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Pocket Guide to  
**Birds of**  
**San Francisco Bay**

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*A project of PRBO Conservation Science and CalPIF*

Pocket Guide to  
**Birds of**  
**San Francisco Bay**

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PRBO Conservation Science

California Partners In Flight

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## Introduction

The San Francisco Bay (SF Bay) Area includes many important food-rich areas and habitat types that support a large diversity of bird species.

SF Bay is recognized as a Western Hemisphere Shorebird Reserve Network (WHSRN) Site of Hemispheric Importance for shorebirds – the highest possible ranking. It is one of the most important wetland sites along the Pacific coast for waterbirds, hosting millions of wintering and breeding shorebirds, waterfowl, and other birds annually. Additionally, tidal marsh and upland habitat support large populations of landbirds around the SF Bay.

Over the past 150 years, the SF Bay has suffered the consequences of a rapidly increasing human population, which has resulted in urban development and broad-scale habitat conversion. Conservation and restoration of a **mix of**

**wetland, mudflat, and upland habitat types is essential** to maintain thriving bird populations, and to protect this important region for people and birds in the future.

## **How to Use this Guide**

This guide was written for people interested in learning about the most common bird species in and around the SF Bay. We focus on 65 of the most common species and separate them by the habitat where they most often occur in the SF Bay. Habitat types are divided as follows:

- 1) **Bay Water,**
- 2) **Near-shore and Mudflats** (including salt ponds),
- 3) **Tidal Marsh,** and
- 4) **Upland** (including riparian and oak woodland).

General descriptions of each habitat can be found at the beginning of each section. Within each habitat section, species are listed in taxonomic order. Conservation tips for each habitat are also listed in this section.

## Species Profiles

Each species profile includes a photo of the particular species. An attempt was made to include photos of birds in plumage typical of how they usually look while in the SF Bay area (many birds can appear different depending on the time of the year and also depending on their age and sex).

Each species includes a profile listing the following sections:

- 1) **Identification:** An overview of important physical features or behavioral clues that help identify a particular species, including its length



in inches. When males and females or different age classes look different, this is noted.

- 2) **Timing:** When the species occurs in the SF Bay Area. *Note:* “Winter” is defined as birds that arrive in the fall and stay until spring, but do not breed here during the summer months.
- 3) **Diet:** The main food items.
- 4) **Note:** An interesting fact about the species natural history, identification, etc.
- 5) **Conservation:** Selected species only. Describes specific conservation status or ways to conserve birds and their habitats. Conservation tips for each habitat type are included in the beginning of each section.

This is not a comprehensive guide to birds of the SF Bay Area, but an introduction to the species, their habitats and how to conserve them. References are listed at the end of this guide.

# Species Profiles

## Bay Water Species

Although you may not usually think of open water as “habitat,” the SF Bay water provides abundant food to many bird species that dive for fish, marine invertebrates, and aquatic plants. This rich food source supports many bird species, especially wintering waterbirds.

Threats to birds in this habitat include pollution, human disturbance, climate change, and invasive plant and animal species.



Sara Acosta

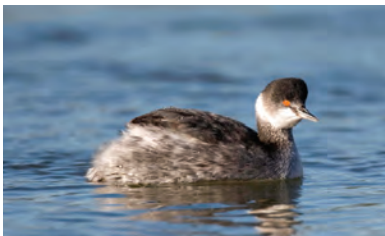
*Alcatraz Island surrounded by Bay Water*

## Bay Water Conservation Tips

- When boating, paddling, and fishing, stay  $\frac{1}{4}$  mile (1300 ft) away from birds nesting on bridges and islands. If birds appear nervous (e.g., head bobbing, calling, or fluttering), you are too close and should move away.
- Paddle, sail, or motor around floating or feeding flocks of birds, rather than through them.
- Support programs that strive to prevent oil spills and encourage installation of double-hulled fuel tanks on ships in the SF Bay.
- Do not feed wildlife and pack out all trash.
- Recycle or dispose of plastics, fishing hooks and line in the trash – not in the water.
- Use barbless fishing hooks and weight fishing lines to avoid hooking seabirds.

## Bay Water Conservation Tips

- Never dump oil, fuel, or other foreign substances into the water or drains.
- Choose environmentally friendly products for household cleaning, gardening, and other areas where toxic chemicals are sometimes used.
- Use less chemically intense alternatives for weed and pest control on your property.
- Never litter. Garbage that is dropped on the pavement can end up in storm drains – and eventually in the Bay.
- Support conservation organizations that strive to improve water quality and protect habitats and the species that depend on them.



Eric Preston

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## Eared Grebe

(*Podiceps nigricollis*)

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**Identification:** 13" – *Winter* (shown): Dusky head and neck with whitish ear patch; slender bill slightly upturned; red eyes.

**Timing:** Winter.

**Diet:** Crustaceans, insects, small fish.

**Note:** Common in salt ponds. Eared Grebes use highly saline areas in winter, where invertebrates are abundant.



Stuart Mackay

---

## Western Grebe

(*Aechmophorus occidentalis*)

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**Identification:** 25" – Black and white long thin neck; long, pointed yellowish bill. Black on head surrounds red eye.

**Timing:** Year-round.

**Diet:** Fish.

**Note:** Elaborate courtship ceremonies include pair diving together for organic materials.

**Conservation:** Support programs that promote oil-spill prevention strategies.



Steve Smith

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## American White Pelican

(*Pelicanus erythrorhynchos*)

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**Identification:** 62" – Large; White overall except black hind wings (visible in flight). Long yellow-orange bill.

**Timing:** Year-round. Non-breeder in SF Bay.

**Diet:** Fish.

**Note:** Forages by dipping bill into the water and scooping out prey, sometimes in symmetrical “chorus lines.”





Steve Smith

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## Brown Pelican

*(Pelicanus occidentalis)*

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**Identification:** 51" – *Adult* (shown): gray overall. *Young*: Dark brown with white belly.

**Timing:** Year-round. Non-breeder in SF Bay.

**Diet:** Fish.

**Note:** Plunges from flight into water for prey up to 65 feet deep.

**Conservation:** Federally and CA State endangered. Reduce pesticide levels and remove fishing lines, hooks, and lures from the marine environment.



Steve Smith

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## Double-crested Cormorant

(*Phalacrocorax auritus*)

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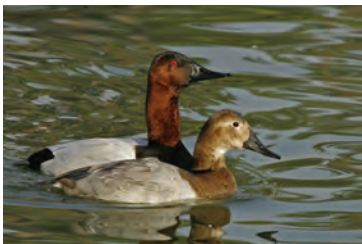
**Identification:** 33" – Dark overall with orange throat patch. *Young:* Pale underparts.

**Timing:** Year-round.

**Diet:** Fish.

**Note:** Often observed perched with wings outstretched.

**Conservation:** Avoid disturbance to nesting colonies by maintaining 1/4 mile distance from the entire nesting colony.



Steve Smith

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## Canvasback

(*Aythya valisineria*)

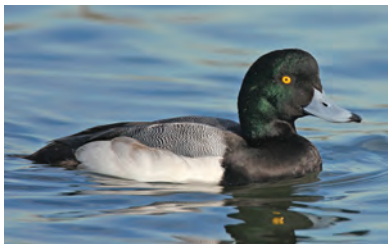
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**Identification:** 21" – Long black bill, distinctive sloping head shape. *Male:* Head and neck chestnut; chest black.

**Timing:** Winter.

**Diet:** Plants (buds, rhizomes, and tubers of aquatic plants), clams, snails.

**Note:** The Latin name *valisineria* is the also the name for wild celery, a favorite food of Canvasbacks.



Steve Smith

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## Greater Scaup

(*Aythya marila*)

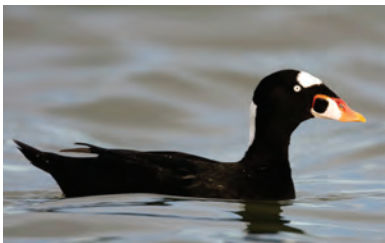
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**Identification:** 18" – *Male:* Dark green head (often looks black), gray back. *Female:* Brown, white patch on face around bill. *Both sexes:* White wing stripe in flight, yellowish eyes.

**Timing:** Winter.

**Diet:** Crustaceans, aquatic insects and larvae, plant materials.

**Note:** Breeds in coastal tundra of Arctic and Subarctic.



Eric Preston

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## Surf Scoter

(*Melanitta perspicillata*)

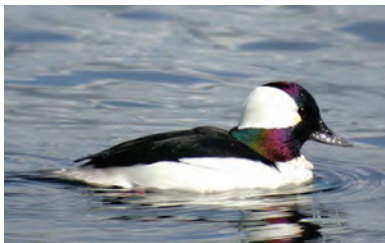
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**Identification:** 20" – *Male:* Black overall with white patches on back of head and forehead. Multicolored bill. *Female:* Dark brown; less distinct white patches on head.

**Timing:** Winter.

**Diet:** Mollusks.

**Note:** It's common for Surf Scoters to accidentally swap young on crowded lakes on their breeding grounds.



Stuart MacKay

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## Bufflehead

(*Bucephala albeola*)

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**Identification:** 13.5" – *Male:* Black and white with white patch on side of head. *Female:* Dark brown with less extensive white head patch.

**Timing:** Winter.

**Diet:** Aquatic invertebrates (insects, crustaceans), seeds.

**Note:** Nest in cavities made by woodpeckers.



Steve Howell

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## Ruddy Duck

*(Oxyura jamaicensis)*

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**Identification:** 15" – Small duck with dark head and white cheeks. Spiky tail often upturned.

*Female:* Dark line across pale cheek.

**Timing:** Year-round. More common in winter.

**Diet:** Aquatic insects, crustaceans, zooplankton, and aquatic vegetation.

**Note:** Use legs and large webbed feet to help propel themselves underwater for feeding.



Steve Howell

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## Western Gull

(*Larus occidentalis*)

---

**Identification:** 25" – Large gull with pink legs, heavy bill. *Adult* (shown): Slaty gray back. *Young*: Patterned brown overall.

**Timing:** Year-round.

**Diet:** Invertebrates, fish, birds (eggs, chicks, adults), carrion, garbage.

**Note:** Also found near-shore. Hybridization with Glaucous-winged Gull common.

**Conservation:** Approximately 1/3 of the total population breeds on Southeast Farallon Island.



## Near-shore and Mudflats

Although they may appear barren, mudflats support millions of tiny creatures living within the mud, thanks to two tidal cycles occurring each day in SF Bay. The tides create strong currents that dispense huge quantities of nutrients throughout the Bay, sloughs, and marshes. At low tide shorebirds probe the mudflats and harvest the benefits while other near-shore birds gather food along the surface of the water.

**Salt Ponds** – Salt is produced around SF Bay using salt ponds of varying salinities, which each support slightly different plant and animal species depending on the salinity of each pond. The salt ponds in the SF Bay support millions of birds annually and are the most important stop-over along the Pacific Coast for many birds.

In today's heavily altered SF Bay, **a mix of shallowly flooded managed ponds as well as restored tidal marshes** are needed to protect SF Bay as a site of Hemispheric importance for migrating shorebirds.



Suzi Eszterhas

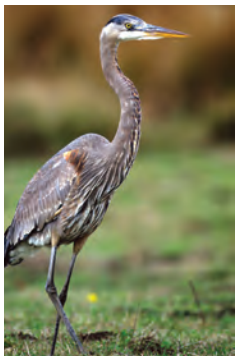
*Shorebirds in SF Bay mudflats*

## Near-shore and Mudflats Conservation Tips

- Never plant non-native invasive plants, including ice plant (*Carpobrotus edulis*), common cordgrass (*Spartina spp*), pepperweed (*Lepidium spp*), giant reed (*Arundo donax*), European beachgrass (*Ammophila arenaria*), and common reed (*Phragmites australis*).
- Support and participate in programs that seek to remove the above invasive non-native plants.
- Support management of some SF Bay habitats to mimic salt ponds. Shallow, flooded ponds create food and habitat for millions of shorebirds each year.
- When hiking and paddling along the Bay shores, stay ¼ mile (1300 feet) away from nesting birds on dykes and levees.
- Participate in habitat restoration projects.

## Near-shore and Mudflats Conservation Tips

- Keep pets on leashes when walking along shores or on bayfront trails; don't allow kids or pets to chase birds.
- Do not feed wildlife, and pack out all trash.
- Recycle or dispose of plastics, fishing hooks and line in the trash – not in the water.
- Use barbless fishing hooks, and weight fishing lines to avoid hooking birds.
- Prevent pollution: never dump oil, fuel, or other foreign substances into the water or drains. Among many things, pollution kills the fish that birds eat.
- Purchase a Federal Migratory Bird Hunting and Conservation Stamp (“Duck Stamp”) from your local post office. Funds directly support wetland conservation on National Wildlife Refuges.



Kim Kreitinger

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## Great Blue Heron

(*Ardea herodias*)

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**Identification:** 46" – Very large and tall dark bird, long legs and neck, stout pointed bill.

**Timing:** Year-round.

**Diet:** Mostly fish, but food items include gophers and marsh birds.

**Note:** Usually nests in trees with egrets and other waterbirds.



California Waterfowl Association

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## Great Egret

(*Ardea alba*)

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**Identification:** 39" – Large, all-white, yellow bill, black legs and feet. Forages by walking slowly or waiting motionless before quickly capturing prey.

**Timing:** Year-round.

**Diet:** Mostly fish but many other items also eaten.

**Note:** Chicks are aggressive towards siblings in competing for food; thus, not all survive until fledging.



Rich Stallcup

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## Snowy Egret

(*Egretta thula*)

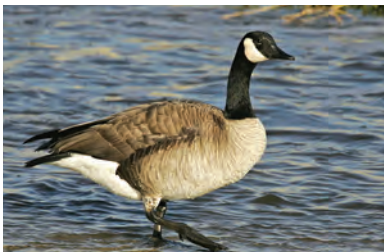
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**Identification:** 24" – Medium-sized, all-white; black bill and legs, yellow feet. Actively forages or crouches motionlessly.

**Timing:** Year-round.

**Diet:** Insects, crustaceans, fish.

**Note:** Until the early 1900s, Snowy Egrets were hunted for feathers, which were sold at twice the price of gold. After near extirpation from CA, recovery efforts began in the mid 20th century.



Steve Smith

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## Canada Goose

(*Branta canadensis*)

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**Identification:** Large, often noisy. Black head and neck with white cheek patch.

**Timing:** Year-round. More common in winter.

**Diet:** Plant material, berries, seeds.

**Note:** Widespread in N. America. Also breeds in Greenland, and introduced pest in Europe, Asia, and New Zealand.





Steve Zack

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## Mallard

(*Anas platyrhynchos*)

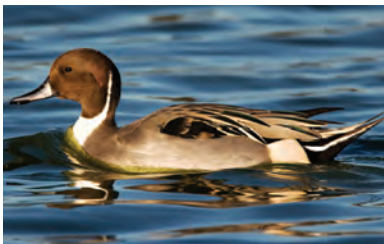
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**Identification:** 23" – *Male* (shown): Glossy green head and white neck ring. Chestnut chest, yellow bill. *Female*: Mottled brown, whitish tail. *Both sexes*: Glossy blue wing patch in flight.

**Timing:** Year-round.

**Diet:** Plant material, insects, crustaceans.

**Note:** The most abundant and recognizable duck in North America, the Mallard was the source for almost all domestic ducks.



Eric Preston

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## Northern Pintail

(*Anas acuta*)

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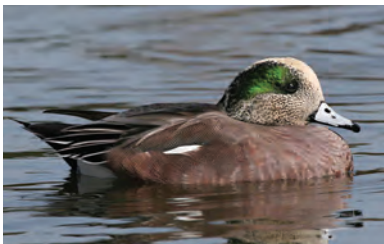
**Identification:** 21" – Long neck, pointed tail.

*Male:* Brown head, white breast, white stripe up neck. *Female:* Mottled pale gray-brown, slender gray bill.

**Timing:** Winter.

**Diet:** Grain, seeds, pond weeds, aquatic insects, crustaceans, snails.

**Note:** Nests farther from water than most ducks but walks with young to water when they are only a day old.



Lyann Comrack

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## American Wigeon

(*Anas americana*)

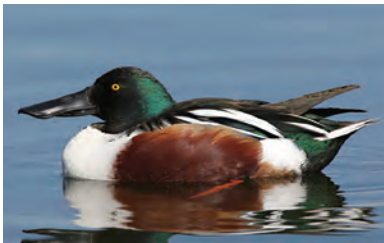
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**Identification:** 20" – *Male:* White crown, green face patch. White patch on wings. *Female:* Mottled rusty-brown, small blue-gray bill.

**Timing:** Winter.

**Diet:** Plant material, insects, crustaceans, seeds.

**Note:** Also known as “Baldpate” because male's white crown suggested a bald head.



Lyann Comrack

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## Northern Shoveler

*(Anas clypeata)*

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**Identification:** 19" – Very long "shovel" bill.

*Male:* Green head, white chest, rufous flanks.

*Female:* Mottled brown, whitish tail.

**Timing:** Winter.

**Diet:** Aquatic invertebrates and seeds.

**Note:** Most common duck in salt ponds. Large bill is adapted to filter food from water.



Rich Stallcup

---

## Peregrine Falcon

(*Falco peregrinus*)

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**Identification:** 16" – Pointed wings. Dark upperparts, broad black mustache.

**Timing:** Year-round.

**Diet:** Birds.

**Note:** A fast and powerful hunter, can fly over 200mph when stooping towards prey.

**Conservation:** Listed and removed from the Federally Endangered List, they were a symbol of the repercussions of DDT and have recovered after its banning. Still State Endangered in CA.



Lyann Comrack

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## American Coot

(*Fulica americana*)

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**Identification:** 15.5" – Duck-like; blackish overall with white bill and shield.

**Timing:** Year-round.

**Diet:** Plants, invertebrates, small vertebrates.

**Note:** Although coots are often observed among ducks, they are not ducks and do not have webbing between their toes. Instead, their toes are lobbed along the sides.



Eric Preston

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## Black-bellied Plover

(*Pluvialis squatarola*)

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**Identification:** 11.5" – Stocky with big eyes, short bill. *Non breeding:* Grayish overall with whitish belly. *In flight:* White rump and wing-stripe, black “wingpits.” Melancholy whistles.

**Timing:** Winter.

**Diet:** Invertebrates (especially worms), bivalves, crustaceans.

**Note:** Flushes easily when potential predators are still far away, thus, may be more sensitive to disturbance than many other birds.



Rick Lewis

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## Semipalmated Plover

(*Charadrius semipalmatus*)

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**Identification:** 7.25" – Brown upperparts, dark breast band, orangish legs.

**Timing:** Winter.

**Diet:** Invertebrates (fly larvae, worms, small bivalves).

**Note:** “Semipalmated” refers to partial webbing between the 3 front toes (difficult to see in the field).





Jenny Erbes

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## Snowy Plover

(*Charadrius alexandrinus*)

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**Identification:** 6.25" – Light brown upperparts, incomplete breastband.

**Timing:** Year-round.

**Diet:** Invertebrates.

**Note:** On the approach of people and potential predators, young drop to the ground to hide.

**Conservation:** Coast population listed as federally Threatened. Avoid disturbance to nesting birds (at salt ponds and dune-backed beaches). Respect closed areas and keep dogs on leashes.



Stuart MacKay

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## Killdeer

(*Charadrius vociferus*)

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**Identification:** 10.5" – Two black bands on breast unique, rufous rump. Noisy, as scientific name implies.

**Timing:** Year-round.

**Diet:** Terrestrial invertebrates (earthworms, grasshoppers, beetles, snails)

**Note:** Killdeer commonly observed pretending to have a broken wing to lead humans and potential predators away from their nests.



Stuart MacKay

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## American Avocet

(*Recurvirostra americana*)

---

**Identification:** 18" – Long, upturned bill. Bold white-and-black patterning. Head and neck pale gray (winter) or cinnamon (summer).

**Timing:** Year-round.

**Diet:** Invertebrates, small fish, seeds.

**Note:** Females accept eggs laid in their nests by other American Avocets and Black-necked Stilts and raise the young as their own.

**Conservation:** Maintain salt pond habitat of varying salinities and depths.



Stuart MacKay

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## Black-necked Stilt

(*Himantopus mexicanus*)

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**Identification:** 14" – Long “hot pink” legs. Black upperparts, white underparts.

**Timing:** Year-round.

**Diet:** Aquatic invertebrates, small fish.

**Note:** Except for flamingos, stilt species have the longest legs in proportion to their body size of all bird groups.

**Conservation:** Maintain salt pond habitat of varying salinities and depths.



Rick Lewis

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## Greater Yellowlegs

(*Tringa melanoleuca*)

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**Identification:** 14" – Long bill and neck. Long yellow legs. White rump and tail.

**Timing:** Winter.

**Diet:** Invertebrates, small fish, frogs, occasional seeds and berries.

**Note:** Easily recognized by distinctive flight calls – a high “deew deew deew” and other alarm calls, consequently, the species has been referred to as telltale, tattler, and yelper.



Stuart MacKay

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## Willet

(*Tringa semipalmata*)

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**Identification:** 15" – Grayish overall with straight bill, gray legs. Bold black and white wing pattern seen in flight.

**Timing:** Winter.

**Diet:** Insects, small crustaceans, mollusks, worms.

**Note:** Willet is the only sandpiper in N. America that breeds as far south as the tropics.



Stuart MacKay

---

## Long-billed Curlew

(*Numenius americanus*)

---

**Identification:** 23" – Extremely long, down-curved bill. Buffy brown plumage.

**Timing:** Winter.

**Diet:** Insects, crustaceans, other invertebrates.

**Note:** Largest N. American shorebird.

**Conservation:** CA Bird Species of Special Concern. Loss of habitat on both breeding (modified grasslands) and wintering grounds (drained wetlands and intertidal). Support programs that promote conservation and restoration.



Eric Preston

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## Marbled Godwit

(*Limosa fedoa*)

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**Identification:** 18" – Slightly upturned bill with pink base. Buffy brown plumage.

**Timing:** Winter.

**Diet:** Worms, small bivalves, crabs.

**Note:** Individual Marbled Godwits stay in the SF Bay area for 7–8 months: of marked individuals the average time absent over the spring and summer was only 137 days.





Lyann Comrack

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## Dunlin

(*Calidris alpina*)

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**Identification:** 8.5" – Fairly long, drooping bill. Blackish legs. Nonbreeding plumage dull brownish gray, whitish belly.

**Timing:** Winter.

**Diet:** Invertebrates. Occasional plant materials.

**Note:** Raptor predation likely accounts for most mortality of Dunlin on the winter grounds.



Stuart MacKay

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## Western Sandpiper

(*Calidris mauri*)

---

**Identification:** 6.5" – Bill slightly drooping. Black legs. Young in early fall show reddish scapulars (“shoulders”). *Nonbreeding:* Gray upperparts, whitish breast and underparts.

**Timing:** Winter.

**Diet:** Marine invertebrates.

**Note:** SF Bay is one of the most important stopover sites for migrating Western Sandpipers, where hundreds of thousands show up each year (especially at salt ponds).



Steve Howell

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## Least Sandpiper

(*Calidris minutilla*)

---

**Identification:** 6" – Bill slightly drooping. Yellowish legs. *Nonbreeding:* Dull brownish upperparts and breast, white belly. Young in fall have reddish upperparts.

**Timing:** Winter.

**Diet:** Invertebrates.

**Note:** Smallest shorebird in the world!

**Conservation:** Maintain salt pond habitat of varying salinities and depths.



Stuart MacKay

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## Long- & Short-billed Dowitchers

(*Limnodromus scolopaceus* & *L. griseus*)

---

**Identification:** Two species almost identical, both relatively long-billed. 11" – *Nonbreeding:* Gray overall, white belly, white “eyebrow.” *In flight:* White wedge from tail to middle of back.

**Timing:** Winter.

**Diet:** Invertebrates, some plant materials.

**Note:** Both adults incubate eggs on breeding grounds, but male is primary caretaker after young hatch.



Stuart MacKay

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## California Gull

(*Larus californicus*)

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**Identification:** 21" – *Adult:* Yellowish legs, yellow bill with black and red marks. *Young:* Patterned brownish overall.

**Timing:** Year-round.

**Diet:** Mammals, fish, birds, invertebrates, garbage.

**Note:** A common breeder in the SF Bay, California gulls breed anywhere from freshwater lakes and rivers to very salty waters such as Mono Lake.



Tom Grey

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## Caspian Tern

(*Hydroprogne caspia*)

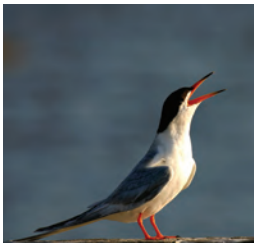
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**Identification:** 21" – Large tern with thick red bill. Deep rasping call, sounds like "kaark".

**Timing:** Summer.

**Diet:** Fish.

**Note:** Largest tern in the world.



Rick Lewis

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## Forster's Tern

(*Sterna forsteri*)

---

**Identification:** 13" – Small tern with orange legs. Black cap in summer, black eye mask in winter (when bill is also black).

**Timing:** Year-round.

**Diet:** Fish.

**Note:** Breeds on salt ponds. Like many other terns, Forsters's dive into water from flight rather than from swimming.



Lyann Comrack

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## Least Tern

(*Sternula antillarum*)

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**Identification:** 9"– Tiny with black-tipped yellow bill. Black cap, white forehead.

**Timing:** Summer.

**Diet:** Fish, invertebrates.

**Conservation:** Federally and state Endangered in CA. Least Terns nest on beaches where pressure from human recreation and development is a threat to their populations. Conserve coastal Least Tern breeding sites.



## Tidal Marsh Species

Tidal marshes transfer nutrients for plants, fish and invertebrates to the open Bay via sloughs. Tidal marshes also naturally filter pollutant run-off from urban areas. Several plants are adapted to the salty marshes, including pickleweed, cord grass, and salt grass. Although there is not a high diversity of birds that use tidal marshes, they comprise an important suite of species, including the Endangered Clapper Rail, the elusive Black Rail, and three subspecies of Song Sparrow found only around SF Bay.



Len Liu

*SF Bay Tidal Marsh*

## Tidal Marsh Conservation Tips

- Never plant non-native invasive plants, including ice plant (*Carpobrotus edulis*), common cordgrass (*Spartina spp*) , pepperweed (*Lepidium spp*), giant reed (*Arundo donax*), European beachgrass (*Ammophila arenaria*) and common reed (*Phragmites australis*).
- Support and participate in restoration programs that remove invasive non-native plants and create marshes with a mix of channels, shallow flooded ponds, and mudflats.
- When hiking on Bay trails, stay on the trail and keep pets on leashes. Marsh plants are sensitive to trampling, and marsh birds nest on the ground or low in the marsh vegetation.
- Do not feed wildlife, and pack out all trash.
- Prevent pollution: never dump oil, fuel, or other foreign substances into the marsh.



Peter LaTourrette

---

## Clapper Rail

(*Rallus longirostris*)

---

**Identification:** Hides in marshes. Call a series of clacking or grunting notes. 14.5" – Long bill, rufous breast, flanks striped, short tail.

**Timing:** Year-round.

**Diet:** Crustaceans, other invertebrates, small vertebrates, seeds.

**Note:** Breeds from the northern U.S. to Peru and Brazil

**Conservation:** Federally and state Endangered in CA. Much tidal marsh habitat has been lost.



Peter LaTourrette

---

## Black Rail

(*Laterallus jamaicensis*)

---

**Identification:** Call a three-noted “kickee-doo” or “kic-kic-kerr.” Often calls at night.

**Timing:** Year-round.

**Diet:** Small invertebrates, seeds.

**Note:** Black Rails are almost never seen, but often heard. Consequently, much remains to be learned about their natural history.



Stuart MacKay

---

## Marsh Wren

(*Cistothorus palustris*)

---

**Identification:** 5" – White eyebrow, reddish rump and "shoulders," black and white striped back.

**Timing:** Year-round.

**Diet:** Insects, spiders, other invertebrates.

**Note:** More easily heard than seen. The Marsh Wren's song has been compared to an old fashioned sewing machine and a rusty hinge.



Rick Lewis

---

## Common Yellowthroat

(*Geothlypis trichas*)

---

**Identification:** 5" – Upperparts olive, throat and chest yellow. *Male* (shown): Black mask with white border.

**Timing:** Year-round.

**Diet:** Insects.

**Conservation:** Create potential nest sites by planting native grasses, sedges, cattails and bulrush.



Eric Preston

---

## Song Sparrow

(*Melospiza melodia*)

---

**Identification:** 6" – Upperparts reddish brown with dark streaking. Gray face with dark stripes. Underparts whitish with heavy streaking.

**Timing:** Year-round.

**Diet:** Insects, seeds.

**Note:** Found in many different habitat types, including riparian and coastal scrub. There are 3 recognized subspecies of Song Sparrow in SF Bay tidal marshes.

## Upland (Riparian & Oak Woodland) Species

### **Upland (including riparian and oak woodland)**

Above the bay and tidal marshes, is “upland habitat.” The plant life that borders rivers, creeks, and other water bodies is known as riparian and supports a high diversity of landbird species throughout the year. Oak woodland is characterized by the presence of oak species (*Quercus* spp.) as the dominant tree type and generally has a more open understory (low-growing herbaceous and shrubby plants) than riparian. Other habitat types can also be defined as “upland,” and for this guide we’ve chosen some of the most common birds within upland habitat around SF Bay. Many of these bird species can also be found in your yard, **especially if you landscape with native plants.**



## Upland (Riparian & Oak Woodland) Conservation Tips

- Plant native plants for birds to nest and feed in, and eliminate pesticide use.
- Do not feed nest predators (e.g., jays, raccoons, feral cats), eliminate outdoor sources of food such as pet food dishes.
- Retain dead trees and woody material on your property.
- Consider the timing of your activities. Mow, trim shrubs, and cut tree branches during the non-nesting season (Aug-Feb) to avoid destroying nests – and if you must mow, mow early and often.
- Retain trees that stand above the other layers of vegetation.
- Promote a diverse vegetation structure (birds need a mix of open, shrubby, and tree-covered areas, as well as a diversity of plant species).



Lishka Arata

*Oak Woodland Habitat*



Tom Gardali

*Riparian Habitat*



Rick Lewis

---

## Turkey Vulture

(*Cathartes aura*)

---

**Identification:** 26" – Blackish-brown overall, unfeathered red head. In flight, underwings two-toned (light hindwing).

**Timing:** Year-round.

**Diet:** Carrion.

**Note:** Turkey Vultures use their heightened sense of smell to locate food.



Eric Preston

---

## Northern Harrier

(*Circus cyaneus*)

---

**Identification:** 18" – Long wings and tail. Distinctive white rump patch in flight. *Male:* Upperparts gray. *Female:* Upperparts brown.

**Timing:** Year-round.

**Diet:** Mammals.

**Note:** Most males mate with one or two (and up to five) females in the same season. The male provides food while females tend to eggs and young.



Eric Preston

---

## White-tailed Kite

(*Elanus leucurus*)

---

**Identification:** 15" – White underparts, gray upperparts, black shoulders. Often seen hovering in place before diving for prey.

**Timing:** Year-round.

**Diet:** Small mammals.

**Note:** White-tailed Kites can roost in groups of more than 100 individuals in the non-breeding season.



Tom Grey

---

## Red-tailed Hawk

(*Buteo jamaicensis*)

---

**Identification:** 19" – Highly variable in appearance. *Adult:* Tail broad and rufous. Commonly has pale chest and dark band across belly. *Young:* Brown tail finely barred black.

**Timing:** Year-round.

**Diet:** Mammals, birds, reptiles.

**Note:** “Dark morph” Red-tailed Hawks can be almost entirely dark brown except for the reddish tail.



Steve Smith

---

## Mourning Dove

(*Zenaida macroura*)

---

**Identification:** 12" – Pinkish brown overall. Black spots on wings and single spot on each cheek. Long pointed tail, tail feathers tipped white.

**Timing:** Year-round.

**Diet:** Seeds.

**Note:** Although Mourning Doves are one of the most hunted birds in North America, they remain relatively common.



California Waterfowl Association

---

## Great Horned Owl

(*Bubo virginianus*)

---

**Identification:** 22" – Large, gray-brown owl with thick ear tufts (“horns”). Yellow eyes. Series of low hoots heard at night.

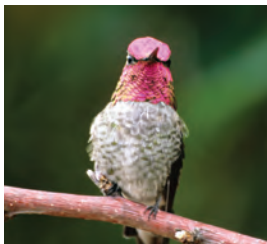
**Timing:** Year-round.

**Diet:** Mammals, birds, reptiles, amphibians.

**Note:** Great Horned Owls are known to regularly eat skunks.

**Conservation:** Avoid using rodenticides at your home or property. Owls can be poisoned by feeding on rodents that have consumed poisons.





Eric Preston

---

## Anna's Hummingbird

(*Calypte anna*)

---

**Identification:** 4" – Upperparts green, underparts grayish. *Male* (shown): Iridescent rose-pink crown and throat. *Female*: Throat with lines of spots or a small patch of pink.

**Timing:** Year-round.

**Diet:** Nectar, insects.

**Note:** Males have an elaborate display including a swift “J” shaped dive.

**Conservation:** Plant native flowering plants like monkeyflower and penstemon.



Brian Sullivan

---

## Allen's Hummingbird

(*Selasphorus sasin*)

---

**Identification:** 4" – Crown and back green. Rump, tail and sides rusty. *Male* (shown): Throat iridescent flame-orange. *Female*: White throat with lines of dark spots.

**Timing:** Late winter through summer.

**Diet:** Nectar, insects.

**Note:** One of the first nesting migrants to return to Northern California (usually by late January).

**Conservation:** Plant native flowering plants like monkeyflower and penstemon.



Stuart MacKay

---

## Belted Kingfisher

(*Ceryle alcyon*)

---

**Identification:** 13" – Long, pointed bill; bushy head. Upperparts blue-gray with white collar. Blue-gray band across chest. *Female* (shown): Rusty band across chest.

**Timing:** Year-round.

**Diet:** Small fish.

**Note:** In streamside banks, pairs excavate nest burrows that can be up to 7 feet long.

**Conservation:** Protect areas with stream-bank burrows.



Lyann Comrack

---

## Black Phoebe

(*Sayornis nigricans*)

---

**Identification:** 7" – Black overall with white belly. Often dips tail while perched.

**Timing:** Year-round.

**Diet:** Insects.

**Note:** Black Phoebes often reuse the same mud and grass nest year after year.

**Conservation:** Protect potential nest structures adjacent to your creek such as pump houses and habitat underneath bridges.



Boris Tomico

---

## Common Raven

(*Corvus corax*)

---

**Identification:** 24" – All black with wedge-shaped tail. Thick bill. Deep croaking calls.

**Timing:** Year-round

**Diet:** Arthropods, amphibians, reptiles, birds (adults, chicks, and eggs), small mammals, carrion, grains, buds, and berries.

**Note:** Raven populations can have negative effects on other nesting birds. Do not supplement their diet, and keep food sources (e.g., compost piles) covered to prevent a feeding station.



Stuart Mackay

---

## American Crow

(*Corvus brachyrhynchos*)

---

**Identification:** 18" – All black with squared tail. Bill smaller than raven's and voice higher pitched, cawing.

**Timing:** Year-round.

**Diet:** Invertebrates, amphibians, reptiles, small birds and mammals, seeds, fruits, carrion.

**Note:** Do not supplement the diet of avian nest predators, such as crows, and keep food sources (e.g., compost piles) covered to prevent creating a feeding station.



Stuart Mackay

---

## Barn Swallow

(*Hirundo rustica*)

---

**Identification:** 7" – Deeply forked tail. Head and upperparts glossy blue-black. Forehead and throat chestnut. Underparts buffy.

**Timing:** Spring and summer.

**Diet:** Insects.

**Note:** Female Barn Swallows judge a potential mate by the chestnut color on his chest.

**Conservation:** Protect potential nest structures such as barns and underneath bridges.



Tom Grey

---

## Yellow-rumped Warbler

(*Dendroica coronata*)

---

**Identification:** 5.5" – Yellow rump and side patches. White outer tail feathers. Overall plumage ranges from brown to blue-gray. Throat yellow or white.

**Timing:** Winter.

**Diet:** Insects, fruit.

**Note:** The only species of warbler able to digest waxes in bayberries (e.g. wax myrtle), contributing to its ability to overwinter farther north than most other warbler species.





California PIF

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## Savannah Sparrow

(*Passerculus sandwichensis*)

---

**Identification:** 5.5" – Brown streaky upper-parts. Underparts white with brown streaks. Yellow lores (between eye and base of bill).

**Timing:** Year-round.

**Diet:** Insects, seeds.

**Note:** Savannah Sparrow was named after Savannah, Georgia, where the first specimen was collected.

**Conservation:** Support projects that promote grassland restoration.



Eric Preston

---

## White-crowned Sparrow

(*Zonotrichia leucophrys*)

---

**Identification:** 7" – Streaky brown upperparts, plain gray underparts. *Adult:* Black and white crown stripes. *Young:* Brown crown stripes.

**Timing:** Year-round. More widespread in winter.

**Diet:** Seeds, buds, grass, fruits, arthropods.

**Note:** Song dialects have been well studied for this species and show that males sing more like the other males where they hatched, than males that hatched in other regions.



Steve Smith

---

## Western Meadowlark

(*Sturnella neglecta*)

---

**Identification:** 9.5" – Bright yellow underparts, black breast band. White outer tail feathers.

**Timing:** Year-round.

**Diet:** Seeds, insects.

**Note:** Female builds nest on ground, sometimes with an elaborate entrance tunnel and grassy roof.

**Conservation:** Support projects that promote grassland restoration.



Rich Stallcup

---

## Red-winged Blackbird

(*Agelaius phoeniceus*)

---

**Identification:** 9" – *Male* (shown): Black overall with a bright red patch on each shoulder. *Female*: Brown overall with dark streaking on underparts.

**Timing:** Year-round.

**Diet:** Insects, seeds.

**Note:** As many as 15 females have been observed breeding with one male, although many of the offspring turn out to be from males in neighboring territories.



Eric Preston

---

## Brewer's Blackbird

(*Euphagus cyanocephalus*)

---

**Identification:** 9" – *Male* (shown): Glossy black, purple and green, pale eyes. *Female*: Gray-brown overall. Eyes usually dark.

**Timing:** Year-round.

**Diet:** Invertebrates, seeds.

**Note:** Some learn to wait at stoplights and pick insects from the grills of stopped vehicles.



California Waterfowl Association

---

## American Goldfinch

(*Carduelis tristis*)

---

**Identification:** 5" – Conical pinkish bill. Body bright yellow to dull brown, white wingbars.

*Breeding Male:* Bright yellow with black cap and wings. *Female:* Dull olive.

**Timing:** Year-round.

**Diet:** Seeds.

**Note:** The American Goldfinch starts breeding when many other species are winding down in their nesting cycle (June & July).

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## References

Brown, S., C. Hickey, B. Harrington, and R. Gill, eds. 2001. The U. S. Shorebird Conservation Plan, 2nd Ed. Manomet Center for Conservation Sciences, Manomet, MA.

CA Partners In Flight Bird Conservation Plans.  
[www.prbo.org/calpif/plans.html](http://www.prbo.org/calpif/plans.html)

CA Partners In Flight 2006. Bringing the Birds Back: A Guide to Habitat Enhancement in Riparian and Oak Woodlands of the North Bay Region. [www.prbo.org/calpif/](http://www.prbo.org/calpif/)

Kaufman, Kenn. 2005. Kaufman Field Guide to Birds of North America. Houghton Mifflin Co., New York.

Poole, A. and F. Gill. The Birds of North America. The Birds of North American Inc., Philadelphia, PA.

Shuford, W. D., and Gardali, T., editors. 2007. California Bird Species of Special Concern 2006: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.

Sibley, D. A. 2000. The Sibley Field Guide to Birds. Alfred A. Knopf, Inc."New York.

## **Websites**

PRBO Conservation Science: [www.prbo.org](http://www.prbo.org)


Cornell Lab of Ornithology – All About Birds:  
<http://www.birds.cornell.edu/AllAboutBirds/>

Your Wetlands, a project of the SF Bay Joint Venture: [www.yourwetlands.org](http://www.yourwetlands.org)

# Notes from the Field

# Notes from the Field

# Notes from the Field

A small brown and white bird, possibly a chickadee, is perched on a thin, light-colored branch. The bird has a dark brown head and back, a white belly, and dark wings. It is facing right. The background is a soft, out-of-focus green.

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