

Notes based on Joe Morlan's Ornithology class lecture November 4th, 2010.
Joe Morlan is not responsible for these notes, any errors or omissions in them are mine.

Buller's Shearwater

Formerly called the **New Zealand Shearwater** in NA. The AOU adopted the name that was used in New Zealand in the interest of keeping some uniformity of English names around the world. Has also been called the **Gray-backed Shearwater** in some literature.

OCCURRENCE

Generally found in cold water.

Breeds on islands off New Zealand.

The easiest place to see them is in the fall off CA, mostly off Monterey. Occasionally seen from shore but mostly you need a pelagic trip to see them.

Historically rare. New Zealand has a very well informed and activist environmental program to try to save its native birds. Most of these birds nest on small islands and they have been decimated by introduced rats. In New Zealand they have gone all out to remove rats from many of the islands where seabirds are nesting. As a consequence there has been a huge improvement in the overall populations of some of these seabirds.

The Buller's Shearwater is no longer considered rare. Probably on any pelagic trip that you take off shore in the fall you should see them.

When you go out in the fall there may be hundreds of thousands of Sooty Shearwaters.

Sometimes in the summer you get numbers that may range upwards of a million Sooty Shearwaters off our coast. Buller's will generally be scarcer than Sooty.

FIELD MARKS

Among the most graceful and attractive of all of the shearwaters.

The only shearwaters Joe has ever seen in flocks flying in unison, banking and sailing and gliding as a whole flock almost like shorebirds.

Identification relatively straight forward. There is no other shearwater that has such a complex and clean looking pattern on its upper parts. The closest thing would be something like a Stejneger's Petrel, which is a very small *Pterodroma* with a black cap and a faint M pattern on the upperparts.

Completely snowy white underneath which is unique among shearwaters.

Cap quite black and well defined.

Gray on the back. A distinct dark W or M pattern is formed by a dark bar across the upper wing coverts and the humerals or humeral coverts together with a black bar across the primaries.

Tail quite long and pointed, wedge-shaped, black, contrasts with pearl gray color on the rump and back.

The wings are frequently bent at an angle, something often seen on *Pterodroma* petrels.

The dark bill is thin and relatively long, more like that of a shearwater. It does not point downward at a 45 angle like on a fulmar or a *Pterodroma*.

Very graceful glider. Flight style closest to the Wedge-tailed Shearwater of warm water habitats.

Sitting on the water: white on the throat, well defined crisp black cap, gray back, a lot of white showing along the water line.

Streaked Shearwater

In the genus *Calonectris* like Cory's Shearwater.

OCCURRENCE

One of the rarest shearwaters to occur in NA.

Unlike most of the other shearwaters it breeds in the northern hemisphere.

Breeds on islands off Japan and is pretty much confined to the western Pacific.

Victor Morejohn collected seabirds off Monterey to test them for avian flu. He shot the first NA record of Streaked Shearwater in October 1975.

There are now 18 accepted records, all in the fall, many of them off Monterey.

FIELD MARKS

A large, lumbering shearwater with angled wings, usually flying very close to the water, not banking in high arcs. Stays close to the surface of the water even in strong winds.

Does more flapping and less gliding than most of the shearwaters.

It is called the Streaked Shearwater because there are faint streaks on the head (not a mark you would ever see in the field) and because of the streaks on the underwing primary coverts.

Variable amounts of white on the head.

Face mostly white with the eye generally visible against the white face.

Bill pale yellowish-white.

Upperparts scaly.

White underparts, more white on the underparts than Pink-footed Shearwater.

Lacks the dark axillaries of the Pink-footed Shearwater, much lighter-winged.

Underwings mostly white with a crescent of streaks on the primary coverts and a dark carpal mark at the bend of the wing.

Variable amounts of white on the tips of the upper tail coverts can form a U-shaped marking.

Pink-footed Shearwater

OCCURRENCE

The second most common shearwater off our coast.

When you go out on a boat you will divide the shearwaters into two groups, dark ones and light ones. The dark-bellied shearwaters are almost all Sooty Shearwaters, but there could be Short-tailed or Flesh-footed. The light-bellied shearwaters are mostly Pink-footed Shearwaters, but they could be Buller's Shearwaters or Black-vented Shearwaters.

Breeds off Chile, migrates into the eastern Pacific region off NA. Spends almost its entire life in the eastern Pacific. Quite common here in the fall, less so in the spring. A few can be found at any time of the year, however they are rare in the winter (when they breed during their summer).

A very rare vagrant outside the eastern Pacific.

It is possible to see them from shore if there are strong winds and you have a powerful scope.

You should be able to see them on any short-distance pelagic trip in season.

When we see them up here, especially in the fall, they are in heavy molt. They molt on their wintering grounds, which is here in our summer.

FIELD MARKS

A large shearwater, same size and shape as Flesh-footed.

White belly.

Underwings much darker than on Buller's, this is quite a smudgy bird on the underwings.

A lot of variation in the mottling of the underwings.

(mottling: a mixture of white and dark that is irregular in pattern)

A little bit of white on the chin and throat, but it is a very narrow area, in the field it looks like the bird has an all dark hood.

Compare the almost all dark head with the distinctly dark-capped appearance of Buller's
Most of the face dark.

Bill pink with a dark tip.

Leading edge of the wing relatively straight in flight, does not have the bent angle like the Streaked Shearwater.

Fairly short-tailed.

When they are molting there can be a break in the trailing edge of the wings where old outer primaries are much longer than the adjacent ingrowing new feathers. The wing coverts molt at the same time as the primaries and secondaries, revealing the white shafts at the bases of those feathers, visible as white stripes along the upper surface of the wing. Flight fairly graceful with a couple of quick flaps and a lot of gliding. They bank a lot.

Black-vented Shearwater

OCCURRENCE

Breeds closer to CA than any other shearwater, on islands off Mexico and Baja California.

Occurs here mostly in the wintertime as a disperser into some of the warm water currents that extend northward from Baja along our coast, like the Davidson current.

Usually seen within sight of land, they tend not to be one you have to go out into deep water to encounter. Their foraging is mostly over schools of anchovies and other shoaling fish.

They frequently occur in flocks and may be seen sitting on the water.

Seawatching (standing on a promontory with your spotting scope and looking at the ocean) from southern CA generally produces a lot of Black-vented Shearwaters. In northern CA they are somewhat sporadic, showing up mostly in warm water years, mostly in the late fall and winter, this is about the peak time for them. Most years you get either none or very few. In certain years, like a big El Niño year when there is a lot of warm water, they can become downright common. Perhaps a little more likely than most other shearwaters to be encountered on a CBC.

TAXONOMY

The vent is another name for the undertail coverts. The name Black-vented Shearwater is designed to distinguish this bird from the Manx Shearwater. The Manx Shearwater is generally a north Atlantic bird, the Black-vented Shearwater is considered to be its representative in warm waters in the northeast Pacific.

At one time Robert Cushman Murphy put together a whole bunch of these Manx-like shearwaters and reclassified them as subspecies of the Manx Shearwater. Since then all of these birds have been re-split. They do not have overlapping breeding ranges at all. They breed on islands.

Whether you prefer to regard them as species or as subspecies is a matter of philosophy. There is an advantage in considering these birds to be subspecies. If they are subspecies you are using nomenclature to tell something about the biology of the birds. If we consider the Black-vented, the Townsend's, the Newell's, the Hutton's, the Fluttering, the Manx and a couple of more

shearwaters to all be one species, we are saying by using nomenclature that they are all more closely related to each other than to any other shearwater. Furthermore, you are saying in the nomenclature that their breeding ranges don't overlap, because subspecies replace each other geographically. That is the philosophy behind lumping. In the 60s and 70s the AOU checklist committee was dominated by people who held that philosophy.

The argument for splitting is that there is no evidence that these birds would ever interbreed if they came into contact. Their ecology is very different. They live in very different parts of the planet. We don't even know what the true genetic relationships are between a lot of these birds. Also many of these birds live in a threatened environment, some of them on a single oceanic island. The introduction of mammalian predators can wipe out entire populations. By considering them to be separate species we are creating units of conservation issue.

FIELD MARKS

Superficially like a Pink-footed, a small brown shearwater with pale underparts.

Smaller than Pink-footed, basically a mini Pink-footed with a dark bill.

Much more white on the underside of the wing, the whole bird looks more compact, the bill is a little bit more dainty and there is no color to it. Bill gray, dusky looking.

In flight from land it's hard to tell them from Pink-footed Shearwater, the reason being that they look about the same, except they are smaller. They may have more rapid wing beats but their plumage is not that different.

Just about the same size as a Manx Shearwater. Manx have a shorter tail and white undertail coverts.

Highly variable patterning on the underparts, some of them are quite a bit browner, some of them quite a bit whiter. A continuum of variation rather than morphs. All have white bellies. The amount and distribution of dark varies individually. A few can even have a white vent. Such birds could be misidentified as Manx Shearwaters. Manx Shearwaters are much more crisply black and white, blacker above, less brown. They have the white ear-surround on the ear coverts which is not found on the Black-vented Shearwater.

Townsend's and Newell's shearwaters are not in our field guides but are of considerable interest, they have been contenders for the CA list for a long time.

Townsend's Shearwater

(Also discussed briefly in class two weeks ago.)

A small black and white shearwater, a poorly known endemic to islands off the southern tip of Baja. Apparently do not disperse. Sightings away from near the nesting grounds are almost non-existent.

It was thought that the white flank patches were diagnostic for Townsend's.

White flank patches are not necessarily the greatest field mark. We looked at a slide of a Black-vented Shearwater showing white flank patches. It is simply the white feathers on the flanks wrapping around a little bit on the top of the bird.

Black vent like Black-vented Shearwater, but the whole bird is more crisply black and white.

Dark undertail coverts that come up to just before the legs and cut straight across. A very crisp demarcation between the dark undertail coverts and the snowy white belly. A more blended muddy pattern on Black-vented and Pink-footed.

No ear surround.

Pretty long tail.

Newell's Shearwater

Currently lumped as a subspecies into Townsend's Shearwater.

Very similar to Townsend's.

Nests at high elevations on the Hawaiian islands where it is endangered. Mostly it is on Kaua'i, which is the one place where the mongoose has not been established.

Are seldom seen at sea. Are often found when they fledge out of their nesting burrows.

They fledge at night and are attracted to street lights. They are blinded by the street lights and end up being found sitting on the streets in the morning. Some are dead. Most of the specimens that are picked up are at the Smithsonian.

Have the longest tail of any shearwater in the Manx group.

Are frequently shown as having white undertail coverts. The undertail coverts are indeed completely white down the center. But the lateral undertail coverts are dark and can blend in with the dark on the underside of the tail. Because the tail is so much longer on Newell's than it is on Manx, the impression you get will be of a lot of dark at the rear end. The Manx Shearwater has a short tail and the white will reach almost or all the way to the tip of the tail in the center.

Many early claims of Manx in CA were rejected by the committee on the grounds that they might be Newell's.

As black on the upper parts as can be.

A very clean crisp demarcation between the black cap and the white throat.

In flight both these birds typically show white flank patches, so do Manx.

Manx is a smaller bodied bird. Has the ear surround and freckling on the side of the face that you can see at short range.

On Townsend's you see some muddiness, not quite as crisp as Newell's, but it generally lacks the kind of freckling that you see extending down onto the sides of the breast in Manx.

There is a suggestion that Manx shows more reflectivity on the underwing, more of the underwing appears to be white, without as much of a dark trailing edge. A more gleaming white underwing compared to Townsend's or Newell's.