

Pacific Loon



Gavia pacifica



Photo by
<https://pixnio.com/free-images/fauna-animals/birds/loon-pictures/pacific-loon-bird-in-water.jpg>

Physical Description:

Formerly considered a subspecies of the Arctic loon, the Pacific loon is now classified as a full species. Slightly larger and sturdier than a red-throated loon, they are notably smaller than a common loon. Pacific loons are 22.8 to 29.1 inches (58 to 74 centimeters) in length, weigh between 35.3 to 88.2 ounces (1,000 to 2,500 grams), and have a wingspan between 43.3 to 50.4 inches (110 to 128 centimeters). They have a smoothly rounded head and neck and a straight bill. In breeding plumage, the top of the head and back of the neck are pale gray, lighter than the face. The body is black with white markings. Non-breeding plumage is dull black-brown, duller black on the back, and dark brown on the sides. Chins, throats, and breasts are all white, with a dark necklace at the top of the throat. The back of the head is darker gray when not in breeding plumage. Like other loons, Pacific loons have their feet positioned far back on their bodies. This makes them strong swimmers, but they can only barely walk on land and cannot take flight from land at all. While they are very strong fliers, they cannot take flight in calm conditions without a large area of open water (at least 100 feet) to use as a runway: they flap and patter along the water before becoming fully airborne.

Natural History:

Pacific loons are the most abundant of North America's five loon species. They are also the most gregarious of the loons and spend much of the day foraging, resting, and flying. During migration and winter, Pacific loons often gather in very large, loose flocks (up to several thousand individuals). During winter, they can be found along the Pacific coast in large numbers in channels, straits, bays, or estuaries with abundant prey, but they chiefly frequent near-shore ocean waters with sandy rather than rocky bottoms. In summer, they nest along the margins of freshwater lakes in tundra and taiga habitats of the far north. These are usually in flat lowlands but sometimes in foothills. Ponds are large, at least several acres in extent, in order to provide enough open water for landing and especially for take-off. In tundra habitats, the lake edges have vegetation such as grasses and sedges. In the breeding season, they sometimes forage in the lakes where they nest (especially when feeding chicks), but they usually fly to nearby lakes, rivers, or marine waters to feed. Pacific loons eat mostly small fish, which they hunt below the water's

surface, swimming agilely with their feet to capture prey in the bill. Before diving, they often dip their heads underwater to look around for fish. In the ocean, they sometimes hunt in loose groups as well alone or in pairs. They also forage in mixed-species flocks of auks, gulls, loons, and cormorants, with each species exploiting the schooling fish in a different manner. During the breeding season, they often forage in shallow nesting ponds, where they may take some prey without diving and sometimes stir the sediment with the bill, trying to locate prey. While Pacific loons are abundant, there is little information on their population trends. Overall, their numbers appear stable but spring migration counts in California showed a sharp decline between 1979 and 1996. Partners in Flight estimates a global breeding population of 840,000 and rates the species a 10 out of 20 on the Continental Concern Score, indicating a species of low conservation concern.

Reproduction:

In the southern part of their range, Pacific loons begin breeding in March. In the northern part of their range, breeding timing depends on the arrival of spring. As soon as males arrive on breeding grounds, they select a nesting lake, which they defend as their territory for the entire breeding season. Often, Pacific loons arrive in nesting areas before these lakes have thawed, and so their claim only begins when open water appears. Pacific loons can mate for life. Mated pairs and groups of Pacific loons can be seen displaying during the breeding season. The female of a pair invites the male by climbing onto the edge of the lake, bowing the head, and raising the tail. Group displays include nesting birds, or failed breeders, gathering into small flocks, often late in the day, and dipping the bill or diving in synchrony, usually accompanied by vocalization. Both males and females may confront trespassers with loud calls, threat displays, and outright attacks. On larger lakes, multiple pairs defend non-overlapping territories. When pairs use smaller lakes, they may defend two or even three adjacent lakes as their territory. Failed breeders may move from lake to lake, sometimes coming into conflict with pairs of loons on each lake. Male and females select the nest site together. Nest sites are almost always at the edge of an island in a lake or on the lakeshore, directly on the ground. If building a nest on land, both the male and female will arrange mud and dead aquatic vegetation to make a basic oval-shaped nest; this process requires only a few hours. If building the nest in the water, the pair must work for a full day or two to build a 15 to 20 inch mound of material. The bowl of the nest (which holds the eggs) measures on average about nine inches across and one inch deep, but varies widely. Although rare, some pairs even build floating nests.

Life Cycle:

The female lays one to two eggs which can be variable shades of buff, brown, and olive-green. Pacific loons only have one brood per breeding season. Both parents take turns incubating the eggs until they hatch which takes 23 to 28 days. The chicks leave the nest one to two days after hatching and are able to swim immediately but will not be able to fly until they are about 60 to 65 days old. Although chicks will leave the nest shortly after hatching, they will continue to return to the nest during the first few days. Parents forage for food for their chicks in the freshwater breeding ponds and in the nearby ocean until the chicks are old enough to forage for themselves and disperse. The Pacific loon doesn't breed until around three years old and younger birds may "wander" utilizing several different lakes as "floaters" until settling. It is possible loons can live over 30 years but a more typical life span is between 9 to 15 years.

Range:

The Pacific loon has a huge range estimated between 100,000 to 1,000,000 square kilometers. This bird can be found in native populations in Canada, the United States, Mexico, Japan and the Russian Federation, and has vagrant populations in China and Greenland (as well as other countries including Great Britain, Spain, Finland, and Switzerland). During the fall and winter, Pacific loons can be found mostly off North America's Pacific coast, as far south as Baja California, or along Asia's Pacific coast, as far south as eastern China. During the breeding months, they occur in Alaska, Canada, and eastern Siberia. Their breeding range extends across northern Canada as far east as Hudson Bay and Baffin Island. During winter, Pacific loons can be found off the coast of Washington and in inland marine waters, such as the Strait of Juan de Fuca. They are a common sight during spring and fall migration and can be seen in huge numbers. September through June is the best time of year to see Pacific loons in Washington, with numbers peaking during migration in October and again in late May. In summer, non-breeding individuals are occasionally seen in marine waters of western Washington, and rarely, especially during fall migration, on large bodies of water east of the Cascades (Rocky Mountains, Great Plains, and even the Atlantic coast).

Diet:

Diet varies with season. During the breeding season, Pacific loons will eat fish, snails, mollusks, insect larvae, and zooplankton such as amphipods. Common prey include arctic grayling, ninespine stickleback, fairy shrimp, tadpole shrimp, water boatmen, caddisfly larvae, dragonfly larvae, water fleas and their eggs, and chewing lice. Some birds also eat seeds and plant fiber at this time of year. Pacific loons also consume pebbles, as other loons do. These pebbles (usually more than a dozen) remain in the gizzard, where they help break down the food. In the nonbreeding season, small fish form the bulk of the diet, especially Pacific herring, shiner perch, surfperches, Pacific sandlance, northern anchovy, and medusafish. Pacific loons also eat small squid.

Threats:

Pacific loons are still hunted (and their eggs gathered) in native communities of the Arctic, but the extent and impacts of these practices are not known. Net fishing can kill Pacific loons, especially in commercial gill-net fishing. Oil and gas development has the potential to damage Pacific loon habitat in their tundra nesting grounds and along shorelines. Another threat to Pacific loon populations is harmful algal blooms which can occur in oceans or freshwater bodies. Algal blooms produce toxic chemicals that can kill birds and other wildlife. In 2007, an algal bloom killed more than a thousand seabirds off the northwest Pacific coast, including migrating Pacific loons. Toxic chemicals, such as mercury, that are produced by coal-fired power plants become more concentrated the closer you get to the North Pole. Because the Pacific loon breeds so far north, it is vulnerable to the harmful effects of these chemicals.

Fun Facts:

- Although Pacific and red-throated loons are similar in size, the Pacific is about a third heavier. This helps Pacific loons dive more efficiently and enables them to catch fish at greater depths.
- Pacific and Arctic loons in the waters off Japan in late winter work together, swimming under and around schools of sandlance and concentrating them into a tight ball.
- Pacific loons are fast fliers and can fly at 37 miles per hour.
- Loons were worshipped as messengers from heaven in Japanese culture since Japanese fishermen would exploit the opportunity to fish for sea bream that gathered to feed on the sandlance concentrated by Pacific and Arctic loons as the loons fed. With such assistance from the loons, the fishermen sometimes earned a year's livelihood in February and March alone. However, this fishing practice has since ceased.
- Pacific loons are so territorial when breeding that scientists in Alaska have seen them perform threat displays at passing airplanes!
- A group of loons has many collective nouns, including an "asylum", "cry", "loomery", "raft", and "water dance" of loons.

Sources:

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