests 41 to 49 d subsequent to the beginning of incubation (mean 45.2 ± 2.2 SD, n = 22 nests, t_{46} = 6.26, $P < 0.001$).

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Primary-Covert Replacement in the Eastern Wood-Pewee

Molt strategies in the Tyrannidae are complex, variable, and poorly understood. First prebasic molts (PBs) in North American species range from partial to complete and can occur on the breeding grounds, the winter grounds, or both (Johnson 1963, 1974; Pyle 1997, 1998). Variability occurs even within genera and species. Prealternate molts also are highly variable, ranging from absent to nearly complete and often more extensive in second-year birds (Pyle 1997).

Some flycatchers replace at least some primary coverts in the first PB (Pyle 1997, 1998). Replacement of outer primary coverts by first-year (HY/SY) birds has been documented in Vermilion Flycatcher (*Pyrocephalus rubinus*) and Olive-sided Flycatcher (*Contopus cooperi*) (Pyle 1998) and suspected but not confirmed in the two wood-pewees (Pyle 1997).

During April and May 2000, several other banders and I had the opportunity to examine 27 Eastern Wood-Pewees (*C. virens*), presumably in northward migration, in the vicinity of Tortuguero on the northeast coast of Costa Rica (10°36' N, 83°33' W). On two of these birds, captured on 17 and 21 Apr, I noticed a subtle molt limit between retained outer and replaced inner primary coverts. The replaced coverts were fresher and duskier, with darker shafts and more barbs, than adjacent retained coverts; they more closely matched the adjacent greater coverts in these characteristics. On both birds, the molt limit was symmetric between the two wings. On the first bird, the inner four coverts had been replaced; on the second,

Fig. 1. Outer wing coverts of Eastern Wood-Pewee showing replaced innermost primary covert.

only the innermost covert had been replaced (Fig. 1). We aged these birds SY based on these molt limits.

Pyle (1997) states that the juvenal primary coverts in Eastern Wood-Pewee apparently(?) are retained through (meaning "until," though these feathers are likely to be among the last replaced [P. Pyle, pers. comm.]) the 2nd PB. Our findings indicate that primary-covert replacement does occur in at least some first-year individuals but may be limited to the inner coverts. Birds showing molt limits within the primary coverts (or anywhere else) can be aged HY/SY reliably on the breeding grounds (and on the winter grounds after the molt).

The molt pattern we observed, with replacement of inner rather than outer primary coverts, is at variance with that documented in other flycatchers and contradicts Pyle's (1998) inference that first-year North American tyrannids retain five or more inner primary coverts, even when all remiges are replaced. It is possible that inner-covert replacement occurs in other species as well but has been overlooked. Pyle (1997, 1998) based many of his findings on traditionally prepared specimens, on which the innermost primary coverts are virtually impossible to see. Juvenal and adult feathers in wood-pewees, furthermore, are very similar and hard to distinguish (Pyle 1997), and molt limits in outer coverts may be more apparent due to differential exposure. Researchers, particularly those in the tropics, should look for and document any occurrence of molt and molt limits in this genus. Those working with wood-pewees on the breeding grounds should look for molt limits within the primary coverts as a means of separating SY and ASY birds.

I thank C. J. Ralph and the Caribbean Conservation Corporation for providing equipment and logistical support during my time in Costa Rica. Peter Pyle encouraged me to write this paper, reviewed two earlier drafts, and sparked my interest in molt patterns in the first place.

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Recent Literature

BANDING HISTORY AND BIOGRAPHIES

J. O. L. Roberts, 1925-1999. A. D. Brewer. 2001. *Ont. Bird Banding* 32:31. R. R. #1, Puslinch, Ont. N0B 2J0 (Brief biography of one of founding directors of the Long Point Bird Observatory, prominent in the activities of the Ontario Bird Banding Association, Point Pelee Bird Observatory and Whitefish Point Bird Observatory. His publications were on the activities, function and history of observatories, age-related eye color in Sharp-shinned Hawks, and migration of owls and warblers.) MKM

Rural banders in the Saskatoon area. C. S. Houston and M. I. Houston. 2002. *Blue Jay* 60:35-37. 863 University Dr., Saskatoon, Sask. S7N 0J8 (Brief biographies, banding efforts and significant recoveries of John Dick, Jr., Henry D. Goossen, Abram S. Loewen, and Philip Siemens, all of whom banded in rural areas near Saskatoon in one or more year(s) between 1928 and 1938. Also included are highlights and recoveries of a crow "control" program in which American Crows and three Black-billed Magpies were banded and released in the Saskatoon area from 1936 to 1938 by Fred G. Bard, Jr.) MKM

BANDING EQUIPMENT AND TECHNIQUES

Recapture rates and breeding frequencies of American Goldfinches wearing different colored leg bands. D. J. Watt. 2001. *J. Field Ornithol.* 71:236-243. Dept. Biol., St. Mary's College, Notre Dame, IN 46556 (Birds with colored bands did not differ in return rate of breeding frequency from expected values.) RCT

Setting harness sizes and other marker techniques for a falcon with strong sexual dimorphism. K. E. Kenward, R. H. Pfeffer, M. A Al-Bowardi, N. C. Fox, K. E. Riddle, E. A. Bragin, A. Levin, S. S. Walls, and K. H. Hodder. 2001. *J. Field Ornithol.* 72:244-257. Centre Ecol. & Hydrol., Winfrith Tech. Cent., Dorchester, Dorset DT2 8ZD, U.K. (Age-predictive equations and attachments are described.) RCT

Effect of investigator disturbance on the breeding success of the Black-legged Kittiwake. H. Sandvik and R. T. Barrett. 2001. *J. Field Ornithol.* 72:30-42. Dept. Biol., Univ. Tromso, N-9037 Tromso, Norway (Some small adverse effects were seen in the first year, but these decreased in the second year.) RCT

A targeted mist net capture technique for the Willow Flycatcher. M. K. Sogge, J. C. Owen, E. H. Paxton, S. M. Langridge, and M. T Koronkiewicz. 2001. *West. Birds* 32:167-172. U.S Geol. Surv., Colorado Plateau Field Stn., Box 5614, Flagstaff, AZ 85011 (Willow Flycatchers at breeding sites were lured into mist nets with tape recorded calls of conspecifics.) RCT

Effects of color bands on Semipalmated Sandpipers banded at hatch. J. Bart, D. Battaglia, and N. Senner. 2001. *J. Field Ornithol.* 72:521-526. Snake River Field Stn., U.S.G.S., 970 Lusk St., Boise, ID 83706 (Effect, if any, on survivorship of chicks was less than 13% and on mass gain was less than 10%.) RCT