

Back: None shows strongly contrasty shades, head to back to tail. Color is a brown-rust, a distinctively different color from the orange color of Browns.

Back/tail contrast: faintly visible in daylight on some specimens, but not obvious on any. The texture of the tail feathers differs from that of the back feathers, which may give a two-toned impression.

Wing bars: Variable

Under-tail coverts: White; both streaked and unstreaked.

Tail: Some slightly brighter than backs (see above) on the top. Underside gray.

No contrast except maybe between wing tips--Primaries--(gray) with tail.

All specimens were a warm orangey brown.

Variable

White; most unstreaked; some have streaks.

Same orange-brown as back and wings.

Underside shows a tinge of orange-brown.



Immature Female Pine Warbler, Boulder Colorado, December 15, 1992. Photo by Dave Leatherman.

PINE AND PALM WARBLERS IN BOULDER DURING 1992/1993 WINTER

Steven Feldstein
673 Walden Circle
Boulder, Colorado 80303

On the afternoon of November 20, 1992, in Boulder, a small olive-brown and yellow bird appeared outside my office window in a group of Scots pines. A snowstorm had just started, and I assumed this bird had come to these trees for both warmth and cover. As I was at work, I did not have my binoculars available and the bird was initially too distant to identify to species. However, the size, color, and behavior of the bird indicated to me that it was a warbler, and not a Yellow-rumped Warbler (*Dendroica coronata*), which is the only warbler that is expected in Colorado in late fall. After about one minute, the bird flew to a tree branch just 4 ft. from my window. It remained at that distance for about one minute. I could see its unstreaked, olive brown upperparts, dull white supercilium, two dull white wing bars, fairly bright yellow breast and sides also without any streaking, dull white belly, and uniformly black legs. These field marks enabled me to eliminate the possibility that this bird was either an immature Bay-breasted (*D. castanea*) or Blackpoll Warbler (*D. striata*), and to quickly identify the bird as a Pine Warbler (*Dendroica pinus*). Furthermore, the absence of streaking on its sides suggested that the bird was an immature male. After one minute of observation, the bird flew to a distant location. I immediately telephoned the Colorado Bird Report but assumed this bird was simply a late migrant and neither I nor any other birders would see it again.

Four days and two snowstorms later, I met several birders in the parking lot next to my office. Included in this group were Duane Nelson, Bill Prather, and Bill Kaempfer. They were all searching for the Pine Warbler which had been seen the previous day by John Prather. He found the bird along Boulder Creek about 400 yards from my office. However, on this day, none of us saw the bird.

The Pine Warbler then started to appear almost daily. Sometimes, it would come together with a Yellow-rumped "Myrtle" Warbler. The bird always showed up between 10:00 a.m. and noon, when my office window received direct sunlight. The warbler would usually slowly creep along branches of nearby trees and often appear to feed on something at the base of groups of needles in one Scots pine. The needles on this particular tree were much duller than those of the surrounding trees, and I assumed that it might be diseased. Although I could not see what the bird was eating, it was later suggested to me by Dave Leatherman that the Pine Warbler could be eating aphid eggs or scale insects.

By November 30, a bright sunny day, I had become accustomed to the daily presence of this Pine Warbler. It was on this day that another warbler showed up just outside my office window. I had initially assumed that I was again seeing the Pine Warbler, but its entirely yellow underparts, olive-brown upperparts with a slight rufous tinge to its crown, bright yellow supercilium, very faint wing bars, yellowish-green rump, and incessant tail wagging immediately indicated to me that I was looking at a different bird, a Palm Warbler of the eastern subspecies *Dendroica palmarum hypochrysea*. This bird rested on a branch of the dull Scots pine for about five minutes at a distance of 4 feet from my window.

For the next two weeks, I would see both warblers on most days. Sometimes the warblers came together and at other times separately. The Pine Warbler would feed and rest in the trees and the Palm Warbler would rest in the trees and feed on the ground. Furthermore, word of the presence of these two warblers spread, and every day I saw several birders looking for these birds. However, both warblers were tough for most people to find, and many birders had to make as many as five or six trips until both birds were seen.

On December 15, also a sunny day, a large group of birders had come to see the warblers. I joined this group in searching for the warblers. Eventually, we found a Pine Warbler and got to watch it perched in a tree just five or six feet away. Everyone thoroughly enjoyed watching this Pine Warbler at a distance too close to focus one's binoculars. However, I was a little troubled by this bird. It resembled the Pine Warbler that I had been seeing every day except that its underparts were entirely dull white. This indicated to me that we were looking at an immature female Pine Warbler. The likelihood of two Pine Warblers together in Colorado just a few days before the winter solstice just seemed too unlikely, and I started to wonder whether the Pine Warbler that I originally identified as a male, may indeed be this female. However, about two hours later I indicated myself, as a male and female Pine Warbler appeared together outside my office window, and they were perched side by side, only about three inches apart. This relaxed pair of warblers was then joined by the Palm Warbler which sat on a nearby branch preening itself. I enjoyed watching these three warblers together for about five minutes. Unfortunately, no other birders were present at this time.

All three warblers were subsequently seen on most days, including the Boulder Christmas Bird Count on Dec. 19. The Pine Warblers represented the second Boulder CBC record and the Palm Warbler the first Boulder CBC record.

Toward the end of December, the warblers were seen less frequently. On January 3, I saw the Palm Warbler for the last time. I continued to see both Pine Warblers about once every three or four days, and most of the time the two birds were together. Other birders found these birds at widely scattered locations, often as far as 400 yards away from my office along Boulder Creek, or even across Arapahoe Street at King Soopers feeding in a dumpster.

The last dates upon which I observed the male and female Pine Warblers were April 2 and April 12, respectively. I hope these two warblers will successfully migrate northeastward to their species breeding range. It will certainly be interesting to see if either of these two birds return to Boulder next winter.

Pine Warbler is listed as being casual in fall and accidental in winter by Andrews and Righter (1992). In Boulder County, there are 5 fall records and 1 winter record since 1982 (Alexander and Gillian Brown, private communication). The first specimen was collected in Boulder on Dec. 11, 1964 (Bailey and Niedrach, 1965). However, none of these references list any record of Pine Warblers spending the entire winter in Colorado.

Andrews and Righter (1992) list Palm Warbler as a rare fall migrant in Colorado and indicate no winter records for this species. In Boulder County, there are 4 fall records of Palm Warbler since 1982 (Alexander and Gillian Brown, private communication). A specimen for Palm Warbler does exist for Colorado (Bailey and Niedrach, 1965). Furthermore, Andrews and Righter state that there are only two sight records of bright yellow birds that most likely pertain to the eastern subspecies *d. p. hypochrysea*. Assuming that this bird is accepted by the C. F. O. Records Committee (as for the two Pine Warblers, extensive documentation

by the author and photographs by Dave Leatherman have been submitted), this bird will represent the first winter record of Palm Warbler in Colorado and the first fully documented individual of the eastern subspecies.

When one notes the large snowfall amounts and cold temperatures during the winter of 1992/1993 in Boulder, both the occurrence of these warblers and the overwintering of the two Pine Warblers is somewhat surprising. The following snowfall and temperature data was provided to me by Klaus Woller of the University of Colorado. The four months consisting of the period from November 1992 to February 1993 had the second lowest mean temperature for that time period this century. In addition, November 1992 had the second largest total snowfall for that month this century. Also, there was a persistent snow cover present from mid-November through mid-January. I assume that it is the diverse diet of Pine Warblers that allowed the two individuals to survive through this particularly rough winter. On the other hand, as Palm Warbler has a less varied diet, this individual may have indeed perished.

The occurrence of the eastern subspecies of the Palm Warbler in Colorado is quite interesting. According to Bent (1922), the migratory route of the two subspecies of Palm Warbler cross each other during migration. The eastern subspecies breeds in eastern Canada and winters along the Gulf coast of the U. S. and Mexico. However, the western subspecies *d. p. palmarum* breeds in central Canada and winters in Florida and the West Indies. Thus, it is rather surprising that the subspecies with the more distant wintering range from Colorado is by far the more likely one to be seen in Colorado.

Literature Cited

- Andrews, R. and R. Righter, 1992. Colorado Birds: A reference to their distribution and habitat. Denver Museum of Natural History, Denver, Colorado.
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Photo by Dave Leatherman.