

# AMERICA'S ARCTIC BIRD CONNECTION

Over 100 migratory bird species use the Arctic coastal plain of Alaska

## FACT SHEET—

## American Golden-Plover (*Pluvialis dominica*)

Few birds in the world cover more of our planet in their annual migrations than the American Golden-Plover. It is difficult to comprehend a bird weighing less than a half pound flying more than 20,000 miles each year. Its annual round trip between the Arctic nesting grounds and southern South America wintering grounds usually includes a nonstop flight of 3,000–3,500 miles over the Atlantic Ocean. This species is also considered the champion speedster of the shorebirds: some estimates of their air speed are 60–100+ miles per hour, although those in the upper range may have favorable winds.

### Arctic Bird Connection

On the Arctic National Wildlife Refuge coastal plain, nesting densities average 10 pairs per square mile (640 acres) in optimum habitats. On the wintering grounds in Argentina, the density may reach 2,500 birds per square mile on grazed pampas. There have been no large scale banding studies of this species to help identify local populations or their specific migration routes. The one recovery of a North Slope-banded golden-plover was an adult banded in June and shot the following September or October in the Lesser Antilles. For the closely related and more intensively studied Pacific Golden-Plover (*Pluvialis fulva*), 80% + of the adults return to the same winter territory each year, some living up to 15 years. There are no firm population estimates for the American Golden-Plover, but it probably exceeds 250,000 at present, which is a fraction of the millions that blanketed the skies prior to 1800.

### Description

American Golden-Plovers in breeding plumage are flecked over the back and top of the head with bright white and golden spots over a darker background. A large white stripe extends from across the forehead down the side of the neck to the bend of the wing, while the lower face, throat and underparts are black. Females are typically more mottled, with white and various shades of brown over the otherwise black breast and a duller gold-flecked back than the males. In juvenile and winter plumage, American Golden-Plovers have a white eye line, belly and undertail coverts, with the upper parts, chest and breast grayish-brown with a



*Male American Golden Plover on the Arctic coastal plain.*

distinct yellowish wash (duller on breast). Weight varies from 4.0 to 8.8 ounces, depending upon the month. Males in breeding dress are distinguishable from the closely related Pacific Golden-Plover by the large white neck strip that terminates abruptly at the bend of the wing but continues down along the flanks in the Pacific Golden-Plover. The latter species nests on the tundra of western Alaska and eastern Siberia and winters throughout the Pacific Basin from SE Asia and Australia, to coastal California. The two species can be difficult to distinguish from each other in the non-breeding plumage.

### Breeding

Adult American Golden-Plovers arrive on the Arctic coastal plain of Alaska at the end of May or first few days of June. Males establish and defend a territory. Pairing and nesting begins immediately. The nest scrape is started by the male, and the four eggs are laid by mid-June. Adults will offer distraction displays to potential predators to try to lure them away from the nest. The precocious young hatch after 26–27 days of incubation by both parents. As soon as all the downy young are dry, they depart the nest to forage in the company of the parents. At hatching, they weigh about 1 ounce but will weigh about 6 ounces by the time they leave Arctic Alaska in late August.

### **Habitat**

Uplands are the usual habitat of the American Golden-Plover. Nesting, migration stopover, and wintering habitats are most frequently characterized by short, sparse vegetation such as native short grass prairie and steppes, pastures, golf courses, and airports; plowed or burnt fields are also favored. Only occasionally are they seen on beaches or exposed tidal flats. Nesting habitat is usually sparse, low tundra vegetation on higher well-drained ridges and slopes, but some pairs will select wetter or more moist tundra habitats with slightly taller vegetation. Prior to the 1870s and the extirpation of the vast herds of American bison (*Bison bison*) on the Great Plains, enormous flocks of golden-plovers followed the herds northward each spring as the large herds left vast sections of the prairie with shorter grass and more visible insect prey. It is possible that the golden-plovers benefit from the early summer grazing by the several Arctic caribou herds, which may help maintain the bird's preferred habitat, but more studies are needed.

### **Distribution**

A few American Golden-Plovers nest in extreme eastern Siberia, but most nest from the Bering Straits east across northern Alaska to eastern Canada. The majority of golden-plovers winter in the pampas of Argentina and Uruguay. The spring migration route is generally across the upper Amazonian Basin along the east flank of the Andes to the Great Plains and Mississippi Valley of the United States.

Most of the fall migrants travel across central Canada in a southeasterly direction to stage in Newfoundland and other eastern Canadian provinces and the adjacent coastal areas of northeastern U.S. A direct flight over the Atlantic Ocean from there to northeastern South America is the predominate route, although some birds pass southward over the spring route and cross the Caribbean Sea en route to South America. Younger birds are more likely to stop in the Lesser Antilles. The species is rarely found west of the Rocky Mountains in migration.

### **Food**

Golden-plovers feed primarily on terrestrial invertebrates (snails, large insects), but also berries and some seeds. The food is visually detected, sometimes as much as a few yards away. Rarely do the birds probe in mud or similar wet habitats for food. The behavior of the birds while feeding is that of run and stop; during the stop phase either food is spotted and an attempt to capture is made, or no prey is observed and they move to the next stop.

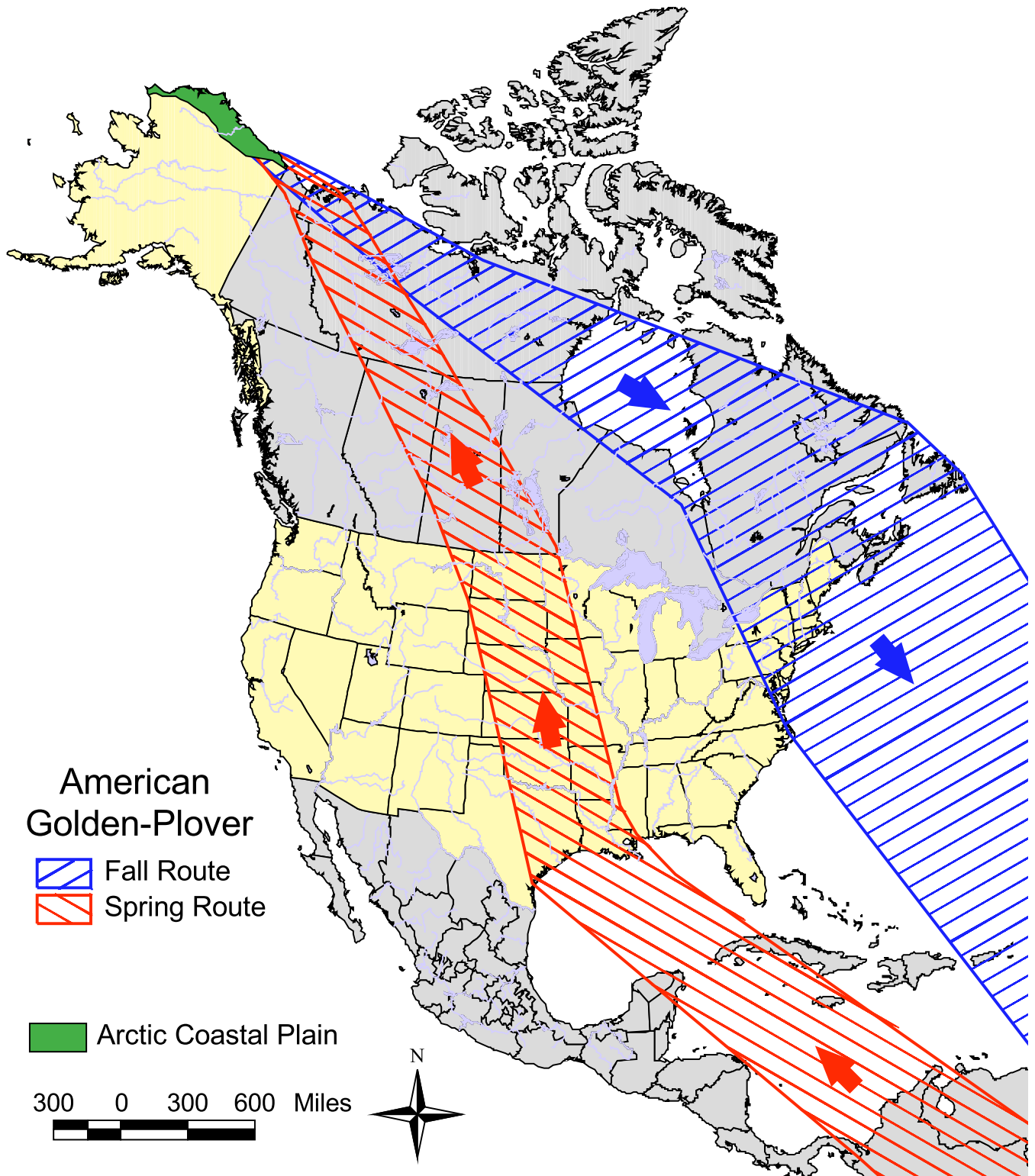
### **Conservation**

Large numbers of American Golden-Plovers were killed in the 1800s and early 1900s by market hunters, mostly in the spring migration through the eastern prairies of the U.S. The famous early ornithologists and artist John James Audubon estimated 48,000 birds shot in a single day near New Orleans in March 1821. Some market hunting on the wintering grounds may have continued into the early part of the 20th Century, but the population appears to have rebounded significantly since the signing of the Migratory Bird Treaty Act of 1918 between Canada and U.S. The loss of grasslands on wintering grounds by conversion to agriculture in Argentina is thought to be the major impediment to restoring the golden-plover to the pre-1800 population level.

### **Mortality**

A high percentage of nests are lost to predators, perhaps more than 50% in some areas in some years. Golden-plovers, especially young birds on their first fall flight, are a favored prey of the Arctic Peregrine Falcon (*Falco peregrinus tundrius*) during migration. This falcon has almost the same nesting and wintering distribution, as well as migration routes, as the golden-plovers except for the long, over-ocean routes to South America. The open habitat favored by the golden-plover is one of the bird's main defenses against this predator and other raptors, since there are few perches available for the hawks.

(Additional information on back page)



*North American Range Map:* These are the expected migration routes for the majority of those American Golden-Plovers using the Arctic coastal plain of Alaska.

## AMERICAN GOLDEN-PLOVER FACTS—

Wing Span (adults)	21–23 inches
Total Length (adults)	10–11 inches
Weight (adults)	4.0–8.75 ounces
Clutch Size	4 eggs
Egg Weight	1.0 ounce
Incubation Period	25–27 days
Age at first flight	21–22 days
Age at Parental Abandonment	21–28 days
Age at First Breeding	1–2 years
Oldest Wild Bird on Record (age of Pac. Golden-Plover)	15 years 5 months
Max. Migration Distance	10,500 miles
Max. Sustained Flight Speed	100 miles per hour
Max. Altitude (migration)	16,000 feet
Normal Altitude (migration)	2,000–5,500 feet

### Primary information sources:

Johnson, O.W., and P.G. Connors. 1996. American Golden-Plover (*Pluvialis dominica*), Pacific Golden-Plover (*Pluvialis fulva*). In *The Birds of North America*, No. 201–202. The Academy of Natural Sciences, Philadelphia; American Ornithologists' Union, Washington.

North American Bird Banding Files, US Geological Survey, Laurel, MD.

*Photo Credits:* Kevin T. Karlson, Rio Grande, NJ.



## THE WILDERNESS SOCIETY'S Migratory Bird Project

Following unmarked pathways more ancient than any living organism, using guidance systems that rival or surpass man's instruments, nearly all of the birds using the Arctic coastal plain of Alaska each summer migrate hundreds or even thousands of miles to areas best suited for their survival each winter. The Wilderness Society has initiated a special educational project to research and describe the major migratory pathways, stopover sites and wintering grounds for the bird species that depend upon the Arctic National Wildlife Refuge coastal plain.

One need not to travel to the Arctic National Wildlife Refuge, or even to Alaska, to be deeply interested and involved in the efforts to have its vital habitats protected for all time. Designating Wilderness on the coastal plain of the Arctic Refuge, where the birds, caribou, musk-oxen, polar bears, and other animals rear their young, will forever protect it. This land is where the giant multi-national oil companies are pushing hard for the Congress to grant full industrial-scale construction of roads, drill pads, airstrips and other facilities related to oil exploitation. The area of Arctic National Wildlife Refuge needing wilderness designation represents only 5% of the Arctic coastal plain in Alaska; the rest is already subject to development.

The Wilderness Society project will produce maps, informational brochures, exhibits and other educational materials so the public may learn firsthand about the many migratory bird benefits received from the Arctic, a legacy that our generation holds in trust for our children and, in turn, theirs, indefinitely. The material you are reading was prepared, in part, by the project. Comments and inquiries are welcomed. Please ask how to become more involved with protecting the Arctic coastal plain of Alaska.

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