

The ***Marbled Godwit*** (*Limosa fedoa*) is a large shorebird that breeds primarily in temperate grasslands of the north-central United States and south-central Canada, and winters primarily at coastal sites from central California south to central Sinaloa, Mexico. Its relatively small population, estimated at 140,000–200,000 birds, makes this species particularly vulnerable to the significant habitat loss and degradation occurring throughout much of its breeding and wintering ranges. The Marbled Godwit is listed as a species of **High Concern** in the U.S. Shorebird Conservation Plan for several reasons: historical declines and range contractions from which the species has never fully recovered; loss and degradation of its habitat; inadequate population trend data; and lack of knowledge about its ecology and life history.



Photo: © John Eriksson

## SHOREBIRD RECOVERY

### MARBLED GODWIT

## ~ ACTION PLAN SUMMARY ~

#### Species Description

The Marbled Godwit is a large shorebird with a long, pink bill that turns slightly upwards towards its black tip. In breeding plumage, its back appears darker and more mottled than in winter, and its barred underside is more prominent. Two subspecies and three breeding populations are recognized. The mid-continental population (*L. f. fedoa*) nests in north-central United States and south-central Canada. Two smaller, disjunct breeding populations nest at James Bay, Canada (*L. f. fedoa*), and on the Alaska Peninsula (*L. f. beringiae*).

#### Population Outlook

The Marbled Godwit's estimated global population is 140,000–200,000 birds. This species generally occurs at low densities throughout its breeding range, and annual distributions can vary widely. Approximately 60% of the population nests in Canada. Survey data (1966–2000) suggest no significant trend up or down, but adequate data are difficult to obtain given survey locations, timing, and the godwit's secretive nesting behavior.

#### Threats

Marbled Godwit populations in Minnesota (USA) and Manitoba and Ontario (Canada) are diminishing as **grassland habitats** associated with diversified farm and dairy operations are **converted** to row-crop agriculture. Causes of nesting failure include **predation and accidental destruction of eggs or nests** by human activity. At wintering and coastal stopover sites, the greatest threats are **development, recreation-based human disturbance, mariculture, and invasive exotic plants and aquatic invertebrates**. At inland stopover sites, the primary threat is **inadequate water supply** in wetland habitats. For the two disjunct breeding populations in James Bay (Canada) and on the Alaska Peninsula (USA), the greatest threat is their **small population size**: 1,500 and 2,000 birds, respectively.

One of WHSRN's goals is to develop consensus-driven conservation actions for the highest priority shorebirds and their habitats. We thank authors Cynthia Melcher, Adrian Farmer, Guillermo Fernández, and the many shorebird biologists with whom they collaborated in developing the **Conservation Plan for the Marbled Godwit**. For more information about this and other species plans, please visit: <http://www.whsrn.org/conservation-plans>.

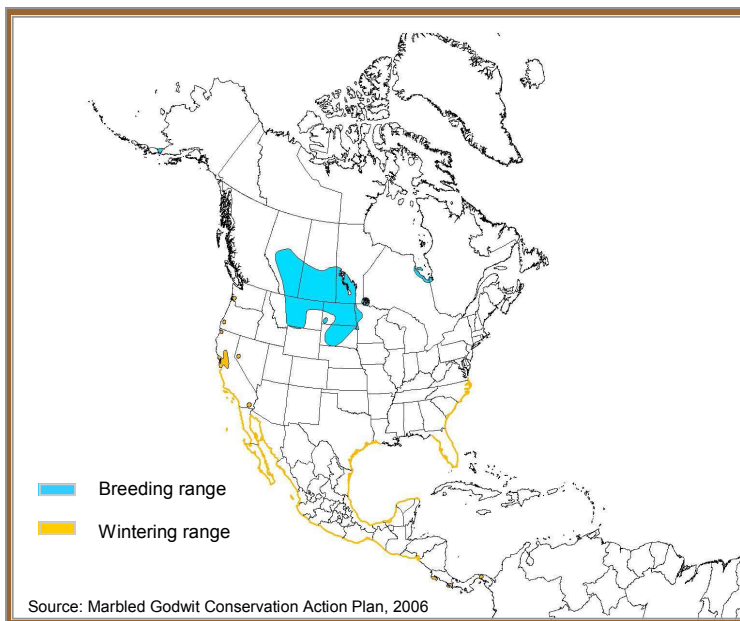
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## Migration

Most Marbled Godwits begin their northbound migration between March and May, arriving on the breeding grounds from late April to May. Routes are not well known, however the mid-continental population appears to follow a direct interior route from northern Mexico and southern California to the prairie regions of north-central United States and south-central Canada.

Southbound migration begins in late July, with godwits arriving at wintering sites between September and November. En route, some 43,000 godwits stop at Bear River Migratory Bird Refuge in Utah. Most winter on the coast from California south to central Sinaloa, Mexico. San Francisco Bay hosts approximately 17,000 birds, or 10% of the species's global population. Godwits from Alaska likely spend the winter at coastal sites from Washington south to central California; birds from James Bay migrate to the coasts of southeastern United States and Gulf of Mexico.



- **Natural History:** Marbled Godwits reportedly return to the same locations to breed as in subsequent breeding seasons. They may delay breeding until their second or third year.

- **Foraging Habitat:** On breeding grounds, godwits probe in seasonal/semi-permanent wetlands with water depths of 5–13 cm (2–5 inches). At stopover and wintering sites, feed at lake and reservoir mudflats, coastal mudflats, salt marshes, brackish estuaries, lagoons, beaches, and shoals. During northbound migration, forage in flooded pastures, meadows, and rice fields.

## Conservation Strategies and Actions

To conserve the Marbled Godwit, the recommended high-priority actions are to:

**Provide habitat protection, particularly in the mid-continental breeding range.** Marbled Godwits need large, contiguous blocks of native grasslands and diverse wetland habitats and sizes, all of which are rapidly disappearing.

**Secure water rights to ensure adequate water levels at staging and stopover sites in the continental interior.** Godwits generally forage in water depths of 5–13 centimeters (2–5 inches), a range that significantly overlaps with other species' water-depth preference, such as Northern Pintail. This presents opportunities to manage water resources for the benefit of multiple species.

**Restore wetlands and grasslands in Minnesota and Canada,** where Marbled Godwits are at greater risk of near-term extirpation. Habitat management is particularly important where invasive plants and/or woody vegetation are encroaching, and where wetlands have been damaged or destroyed.

**Protect lands within and adjacent to nonbreeding (wintering) sites.** Priority lands include estuaries in which mariculture and other extractive activities are occurring, and upland habitats wherein godwits roost and/or take shelter during stormy weather.

**Protect godwits from disturbance caused by humans and dogs at coastal sites.** Reduce disturbances from recreational activities (on beaches or with watercraft) through public education and outreach and by closing key areas during seasons of high use by godwits.

- **Nesting Habitat:** Prefer short, native grasslands with moderately sparse cover. Rarely nest in croplands or stubble fields. Within grasslands, godwits also require complexes of wetlands with a diversity of sizes and types.

- **Important Foods:** At migration staging sites and on breeding grounds, feed on insects, aquatic tubers, and fish. At wintering and coastal sites, feed on aquatic invertebrates such as bivalves, crabs, and polychaetes (worms and leeches).



The Western Hemisphere Shorebird Reserve Network (WHSRN) is a partnership-driven, hemisphere-wide, site-based shorebird conservation initiative that began in 1985. It is facilitated by the WHSRN Executive Office, a program of the Manomet Center for Conservation Sciences located in Manomet, Massachusetts, USA. Learn more at <http://www.whsrn.org>.

