(Some) Marine Birds of the Salish Sea

Presentation to Sound Water Stewards, 16 May 2023, by Sarah Schmidt

"**Marine birds**" are species whose normal habitat and food source is the sea – during all or part of the year.

Major threats to marine birds:

- Prey species changes (forage fish; climate change)
- Introduced species (e.g., at nesting colonies)
- Fishing bycatch (derelict gear)
- Pollution effects on reproductive success
- Recovery of predator populations
- Hunting and egging (other parts of the world)

Let's meet some Salish Sea marine birds you're most likely to encounter [spot your bird and teach us!]
(definitions of words in red are at end of document)

I am **Pigeon Guillemot. I am the most widespread and commonly seen alcid (member of the auk family) along your coast. I nest in burrows in your bluffs, in rock cavities at Deception Pass, and also in the old pier structure off Keystone Spit. I am the only seabird to nest on Whidbey Island. I generally feed inshore, in water 30 to 90 feet deep, diving to the sea bed to probe among rocks and vegetation for benthic fish and invertebrates. I am featured on the logo for Whidbey Audubon Society. Would you like to be part of the Whidbey Island Pigeon Guillemot Citizen Science study?

*I am **Rhinoceros Auklet**. The name comes from a "horn" that grows at the base of the bill during breeding season from March to June. I am uncommon around Whidbey in fall and winter and common in spring and summer, when we have a breeding colony on Protection Island. Unlike other alcids, we sometimes cooperatively herd sand lance and herring schools by blowing bubbles from the sides of our mouths!

*I am **Marbled Murrelet**, a small, plump seabird. These are my winter markings. I was born with no siblings on a bed of moss high up on the large horizontal branch of a tree more than 200 years old in a coastal rainforest. My parents brought me fish at night, flying fast and straight to avoid predators. On my first flight I had to make it all the way through the forest out to the ocean. We eat small schooling fish and also some invertebrates. We live in nearshore and protected coastal waters throughout the year. We form strong pair bonds that hold through the year.

I am **Pelagic Cormorant. I am the smallest of the three cormorant species in the Salish Sea. Although I am exclusively marine in habits, my name is misleading, since I prefer inshore areas. I feed primarily on solitary fish and invertebrates on the bottom. Like all other cormorants, I am sensitive to disturbance at colonies and vulnerable to oil spills, gill-net entanglement, and contamination of marine food webs.

I am **Glaucous-winged Gull. I am the most abundant gull in this area. My numbers have steadily increased thanks to the availability of garbage and fish offal. We usually nest in colonies on offshore islands. We form pair bonds, staying together for several years. I am omnivorous, eating a wide variety of fish, marine invertebrates, garbage, and carrion. I can plunge dive for fish, or pick food off the water surface. I pull chitons, limpets and barnacles off rocks. I drop hard items like clams and mussels on hard surfaces to break them. Have you ever seen me "moon-walking" in shallow water, stirring up invertebrates?

(S) I am **Heerman's Gull**, clearly the most handsome of gulls! During your winter, I am in Mexico where I breed in colonies on arid offshore islands. After nesting we disperse north along the Pacific Coast to southern B.C. I arrive here in July. I eat small fish, marine invertebrates, lizards, insects, refuse and carrion. I steal food from marine mammals and other birds. Look for me at Keystone Spit and from the Port Townsend ferry from July to November.

(S) I am **Caspian Tern**, the largest tern, and have a massive coral-red bill. I have been described as "the largest, strongest and fiercest of the terns." I feed almost entirely on fish, capturing them in shallow surface waters. I fly over the water until I spot a fish, then hover, and plunge-dive. We generally nest in colonies on flat rocky islands, beaches, and sandy shores. I have a raucous call. Look for me fishing over Saratoga Passage, resting on sand flats or at Crockett Lake, or gathered in a large colony atop a building at the Seaplane Base.

(W) I am **Common Loon**. You may be more familiar with my colorful summer plumage, but this is what I look like in winter. I am well adapted to my diving lifestyle, with solid bones that reduce buoyancy and feet placed well back on my body for propulsion. This means that I am very awkward walking on land, and I have to run across the water to become airborne. We breed in Alaska, Canada and some northern states including a few lakes in inland Washington. On our breeding lakes we are vulnerable to boat wakes, which swamp our shoreside nests. I can pursue fish to depths of 180 feet. Humans love the haunting sound of my *tremolo* alarm call, *wailing* contact call, and territorial *yodel*.

(W) I am **Red-throated Loon**, the smallest member of the family. I winter primarily in inshore coastal waters, diving for small fish and invertebrates in shallower water than other loons. I nest on remote ponds in coastal tundra habitat. I am the only loon that can take off from small ponds, and even from land. We migrate down the west coast, and many of us winter in the Salish Sea. Deception Pass is a very important feeding ground for us.

(W) I am **Red-necked Grebe**. I winter along the coast, diving for fish, crustaceans, aquatic insects and some mollusks. In winter, we occur in higher concentrations in Puget Sound than anywhere else in North America. In summer we breed in small inland lakes in Canada or Alaska, and some in northeast Washington. Like other grebes, I often carry my chicks on my back!

(W) I am **Surf Scoter**, a seaduck endemic to North America. I nest on freshwater lakes in northen Canada and Alaska, and winter along both East and West Coasts of North America. On the breeding grounds I eat aquatic invertebrates. On our wintering grounds we forage mainly on mussels and clams. We love Penn Cove Shellfish Company! Before spring migration from the Salish Sea, we switch from mollusks to herring eggs, which give us needed fat for our migration. As herring stocks have crashed, so have our numbers.

*I am **Barrow's Goldeneye**. I am more striking than the Common Goldeneye, and also have a much narrower habitat range. I feed on invertebrates and some plant material. I am loyal to favored wintering locations, returning yearly to old docks and pilings with crustaceans and mollusks. Look for me in winter by the Mukilteo ferry dock. We breed mostly in western Canada and Alaska, but some of us stay to nest on subalpine lakeshores in the Cascades. The nest will be in an old woodpecker hole in a decaying tree or stump, or in a rock pile.

(W) I am **Bufflehead**. You may recognize me; I am widespread along the coast of Whidbey in fall and winter. We are one of the few monogamous species of duck. We nest in tree cavities near small ponds and lakes with wooded margins in boreal forest and aspen park-land. In my breeding lakes I dive for insect larvae and amphipods. In winter I live on coastal salt water in shallow bays and coves, feeding on crustaceans, mollusks and small fish.

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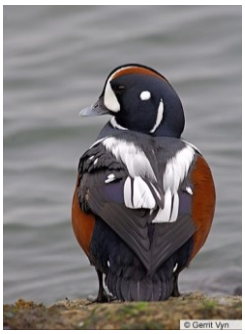
(W) I am **Red-breasted Merganser**. I have a thin, serrated ("saw-edged") bill for grasping slippery prey and am an expert diver. To become airborne I usually run across the water. I nest in the tundra and boreal forest zones on fresh, brackish and saltwater, usually not far from the seacoast. I winter on secluded bays or estuaries on both coasts of North America. I mostly eat fish, but also crustaceans, worms, insects and amphibians. I have a great punk haircut!



*I am **Harlequin Duck**. I winter along rocky coastlines, feeding in the surf line. I dabble and dive to glean prey from rocks or the bottom. I eat insects, small fish, and marine invertebrates. In spite of my bold colors, I am surprisingly well camouflaged. In summer I move to forested mountain areas like the Cascades and Olympics to breed near shallow, fast-flowing streams and rivers.

(W) I am **Brant**, a small sea goose. You can see from the map that I live only along coastlines. I nest in Arctic Canada and Alaska and migrate long distances to wintering areas. I feed primarily on sea grasses and certain marine algae. In the Puget Sound I seek out saltwater bays with extensive eelgrass beds, such as Padilla Bay. Brant usually mate for life, and we accompany our young through their first migration.

I am **Black Oystercatcher. I live along rocky marine shorelines of western North America. I use my long, chisel-like bill to pry open shellfish attached to rocks – principally mussels and limpets. Oystercatchers are long-lived and form monogamous pair bonds, often occupying the same territory year after year. In winter I join other oystercatchers to form flocks. Our loud piercing flight calls and territorial trills often reveal our presence. A good place to look for me is along West Beach when intertidal mollusks are exposed, and on the rocky shoreline at Deception Pass State Park. Most years a pair of us nests on the small island that is connected to Rosario Tide Pools at low tide. That's why people aren't allowed on the island.

(W) I am **Black Turnstone**. My name refers to my habit of flipping over small, loose objects to expose concealed food items. I am found along the rocky coasts of western North America. I feed among the rocks, prying loose or chiseling apart foods like mussels and barnacles. In winter, flocks of turnstones hang out at the Oak Harbor marina, along shores of Penn Cove, and out on the mussel rafts. We constantly chatter and skirmish as we move about in small flocks. By April we begin moving north, to arrive at our nesting grounds in early May. We breed in a narrow band of coastal sedge meadows throughout western Alaska.

** I am **Belted Kingfisher**. I eat mostly fish, which I catch by plunge-diving from a perch or from hovering flight. I am found along water wherever I can find a suitable nesting site: an earthen bank where I excavate a burrow 6 feet deep or more to raise my young. It is easiest to locate me by my Rattle Call, which I readily give at the slightest disturbance! Except while breeding, I fiercely defend my shoreline territory against other kingfishers of either gender. Look for my nest holes in Whidbey shoreline bluffs.

This is by no means a comprehensive list, but highlights many of the bird species that regularly use the marine waters of Island County: Saratoga Passage Marine Stewardship Area and Admiralty Inlet Marine Stewardship Area. **Other species** shown in slide show: *Double-crested Cormorant, (W) Horned Grebe, (W) White-winged Scoter, (W) Black Scoter, (W) Common Goldeneye, **Northern Rough-winged Swallow, **Great Blue Heron, **Osprey, **Bald Eagle.

KEY:
- * In our area year round. Nests in Puget Sound region but not known to nest in Island Co.
- ** In our area year round; nests in Island Co.
- (W) A "Winter" resident or visitor (Fall–Spring). Migrates away to breeding grounds.
- (S) In our area only during "Summer" (Spring–Fall).

<u>Species in these groups not included in the slideshow text:</u>

Alcids: Common Murre, Ancient Murrelet, Tufted Puffin

Cormorants: Brandt's, Double-crested

Gulls: Bonaparte's, Short-billed (Mew), Ring-billed, Western, California, Herring, Iceland

Loons: Pacific

Grebes: Pied-billed, Horned, Eared, Western,

Seaducks: White-winged Scoter, Black Scoter, Long-tailed Duck, Common Goldeneye, Hooded Merganser, Common Merganser

Shorebirds: many species

Definitions

alcid / auk family –family of web-footed diving birds of northern regions with chunky body, short legs and wings that includes auks, murres, and puffins. "Fly" underwater, using their wings for propulsion

amphipod – small marine or freshwater crustaceans with laterally compressed body, such as beach sand hopper

benthic – relating to the bottom under a body of water or to the organisms that thrive there

boreal forest, aka taiga - coniferous evergreen forests of subarctic lands, covering vast areas of N North America and Eurasia. Consist mainly of cone-bearing evergreens, such as firs, pines, and spruces; also some deciduous trees, such as larches, birches, and aspens. The taiga is found just south of the tundra, and north of the steppe.

endemic – native to or confined to a particular region

pelagic – living in open oceans or seas rather than waters adjacent to land or inland waters. Return to shore only for breeding.

Species cards not used in 2023

*I am **Common Murre**, a medium-sized seabird in the auk family. I eat fish, squid and other marine invertebrates. I dive underwater to capture prey, using my wings to swim, essentially "flying" under water. I often forage in flocks with other murres. We are highly social, nesting in dense colonies on island cliff ledges. We have a large colony off Cape Flattery on Tatoosh Island. We are vulnerable to oil spills and gill-netting, and can be heavily affected by climate changes that cause warming water and diminished food supply.

(W) I am **Western Grebe**. I eat a wide variety of fish, which I pursue under water. I particularly like juvenile herring. We nest in colonies of hundreds on large inland lakes. We have a spectacular courtship display, when two birds rear up and rush across the water's surface in unison. We migrate to coastal waters in winter. There has been a dramatic decline in our numbers in the Salish Sea over the past 10 years.

(W) I am **White-winged Scoter**. Of the world's 3 species of scoters, I am the largest. In North America I nest on freshwater lakes and wetlands in the northwestern interior, and winter along the Pacific and Atlantic Coasts. I feed almost exclusively by diving. My important winter foods are mollusks, especially the blue mussel, and crustaceans. Herring eggs are also important food for me in early spring. Along with Surf Scoters I loaf and feed in large flocks. When taking off from water, I must run across the water surface for a short distance to become airborne.

(W) I am **Long-tailed Duck**. A true arctic species, I breed in tundra and taiga regions around the globe. I nest at water's edge on shallow ponds, streams and other arctic wetlands. After breeding we migrate to spend nine months along both coasts of North America and on the Great Lakes. I dive deeper for food than other sea ducks, up to 200 feet. I have a varied diet of animal prey, selecting whatever is locally abundant. I am the most vocal sea duck. I (the male) make a melodious yodeling that resembles *ow ow owoolett*!