

AMERICAN GOLDEN-PLOVER - PLUVIALIS DOMINICA

Taxonomy: Kingdom: Animalia Phylum: Chordata Class: Aves Order: Charadriiformes Family: Charadriidae Genus: Pluvialis Species: P. dominica

Habitat:

Biomes: Breeds on Arctic tundra, especially in low vegetation on rocky slopes. Winters in grazed grasslands. On migration found in prairie, pastures, tilled farmland, golf courses, airports, mudflats, shorelines, and beaches.

Distribution:

In US: The breeding habitat of American golden plover is Arctic tundra from northern Canada and Alaska. They nest on the ground in a dry open area. They are migratory and winter in southern South America. They follow an elliptical migration path; northbound birds pass through Central America about January–April and stage in great numbers in places like Illinois before their final push north.

In Other Countries: Europe, Mexico, South America, Canada.

Holistic Description: A large shorebird of pastures, open ground, and mudflats, the American Golden-Plover makes one of the longest migratory journeys of any shorebird. It breeds on the high Arctic tundra of Alaska and Canada and winters in the grasslands of central and southern South America. The Golden Plover is an aristocrat among birds. Everything about it is distinctive. The jet black breast and belly, the golden yellow back and striking head markings of the breeding plumage would in themselves be enough to set it apart in any assemblage of its relatives. In addition it has rather stately and dignified movements in contrast to the darting hasty nervousness of so many shorebirds whether feeding, migrating or on the breeding grounds. The downy chicks are also among the loveliest of all young birds, their yellow backs being startlingly different from the usual blacks, browns and grays affected by most newly hatched youngsters of the shorebird clan.

Species Richness: NO SUBSPECIES

Population Dynamic: Large numbers were shot in the late 19th century and the population has never fully recovered.

Evolution and Systematics:

Evolution: Little is known concerning fossil history of the Charadriidae. Bones of “Pluvialis sp.” were found in late Pleistocene cave sediments in northeastern Mexico.

Systematics: The family Charadriidae, the plovers and lapwings, is well supported and is one of the core groups in the shorebird radiation. Within the Charadriidae, the genus Pluvialis is also well defined: it consists of 4 species worldwide, each broadly similar in shape, size, and general plumage pattern. Pluvialis dominica and P. fulva were long considered to be conspecific, and were treated collectively under the English name, the Lesser Golden-Plover. Following initial arguments for a split (8), subsequent evidence indicated “clear and consistent differences in breeding vocalizations and nesting habitat, and strict assortative mating in areas of sympatry in western Alaska”. Speciation of P. dominica and P. fulva probably occurred about 1.8 million years ago.

AND

It is similar to two other golden plovers, European and Pacific. The American golden plover is smaller, slimmer and relatively longer-legged than European golden plover (Pluvialis apricaria) which also has white axillary (armpit) feathers. It is more similar to Pacific golden plover (Pluvialis fulva) with which it was once considered conspecific under the name “lesser golden plover”. The Pacific golden plover is slimmer than the American species, has a shorter primary projection, and longer legs, and is usually yellower on the back.

Number of Species: NO SUBSPECIES

Number of Genera: NO SUBSPECIES

Physical Characteristics:

Size and Length: Length: 9.4-11.0 in (24-28 cm) Weight: 4.3-6.8 oz (122-194 g)

Wingspan: 25.6-26.4 in (65-67 cm)

Coloration: The breeding adult American golden plover has a black face, neck, breast, and belly, with a white crown and nape that extends to the side of the breast. The back is mottled black and white with pale, gold spots.

General Body Features: Medium-sized to large shorebird. Legs moderately long. Neck short. Bill short. Head large and rounded. Golden and black speckled back. In breeding plumage, black from face to under tail.

Special Features of the Body: The American Golden plover's coloring helps it blend in to its surroundings. The American Golden Plovers eggs camouflage with the sand to avoid predators which can be an advantage. Their nests are built with materials around them which also gives them a camouflage advantage to avoid predators such as humans and other animals.

Special Features of the Head and Sensory Organs: They turn away from predators, sometimes crouching to hide their darker head and breast markings. When the birds stop running they seem to disappear, blending into the surroundings.

Dentition: BEAK/LAMELLAE/GIZZARD

Special Features of the Limbs and Digits: NONE

Any Special Internal Anatomy: The bird has one of the longest known migratory routes of over 40,000 km (25,000 mi). Of this, 3,900 km (2,400 mi) is over open ocean where it cannot stop to feed or drink. It does this from body fat stores that it stocks up on prior to the flight. It is a regular vagrant to western Europe.

Sexual Dimorphisms: The breeding female is similar, but with less black. When in winter plumage, both sexes have grey-brown upperparts, pale grey-brown underparts, and a whitish eyebrow. The head is small, along with the bill.

Differences Between Juvenile Stage and Adult: Juvenile similar to winter adult, but with light barring on chest, sides, and flanks, and more distinct yellow edges and spots on feathers of crown, back, and wings.

Behavior:

Diurnal, Nocturnal, or Crepuscular: SLEEPS DIURNALLY INTERMITTENTLY AND JOINS ON NOCTURNAL ROOSTS.

Activity: Feeds in short vegetation or open areas. Moves by stop-run-stop, scanning and capturing prey at stops. Captures prey by single peck or series of pecks. This bird uses scrape nests, lining them with lichens, grass, and leaves. At its breeding grounds, it is very territorial, displaying aggressively to neighbors. Some American plovers are also territorial in their wintering grounds. Overwintering Pacific Golden-Plovers in Hawaii sleep intermittently during daylight hours, squatting or standing on one leg, either with head resting on shoulders and bill forward or with head turned and bill tucked beneath scapulars. Presumably, American Golden-Plover is similar, but no reports. Brief intervals of sleep likely on breeding grounds, but no information available. Roosts in flocks during the nonbreeding season. In Argentina, American Golden-Plover joins other shorebirds on multispecific nocturnal roosts "at the edge of lagoons and swamps"

Locomotion: Commonly walk and run. Often stand on one leg while loafing or roosting; if disturbed, may hop on that leg for considerable distance before changing gait. Except with certain topographic features of tundra landscape, locomotion does not involve elevated perches. Capable of swift and extended flight. These plovers are considered "the high speed champions among shorebirds" Not an aquatic species; the sighting of a plover on the ocean surface during migratory periods would probably indicate a bird forced to rest on water by dense fog, fatigue, or injury.

Communication and Perception: Song a rapid series of abrupt whistled notes. Flight call a whistled "que-del," or "tuu-u-ee."

Home Range: Highly territorial on the breeding grounds. Territory sizes estimated at roughly 25 ha on North Slope of Alaska, 10–50 ha on Seward Peninsula. Most pair activity is focused on the territory, but considerable foraging occurs elsewhere as the non-incubating bird is often absent from territory. Extraterritorial feeding probably of a communal nature on specific sites. Interyear fidelity to breeding territory high in males, low in females. Territories established and defended with ground and aerial displays, vocalizations, chases, fights. Complex Whistle a frequent warning from ground as intruders fly by.

Degree of Sociality: Flocking behavior is characteristic of pre-migrants and migrants. No evidence of either intraspecific or interspecific sociality between American and Pacific golden-plovers during the breeding season, except birds are somewhat gregarious on extraterritorial foraging areas.

Level of Aggression: Among overwintering Pacific Golden-Plovers, territorial individuals are intolerant of each other and often highly aggressive; non-territorial birds forage communally, but maintain spacing through low-intensity aggression; and agonistic interactions are frequent at nighttime roosts. Presumably, similar behaviors occur among overwintering American Golden-Plovers, but details are lacking. In Argentina, the American Golden-Plover is territorial on grasslands and inland wetlands. Birds occupy their territories most of the day, except for mid afternoon when territorial and non-territorial birds merge into large flocks for drinking and bathing at local water sources.

Migration: They are migratory and winter in southern South America. They follow an elliptical migration path; northbound birds pass through Central America about January–April and stage in great numbers in places like Illinois before their final push north. In fall, they take a more easterly route, flying mostly over the western Atlantic and Caribbean Sea to the wintering grounds in Patagonia. The bird has one of the longest known migratory routes of over 40,000 km (25,000 mi). Of this, 3,900 km (2,400 mi) is over open ocean where it cannot stop to feed or drink. It does this from body fat stores that it stocks up on prior to the flight. It is a regular vagrant to western Europe.

Predators:

Predators: Rough-legged Hawk, Gyrfalcon, Peregrine Falcon, Parasitic Jaeger, Long-tailed Jaeger, Snowy Owl, Pomarine Jaeger, Short-eared Owl, and Common Raven. Caribou and Reindeer are known to trample nests and eat eggs or young of tundra-nesting birds.

Anti-Predator Defenses: These include: (1) sit tight and sink more deeply into nest; (2) flatten with head outstretched, body motionless; (3) fly from nest and stand silently some distance away; (4) sneak away from nest silently; (5) depart noisily from nest while predator is still at considerable distance; (6) sit tight until intruder is relatively close; (7) perform specialized

distraction displays to lure predator away; (8) attack/mob the predator with aggressive aerial maneuvers. MOSTLY RESPOND WITH NON-AGGRESSIVE BEHAVIORS.

Diet and Nutrition:

Adult Diet: Invertebrates, berries, leaves, and seeds. Invertebrates, primarily terrestrial, some freshwater and marine; also berries, leaves, and seeds. Studies in other shorebirds (187) suggest that these plovers might retain seeds in digestive tract, transporting them over great distances during migrations. Small vertebrates are known to be eaten occasionally by Pacific Golden-Plover, and also possibly by American Golden-Plover, but definite evidence lacking. On breeding grounds near Churchill, Manitoba, American Golden-Plover tends to forage selectively on relatively large prey. Beetles, Grubs, Cutworms, Wireworms, Earthworms, Molluscs, Crustaceans, Spiders, Crowberries, Blueberries, Wasps, Ants, and Weevils.

Juvenile Diet: ^^^^^

Special Adaptations for Getting Prey: Plovers have a unique way to catch a meal of kelp or wrack flies. Encountering a mass of the flies on the beach, a plover runs through the cloud of insects with its mouth open, snapping at them to catch them in mid-air. AND FEATURES.

Reproduction:

Mode of Reproduction: Monogamous

Mating System: Socially monogamous, with pairs remaining together for the breeding season and for replacement nesting. Both sexes defend territory, incubate, and tend young prior to fledging. Studies of banded birds on Seward Peninsula indicate that remating in subsequent years is much less likely than new pairing, despite high site fidelity of males.

Mating Season: April to June

Courtship: Five are described briefly here: (1) on ground performance by both sexes of Complex Whistles; (2) Scraping Display where male uses breast and feet (and probably bill) to form nest scrape on tundra or occasionally on snow, often picking up bits of vegetation during display; (3) Wing-Stretch, in which male stretches wings vertically, head held low; (4) Torpedo Posture of male with bill, head, and back horizontal, back feathers usually ruffled, wings sometimes raised; either remains stationary or runs toward female; (5) Erect Posture in which male stands very upright, neck stretched upward, motionless for up to 30 s.

Territoriality: HOME RANGE

Mating: Copulation usually lasts only 1–4 s, follows brief pursuit of female.

Nesting: Male forms nest cup by scraping with feet and rubbing with breast. The process also involves male standing either in or next to scrape and tossing bits of lichen alternately over each shoulder. Nest is usually lined with lichens, especially *Thamnomia vermicularis*, and some nests contain dry grasses, leaves of willow and *Dryas*, occasionally a few pebbles and/or small sticks. Some nests are very simple with lining incomplete over surface of ground. EXTREMELY WELL CAMOUFLAGED.

Egg-Laying: Clutch Size: 3-5 eggs Number of Broods: 1 brood Egg Length: 1.8-2.0 in (4.44-5.21 cm) Egg Width: 1.3-1.4 in (3.29-3.53 cm) Incubation Period: 24-27 days Egg Description: White to buff, heavily spotted and splotched with dark brown and black.

Hatching and Incubation/Gestation: Covered with down and able to walk soon after hatching. Feed themselves within one day.

Development: Nidifugous/Precocial (leave the nest shortly after hatching), ptilopaedic (downy) young grow rapidly. Juvenile feathers except for “barely visible” wing quills.

Parental Care: Chicks brooded in the nest for variable period of hours after hatching is complete, desert nest thereafter. Both parents tend foraging chicks and frequently brood them. Coordinated movements and other responses develop rapidly, and within a few hours of hatching precocial young are apparently adept at finding food. Chicks not fed by parents; forage independently by pecking at prey on vegetation or on ground. Diet most likely insects and spiders. Both adults tend young during at least first 2 wk, leading them to foraging areas and protecting them from predators.

Lifespan: Usually around 8 years.

Conservation:

Official Federal Status: Least Concern

Special Statuses in Individual States: NONE

Threats: This species is on the 2014 State of the Birds Watch List, which lists species most in danger of extinction without significant conservation action. Market hunting in 19th and early 20th centuries caused major decline in American Golden-Plover numbers. One estimate of a single day's kill near New Orleans was 48,000. Population rebounded after hunting ended.

Conservation Efforts: ^^^^^^^

Extra Facts:

1. The American Golden-Plover has a long, circular migration route. In the fall it flies offshore from the East Coast of North America nonstop to South America. On the return in the spring it passes primarily through the middle of North America to reach its Arctic breeding grounds.
2. Adult American Golden-Plovers leave their Arctic breeding grounds in early summer, but juveniles usually linger until late summer or fall. Some adults arrive on the wintering grounds in southern South America before the last juveniles have left the Arctic.
3. The oldest American Golden-Plover was at least 13 years old, when it was recaptured and rereleased during a banding operation in Alaska.

Notable Species: NONE