

Notes based on Joe Morlan's Ornithology class lecture March 10th, 2010.
Joe Morlan is not responsible for these notes, any errors or omissions in them are mine.

Scrub Jays have a very soft and quiet but beautiful song. You don't hear that song often. They are also very surreptitious around their nest. Joe has found maybe a handful of nests in all his years of birding. Steve and Carol heard a Scrub Jay singing today and hanging around a nest.

Both **Bewick's Wren** and **Song Sparrow** have very structured songs that vary a lot. Every individual sings a different song from every other individual.

The typical structure of the song of Bewick's Wren: an inhale at the beginning, then a buzz and a very clear trill at the end. There are all kinds of variations. One of the more common is that they just do the trill. Many variations, but a very well structured song.

There are a few Bewick's Wrens in SF, but they are rare.

The Song Sparrow has not as clean a song. It usually starts with a series of three well spaced notes, followed by more or less a rapid jumble. Some people think it sounds like a Bewick's Wren backwards.

White-crowned Sparrows can also have a fairly structured song which varies quite a bit and often ends with a trill. There are different subspecies and different dialects.

Downy Woodpecker and Hairy Woodpecker

These two woodpeckers look almost identical although they are not each other's closest relatives. Downy is closely related to Ladder-backed and Nuttall's woodpeckers.

Hairy Woodpecker is in a different clade (a "branch" on the "tree of life"), it is closer related to White-headed, Arizona and Red-cockaded woodpeckers.

A research article which includes these species is here (cladistic tree on page 7):

<http://bio.wayne.edu/profhtml/moore/PUBLICATIONS/MooreEtal2006Veniliornis.pdf>

The ranges of Downy and Hairy woodpeckers overlap almost completely in NA.

There is geographical variation across the country in both of these woodpeckers.

That geographical variation is parallel. The plumage of Downy Woodpeckers in New England is very similar to the plumage of Hairy Woodpeckers in New England, but different from the plumages of these birds in the Rocky Mountains or at the west coast or the Pacific northwest. Each of these populations differs geographically in the same way.

We are used to that similar species exhibit character displacement. They may look alike in different parts of their ranges, but in areas where they overlap they tend to look more different. Character displacement is considered to be an isolating mechanism that tends to prevent hybridization in closely related species. Downy and Hairy woodpeckers are not closely related.

Downy Woodpecker

OCCURRENCE

One of the most common woodpeckers in CA and in the Bay Area.

The smallest of the regularly occurring woodpeckers in CA.

Found in a wide variety of disturbed habitats, including parks and gardens. Common in residential areas. Also occurs around edges of woodlots.

It is not migratory and does not breed in outer Pt Reyes, but every fall a few birds get there, probably due to local postbreeding dispersal. They are not tied into the forest the way the Hairy is, so they are more likely to get to places like Pt Reyes because they can forage in weedy fields, there is no real barrier.

Neither of these species has ever occurred on the Farallon Islands.

Hairy Woodpecker

OCCURRENCE

Throughout most of NA like Downy. Also in mountains down into Mexico, reach all the way down into Panama. In the southern parts of Middle America they get progressively smaller. In Costa Rica they are the size of Downy Woodpeckers. (Bergman's rule about geographical variation.)

In the areas where Hairy and Downy overlap, there is no overlap in size between them. No hybridization.

In the Bay Area much less common than the Downy and tends to be confined to more wilderness type habitat. Forest with mature trees, particularly conifers. Generally away from human habitation. Used to be absent in GG Park. Has become barely established within the last few decades. The mature Monterey Pines provide suitable habitat.

Completely non-migratory, which is probably why it took them so long to colonize GG Park.

Downy Woodpecker and Hairy Woodpecker Field Marks

Almost identical pattern to both species.

Both species have a white patch on the back.

Males have a red patch on the back of the head which the females lack.

None of them have barring on the underparts. The only woodpeckers of this type with plain underparts.

There is parallel geographical variation across the country in both of these woodpeckers.

The ones in the Pacific northwest are frequently dingy on the belly and on the back and have very limited amounts of white spotting on the wing coverts.

The really dark birds in Sibley do not occur in CA, they would be expected in Washington, Oregon, British Columbia. Our birds sometimes have a trace of a sooty color on the underparts (and occasionally there have been birds that have had abnormal pigment).

The ones in the Rocky Mountains are white underneath without that dingy coloration, but they have less white spotting than birds in the east which have the most amount of white spotting.

The birds follow each other in their geographical variation, they look more like each other where they overlap than they look like the same species in another part of the country. Wherever you go within the range of these woodpeckers they will be hard to tell apart. Sibley illustrates this well. On top of this geographical variation there is a fair amount of individual variation.

DIFFERENCES BETWEEN THE SPECIES

Bill Length

A difference in the relative length of the bill. There is a lot of talk about how many head lengths the bill is or how far the bill reaches if you reverse it. The trouble with that is that photos may misrepresent it and it is difficult to apply in the field when the birds are not sitting still in perfect profile. Joe is trying to get away from that method and use other methods.

A Hairy Woodpecker looks like it has a normally sized bill for a woodpecker. Downy Woodpecker appears to have an unusually short or stubby little bill. This is using gizz rather than trying to quantify it.

Outer Tail Feather Pattern

Downy black bars on the outer tail feathers.

Hairy usually all white outer tail feathers, sometimes some black spots.

Head Shape

Head of Downy usually appears relatively rounded.

Hairy has a relatively flat head.

Face Pattern

Hairy has narrower white striping on the side of the face.

On a lot of the Downy the face looks different with broader white striping.

Nasal Tufts

These species are named for their nasal tufts.

On Downy they are shorter and appear softer. They are usually fairly well expressed. A little poof of feathers sticking up right at the base of the culmen where it meets the forehead, looking like a little bud. Usually snowy white..

The nasal tufts are less distinctive on a Hairy. The feathers are actually longer, but they lie flat against the bill.

Nasal tufts yellowish in color, so they are not as distinctive. Sibley painted them grayish.

Breast Pattern

There is supposedly more of a dark projection on the sides of the breast of the Hairy and less on the Downy, Joe has never really field-tested this.

Feeding Substrate

Hairy is a heavier bird and has difficulty holding on to skippy branches, tends to stick to the big main trunks which is why it is restricted to older forests that have mature trees.

Downy can forage in any kind of second growth and little teeny twiggy branches are

quite typical foraging substrate for Downy, wrong for Hairy. Downy is not infrequently foraging on weed stocks. Downy can forage on thick trunks as well.

Body Shape

The shape of the Hairy seems a little more elongated.

JUVENILES

The juveniles of both species have red on the top of the head, which occasionally can look yellowish. Young females less red than young males.

Can lead to confusion with the American Three-toed Woodpecker!

VOCALIZATIONS

Hairy much huskier call note. Really heavy chuck or chick note.

Downy much higher pitch in the chip note.

Hairy's rattle is much more emphatic and heavier than the rather looser rattle call given by the Downy. Downy has a little whinny, a little laughing sound.

American Three-toed Woodpecker

OCCURRENCE

Ranges across Canada, into Alaska and then down into the Rocky Mountains.

Nominate *dorsalis* of Rocky Mountains ranges all the way down into Arizona and New Mexico. Alaska and British Columbia *fasciatus*. ("Taiga" in Sibley, which means northern coniferous forest.)

Eastern *bacatus* is slightly migratory. The birds in the west do not appear to be very migratory.

There is no accepted record for CA. It is the only bird that is found in the three states that border CA that has never been recorded in CA itself. Sibley shows a green dot. That is a sight record from the Warner Mountains by a single observer about 20 years ago. Quite exquisite description by a very experienced birder. The record was accepted by the California Bird Records Committee by a vote of 9:1. The one recalcitrant member felt that since the bird was a permanent resident in Oregon and adjacent Nevada that that would indicate that there was a population there and that we would eventually get a better record. Joe Morlan was not thrilled with adding a new bird to the state list based on a single observer sight record. California is unusual in that we have no codified prohibition against adding a bird to the state list without tangible evidence.

This record failed when it years later got under attack together with 4 other species that were on the state list without a photo or specimen. The record was stricken from the state list.

To overturn an accepted record all or all but one members have to agree, it is very conservative.

In the west they are spruce specialists. That's why they are in the Rockies and not in the Sierra. The Warner Mountain bird was seen in a Douglas Fir, there was no spruce near the site. There are areas that have spruce in extreme northern CA. Nobody has ever found a Three-toed there.

They don't peck hard against the tree trunk. Instead they scale the bark. Likewise Black-backed. Both species are somewhat erratic and move in when there has been a burn. Somewhat specialist on that kind of situation.

TAXONOMIC HISTORY

Was formerly regarded one species together with the Eurasian Three-toed Woodpecker. The Eurasian *Picoides tridactylus* was described by Linneus based on specimens from Europe. A few years ago it was decided to split the American birds from the Eurasian birds. Sibley came out earlier, it still has the old name of the circumpolar species before the recent split. The name American Three-toed Woodpecker was also used in the earlier part of the 20th century when the birds had been previously split.

However, the scientific name was different then, it was called *Picoides americanus*. *Picoides americanus* was described by Brehm in 1831. *Picoides dorsalis*, the name now used, was described by Baird in 1858. The first legitimate description of a bird has priority, subsequent names are considered to be synonyms. Brehm's description was not based on a specimen but on hearsay, which makes it not a legitimate description.

Baird's description was in the Pacific Railroad Reports Volume 9, page 100, based on a type from Wyoming, within the range of the Rocky Mountains. In the early part of the 19th century the US government funded several expeditions to find a path to run a transcontinental railway from the west coast to the east coast. They sent out many exploratory teams to survey the western US to find a pass that would be appropriate for building a transcontinental railway. Their reports were quite exhaustive. They had usually a surgeon along who was also a naturalist. They collected specimens of all the animals and plants and sent them back to the Smithsonian for classification. Baird was the secretary of the Smithsonian. This is now the first valid name for the Three-toed Woodpecker in America.

FIELD MARKS

Barring on the underparts.

Yellow spot on top of the head in males, usually not as distinct as on Black-backed, more thinly marked.

Most show a white stripe behind the eye.

Only three toes, two forward and one back.

Eastern ssp. *bacatus* quite dark on the back, can be tricky to tell from Black-backed.

Rocky Mountain *dorsalis* have a mostly white back. Can be confused with Hairy, especially young Hairy that have yellowish on the top of the head or females that have no yellow on the head. The white on the back has incomplete barring, it is ragged around the edges.

Alaskan *fascialis* is more variable, somewhat intermediate between *dorsalis* and *bacatus*.

DRUMMING

Different from other woodpeckers, likewise the Black-backed.

Their drum gets faster and faster and faster and also fainter and fainter and fainter.

Black-backed Woodpecker

OCCURRENCE

Used to be called Black-backed Three-toed Woodpecker.

Does not occur in Eurasia.

Ranges across Canada.

Closely related to the Three-toed Woodpecker.

Range quite similar, but there are populations in CA, in the Sierra Nevada.

The Sierran birds are completely non-migratory. There is no downslope movement. There are no records from the foothills or the coast. They are strictly resident birds and spend the winter in the Sierra Nevada.

In the eastern part of the US they are eruptive and depending on what the insects are doing they may move south.

It is a highly sought after bird in the Sierra Nevada. The other woodpecker that occurs at high elevations and has a black back is the male Williamson's Sapsucker.

The further north in the Sierra Nevada the more likely it is that you will find it. Frequently found in large trees around alpine lakes.

Has been found nesting at Yuba Pass.

When there had been a burn on the south side of Mono Lake some years ago Black-backed moved into that burn area and where fairly easy to see for a while. A pair got collected there, probably because of a misunderstanding.

Are in Yosemite also.

Fly really funny. When they fly from tree to tree they angle their body up in a 45 degree angle and flutter like mad, instead of hopping the way a lot of woodpeckers do.

In areas where there are a lot of Three-toed, there are usually not a lot of Black-backed. Prefer different trees. They also scale the bark of live trees and kill the tree.

FIELD MARKS

Lacks a white stripe behind the eye.

Back all black.

Male quite crisply defined yellow on top of the head.

Handle-bar moustache.

DRUMMING

Different from other woodpeckers, likewise the American Three-toed.

Their drum gets faster and faster and faster and also fainter and fainter and fainter.