

News, Notes, Comments

Corrections to NABB 36(2):65

Page 65, 2nd column, next to last paragraph.

Anthony Hill's email is as follows:

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In addition on the back cover under the Table of Contents, the first author's last name is misspelled, it should be **Thomas Greg**.

The EBBA editor apologizes for these typos.

Primary Covert Replacement Patterns in the Western Wood-Pewee (*Contopus sordidulus*)

Western Wood-Pewee (*Contopus sordidulus*) is a Nearctic-Neotropic migrant flycatcher commonly found from April through October in northern California (www.ebird.org). After breeding, most Western Wood-Pewees migrate to tropical molting or wintering grounds prior to initiating their preformative or definitive prebasic molt. Although definitive prebasic molts among them are complete, the understanding of the variation in primary covert replacement during the preformative molt remains tentative (Pyle 1997). Interestingly, Burton (2002) described replacement of several primary coverts during the preformative molt in the closely related Eastern Wood-Pewee (*Contopus virens*), captured in Costa Rica.

Between May and July 2007, two of eight Western Wood-Pewees captured at several banding stations in northern California had mixed juvenal and formative primary coverts. More specifically, 1-4 inner and 1-2 middle primary coverts had been replaced during the previous preformative molt (Fig 1). The retained juvenal primary coverts were washed brown, were relatively more worn, and had noticeably less compact barb density. In 2008, we reviewed 60 formative and definitive plumage and Western Wood-Pewee specimens of both subspecies occurring north of Mexico (*C. s. saturatus* and *C. s. veliei*) at the Smithsonian National Museum of Natural History. In general, it was difficult to

differentiate formative from definitive basic-plumaged specimens due to the concealed nature of the primary coverts. However, out of the 60 formative and definitive plumaged specimens, five had noticeably mixed juvenal and formative primary coverts (Fig 2), following the same pattern found in birds captured in northern California.

Further evidence of mixed primary covert replacement in Western Wood-Pewee was documented during banding efforts in southern Oregon. From mid-May through August 2008, 18 Western Wood-Pewees were captured in southern Oregon and determined to be formative plumaged birds by the recognition of retained juvenal primary coverts. Of these, we found mixed primary covert replacement in 11 individuals (61%; Fig 3).

Interestingly, out of the 13 total Western Wood-Pewees captured in northern California and southern Oregon with mixed primary covert replacement, only two birds exhibited the same replacement pattern (Fig. 3). Thus, the preformative molt of Western Wood-Pewee is unique for two reasons: (1) mixed primary covert replacements which have only been documented in a few other species; e.g., Eastern Wood-Pewee and Olive-sided Flycatcher (*Contopus cooperi*) (Pyle 1997, Burton 2002) and (2) variation in molt initiation points within the middle primary coverts. Given variation in Western Wood-Pewee primary covert replacement, it remains possible that some individuals replace all primary coverts during the preformative molt, thereby confounding age classification.

Western Wood-Pewees are long distance migrants which commonly occupy sunny habitats, thereby subjecting their plumage to the degrading effects of sustained solar exposure. Subjection to intense sun presumably leverages evolutionary pressure upon birds to replace more feathers during the preformative molt, relative to species occupying more shaded environments (Pyle and Kayhart 2010). Although this study's findings agree with



Fig. 1. Western Wood-Pewee captured in Lassen County, CA, May 2007. This formative-plumaged wood-pewee had formative and juvenile primary coverts. The retained juvenile primary coverts, denoted by 'J', (5-6 and 8-10) were more tapered, worn, brown, and less-densely barbed relative to formative primary coverts, denoted by 'F' (1-4 and 7), which were truncate, fresh, and steely gray.



Fig. 2. Example Western Wood-Pewee specimen from northern California photographed at the Smithsonian National Museum of Natural History, Jan 2008. Photographing molt limits within the primary coverts of closed-wing specimens is inherently difficult. Similarly to wild wood-pewees captured in northern California (Fig. 1), this formative-plumaged wood-pewee specimen had mixed formative and juvenile primary coverts. The retained juvenile primary coverts, denoted by 'J' (central and obscured outer feathers), were more tapered, worn, brown and less-densely barbed relative to formative primary coverts, denoted by 'F' (apparently 1-3 and possibly 6-7), which were truncate, fresh, and steely gray.

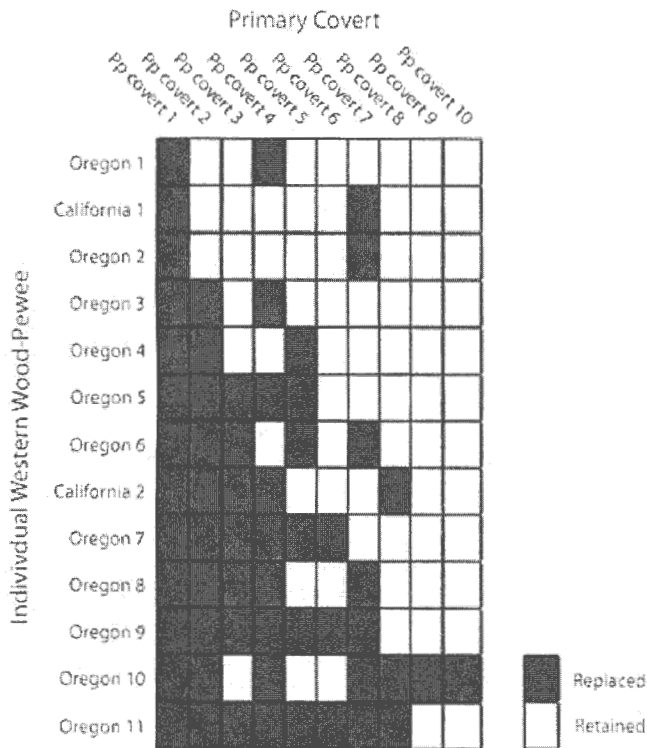


Fig. 3. Matrix illustrating 13 captured Western Wood-Pewees with mixed primary-covert replacement, which covert was replaced and location of capture (California or Oregon).

previously published postulations regarding correlations between migratory distance leading to increased solar exposure and molt extent, confounding phylogenetic relationships must be considered (Pyle and Kayhart 2010). For example, two other species of *Contopus* (wood-pewee) found in North America (*C. cooperi* and *C. virens*) can replace primary coverts during the preformative molt (Pyle 1997, Burton 2002). Phylogenetic analysis is necessary to differentiate evolutionarily conserved from derived preformative molt extents among closely related species.

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LITERATURE CITED

- Burton, K. 2002. Primary-covert replacement in the Eastern Wood-Pewee *North American Bird Bander* 27:12-14.
- eBird. 2011. eBird: An online database of bird distribution and abundance [web application]. Version 2. eBird, Ithaca, NY. Available: <http://www.ebird.org>. (Accessed: 28 Apr 2011).
- Pyle, P. 1997. Identification guide to North American birds. Part I: Columbidae to Ploceidae. Slate Creek Press, Bolinas, CA.
- Pyle, P. and R. Kayhart. 2010. Replacement of primaries during the prealternate molt of a Yellow Warbler. *North American Bird Bander* 35:178-181.

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A Well-traveled Goldfinch

On 2 Jul 2009, Stephen Davis caught and banded a female American Goldfinch (band number 2500-77446) at his MAPS station 2.5 km southwest of Craven, SK (coordinates 503-1045). The bird hatched in 2007 or earlier. Nothing unusual about this.

On 29 Jan 2011, however, slightly more than one and a half years later, this bird was captured by Vernon Kleen five miles (8 km) east of Murrayville, Morgan County, IL, as a “foreign retrap” (coordinates: 393-0900). The distance between this bird’s initial capture and subsequent recapture is approximately 1600 km (1000 mi).