WESTERN BIRDS



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PELAGIC BIRDS OF MONTEREY BAY, CALIFORNIA

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Monterey Bay is one of the best and most accessible localities in the world to observe a large variety of seabirds. At any time of year many species of pelagic birds and mammals may be seen. The annual passing of migrants, the inclusive periods of residency of wintering animals and their favored haunts on the bay have now been studied adequately enough that we may generalize them in print.

In cases where descriptions in popular field guides are incomplete or inaccurate, a piece on identification at sea is included in the following annotated list of selected bird species.

THE BAY

Monterey Bay is ideal for pelagic bird trips for several outstanding reasons:

- 1) The edge of the continental shelf is very close to shore at this point, bringing deep-water species in and cutting down boat commuting time to truly oceanic waters.
- 2) The Monterey Submarine Canyon, the main underwater geographical feature, is very deep and upwellings caused by strong northwest winds at both rims are attractive to seabirds, particularly storm-petrels.
- 3) The bay itself is half-moon shaped and relatively sheltered.
- 4) The bay is situated far enough south to appeal to warm water species and far enough north to appeal to cold water species.
- 5) The weather is stable enough to allow year-round trips. Though the water may be quite rough at times, we have never witnessed a trip on a larger boat canceled for that reason.

ACCESS

There are many boats for charter from Fisherman's Wharf in Monterey and a few at Santa Cruz and Moss Landing. All are relatively small (fewer than 50 passengers) and none have galleys. Western Field Ornithologists, many local Audubon chapters and other nature oriented

groups schedule regular trips which are advertised in their newsletters and journals. The average cost is between 12 and 15 dollars and, at that, still a bargain. Because the trips are very popular they are filled on a first come, first served basis and most also have waiting lists.

Often during the tourist season and on weekends short, inexpensive (\$3-5) sight-seeing or whale-watching tours are run from Fisherman's Wharf, Monterey. Check the charter offices near the end of the pier for schedules. No reservations are necessary. These trips can be very productive for birders.

Bring food, drinks and warm and waterproof clothes. Afternoons may be warm, so be adaptable.

SEASONS

Autumn (early August to mid-November) is by far the best for numbers and variety of seabirds. During this time, at least in the last five years, there have been five or more birding boat trips per year, vastly more than at any other season. Consequently most of our information refers to fall.

Winter is very good for seeing large numbers of alcids, Black-legged Kittiwakes and Northern Fulmars and is perhaps the best season for Fork-tailed Storm-Petrel and Short-tailed Shearwater.

Spring is good for variety (though always less than fall) and for seeing the birds in high plumage.

Summer is poorly known but is the best season to see large numbers of Black-footed Albatrosses.

AUTUMN TRIPS

The best way to proceed (and we have tried many) is to leave Monterey harbor as early as the boat operators will go (0800 or 0900) and parallel the Pacific Grove shore (checking for Thick-billed Murres among the Commons and looking at terns, grebes, scoters, Sea Otters and sea lions) until reaching Point Pinos. Often by this time the skipper will have heard from fishing boats that "the birds" are slightly south and you may wish to detour briefly toward Carmel Bay. If not, go straight out 5-15 km or more, then cut north toward Santa Cruz to the Monterey Submarine Canyon. Turn east (toward the large concrete smoke stacks at Moss Landing) along the canyon's south or north rim, looking for rafting storm-petrels. Then, as time permits, meander back south in the bay to the harbor. By going this way the boat will never be heading directly into the sun, you are in the heaviest bird concentrations early and later the storm-petrels tend to raft in larger numbers. Always deviate from course to head for feeding flocks and do not be too anxious to get far offshore as birding is often very bleak there. When approaching birds on the water, get the skipper to maneuver the boat so that it

is between the sun and the bird for good lighting and so that the boat is broadside to the bird to allow everyone a good view. The tendency is to head straight for the animal and then only those on the bow can see it.

SPECIES ACCOUNTS

PROCELLARIFORMES

LAYSAN ALBATROSS, Diomedea immutabilis. There are at least five records for the Monterey Bay area, all between 29 November and 27 May. All are recent.

Field identification: The bird is mostly white below, has entirely dark gray-brown upper surface of wings and back and has a yellowish-pink bill and pink legs and feet. The white rump is set off by dark rectrices. Laysan is the same bulk as Black-footed Albatross and averages slightly larger in wingspread.

BLACK-FOOTED ALBATROSS, D. nigripes. Numbers vary year to year depending upon water temperature and thus, food availability. Chances of seeing one or more near the continental shelf or above the Monterey Submarine Canyon are very good from May to mid-September and marginal at other times. Large numbers have been found consistently in June and July and over 100 individuals have been found together on more than one occasion, usually at active fishing trawlers.

Field identification: Mostly uniform dark brown with some white in primary shafts, on the feathers at the base of the bill, and on under and sometimes upper tail coverts. Very old birds may become extremely pale on the belly and underwings. Bill, legs and feet are always black. Immature Short-tailed Albatross has a pale bill, legs and feet and is more uniform brown.



Black-footed Albatross (Diomedea nigripes). Off Eureka, California, 6 May 1973.

Photo by John Luther.

SHORT-TAILED ALBATROSS, *D. albatrus*. Formerly very common near shore in central California. Now nearly extinct due to destruction of breeding colonies in the Bonin Islands, 600 km south of Japan. It was last seen in California waters in February 1946. Because the species is now a Japanese national monument, is rigidly protected and slowly increasing and because Monterey Bay is well within the species' traditional range, it seems likely that someday it will be seen here again.

Field identification: Adults are similar to the Laysan Albatross but have white backs and may be washed with buff. Immatures are all uniform dark chocolate brown, but have pink bills, legs and feet. Short-taileds are distinctly larger than our other two albatross species.

KEY TO THE REGULAR SHEARWATERS

- I. If belly white see A
- II. If belly dark see B
 - A. 1. Large, slow wing beat, uniform gray-brown above, light pink base bill and pink feet, mottled gray-white underwings...
 ... Pink-footed Shearwater
 - Medium size, black cap, gray back, sharply contrasting black and gray wings, underwings bright white narrowly bordered with black, bill dark... ... Buller's Shearwater
 - 3. Small, uniform dark above and light below (except broad trailing edge of underwings and vent dark), fast wingbeats, bill dark...
 - B. 1. Large size, slow wingbeats, all dark above and below except light based bill and pink feet...
 - ...Flesh-footed Shearwater
 - Medium size, all dark blackish-brown above and below including bill and feet excepting silvery white lining on the dark underwing, usually ignores boats...
 - ...Sooty Shearwater
 - Medium size, generally short bill, uniform dark sooty-gray brown all over except for evenly smoke colored or brownish underwings, usually attracted by boats...
 - ...Short-tailed Shearwater

Exception: Northern Fulmar—a medium sized procellariform of variable plumage (dark, light, intermediate and mottled) that can be told from all others by its thick neck and rounded head, yellow bill (quite dark in darkest phased birds), rounded wing tips and, in all but the darkest plumages, light patches in the outer wing.

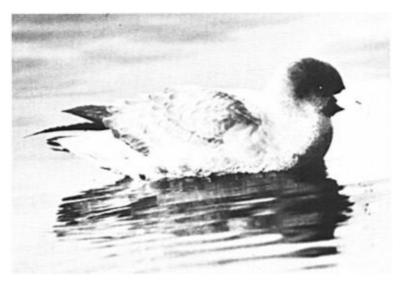
NORTHERN FULMAR, Fulmarus glacialis. First appears offshore in late September and quickly increases in numbers to a peak in mid-November. There are one 10 June and one oversummer records. The summering bird was not healthy. A few always overwinter but some years they are abundant and can be seen eating scraps of fish with gulls at harbors and flying nearshore from coastal points.

Field identification: Highly variable in plumage (light, dark, intermediate and mottled). See key to the shearwaters. White shafted primaries in all but the darkest phase appear as a white flash on the upper surface of the wing. Dark birds are usually more common by 8 or 9 to 1 but in winter of 1973-74 dark and light were equally common and in 1974-75 light birds were more common than dark.



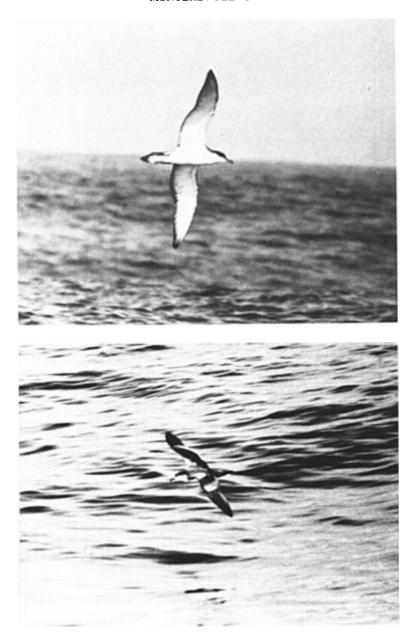
Pink-footed Shearwater (Puffinus creatopus). Monterey Bay, fall 1976.

Photo by Bruce Sorrie



Northern Fulmar (Fulmarus glacialis). Monterey Bay, November 1973.

Photo by Bruce Elliott



Buller's Shearwaters (Puffinus bulleri). Monterey Bay, October 1974.

Photos by Bruce Elliott

PINK-FOOTED SHEARWATER, Puffinus creatopus.

Fall-Guaranteed. Usually the second commonest shearwater after Sooty. Numbers drop abruptly in late October and early November.

Winter-Irregular; probably not present every year and when present, numbers are small.

Spring—Begins to reappear near the end of March and is then present in small numbers until late July when the fall influx begins.

Field identification: Large, relatively slow flying, uniformly gray above and white below. Underwing linings imperfectly white, flight feathers dark. Feet pink, bill pink based and black tipped. Solitary or gregarious but seldom in homogeneous flocks with its own kind. On the water see white throat and chest, pink based bill and uniform gray upperparts.

BULLER'S SHEARWATER, P. bulleri (also New Zealand, Gray-backed Shearwater).

Fall—Normally only occurs in California waters in the fall from late June through November with a probable peak during the first week of October, but there are two recent winter records. On some trips seen in hundreds but most often from 10 to 70 individuals. Seems to be increasing in numbers.

Field identification: A really striking bird to which no field guide has done justice. Immaculately white below narrowly margined on underside of wings by black. Above, distinctly black capped, gray backed and with an obvious dark on gray extended "W" pattern on upper wing surfaces. On the water see black cap distinct from very white throat and chest (as in Manx), evenly gray back. While flying at ease, Buller's tend to arc more frequently than do Pink-foreds and they do not beat the wings nearly as quickly or as often as Manx. Homogeneous flocks are sometimes encountered and their synchronized flight is beautifully graceful.

MANX SHEARWATER, P. puffinus (including Black-vented Shearwater).

Fall-Irregularly reported in August and September; most records are from mid-October to late November.

Winter—There are a very few winter records, indicating the species is irregular then in tiny numbers.

Spring—The three records for early May suggest a possible small but regular passage then.

Field identification: Uniform dark blackish-brown above and entirely white below except for flight feathers and wing leading-edge margin and in this, the "Black-vented" race, a dark crissum. Very small, fast flying. Manx Shearwaters favor shallow water and are probably as often seen from shore as from ocean going vessels.

SOOTY SHEARWATER, P. griseus.

Fall—Flocks of literally millions pass near-shore from mid-July through August and the species may still be considered abundant here through mid-November.

Other seasons—Sooty Shearwaters are always present in varying numbers in California waters and it would be a unique experience to bird a day on Monterey Bay without seeing any. Mid-winter is the lowest ebb.

Field identification: Medium size, uniform gray-brown with silvery underwing linings and blackish flight feathers (see Short-tailed Shearwater). Birds molting flight feathers often appear to have white wing patches and we have seen symmetrically partial-albino individuals on more than one occasion. See Cape Petrel.

SHORT-TAILED SHEARWATER, P. tenuirostris (formerly Slender-billed Shearwater). The status of this species has changed in the last century in California waters. Formerly considered common near shore, our recent records indicate that it is at best uncommon. It is most often seen in mid-winter. Very difficult to identify.

Fall-Rarely reported before mid-November.

Other seasons—Occasionally seen from November through February; records from spring, summer and early fall are questionable.

Field identification: Slightly smaller than the very similar Sooty Shearwater but underwings uniform smoke or brownish-gray (not merely lined with silverwhite as in Sooty) but not black as in some descriptions. Body color is subtly less dark (blackish-brown) than in Sooty and is more gray-brown. At close range the bill averages smaller than the Sooty Shearwater's in length and less so in bulk. Seen in flight the tail is noticeably shorter. Short-taileds often show interest in boats, whereas Sooties seldom do.

FLESH-FOOTED SHEARWATER, P. carneipes (formerly Pale-footed Shearwater).

Fall-Earliest record 8 August and latest 1 December. Rare but regular on Monterey Bay and never more than one or two per trip, if any.

Other seasons—Two records for May indicate irregular spring passage in tiny numbers. One 21 February and one 13 March records suggest rare wintering. There are no records between 28 May and 8 August.

Field identification: Large with proportions, behavior and style of flight very similar to that of the Pink-footed Shearwater (some authorities believe that the two are conspecific). Mostly very dark throughout but with pale (whitish or pinkish) based, black tipped bill and light colored legs and feet which can best be seen as the bird is water-running to gain flight. On the water note slightly larger size than Sooty Shearwater and obvious light based bill. First year Heermann's Gulls are similarly dark blackish-brown throughout, have pink based, black tipped bills but are smaller, have black legs and feet, fly bouyantly and are obviously gulls, not shearwaters.



Flesh-footed Shearwater (Puffinus carneipes). Monterey Bay, 5 October 1973.

Photo by John Luther

STREAKED SHEARWATER, Calonectris leucomelas (formerly White-faced Shearwater). A single individual was collected from a mixed flock of shearwaters on 3 October 1975 on Monterey Bay. It is the only record for the northeast Pacific.

Field identification: Nearly as large as a Pink-footed Shearwater. Face, neck and closed wings with distinct black streaks. Mostly brown above including tail. Bill yellowish, legs and feet pinkish.

Range-Breeds and winters strictly in the western Pacific but is highly migratory there. This bird was truly out of range but the species may well occur again in California waters.

CAPE PETREL, Daption capensis. Exceedingly rare. One shot "off Monterey" before 1853 is questionable. Two recent sight records are for 9 September 1962 and 13 March 1974.

Field identification: The striking black, white and checkered pattern of this bird make it seemingly unmistakable; however, it is not dissimilar to some mottled Northern Fulmars and we have seen symmetrically partial albinistic Sooty Shearwaters which looked surprisingly like this species.

FORK-TAILED STORM-PETREL, Oceanodroma furcata. Another species which seems to fluctuate in numbers according to water temperature patterns, preferring cold conditions. Some years almost common.

Fall—Recently but one or two have occasionally been seen in the great flocks of Black and Ashy storm-petrels above the Monterey Submarine Canyon or near Point Pinos.

Other seasons—In optimum years (none in the last ten), Fork-taileds may be seen near shore during any season except summer. Recently however, the few records away from fall have been for mid-winter and most of these, blown near-shore by northwest gales.

Field identification: This is the only uniform light gray North Pacific stormpetrel but phalaropes (especially Red) and other shorebirds at sea may be problematical. Storm-petrels have bouyant, pumping flight (not labored and hurried as do shorebirds) and appear blunt headed and long tailed.

LEACH'S STORM-PETREL, O. leucorboa. Very rarely encountered near Monterey; the few recent records are near the edge and beyond the continental shelf, except for individuals blown to shore by northwest gales. A preference for more offshore, deeper water is indicated.

Seasons-All of the records for Monterey Bay are for October and November. A rather common breeder on the Farallon Islands.

Field identification: Only white-rumped individuals have thus far been detected off northern California (a dark rumped form occurs off southern California). The white rump patch is actually partially divided by a dark bar and appears smudgy, not bright white. The smudgy white rump, dark brown plumage, notched tail (hard to see), dark underwings and rather erratic, nighthawk-like flight as well as the large size (only slightly smaller than a Black) and relatively long wings, bent or bowed will identify this species.

GALAPAGOS STORM-PETREL, O. tethys kelsalli. An individual of this, the southern, Peruvian race was taken alive at Carmel on 21 January 1969, after five days of southerly gales. It was the first North American record for this race and the first U.S. record for the species. It is unlikely that this bird will ever be encountered on a Monterey pelagic trip.

Field identification: Small and quite black with a square or very slightly notched tail and long, triangular white rump patch. From Leach's: it is much



Black Storm-Petrel (Oceanodroma melania). Monterey Bay, September 1974.

smaller and darker with relatively much shorter wings and a triangular bright white rump patch. From Wilson's: somewhat smaller with black feet, a triangular white rump patch and deliberate flight.

WILSON'S STORM-PETREL, Oceanites oceanicus. One to three individuals have been found by fortunate birders on trips from September to November for the last six years associated with the great storm-petrel flocks over the submarine canyon. There are probably more records for Monterey Bay than for the entire rest of the North Pacific.

Field identification: Medium sized and quite black with a bright white rump patch, rounded tail, yellow foot webbing (hard to see) and fluttery, dangly flight and behavior identify this bird. It is very long-legged and when flying directly the feet usually extend slightly beyond the tail tips but rarely are carried reflexed forward (Will Russell pers. comm.). Though very rare, it is the most likely white-rumped storm-petrel to be seen inside Monterey Bay during periods of calm wind.

LEAST STORM-PETREL, *Halocyptena microsoma*. Very rare and only present in years of warm water. Has only been found in 1969, 1972, 1974 and 1976 and only from September to late October. Most times that this species is correctly identified extralimitally (as in Monterey Bay) it has been by observers who have become familiar with the bird where it is more common.

Field identification: The smallest storm-petrel, all dark with a wedge-shaped tail. Contrary to what other authors have suggested, the tail appears relatively short, not long. Flight is fairly direct with rather deep wingbeats, similar to those of the Black Storm-Petrel, but more rapid.

ASHY STORM-PETREL, Oceanodroma homochroa. Abundant at diurnal roosts 3-10 km off Moss Landing above the rims of the Monterey Submarine Canyon from August through November. In the fall, individuals are occasionally seen during morning hours flying toward the roost from other sectors of the bay.

Other seasons—Occasionally seen winter and spring especially in-bay during northwest gales. A common breeder on the Farallon Islands.

Field identification: All dark with lighter wing linings and a notched tail. Medium size with wingbeat rhythm between that of Black and Least storm-petrels but more shallow. The wings are raised only to and not above horizontal before the down-stroke. Familiarity with these three is the best way to tell them apart. It is often more of impression than detail.

BLACK STORM-PETREL, O. melania. Common in autumns of warm water and uncommon in others. The earliest date is 8 August 1974. Sometimes nearly as numerous as the Ashy Storm-Petrel with which it shares the same habits and distribution on Monterey Bay.

Other seasons-Does not occur in winter, spring or early summer.

Field identification: Large and dark with dark underwings and a slightly notched tail. Flight is deliberate and wingbeats are fairly deep and spaced reminiscent of the flight of a Black Tern. Unlike the Ashy Storm-Petrel, the wings are raised definitely above the horizontal before each down-stroke.

PELICANIFORMES

RED-BILLED TROPICBIRD, *Phaethon aethereus*. There are two records, 29 June 1973 and 14 July 1970, both of adult birds.

Field identification: Flight rapid like an accelerating Rock Dove. From below see dark inner secondaries. From above see black speckled back and inner wings. White-tailed Tropicbird, which has definitely occurred once in southern California, has white inner secondaries from below and solid black bars on the wings from above.

MAGNIFICENT FRIGATEBIRD, Fregata magnificens. There are several records for the fall between 15 July and 20 October. It is at best a rare and irregular species and most observations are from shore.

Field identification: See any good field guide but do not assume that any frigatebird is a Magnificent. Check them carefully. The rusty coloration on the breast and head of the immature Great Frigatebird (F. minor) may be conspicuous or it may be restricted to just a few feathers and hence visible only at close range (Alan Craig pers. comm.).

DOUBLE-CRESTED CORMORANT, *Phalacrocorax auritus*. Very rarely seen along the Pacific Grove shore or on boat trips in the southern part of the bay. Occasionally seen nearshore from Santa Cruz to Moss Landing. Most often found in fall and winter.

Field identification: A large cormorant with a distinct orange or yellow gular pouch and in the immature often with a mostly yellow-orange bill. Immatures are light brown above and often very whitish below. In flight, the head is clearly distinct from the neck and the neck itself is carried crooked at all times (Figure 1).

BRANDT'S CORMORANT, P. penicillatus. Common on rocks along the Pacific Grove shore and very common on Monterey Bay feeding in mixed flocks on surface fish or flying in small to large flocks very close to the water. A common breeder at Point Lobos and abundant in winter probably due to influx from Farallon Island populations. Present throughout the year.

Field identification: A large cormorant. Breeding adults with an incredible sky-blue and pale yellow gular pouch. In other plumages and at some distance the gular pouch appears tan (sometimes yellow but never as bright as that of the Double-crested in any condition). Immatures are dark brown to blackish above and slightly paler below, lightest on the chest. In flight the head is distinct from the neck. The neck is carried straight during normal commuting flight (Figure 1), but is sometimes crooked when individuals look at some attraction like a boat or a feeding bird flock.

PELAGIC CORMORANT, P. pelagicus. Always present but never as common as Brandt's along the Pacific Grove shore and in Monterey Bay. Breeds in small numbers at Point Lobos on cliff faces away from the large Brandt's colonies.

Field identification: A relatively small cormorant. The red gular pouch of spring birds is difficult to see but adults in vernal plumage have obvious white oval flank patches on each side of the rump. Immatures are nearly uniform dark brown unlike the two larger species which show pale areas on the underparts. The iridescence of adults is consistently and beautifully green. In flight the head and neck are always straight and seem virtually to taper to a point. There is little apparent head (Figure 1).

BLUE-FOOTED BOOBY, Sula nebouxii. One adult and three immatures were seen from Lover's Point on 16 October 1971 and two immatures were there the next day. Blue-footed Boobies staged a major invasion into southern California that year. See the list of reasonably possible species below.

CHARADRIIFORMES

RED PHALAROPE, Phalaropus fulicarius. The seasonal status of this invasionary bird is quite variable. There are always a few present on the bay from late September to late November, and from late April through May. Some autumns, however, (about four in ten) many thousands appear and during these invasions the species may be present from as early as mid-August with individuals lingering throughout the winter.

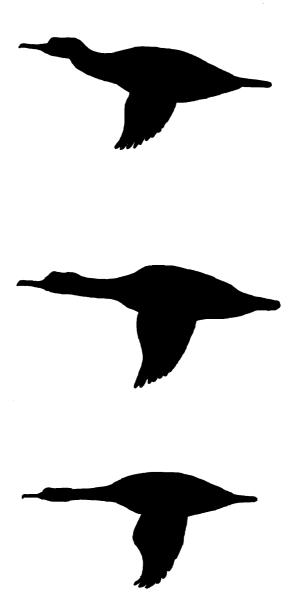


Figure 1. The identifying characters of cormorants in flight. Above, the Double-crested, demonstrating its large bill and head and crooked neck. Middle, the Brandt's, with its large bill and head and straight neck (see text). Below, the Pelagic, a smaller bird with a slim neck and bill, and very little apparent head.

Field identification: Generally chunkier than the Northern Phalarope with a distinctly bigger head, shorter, thicker neck and shorter, stouter bill. The body is more robust and circular. In fall the back is uniform pale gray, darkest on the hindneck, and the dark eyestripe may be very nearly lacking. With its bold white wingstripe, the flying fall Red Phalarope strongly suggests a Sanderling. Contrary to popular opinion the bill color of most individuals in the fall is black, not yellow. The basic call note is a "pik" similar to but louder than that of the Northern Phalarope; however, a short, high trill is sometimes given, particularly in the spring. Breeding plumaged birds can hardly be mistaken.

NORTHERN PHALAROPE, Lobipes lobatus. Generally earlier and more regular than the Red Phalarope. The species is present from late July through September and from early April to early May, sometimes in large numbers. There are only three winter records, all onshore.

Field identification: Thinner in all respects than Red Phalarope. The head is smaller, the neck longer and more slim and the bill narrower and more sharply pointed. The back is generally darker gray to black and most often contains light stripes, but winter plumaged adults can be surprisingly light gray with indistinct stripes. The blackish crown, hindneck and eyestripe are much more evident in this than in the Red. The basic calls are a detached series of "pik" notes, similar to but flatter than those of the Red.

JAEGERS. To identify immature jaegers, some comparative experience is mandatory.

LONG-TAILED JAEGER, Stercorarius longicaudus. Records extend from 30 August into late October but the species is very rare here and is not identified each year. They may be more common farther seaward with flocks of Arctic Terns.

Field identification: Adults with their extremely long, flexible pointed tail feathers, clearly isolated black cap and immaculate white chests are easy. Immatures are usually not safely identifiable from Parasitics or even from Pomarines but they do fly more gracefully, even ternlike, are more uniform gray and have three or less white shafted primaries. The undersurface of the wings are beautifully and evenly marbled and the flanks are often barred vertically with wide, dark stripes. The bill is quite small but so are those of some Parasitics.

PARASITIC JAEGER, S. parasiticus. Occurs regularly from late July through mid-November with a probable peak in mid-September. A few are usually seen on pelagic trips during this time generally within a kilometer or two of shore. Often seen from shore between Pt. Pinos and Monterey Harbor.

Other seasons—There are a few scattered records from December into April and only two between early May and early July.

Field identification: No obvious sexual dimorphism but many phases. May be confused with Pomarine (see below) or Long-tailed (see above) jaegers. Adults with elongated central tail feathers are easy but be aware that Long-tailed Jaegers can have short (broken or growing) tail feathers. Parasitics have generally smaller heads and bills than Pomarines and only 3 to 5 white shafted primaries. At ease flight is like a medium sized gull.

POMARINE JAEGER, S. pomarinus. More common than Parasitic Jaeger except perhaps very near the Pacific Grove shoreline. As many as 40 have been seen on trips during late September and early October.

Other seasons—A few linger through the winter and there is some passage from early April into the first week of May. From mid-May to mid-July (when the first fall returnees arrive) there are very few acceptable records.



Pomarine Jaeger (Stercorarius pomarinus). Monterey Bay, fall 1976.

Photo by Bruce Sorrie



Parasitic Jaeger (Stercorarius parasiticus). Monterey Bay, fall 1976.

Photo by Bruce Sorrie

Field identification: Adults with full tails are easy and obvious. Immatures may be mistaken for Skuas or Parasitic Jaegers. After seeing many of both, one can sometimes tell Pomarines from Parasitics by the "pom's" larger proportions (frame, bill, head, neck) more primaries with white shafts (5 to 8 versus 3 to 5) and their rhythm and "weight" of flight (normal, at ease flight only) resembling a Herring Gull for Pomarine and a Heermann's Gull for Parasitic. See Skua.

SKUA, Catharacta skua. Skuas have been seen on Monterey Bay every fall since 1962 and as many as 10 have been reported by some fortunate observers there. The species is missed, however, more times than it is seen and can never be guaranteed. Fall records run from late July through October.

Other seasons-There is one record each for March, April, May and June.

Note: Some authorities recognize five species of Skua and most (outside the United States) recognize at least three. All of the live birds we have been able to specifically identify have definitely been the South Polar Skua, C. maccormicki, and there is no published acceptable record of any other form from the northeast Pacific.

The bird is similar to the Great Skua and similarly, immatures are chocolate brown. Adults, however, are brown with gold and yellow hackles not gray-brown uniformly like adult Great Skua. Of the other three Skuas there is a really big blackish one, a dull brown one and a ferruginous colored one. *Maccormicki* has the shortest, stubbiest bill of all. If possible photographs should be taken of all Skuas, as some of the other forms may well occur here.

Field identification: Dark, immature Pomarine Jaegers are often mistaken for Skuas but when there really is a Skua, seldom if ever is the reverse true. They are big, very dark with very prominent white wing patches on both upper and lower wing surfaces. The wings are super broad and more rounded (less pointed) than those of the jaegers. The tail is rather short. Skuas have thick "wrestler" necks and like jaegers are usually stirring up a lot of trouble.

BLACK-LEGGED KITTIWAKE, Rissa tridactyla. Invasionary. Occurs in varying numbers from very late August into May and occasionally May to August following flight years.

Field identification: The books are adequate but most fail to mention that this species has a more rounded wing appearance and faster, stiffer wingbeat than other gulls of this size.

Note: Black-legged Kittiwakes with pink or reddish legs do occur.

SABINE'S GULL, *Xema sabini*. Always uncommon but a few are seen annually in fall, late August to late October, and in spring, mid-April to mid-May. There is one winter record.

Field identification: With any decent view, this striking bird is obvious and there should be no problem. Be aware that Bonaparte's Gulls, which most resemble its flying manner, and hatching-year Black-legged Kittiwakes, which most resemble its plumage, are both more common in the bay.

ARCTIC TERN, Sterna paradisaea. Uncommon but regular mid-August to mid-October usually well offshore. Very rare nearshore in spring and all of the few records then are from late April to 10 June.

COMMON TERN, S. birundo. Fairly common from late July through early November and from mid-April through May. Often seen inside Monterey Bay as well as far offshore where it is occasionally encountered in mixed flocks with Arctic Terns.

FORSTER'S TERN, S. forsteri. Present throughout the year with strongest passage in April and May and from early August through October. A very few

are present in winter and it is the only tern likely to be seen then. Forster's are seldom seen more than a few hundred meters from shore but there are two April records of the species several kilometers northwest of Point Pinos.

Field identification of Sterna terns: The identification of immatures and many times adults is difficult and sometimes impossible under less than optimum viewing conditions. Field guides disagree and popular concensus is usually inaccurate concerning certain identification clues for these fine birds.

The following is a summary of bird guide descriptions, personal observations and various other printed materials, notably an account by Jean-Pierre Vande Weghe translated and reprinted from Aves, with an addendum to include Forster's Tern (California Birds 1:29-36, 1970).

Forster's Tern is the most different of these three similar species, so let us look at it contrasted against Common and Arctic terns, alternately coined "commic" terns (Figure 2).

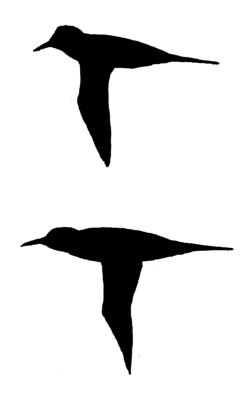


Figure 2. Above, silhouette of Arctic Tern, demonstrating its short front end, small slightly decurved bill and rounded head. Below, Common or Forster's Tern, showing its long front end, longer, thicker bill and flatter head.

FORSTER'S

- Adult mantle pale gray, tail pale grayish yielding little contrast on upperparts (not valid in immatures).
- 2) Adult distinctly white outer web to outer tail feather (tail grayish).
- 3) Adult primaries lighter than mantle above and uniform light from below.
- 4) Winter and immature with black eyepatch to rear of eye only rarely connecting on nape. Like a party mask.
- 5) Immature with light leading edge to inner wing (no mark).
- Immature with buff edges to back feathers and black tips to outer three rectrices.
- 7) Wingbeats (flying at ease) relatively shallow and fast.

"COMMIC"

- 1) Mantle darker gray than Forster's, white rump and tail yield distinct backtail contrast (as in immature Forster's).
- 2) Distinctly dark outer web to outer tail feather (tail white).
- Primaries as dark or darker than mantle above and showing black tipped primaries from below.
- 4) Winter and immature with eye in black, black hindcrown triangling on to nape. Like a bandanna worn black on white.
- 5) Immature with dark leading edge to inner wing most noticeable as a dark shoulder crescent on perched birds. This mark can sometimes be covered by body feathers.
- Immature with brown and black edges to back feathers and dusky tips to outer rectrices.
- 7) Wingbeats (flying as ease) relatively rather deep and slow.

Common and Arctic Terns are superficially quite similar but posture and coloration differences make them easily separable under good viewing conditions.

COMMON

- In flight, relatively long bill and head and short tail make that part of the bird in front of the wings about the same length as that part behind the wings. Good straight profile view only.
- 2) Long bill gives the head a long, sleek appearance.
- Looking up at the bird, little or no light can be seen through the flight feathers and the tail shows dark outer edges.
- 4) Underside of primaries broadly tipped with dark.
- 5) Adult in spring slightly flushed with light gray (hard to see). No obvious white stripe on face.
- 6) Adult bill usually orange-red and usually tipped with dark.
- Perched, legs (tarsi) quite long when compared to similarly perched Arctic Tern.
- 8) When perched, wing tips meet the end of the tail.
- 9) Dorsal wing coverts of immature gray.
- 10) Dark wedge on upper wing surface from tip toward base of 5th and 6th primaries.

ARCTIC

- In flight relatively short bill and head and long tail make that part of the bird in front of the wings barely half as long as that part of the bird behind the wings.
- 2) Short bill gives head rounded, delicate look.

- 3) Looking up at the bird, much light may be seen through nearly all primary and secondary feathers forming large triangles of transparency and the tail is quite white all over.
- 4) Underside of primaries narrowly tipped with blackish.
- 5) Adults are distinctly gray below but show a clearly defined white facial stripe between the black cap and the gray throat.
- 6) Adult bill blood red with no dark tip (Common can get this way).
- When perched, legs (tarsi) quite short when compared to similarly perched Common Terns.
- 8) When perched, wingtips fall short of the end of the tail.
- 9) Dorsal wing coverts of immature whitish.
- 10) Lack the black wedge on upper wing surface.

Three marks often considered to be diagnostic should be used only to qualify other evidence.

- Bill color is quite variable. In spring Forster's is usually yellow-orange with
 a dark tip, Common is usually orange-red with a black tip and Arctic is
 usually blood red to the tip. Forster's, however, can be quite red and Common can be red with no black tip. Bills of all three species turn black in
 winter.
- 2) Apparent tarsal length depends upon how the bird is standing and how the belly feathers are arranged.
- 3) The vocalizations of these birds vary considerably, migrants seldom call and the field guide descriptions leave most people confounded. The differences in call seem to be of relative nasality with the voice of Arctic being generally harsher and more raspy.

COMMON MURRE, *Uria aalge*. Quite common from July, when adults swim into the bay with flightless chicks, into April, when most leave to breed on outer rocks. A few are usually present through May and June.

Field identification: In fall most Commons are in full winter plumage so dark headed individuals then should be checked for Thick-billed Murres. See next species.

THICK-BILLED MURRE, *U. lomvia*. In most of the last ten years one or two individuals have been present just off the mouth of the Monterey boat harbor from late August to November and occasionally through late February. Only twice has Thick-billed been encountered more than a few hundred meters from shore.

Field identification: Because in the fall most Common Murres are in winter plumage, dark headed birds should be checked. Thick-billeds average blacker in head and back (brownish-black in Common) but this may be distorted by wear. The white gape mark is difficult to see and may be lacking altogether. Better marks are the angle about mid-bill on the gonys and an evenly decurved culmen. The bill appears slightly shorter and thicker but its shape, not bulk, should be noted (Figure 3). Thick-billeds more often sit on the water with the neck slightly extended and bill pointed forward guillemot-style but may also slouch the head backwards and raise the bill tip like a Common Murre. Another mark which is seldom treated is that where the white and black (summer plumage only) meet on the breast there is a rather definite high angled peak forward on the throat of Thick-billed and it is a lower, more rounded peak in the Common. Even with all of these clues a group of us once had excellent, close looks at an individual murre and could not assign either name to it. For photographs and further discussion of murre identification see Yadon, California Birds 1:107-110, 1970.

PIGEON GUILLEMOT, Cepphus columba. A common breeder under wharfs in Monterey Harbor and old buildings along Cannery Row but numbers drop dramatically in fall and the species is scarce until spring. A few, however, may be found any time of the year near shore at Hopkins Marine Station. Seldom seen more than a few hundred meters from shore.

Field identification: Juveniles and winter plumaged birds have been mistaken for winter plumaged Marbled Murrelets. It is not hard to do as they can look much more similar than the books indicate. Watch size and shape and be sure that the white wing marks are coverts, not scapulars.

HORNED PUFFIN, Fratercula corniculata. Very rare. Previous to 1976 there were only six records for the Bay and five of them were of sick or dead birds on beaches. In June 1976 at least seven healthy birds were seen off Monterey. Most California records are for June but scatter into November. It is possible that some of the fall records were actually beached during late summer and not discovered promptly.

Field identification: The immaculate definition between the black upperparts and white underparts and the puffin bill will identify this species since the Common Puffin (F. arctica) is most unlikely here.

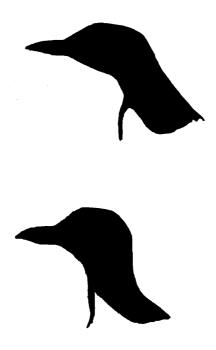


Figure 3. Above, the head of a Common Murre showing the rather straight culmen and the angle of the gonys slightly posterior of mid-bill. Below, the head of a Thick-billed Murre showing the evenly decurved culmen and the angle of the gonys at mid-bill.

TUFTED PUFFIN, Lunda cirrhata. Occasionally one or two are seen on fall trips and there are a few widely scattered records for the rest of the year.

Field identification: The only problem is that immatures may look very much like the similarly sized Rhinoceros Auklet. With a good view, however, bill shape is definitive.

RHINOCEROS AUKLET, Cerorbinca monocerata. Returns to Monterey Bay beginning in late July, is uncommon through early October, and in mid-winter builds in numbers to many thousands which night-roost on the calm waters but forage by day more seaward. Most fall trips record a few individuals. The later the trip the more Rhinos. A sparse breeder on the Farallon Islands.

Field identification: See Tufted Puffin. Flying birds are simply large, mostly dark, light bellied alcids one-third again the size of Cassin's Auklet and murrelets. Immature Tufted Puffins have more rounded wings and larger bills.

PARAKEET AUKLET, Cyclorrhynchus psittacula. Not certainly identified alive for many years here. Old records and beach corpses are from mid-November to early April

Field identification: The field guides seem to be adequate.

CASSIN'S AUKLET, Ptychoramphus aleuticus. Begins to return to Monterey in mid-August and may be seen there through fall and winter, departing in April. It is likely that several thousands use the bay for a night roost in winter as during that time droves are often seen flying west past Pt. Pinos at dawn with Rhinoceros Auklets. The few summer records may be of foraging flocks from their nesting stronghold, the Farallon Islands.

Field identification: Small, like murrelets. Uniform gray-brown above including throat and breast. Definitely light bellied but never gives the impression of a black and white bird as do all murrelets in winter plumage. In summer plumage, Marbled Murrelet is brown but does not have an extensively whitish belly, has a mottled appearance and has more pointed wings. In flight, the wingtips appear more stiff and rounded (like tongue depressors) than do those of the large Rhinoceros Auklet and of the murrelets. The large Crested Auklet (Aetbia cristatella) which conceivably could occur is darker, especially on the crown and nape, has a pale bill and is dark bellied. On the water all winter murrelets show considerable white. Cassin's does not.

MARBLED MURRELET, Brachyramphus marmoratus. Resident but rarely encountered on fall trips, or any trips for that matter, from Monterey Harbor. Occasionally one or two are in the Harbor. Most individuals seen within the bay are extremely nearshore from Moss Landing northwest to Santa Cruz. The nearest reliable place to see this species is from Pigeon Point, San Mateo County, by telescope.

Field identification: The field guides are adequate. See Pigeon Guillemot above.

XANTUS' MURRELET, Endomychura bypoleuca scrippsi. Not as uncommon as is popularly believed. Has been seen on Monterey Bay on at least one boat trip every fall in the last thirteen. Usually in singles or pairs and usually west of the 100 fathom line, or over the submarine canyon but as many as 16 have been seen on a single trip and at various points in the outer bay. The earliest fall record is 3 July and the latest is 24 October. Several were carefully identified near Point Pinos on 15 February and 4 April 1976 and recently a few have been in the vicinity of the Farallon Islands in spring, suggesting possible nesting. A single southern Xantus' Murrelet (E. b. bypoleuca) was definitely observed 10 km northwest of Point Pinos on 2 October 1976 and is no doubt the northernmost record for that subspecies. In this form, the white from the cheeks extends up in front of the eye and occasionally over and behind it. For critical identification of Endomychura

murrelets see Jehl and Bond, Morphological variation and species limits in murrelets of the genus *Endomychura*, Transactions San Diego Society of Natural History 18(2):9-24, 1975.

Field identification: Uniform dark blackish-gray above and all white below; gleaming white underwings sometimes flecked with a few dark feathers. Winter Marbled Murrelet always shows white scapulars and Ancient has a gray back and upper wing coverts. Xantus' and Craveri's Murrelets hold the head high with neck extended, not slouched as pictured in field guides.

CRAVERI'S MURRELET, Endomychura craveri. There are two recent records, both in August 1972. Old specimen records, however, extend from late August to early October.

Field identification: Like Xantus' but blacker above. Underwings appear offwhite to dark gray but never bright white. Axillars are notably lighter than the rest of the underwing. Distribution of light and dark in the neck area may be a usable mark where a narrow peninsula of black juts downward slightly toward the upper breast from the side of the neck as in the winter plumaged Spotted Sandpiper. Posture is like that of the Xantus' Murrelet.

ANCIENT MURRELET, Synthliboramphus antiquus. Later than most alcids; the earliest date for normal arrivals is 4 October. Numbers build in late October and November. Ancients are fairly common offshore through the winter and into early April. There is a record of one in breeding plumage for 1 June 1975.

Field identification: Black of crown, face and chin (and in breeding plumage, throat) sharply defined from gray back. The bright white underparts extend well up on to the neck almost forming a white collar. Bill is yellow and this is visible at a remarkable distance. None of the other small alcids are gray backed except Cassin's Auklet, which is darker and much more extensively dark on the breast and sides.

REASONABLY POSSIBLE SPECIES

WANDERING ALBATROSS, *Diomedea exulans*. An adult female was photographed sitting on shore in Sonoma County on 11 and 12 July 1967. It flew seaward on the 12th. It is possible that this bird was a genuine wanderer and thus is a possible expectee for Monterey Bay.

MOTTLED (SCALED) PETREL, Pterodroma inexpectata. One was picked up dead on Point Reyes Beach on 25 February 1976 (Manolis, Western Birds in press). It was a first occurrence for California; however there are several recent and old records from Washington and Oregon. An additional specimen was found beached at San Simeon, San Luis Obispo County on 13 March 1976 for the second state record (David Ainley pers. comm.). Since that time, there have been two additional beached corpses reported in California, one from the south coast and one from Humboldt County. This species will very likely be encountered one day off Monterey.

HARCOURT'S STORM-PETREL, Oceanodroma castro. Has been reported once with convincing documentation as seen in September off San Diego and is a possibility here.

WHITE-TAILED TROPICBIRD, *Phaethon lepturus*. Has been seen once in southern California and an individual tropicbird, "probably White-tailed," was seen 12 km northwest of Point Pinos over 500 fathoms of water on 10 March 1970 by an extremely competent observer.

BROWN BOOBY, Sula leucogaster. Recorded in waters off southern California. One was well described from near Davenport, Santa Cruz County 20 July 1975. Boobies of all species regularly ride the masts of ships. Some are doubtless captured and kept alive on vessels passing through tropical waters and later are released or escape.

RED-FOOTED BOOBY, S. sula. An individual of this species was captured on the Farallon Islands on 25 August 1975 and a different bird was well seen there on 12 October of the same year (Huber and Lewis, Western Birds in press). The possibility that they were "helped" along by a northbound ship does exist.

KITTLITZ'S MURRELET, Brachyramphus brevirostris. An individual in summer plumage washed up in southern California in August and there are recent records from Washington State. For these reasons it is included here as a possibility.

OTHER BIRDS USUALLY SEEN LATE SEPTEMBER THROUGH OCTOBER

Common Loon
Pacific Loon
Red-throated Loon
Western Grebe
Red-necked Grebe
Horned Grebe
Eared Grebe
Pied-billed Grebe
Brown Pelican
Surf Scoter
White-winged Scoter
Red-breasted Merganser

Black Turnstone
Glaucous-winged Gull
Western Gull
Herring Gull
Thayer's Gull
California Gull
Ring-billed Gull
Mew Gull
Bonaparte's Gull
Heermann's Gull
Elegant Tern

OTHER ANIMALS WHICH HAVE BEEN SEEN ON MONTEREY BAY BIRDING TRIPS

Sea Otter
Steller's Sea Lion
California Sea Lion
Harbor Seal
Northern Fur Seal
Northern Elephant Seal
Pacific White-sided Dolphin
Harbor Porpoise
Dall Porpoise

Dall Porpoise Northern Right Whale Dolphin Gray Grampus (Risso's Dolphin)

Pilot Whale

Orca (Killer Whale)
Sperm Shale
Humpback Whale
Minke Whale
Sei Whale
Finback Whale
Blue Whale
California Gray Whale
Sunfish
Blue Shark
Great White Shark

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Thanks to all.



Short-tailed Shearwater (Puffinus tenuirostris) about 8 km northwest of Point Pinos, Monterey County, California on 6 March 1977. Note the short bill, steep forecrown and rounded head which give this species more of a "gentle look" compared to the longer bill and rather flat forecrown of the Sooty Shearwater (P. griseus).

Photo by Richard W. Stallcup

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