

EASTERN RECORDS OF *Falco columbarius suckleyi*

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Four subspecies of Merlin (*Falco columbarius*) have been recognized by the American Ornithologists' Union (A. O. U. 1957). These taxa differ in color, number of tail bands, degree of barring along the anterior and posterior web of the outermost primary (P10) and some mensural characters (Temple 1972).

Falco columbarius suckleyi Ridgway is the darkest of the four races. Grossman and Hamlet (1964) stated, "In Vancouver, British Columbia, they are so dark they are called Black Pigeon Hawks." *Suckleyi* nests in the wet coastal forests of British Columbia and Washington (Bent 1938). Their upperparts are darker and their underparts are more heavily barred than the other subspecies (for characters see Table 1). They winter along the Pacific coast, south through California and irregularly into New Mexico (A. O. U. 1957) (Fig. 1). *F. c. columbarius* Linnaeus and *F. c. bendirei* Swann breed in the taiga biome of North America. The wintering range of these taxa includes the southern United States, Central America, the West Indies and northern South America (Fig. 1). Brown and Amadon (1968) did not recognize *bendirei* as distinct from *columbarius* and Temple (1972) suggested synonymizing *columbarius* and *bendirei*. We follow their taxonomy in this paper and treat these taxa together as *columbarius*. *Columbarius* lacks the heavy barring found in *suckleyi*. These birds are noticeably lighter than specimens of *suckleyi* (Table 1).

Although these subspecies have well defined breeding and wintering ranges, they occasionally wander and may cause problems for hawk banders. Reports of vagrants and the regularity of these wanderings also are important for understanding the migration of these taxa. We found two very dark specimens labeled *columbarius* from the east coast in the collection of the American Museum of Natural History (AMNH) in New York and two in the Academy of Natural Sciences of Philadelphia (ANSP). The upperparts and underparts of these birds matched specimens of *suckleyi* from British Columbia (for description, see Table 2). The AMNH birds were an adult female (AMNH 156173) and an immature male (AMNH 156174) collected from New Jersey on 21 Oct 1921 (Fig. 2). One of the Academy birds (ANSP 76104) was also an

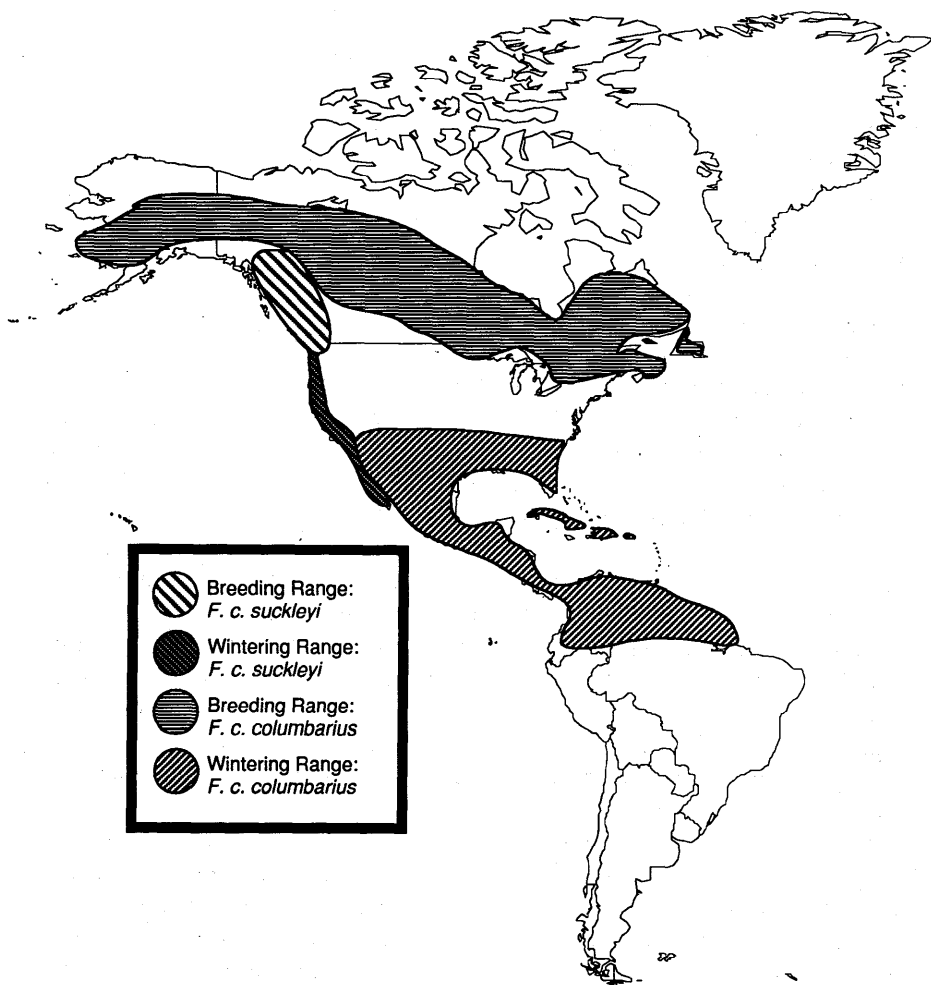


Figure 1. Breeding and wintering ranges of two North American subspecies of Merlin, *Falco columbarius columbarius*, *Falco columbarius suckleyi*.

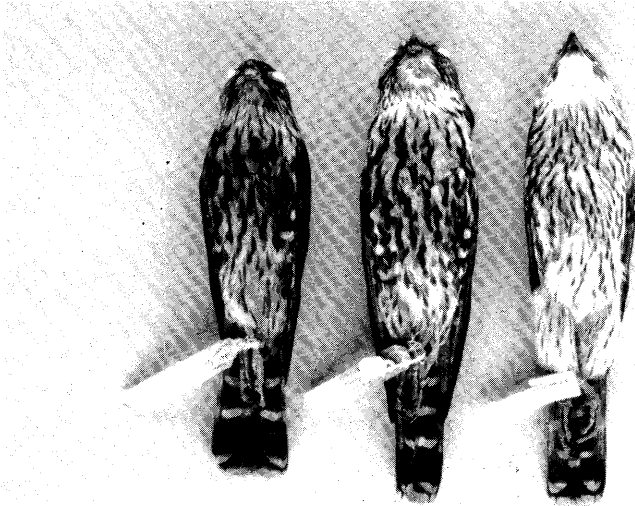


Figure 2. Ventral view of (left to right) AMNH 156174, AMNH 156173 (*F. c. suckleyi*) from New Jersey compared to AMNH 352971 (*F. c. columbarius*) from the east coast.

adult female from New Jersey, collected on 1 Oct 1883. The second ANSP specimen (ANSP 76103) was collected in Florida on 7 Dec 1889. In addition to the study skins we also have a report of an extremely dark juvenile captured and banded on Fire Island, New York in Sep 1980. Wegner (*pers. comm.* 1985) noted, "It was dark enough to be called *suckleyi*, with virtually no barring on the rectrices and generally dark all over."

We consider the banded migrant and the AMNH specimens from New Jersey to be *suckleyi* (see Figure 2 for ventral comparisons with *columbarius* from the east coast). The latter were collected in New Jersey on the same day, suggesting that they were traveling together. There is evidence that family groups may start fall migration together but it is unknown how long they remain together during migration (Cade 1982).

Characters of ANSP 76103 and 76104 are intermediate between *columbarius* and *suckleyi*. These dark birds are close to *suckleyi* and may be from contact areas with *columbarius* in central British Columbia and Alberta or dark extremes of *columbarius*. These specimens point out the difficulty identifying some specimens intermediate between these two subspecies. Temple (1972) showed that there is almost complete overlap

Table 1. Characters separating two subspecies of Merlin.¹

Taxon	Characters
<i>F. c. columbarius</i>	anterior web of P10-barred, posterior web of P10 - barred, lighter upperparts and underparts, crown intermediate between <i>richardsoni</i> ² and <i>suckleyi</i>
<i>F. c. suckleyi</i>	anterior web of P10-unbarred, posterior web of P10 - unbarred, dark upperparts and underparts, crown predominantly black, five tail bands

1 - from Temple (1972).

2 - large, pale prairie subspecies

Table 2. Characters of four problem specimens of *Falco columbarius*.

Specimens	Characters
AMNH 156173 (ad. female) 4 Oct. 1921 New Jersey: Sussex Co.	anterior web of P10-unbarred, posterior web of P10-barred, dark upperparts and underparts, crown predominantly black
AMNH 156714 (imm. male) 4 Oct. 1921 New Jersey: Sussex Co.	anterior web of P10-unbarred, posterior web of P10-barred, dark upperparts and underparts, crown predominantly black
ANSP 76103 (ad. female) 7 Dec. 1889 Florida: unknown	anterior web of P10-unbarred, posterior web of P10-barred, lighter upperparts and underparts, crown predominantly black, five tail bands
ANSP 76104 (ad. female) 1 Oct. 1883 New Jersey: Beach Haven	anterior web of P10-unbarred, posterior web of P10-barred, lighter upperparts and underparts, crown predominantly black, five tail bands

between *columbarius* and *suckleyi* in mensural characters. We also had difficulty identifying intermediate specimens with the plumage characters suggested by Temple. Webbing on the anterior and posterior of P10 and barring on the rectrices are the best characters for separating most specimens but even these are equivocal for some extreme specimens.

How regular is the occurrence of western Merlins on the east coast? Apparently western Merlins (either pure *suckleyi* or intergrades from the contact areas) occasionally occur along the east coast of North America. Bird banders should be on the alert for these dark Merlins migrating along the Atlantic Flyway. Specimens from other collections should be reviewed and searched for overlooked vagrants identified as *columbarius*.

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