Notes based on Joe Morlan's Ornithology class lecture April 22nd, 2009. Joe Morlan is not responsible for these notes, any errors or omissions in them are mine.

Northern Saw-whet Owl

Rather poorly known species.

OCCURRENCE

At least partially migratory, with birds from southern Canada moving south in the wintertime. In some areas it appears to be a permanent resident, but there certainly are movements that are very difficult to document. We know a little bit about some of the migration of Northern Saw-whet Owl from banding. Mist nets are set up routinely at a few banding stations at night. One of the really famous places is Whitefish Point at the northeast point of Michigan's Upper Peninsula, which sticks way up into Lake Superior. The owls and other birds that are migrating up around the Great Lakes follow the contours and end up getting pushed together at that point. Another spot that is really famous for these small owls is Amherst Island on the north side of Lake Ontario. In the wintertime owl numbers tend to concentrate in places like that during good invasion years.

The occurrence of Northern Saw-whet Owl in CA is a bit more mysterious with the birds being resident, at least locally, down at fairly low elevations all the way down to essentially sea level, including the Bay Area. The Saw-whet Owl breeds essentially throughout the Bay Area. In CA we know very little abut their migration. An ad hoc survey was done by somebody driving over the Donner Pass on interstate 80 during the winter, there was a lot of snow on the ground. Along maybe 30 miles he found about 35 owls, just on the one side of the road. It is a bird that is almost unknown in the Sierra Nevada. We know they are there, sometimes people hear them, but it is extremely unusual to encounter them at all. Quite clearly there was a big movement of them through the Sierra Nevada at the time. A lot of times these birds will hunt along roadsides, especially when the snow is really thick because the rodents are easier to acquire there.

Frequently found roosting in conifer trees, sometimes during the daytime. They can settle in at daytime roosts and come back to roost in the same tree. Has a reputation for being tame.

FIELD MARKS

Most closely related and similar to Boreal Owl.

Rather small, about the size and shape of a large pine cone.

Eyes fairly close set.

Facial disc buffy without a black outline around it. (Boreal pale gray with black outline.) Underparts have rusty brown streaks that are thick and blurry. (Dark brown, not reddish on Boreal.)

Bill dark. (Boreal pale.)

Little white streaks on the forehead. (Round spots on Boreal.)

JUVENILE

Buffy, almost orange color on the underparts.

Dark bill.

Rather bluish cast to the face.

White triangular pattern above the bill

VOCALIZATIONS

Sound a lot like Northern Pygmy-Owls, only their whistles are a little bit closer together, possibly a little higher pitched, a little different accent and more monotonous. Starting around two, three in the morning you can hear them calling quite a bit. They start calling mostly in October and November and call pretty much through the early winter. They nest fairly early.

Northern Hawk-Owl

OCCURRENCE

Ranges through Canada and up into Alaska. Found pretty much strictly in boreal forest, particularly spruce and fir forests in the far north. A very rare visitor anywhere further south, it is essentially a permanent resident. But in years after the nesting has been super successful after a rodent outbreak, young birds may be forced south in search of food.

Northern Minnesota is a place where they sometimes have these eruptions, especially in the Duluth area at the west end of Lake Superior.

Most readily found in Alaska, in the Denali region. Usually the thing to do is to just drive around and just look in the spruce forest. They like to sit on the tops of dead snags in the middle of the day.

It is relatively tame as is the case with a great many of these northern owls.

Also found in Eurasia in similar habitat.

No CA records.

FIELD MARKS

Identification pretty straight forward. A somewhat larger owl, medium sized.

Long tail, the only larger owl that has a long tail.

Bars across the underparts.

Boreal Owl

Called Tengmalm's Owl in Britain.

One of NA's most mysterious and poorly known birds.

OCCURRENCE

Replaces the Northern Saw-whet Owl in northern Canada and in parts of Alaska.

Everywhere it occurs it is generally rare.

Its status is very mysterious. It occurs as a breeding bird in Canada and in the Rocky Mountains. Breeds in November, December and January. Only active in the middle of the night.

No confirmed records for CA. A very interesting report came to the records committee from somebody who was snowcamping at Echo Lake in the Sierra Nevada. From his tent at night he heard what sounded like a Boreal Owl. There really is no other kind of owl that should be there at that elevation in the middle of the winter singing. Boreal Owl is the only plausible bird. He could not find it again on a subsequent trip. The record was not accepted, but it is very likely that Boreal Owls breed somewhere in the Sierra Nevada in extremely low densities at high elevations and are probably detectable only when they are singing in the middle of the winter.

They breed at higher elevations than Saw-whet.

FIELD MARKS

A little bit larger than the Northern Saw-whet Owl.

Superficially like Northern Saw-whet Owl.

Bill light in color. (Northern Saw-whet dark.)

Face pale chalky grayish with black outline. (Northern Saw-whet buffy, no black outline.)

Forehead more spotted than streaked.

Streaks on the underparts dark chocolate brown without reddish tones, thick and blurry. **JUVENILE**

Unspotted, sooty brown underparts.

Pale bill.

Darker on the underparts.

Black outline to the face, white "eyebrows".

Otherwise similar to juv Northern Saw-whet Owl.

Burrowing Owl

OCCURRENCE

Reasonably widespread in the western half of the US. Also an isolated population in southern Florida. Ranges south all through South America.

Declining throughout their NA range and retrenching. Much of the population is quite migratory, particularly the populations in the plain states, where the birds are usually found in prairie dog towns. In many ranches prairie dogs are being deliberately and systematically exterminated because horses and cows break their legs by stepping into the burrows, this has led to a negative impact on Burrowing Owls in those areas.

In CA now considered a threatened species, the situation is critical.

When Joe first came to the Bay Area, Burrowing Owls were reasonably common right around the SF Bay region. The Bay Area now has very few Burrowing Owls. These are not resident birds, they are from the migratory population and disappear in the summer months. They are capable of long over water migration. Show up on the Farallon Islands from time to time. Joe encountered one on a pelagic trip 40 miles out on the ocean.

Small numbers are seen in Alviso on property adjacent to the Jubilee Church at Nortech Pkwy and Disk Dr, right near the sidewalk.

In the last couple of winters some have been found in the north east quarter of Cesar Chavez Park in Berkeley.

Sometimes they are seen in the landfill at Martin Luther King Regional Shoreline as you enter into San Leandro Bay.

There are a few records for SF, including one that showed up inside the old Academy of Sciences at one time.

In the wintertime they occasionally use badger holes at Pt Reyes.

There used to be a large colony on the campus of UC Davis. A graduate student there studied Burrowing Owls there and in other places and their reproductive success. She found that reproductive success was dependent on the size of the colony. You needed to have something like 60 birds in the colony and then there would be maybe 5 nests. There would be helpers at the nest. Sustained successful breeding required a large colony like that. In the smaller colonies there were

fewer nests, not enough helpers and the number of new owls raised was smaller than the number dying each year. She predicted the extinction of the Davis colony which was smaller within a couple of decades, it became true.

Burrowing Owls seem to have a propensity to choose places that are slated for development. Attempts to relocate Burrowing Owls take place to this day despite of the fact that it never has been successful anywhere, it does not work.

In CA they associate with ground squirrels instead of prairie dogs. They tend to choose kind of hog wallows, wet soil. It has to be really flat, they don't seem to like areas that are on slopes. Otherwise we don't know why they choose the places they choose. There are many, many large colonies of ground squirrels without Burrowing Owls.

In CA the Burrowing Owl has a sustainable population only in the Imperial Valley and that also appears to be declining. You can drive along the levee roads there and see them sitting on the impoundments.

They probably are declining due to pesticide use. Burrowing Owls eat beetles, for the most part scarabs or burrowing beetles, they do not normally eat rodents. They find the beetles by digging for them.

A ground owl, mostly seen on the ground near a burrow where they seem to keep vigil even during the daytime. They either excavate their own holes or use holes that they usurp from California Ground Squirrels. May also be as high as perching on wires. When you approach them they do not scurry into their burrow, they will fly. They have very rounded wings and fly in a rather floppy manner.

They often are in fields that have cows in them. Cows produce cow pies which are brown lumps that are out there in the field, the heads of Burrowing Owls are not easy to pick out between them.

FIELD MARKS

Quite different from other owls.

Long legs with little or no feathering.

(There are other owls that also have long legs, most notably the Elf Owl.)

Underparts with a pattern of bar-spots.

A rather flat head.

The birds in Florida are apparently a bit darker than the ones in the far west.

JUVENILE

Quite pale on the underparts, no spots

VOCALIZATIONS

Mostly quiet

Are supposed to give a barking call occasionally at night