

NEW YORK'S FIRST RECORD OF PACIFIC GOLDEN-PLOVER (*Pluvialis fulva*)

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On 1 Sep 2003, Jim Ash, Andrew Baldelli and I found a Pacific Golden-Plover (*Pluvialis fulva*) at Mecox Bay in eastern Suffolk Co. During the three hours that we observed the bird, we were able to secure several fairly good photographs, and take detailed notes confirming the identification. This marks the first time a Pacific Golden-Plover has been recorded in New York State.

The Sighting

Mecox Bay is a brackish estuary along the South Shore of Long Island. Along its southern side there is a temporal inlet, which is periodically opened by the local town government in response to high water levels. When the inlet is open, the bay is tidal and a large sand flat of 2-5 hectares occurs on the north end of the inlet. This flat is a spectacular spot to find migrant shorebirds from mid-July to late September. In late August and early September 2003, some 2000 to 4000 shorebirds used the sand flat. At least 30 species of shorebirds were seen from July through September 2003.

1 Sep 2003 (Labor Day) began as a cloudy morning and a steady drizzle developed by about 8:30 AM. We arrived at the flat at 7:30 AM. Around 8 AM I spotted an adult plover in transitional plumage, from breeding to winter, although the bird still had significant vestiges of its breeding plumage. At this point the plover was about 150 meters away, and I wrote it off as a dark Black-bellied Plover (*P. squatarola*). As we birded we got within 30m of the bird, and Baldelli found the plover again. At closer range the golden spangles on the back were obvious, ruling out Black-bellied Plover. Baldelli was immediately struck by the very short extension of the primaries beyond the tail, and urged us repeatedly to study all features in detail. As we examined the bird, we noted marks that seemed to be slightly different than those of the regularly occurring American Golden-Plover (*P. dominica*). Ash noticed its relatively long bill and I noted that the undertail coverts were an immaculate white. At one point the bird flushed briefly, and we could clearly see that the tail was uniformly grayish-brown (not white), and that the bird lacked a white wing-stripe. This observation allowed us to rule out European Golden-Plover (*P. apricaria*), which would show a wing-stripe. While we all felt that this bird might not be an American Golden-Plover, none of us was completely sure of the characters that we would have to observe in order to call the bird a Pacific Golden-Plover. We then returned to our cars to look at the field guides.

After looking at the guides, we felt convinced that the bird was a legitimate contender for being a Pacific Golden-Plover and that a more detailed study of the bird was warranted. We also realized that we needed more detailed information than was provided in Hayman et al.(1986),Chandler(1989)or Sibley

(2000), which we happened to be carrying that day. Ash had other commitments and could not return to the flat. Once Baldelli and I were back on the flat watching the bird, we called P.A. Buckley, Tom Burke, and Anthony Lauro. Buckley alerted us to the characters to examine. A while later after further observation, we also talked with Tom Burke and discussed the field marks observed. At this point, it became clear that the field marks we observed favored Pacific Golden-Plover and were beginning to believe that we had found New York's first Pacific Golden-Plover!!

We reached Lauro at about 8:30 AM and he arrived at Mecox at about 10 AM. He had brought with him Byrkjedal & Thompson (1998). We reviewed the field marks outlined in that book, and then got Lauro a look at the bird. Within a minute of observation he was convinced that the bird was a Pacific Golden-Plover. Unfortunately, the bird left the flat before a group of eight or so other birders who had been alerted, arrived at 2 pm.

The Field Marks

An extensive literature exists for separating the two species in the field, and much of what follows is derived from Byrkjedal & Thompson (1998). The primary structural characters that distinguish Pacific from American are long legs, a long bill, short primary extension beyond tail and tertials, long tertials, the number of primaries projecting beyond the tertials, and the relative amount of leg showing in flight, as well as the overall "jizz". In Pacific the bare part of the visible tibia is about 50-60% as long as the tarsus, whereas in American it is 40-45%. Pacific's tarsus is as long or longer than the bill. In the field, Pacific looks tall and its knee is almost mid-way between the body and the ground. In American, the relatively short tibia brings the knee closer to the body. In Pacific the length of the bill when projected backwards falls well behind the eye, whereas in American it usually falls within the eye. Pacific has a longer and stouter bill. Its primaries extend barely beyond the tail, while in American there is significant projection of the primaries beyond the tail. Pacific has relatively long tertials and this results in only 2-4 (on average 3) primaries projecting beyond them. In American, 4-6 primaries project beyond the tertials, with the typical number being 4. A consequence of this is that the extension of the primaries beyond the tertials is relatively short in Pacific and long in American. The tertials reach the outer third of the tail in Pacific, but only the inner fourth of the tail in American. Further, in Pacific the wing tip is formed by the two longest primaries, which are nearly equal in length, whereas in American the wing-tip is formed by a single primary. In the field, the structure of the primaries and tertials give Pacific a blunt tailed appearance, while American appears to have an attenuated, or more elongate rear end. The long legs also result in projection of the toes beyond the tail in flight in Pacific, but not at all or barely so in American. Finally, Pacific appears to have a relatively large head, a slender neck and a plump body, while American appears slender bodied, with a short neck and small head (Mullarney et al. 1999).

Pacific can be easily separated from American by voice. The alarms notes are different, with Pacific having a two-noted call ("tju-itt") accented on the second syllable (which is said to sound much like Spotted Redshank), and American having a curlew-like two-noted call ("tu-li"), accented on the first syllable. Away from the breeding grounds, this is the vocalization most likely to be heard. The flight display songs and "trilling" songs of each species also differ

Separating Pacific from American is thus based on both absolute characters (i.e., those with a definitive state), such as the backwards projection of the bill onto the face, or voice, and comparative characters, such as the size of the back spangles. Each character in the two species differs subtly and determination of them requires experience with at least one of the species. In addition within both populations there is significant variability in all of these characters. Thus, the identification of Pacific Golden-Plover must be made by observing a suite of characters. As I discuss below, the bird at Mecox Bay displayed most of the characters that are consistent with Pacific and not consistent with American. In no case did we observe even a single character that favored American, although some are compatible with both species.

Analysis of the Photos

Figures 1 and 2 show profile views of the Pacific Golden-Plover found at Mecox Bay on 1 Sep 2003. The photos clearly show the large bill, the long legs, and the robust body, which character caused my initial erroneous identification of the bird as a dark Black-bellied Plover. Crossley (2003) points out that Pacific has "Black-bellied Plover jizz at times." The photos allow us to rule out Black-bellied by the dorsal golden spangles (easily visible in the color photos). That species and European Golden-Plover can be ruled out by our brief observation of the bird in flight in which we could see the grayish tail and the lack of a wing stripe.

Both photos show the very short extension of the primaries beyond the tail. At the time, Ash and I estimated the extension to be 3mm. Figure 1 also shows the very long tertials and the very short extension of the primaries beyond them. Although they cannot be seen in the photo, in the field we counted 2 primaries visible beyond the tertials, as we were not able to discern the two longest primaries as separate. In other words, this bird actually had three primaries extending beyond the tertials. The blunt

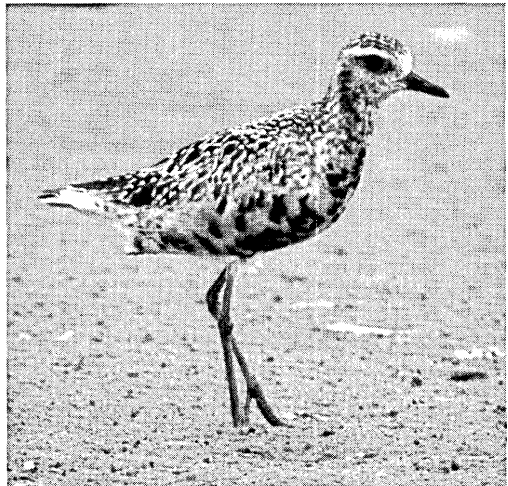


Figure 1 - Pacific Golden-Plover
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rear end of the Mecox Bay bird is also visible in the photos, especially Figure 2. In our brief observation of the bird in flight, we were unable to note if the toes extended beyond the tail. As for the overall appearance of the bird, it looks large bodied to me, but I'm not sure that I can claim that it is small headed or slender in the neck. In summary all of the structural characters that were observed indicated Pacific, and none of them favored American.



Figure 2 - Pacific Golden-Plover
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We did not hear the bird vocalize so only the plumage characters remain for discussion. It is difficult to assess the status of the flank stripe in the Mecox Bay bird since it was in a transitional plumage. However in Figure 2 a flank stripe can be imagined and the presence of gray feathers in the area is consistent with Pacific. Figure 2 shows the pure white undertail coverts. Although winter-plumaged American could show this mark, in my experience American in transition from breeding to winter plumage always show some remnants of the black feathering in the undertail coverts. In both photos the gray coverts produce

a pale patch on the folded wing. Both photos show that the black patch through the eye is paler and more diffuse than would be expected in American. The plumage characters of the Mecox Bay had states that indicate Pacific or are consistent with it. In summary, the both structural and plumage characters indicate that the Mecox Bay bird was a Pacific Golden-Plover. While there are a few character states that are consistent with both species, there are none that indicate American Golden-Plover. The two species are not known to hybridize.

Prior Occurrences and Distribution

There are three accepted prior records from the eastern United States, two in fall (both in the first half of September) and one in spring. A bird was shot at Scarborough, Maine on 11 Sep 1911 (Palmer 1949). The second record was of a bird in transitional plumage (from breeding to winter) in Cumberland and Salem counties (it flew back and forth), New Jersey from 4-16 Sep 2001 (Crossley 2002). The third record was from Plum Island, Massachusetts, 21 Apr to 5 May 2002 (Heil 2003). There is also a report of one from Delaware in late September or early October 2003, but I haven't seen any details on this sighting. In addition, Crossley (2002) reports three records from Greenland (all immatures), one from Bermuda and two from Barbados.

Pacific Golden-Plover is a rare but regular fall migrant, and a casual spring migrant in all the Pacific Coast states. It is a very rare, but annual, winter visitor in California. Away from the coast there are several records for inland California, inland Washington, Alberta, Idaho, Nevada and Arizona (P. Lehman, pers. comm.). In western Europe it is a casual vagrant in fall (Jonsson 1993, Mullarney et al. 1999)

The Pacific Golden- Plover is a long distance migrant that breeds on the tundra of eastern Siberia and western Alaska. It nests along northern coastal Siberia from the Yamal Peninsula (70 degrees East) eastwards to far western Alaska. In Alaska it can be found nesting from Point Hope south through the Seward Peninsula to Kuskokwim Bay where it is sympatric with breeding American Golden-Plover (Byrkjedal & Thompson 1998). Pacific winters from the horn of Africa east to eastern Oceania, and there is also a small group that winters in California annually. The primary wintering areas are the eastern Indian coast, Bangladesh, southeast Asia, eastern Australia and Oceania (Byrkjedal & Thompson 1998). Thus it is not unexpected that a few Pacifics might get mixed in with flocks of Americans and head south with them, and they might be likely to turn up anywhere in North America. The fact that three of the records have occurred since 2000 may be a function of the rise in popularity of digiscoping and the availability of detailed information that is applicable in the field. It was not long ago that Pacific Golden-Plover and American Golden-Plover were considered very difficult to separate even in the museum drawer.

Until recently, both were considered races of a single species *P. dominica*. Connors and his associates have demonstrated that in the area of sympatry in western Alaska both occupy different habitats even when their territories are adjacent (Pacific prefers wetter tundra, American drier sites). In addition, they have behavioral mechanisms (mainly in the form and use of flight songs and calls) that prevent interbreeding. Indeed no instances of mixed pairings were observed in Alaska, despite the proximity of nesting pairs to each other (Connors et al. 1993). When two populations are sympatric and do not interbreed, they must be valid species. Thus by the early 1990s, Pacific Golden-Plover was accorded species status by the AOU. The use of wetter tundra and shoreline habitats by Pacific has apparently affected its evolution, and has given rise to several of the structural differences that are used as field marks for separating the two species. Pacific's longer legs and longer bill would have obvious selective advantage in littoral habitats.

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Literature Cited

- Byrkjedal, Ingvar & D.B.A. Thompson. 1998. *Tundra Plovers: The Eurasian, Pacific and American Golden Plovers and Grey Plover*. T&AD Poyser, London 422 pp.
- Chandler, Richard J. 1989. *North Atlantic Shorebirds*. Facts on File, New York. 208 pp.
- Connors, P.G., B.J. McCaffery & J.L. Maron. 1993. Speciation in Golden Plovers, *Pluvialis dominica* and *P. fulva*: Evidence from the Breeding Grounds. *Auk* 110:9-20.
- Crossley, Richard. 2002. New Jersey's First Pacific Golden-Plover. *Records of New Jersey Birds* 28(3):57-60
- Hayman, Peter, John Marchant & Tony Prater. 1986. *Shorebirds: An Identification Guide*. Houghton Mifflin Company, Boston 412 pp
- Heil, Richard S. 2003. Three New Species for Massachusetts from Plum Island in 2001-2002. *Bird Observer* 31(2)
- Jonsson, Lars. 1993. *Birds of Europe with North Africa and the Middle East*. Princeton University Press, Princeton, NJ. 559 pp
- Mullarney, Killian, Lars Svensson, Dan Zetterstrom & Peter J. Grant. 1999. *Birds of Europe*. Princeton University Press, Princeton, NJ 402 pp.
- Palmer, R. 1949. Maine Birds. *Bulletin of the Museum of Comparative Zoology* 102:1-656.
- Sibley, David Allen. 2000. *The Sibley Guide to Birds*. Alfred A. Knopf, New York 544 pp.

