

Notes based on Joe Morlan's Ornithology class lecture December 10<sup>th</sup>, 2009.  
Joe Morlan is not responsible for these notes, any errors or omissions in them are mine.

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**Townsend's Warblers** on the Pacific coast all carry Hermit Warbler mitochondrial DNA. Townsend's Warblers from further inland carry Townsend's Warblers mitochondrial DNA. There is nuclear DNA, the main part of the DNA which is in the nucleus of the cell, and there is mitochondrial DNA, which is in a separate part of the cell, in cell organelles called mitochondria. Since male sperm are very small and do not have any mitochondria, mitochondrial DNA is inherited only on the maternal side.

Other studies have shown higher testosterone levels and superior fighting ability in male Townsend's Warblers compared to male Hermit Warblers. Researchers have concluded that Townsend's Warblers, which lived a little further inland, invaded the range of Hermit Warblers along the north Pacific coast, where the Townsend's males dominated over the Hermit males and mated with Hermit females. The Townsend's Warblers completely took over the northern part of the Hermit Warbler's range, only the mitochondrial DNA from the Hermit females they mated with is left now.

<http://uwnews.org/article.asp?articleid=44978>

**Sabine's Gull** is a common migrating bird off CA in August, September and into October, with a few stragglers into November. It is a highly pelagic species. They migrate offshore along with the Arctic Terns which have a somewhat similar breeding and winter distribution. It is a spectacular and elegant gull. It has bold black wedges on the outer primaries, contrasting with snowy white wedges on the inner wing. This big W-pattern makes them recognizable at great distance. (The immature Red-legged Kittiwake has a similar pattern though.) They are very elegant flyers. They dip onto the surface of the water, picking food. Bill small, black with (in adults) a yellow tip. They migrate in juvenal plumage. Juveniles have a brown cap and back. One may have been seen at an Audubon Society field trip at Mori Point. They were not aware of how unusual a Sabine's Gull is in the wintertime, there are only two documented winter records for NA north of Mexico. There are some claims from northern CA. Winter records from the coast of CA require substantiation.

In mergansers, the younger males can have female like plumage for a good portion of the first year. A **Hooded Merganser** with an all black bill is more likely to be a male. Sometimes you see the male bright plumage begin to come in. The black markings on the chest tend to show up first.

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## Eiders

Eiders are large sea ducks that breed in the far north and winter primarily in the open ocean, although some of them may occur in the Great Lakes.

There are four species of Eider in the world, all four occur in the Bering Sea.

Not easily kept in captivity, they are not particularly responsive to being in a puddle or a small pond. They need to dive very deep, they need shellfish and they really like salt water.

Any eider is a review species in CA.

The pattern of maxillary feathering, how the feathers come down onto the upper mandible, is helpful in telling female-type eiders apart.

## Common Eider

### OCCURRENCE

Common to abundant off New England in the wintertime, close to shore and sometimes into sheltered bays. May occur in flocks of dozens to several hundred.

They tend to prefer rocky shores.

Feed on shellfish which they swallow whole. The gizzard grinds up the shells and they regurgitate the indigestible portions in the form of pellets.

Known from CA by a single record of a male in winter plumage in July off Crescent City. There is a couple of records from British Columbia.

The Common Eiders in the Pacific behave very differently from those in the Atlantic. In the Atlantic they move south regularly and occur in big numbers down as far as New Jersey, even into Maryland, perhaps further south than that. Common Eiders don't move much in the north Pacific.

Eider down is highly prized. It comes out of the breast of the females, they pluck it off their bodies and use it to insulate the nest.

### FIELD MARKS

Canvasback-like profile with a very long bill.

The long bill often gives the impression of being angled downward.

In profile it looks as though the bill is coming straight out of the top of the head.

A lobe of feathering comes down the side of the face and forms a point almost to the nostril. (This feather lobe is shorter on King Eider.)

The feathering that comes down the top of the bill, the culmen, is short (long on King).

### Basic (Bright) Plumage Male

Black underneath and white above, the reverse pattern of many birds.

White chest and white on the back.

It takes the males several years to get the full adult plumage.

In the first winter only the breast and part of the back are white.

Males have modified scapulars that form little "sails".

Fairly white underwings.

Bill olive colored in Atlantic *dresseri*, bright orange in *V-nigrum* which is found in the Bering Sea.

The Pacific subspecies has a black V on the chin (*V-nigrum* means black V).

There are two more subspecies, one in the eastern arctic and one in Hudson Bay.

### Female

Some of the west Atlantic population *dresseri* are very reddish looking in winter. No other eider has a red morph like this.

Paler, grayer in summer.

Dark speculum with a little bit of white on the trailing edge, may appear all dark in flight with a narrow white trim on the tips of the secondaries.

The pattern on breast and flanks is decidedly barred vertically. More scalloped on King Eider. Don't use that field mark though! It is too difficult to assess, real life is messier than the field guides.

## **King Eider**

### **OCCURRENCE**

Generally much rarer than the Common Eider. That is particularly true on the east coast, where there are very few King Eiders. They frequently are separate from the Common Eiders, not necessarily in flocks of Common Eiders.

Occur occasionally in CA, primarily in the late fall and winter. All records are coastal.

There appears to be a pattern of occurrence at the west coast. Although they are less common than Common Eiders in Alaska, they are more prone to vagrancy. There are enough records in western Canada, Washington, Oregon, northern CA, all the way down to southern CA, to support the theory of natural occurrence. The species seems to come and go in fits and starts. If there is an "invasion year" (maybe 3 birds) you'll find a whole pattern. There'll be King Eiders in the northwestern Pacific and we'll get them a little bit later in CA. Once they get out of their normal range, which is the ocean of the Bering Sea in the middle of the winter, they really move. They are basically as likely to find in Crescent City as they are in San Diego.

### **FIELD MARKS**

Bill slightly curved, not quite as Canvasback-like as Common Eider, gradually curving upward and reaching the feathering in front of the eye instead of above it the way it often looks in Common Eider.

Bill held out straight, does not give a downward impression like a Common Eider.

The slightly curved bill gives it a cuter face.

A reasonably steep forehead, not as straight as Common Eider.

### **Basic (Bright) Plumage Male**

Full adult unlikely to be seen in CA.

Bright red bill with orange frontal shields outlined in black.

Crown and nape pale ice blue.

Body mostly black with a white flank patch, a little bit of white along the scapulars, a white chest.

Little pointed sails on the scapulars.

In flight trapezoidal white patches on the wing coverts, black back (Common Eider has a white back).

### **Female**

Looks very much like a female Common Eider, the key difference is the pattern on the bill.

Female bill all dark. Immature males have pinkish bills.

The lateral maxillary feathering does not come down as far as on Common Eider but the maxillary feathering on the culmen comes as far out as the lateral lobes, so there are three lobes of feathers all of equal length. (On Common Eider the lateral lobes are very long and the lobe on top is very short.)

A combination of the feathering and the shape of the bill makes it look as if it is smiling a little bit, the graceful royal smile of the King Eider!

Darker bird than the red morph Atlantic Common Eider.

Pattern on sides and flanks more scallopy or scaly. But not always obviously so, it could sometimes be interpreted as vertical.

**Immature Male**

Similar to female, but:

Pretty obvious eye ring, may also have a postocular stripe that droops down the side of the face.

Chest paler or whitish.

Bill pinkish.

**Spectacled Eider****OCCURRENCE**

Confined to the northern part of the Bering Sea.

Declining rapidly.

Old CA record of one that was allegedly shot in the 19<sup>th</sup> century by a hunter at a place called Bitterwater Lake in San Benito County. The specimen can not be located. The hunter's grandfather actually spent that summer in Alaska...

**FIELD MARKS**

In many ways similar to the Common Eider but has big goggles in the face.

The maxillary feathering starts at the gape, extends straight above the nostril and wraps around over the top of the bill, not forming distinct lobes but essentially cloaking the base of the bill.

**Steller's Eider****OCCURRENCE**

Breeds in the high arctic.

Winters mostly in the Aleutians.

Most that have been seen in CA have been female plumaged.

Has occurred as far south as Bodega Harbor.

**FIELD MARKS****Basic (Bright) Plumage Male**

Boldly patterned.

Green spots on either side of the nape that almost stick out as tiny crests.

Variable amounts of a salmon pink wash on the underparts.

Long tail.

**Female**

Mallard-like look.

Speculum with white borders front and back.

A rather flat bill, no extensive feathering coming onto the top of the bill, it looks more like a dabbling duck than like a diving duck.

The rear toe has a lobe on it that is not found on the rear toe of surface feeding ducks.