The Merlin (Falco columbarius) is a small circumboreal falcon with nine currently recognized subspecies, three of which occur in North America: the pale Prairie Merlin (F. c. richardsonii) of the northern Great Plains, the Black Merlin (F. c. suckleyi) of the Pacific Northwest, and the widespread and medium-hued Taiga Merlin (F. c. columbarius), the paler western component of which was once considered a fourth subspecies, F. c. bendirei (American Ornithologists' Union [AOU] 1957). Migration is highly variable, some birds being resident, others long-distance migrants (Palmer 1988); the winter range extends from southern coastal Alaska to Newfoundland (mostly in cities) across most of the U.S. to northern South America (AOU 1998). Taiga Merlins account for the majority of North American wintering birds outside of areas occupied by resident Prairie and Black Merlins. The featured photo on the back cover shows four female Merlins housed at the Natural History Museum of Los Angeles County (109178, 110767, 109383, 107885 left to right), each collected in southern California since 1993. The three left birds show predominantly suckleyi characters, yet all but 109838 were originally labeled F. c. columbarius, prompting this review. Some of the marks touched upon here may often be imperceptible under field conditions, but with patience, practice, and good fortune, observers may be surprised at the possibilities for close study; this may be particularly true of suckleyi, which often seems naive on its winter grounds (Schmitt pers. obs.).

All specimens of suckleyi are blackish brown above with heavy, dark streaking below. Adult males show a slaty cast to the upperparts (visible only under ideal circumstances) and are often perceptibly smaller than adult females (with experience or in direct comparison). Also, in comparison with female suckleyi, males tend to be more sparingly marked through the face, nape, and underparts, thus appearing more like columbarius. Adult females and young of suckleyi are extremely similar, with considerable overlap in color and markings. Adults’ uppertail coverts usually show heavy black shaft streaks and pale tipping, but the most consistent difference among adults is that, in suckleyi, the dark rachis nearly or completely divides the white tail tips (see the left two birds in the featured photo).

Adult males of columbarius are variably blue-gray above, while adult females and immatures are brown, often a warm tone but seldom matching the “dark chocolate” appearance of typical female/immature suckleyi. Adult females and immatures of columbarius are very similar, though the adults often show a grayer cast above, especially on the rump and uppertail coverts; and, as on adult suckleyi, their uppertail coverts have well-defined black shaft streaks and pale tips.

The underparts of most specimens of suckleyi are more dark than light, with a blush of rich buff across the breast that is fairly prominent when fresh. Bar components to the blackish brown streaking yield a blurry or motled appearance, and these bold breast markings together with mostly dark auriculars serve to accentuate the whitish throat, which is finely to moderately streaked. Breast streaking on columbarius is medium brown, often with a rufous cast in good light, and strongly marked individuals are about equally dark and light below. The throat of columbarius, though generally more lightly streaked than that of suckleyi, shows less contrast against the moderately streaked breast, paler buff wash across the upper breast, and paler auricular that is often darker toward the rear, with a faint or modest moustache mark;
thus, the throat of *columbarius* does not draw attention as does that of *suckleyi*. The throat contrast of *suckleyi* is a field mark particularly valued by hawk-watchers since it is visible from a considerable distance (Schmitt pers. obs.).

As shown by the second bird from the left, the sides and flanks of *suckleyi* are blackish brown, often with large white spots that yield a barred appearance; such marks are usually reduced and paler on *columbarius*. The leg feathers and undertail coverts of *suckleyi* normally have obvious dark shaft streaks or even teardrop markings, with partial bar components to the streaking of the distal two or three undertail coverts. Most specimens of *columbarius* have more narrowly streaked leg feathers and narrowly or unstreaked undertail coverts. These feather tracts are often obscured on perched birds but can be seen in the featured photo.

On *suckleyi*, whitish (to bluish) tail bands or spots are often limited to the inner webs, with any pale markings on the outer webs generally limited to spots near the rachis; as a result, these marks are usually visible on the ventral surface (see left three birds in featured photo), while the dorsal surface often appears uniformly dark unless the tail is spread. Though pale tail markings may be vague, we have never encountered a specimen completely lacking them. The subterminal dark tail band of *suckleyi*, like that of adult male *columbarius*, is significantly wider than the adjacent dark band, while these bands are of nearly equal width in female and young *columbarius*. Because of this difference, the undertail coverts of *suckleyi* normally cover all but two or three light bands in the folded tail, while those of *columbarius* allow three or four light bands to show. On some specimens of *columbarius* (and virtually all of *richardsonii*) the subterminal brown band is darker than those above it, a contrast lacking in the darker tail of *suckleyi*. As shown by the left two birds, the white rectrix tips of adult *suckleyi* are usually split by the dark rachis, while in *columbarius* and young *suckleyi* the tips are usually unbroken white, although the dark shaft streak may reach the end of the tail in some cases.

In flight, the wing-linings of *suckleyi* appear blackish with white spotting, rather than a more neutral "checkerboard" pattern in *columbarius*. Similarly, the remiges of *suckleyi* appear dark brown with buff spots or "dashes" toward their bases, while the flight feathers of *columbarius* show pale barring that extends to the tips. As one might imagine, these markings can be very difficult to perceive on a flying Merlin, but they can be useful with practice, concentration, and circumstance.

As touched upon previously, the auriculars of *suckleyi* are typically dark, setting off the whitish throat, and the crown is blackish. Strongly marked individuals often exhibit a strikingly "hooded" head pattern, with a thick moustachial mark that may evoke a diminutive Peregrine Falcon (*F. peregrinus*). Nominate *columbarius* normally has paler auriculars, and the crown is brown on females and immatures. Pale nuchal mottling, sometimes said to form a "false face" on the nape of *columbarius*, is greatly reduced or lacking on typical *suckleyi*. Finally, while especially dark *suckleyi* may nearly lack a pale supercilium, there seems to be overlap with *columbarius* in this respect (Schmitt pers. obs.).

It bears emphasizing that Merlins are variable, perhaps to the point where no migrating or wintering individual can be identified to subspecies with utter confidence. Not only do some individuals exhibit intermediate characters (e.g., Clarke and Wheeler 1987), but birds showing the "classic" features of a given subspecies may originate from well outside the known range implied by those features (cf. Snyder and Snyder 1991, p. 190, the sobering image of an exceedingly pale adult male Merlin photographed at a nest in Alaska). Therefore, while the information in this article should help observers to recognize and document Taiga and Black Merlins more confidently, we cannot even state with certainty that the specimens in the featured photo are correctly identified! Thus, we recommend prefacing such pronouncements with the phrase, "a Merlin showing the characteristics of..."
Our thanks go out to Jerry Ligouri for a cogent and timely review, and to Kimball L. Garrett of the Natural History Museum of Los Angeles County for his cheerful assistance with the specimens considered here.

LITERATURE CITED


WESTERN FIELD ORNITHOLOGISTS
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- Systematics, biogeography, and geographic variation of birds of the Pacific coast region, the North American interior, and the interface between the two
- New information on field identification problems relevant to the birds of western North America and the eastern Pacific Ocean
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(2) We expect to allot 20 minutes per oral presentation, which should include 5 minutes for questions and discussion; longer time slots (30 minutes) are negotiable.

(3) Posters should fit within a width of 6 feet.

(4) An abstract of your talk in the following format should be submitted no later than 15 June to Kimball Garrett at kgarrett@nhm.org or Section of Vertebrates, Natural History Museum of Los Angeles County, 900 Exposition Blvd., Los Angeles, CA 90007.

LAST NAME, FIRST NAME. Your affiliation (if any), complete mailing address, and (optional) e-mail address. Title of Your Talk. Brief (300-word maximum) summary of the goals, results, and conclusions of your study.

For more information about the meeting visit the WFO web site at www.wfo-cbrc.org or contact Bob Barnes, State Director Bird Conservation Programs, Audubon California, P. O. Box 953, Weldon, CA 93283; phone: 760-378-3044, fax: 760-378-4013, e-mail bbarnes@lightspeed.net. Kern River Preserve Web Site: http://frontpage.lightspeed.net/KRP.

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