

What are migratory birds?

Migratory birds are defined as birds that migrate between a breeding site and a wintering site in specific seasons each year. Shorebirds represent a major segment of the migratory bird population. They can be seen mainly on tidal flats and along the coastline. The birds that stop over in Japan in spring and autumn spend their summers breeding on the tundra of Siberia and Alaska and pass the winter in Southeast Asia and Oceania. In many cases, these shorebirds migrate in flocks across great distances at a single stretch. As a result, they must rest at stopovers in order to regain the significant amounts of fat they require as the energy for continuing their migration. Migratory birds cannot survive without all these breeding sites, wintering sites, and stopovers. And because they fly across national borders, migratory birds require the highest levels of international commitment to ensure their survival.

Birds Inhabiting the Fujimae-higata

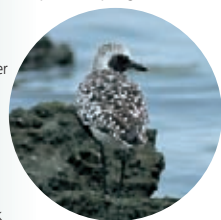
Eared grebe
Black-necked grebe
Great crested grebe
Streaked shearwater
Great cormorant
Great bittern
Yellow bittern
Black-crowned night-heron
Striated heron
Cattle egret
Great egret
Intermediate egret
Little egret
Gray heron
Black-faced spoonbill
Greater white-fronted goose
Tundra swan
Common shelduck
Mandarin duck
Mallard
Spot-billed duck
Eurasian teal
Green-winged teal
Baikal teal
Falcated duck
Gadwall
Eurasian wigeon
American wigeon
Northern pintail
Northern shoveler
Common pochard
Tufted duck
Greater scaup
Common goldeneye
Smew
Red-breasted merganser
Osprey
Oriental honey-buzzard
Black-eared kite
White-tailed eagle
Northern goshawk
Japanese sparrowhawk
Eurasian sparrowhawk
Common buzzard
Grey-faced buzzard
Northern harrier
Eastern marsh harrier
Peregrine falcon
Eurasian hobby
Merlin
Eurasian kestrel
Water rail
Ruddy-breasted crake
Common moorhen
Eurasian coot
Eurasian oystercatcher
Common ringed plover
Little ringed plover
Kentish plover
Lesser sand plover
Greater sand plover
Pacific golden-plover
Grey plover
Grey-headed lapwing
Northern lapwing
Ruddy turnstone
Red-necked stint
Long-toed stint
Temminck's stint
Dunlin
Curlew sandpiper
Red knot
Great knot
Sanderling
Ruff
Broad-billed sandpiper
Long-billed dowitcher
Asian dowitcher
Spotted redshank
Common redshank
Common greenshank
Green sandpiper
Wood sandpiper
Grey-tailed tattler
Common sandpiper
Terek sandpiper
Black-tailed godwit
Bar-tailed godwit
Eurasian curlew
Far eastern curlew
Whimbrel
Common snipe
Latham's snipe
Black-winged stilt
Red-necked phalarope
Pomarine jaeger
Black-headed gull
Herring gull
Slaty-backed gull
Glaucous gull
Mew gull
Black-tailed gull
Saunders's gull
Black-legged kittiwake
White-winged tern
Whiskered tern
Common tern
Little tern
Common kingfisher
Grey wagtail
Black-backed wagtail
Japanese wagtail
and others



Dunlin
This bird is characterized by its slightly downward-curving beak. Dunlins sometimes form large flocks. They breed in northern Eurasia and North America and stop over or winter in Japan.



Bar-tailed Godwit
This bird is recognized by the long upward curve of its beak. The bar-tailed godwit breeds in northern Eurasia and Alaska and migrates south to Australia and Africa in winter. It uses Japan as a stopover in spring and autumn.



Grey Plover
A member of the Charadriidae family, the grey plover is known to migrate over long distances. It breeds in northern Eurasia and North America and winters in Africa, Australia, and South America. Japan is both a stopover and wintering site for this bird.



Osprey ★
A large, fish-eating hawk, the osprey inhabits coastlines and lakeshore, where it can be seen hovering above water before diving to catch fish with its claws. The osprey is considered a species at risk.



Eastern Marsh Harrier ★
A small group of Eastern marsh harriers breeds in reed beds in Central Japan and northward. They migrate to the main island of Japan and southward to winter in reed beds in wetlands and on reclaimed land where they prey on birds and small mammals. This species is listed as vulnerable.



Saunders's Gull ★
The largest colony of Saunders's gulls is located in China. In Japan, they winter on tidal flats and at river mouths mainly in the western part of the country. They fly low in order to catch crab and fish. The Saunders's gull is listed as a vulnerable species.

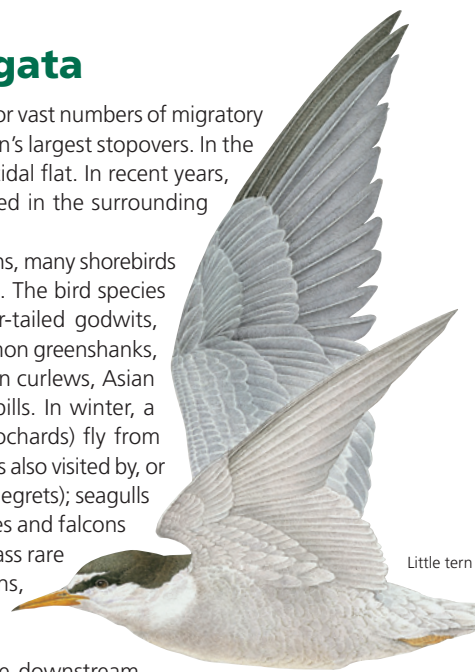
★=Rare species

Birds Observed at Fujimae-higata

The Fujimae-higata and its surrounding area serve as a stopover for vast numbers of migratory birds on the East Asia-Australia flyway. In fact, this is one of Japan's largest stopovers. In the spring of 2000, 11,000 shorebirds were recorded as using the tidal flat. In recent years, 172 bird species (including woodland birds) have been observed in the surrounding area, of which 41 species were shorebirds.

During the wintering season and the spring and autumn migrations, many shorebirds use the tidal flat and surrounding areas for feeding and resting. The bird species observed include dunlins, red-necked stints, grey plovers, bar-tailed godwits, lesser sand plovers, kentish plovers, grey-headed lapwings, common greenshanks, and grey-tailed tattlers as well as rare species such as Far Eastern curlews, Asian dowitchers, Nordmann's greenshanks, and black-faced spoonbills. In winter, a large number of ducks (such as tufted ducks and common pochards) fly from Russia, the Far East and Alaska for wintering. The Fujimae-higata is also visited by, or home to, many herons (Ardeinae, including great egrets and little egrets); seagulls (Laridae, including black-headed gulls and common terns); eagles and falcons (Falconiformes); and raptors (including ospreys), which encompass rare species such as intermediate egrets, Saunders's gulls, little terns, eastern marsh harriers, and peregrine falcons.

The downstream banks of the Shonagawa and Shinkawa Rivers leading to the tidal flat are covered with reed beds, while the downstream areas of the Nikkogawa River offer a tranquil freshwater environment. For this reason, these areas are inhabited by prairie birds (including great reed warblers) and freshwater ducks (including northern pintails and Eurasian teals). A total of 31,000 waterbirds were observed in March 2000.



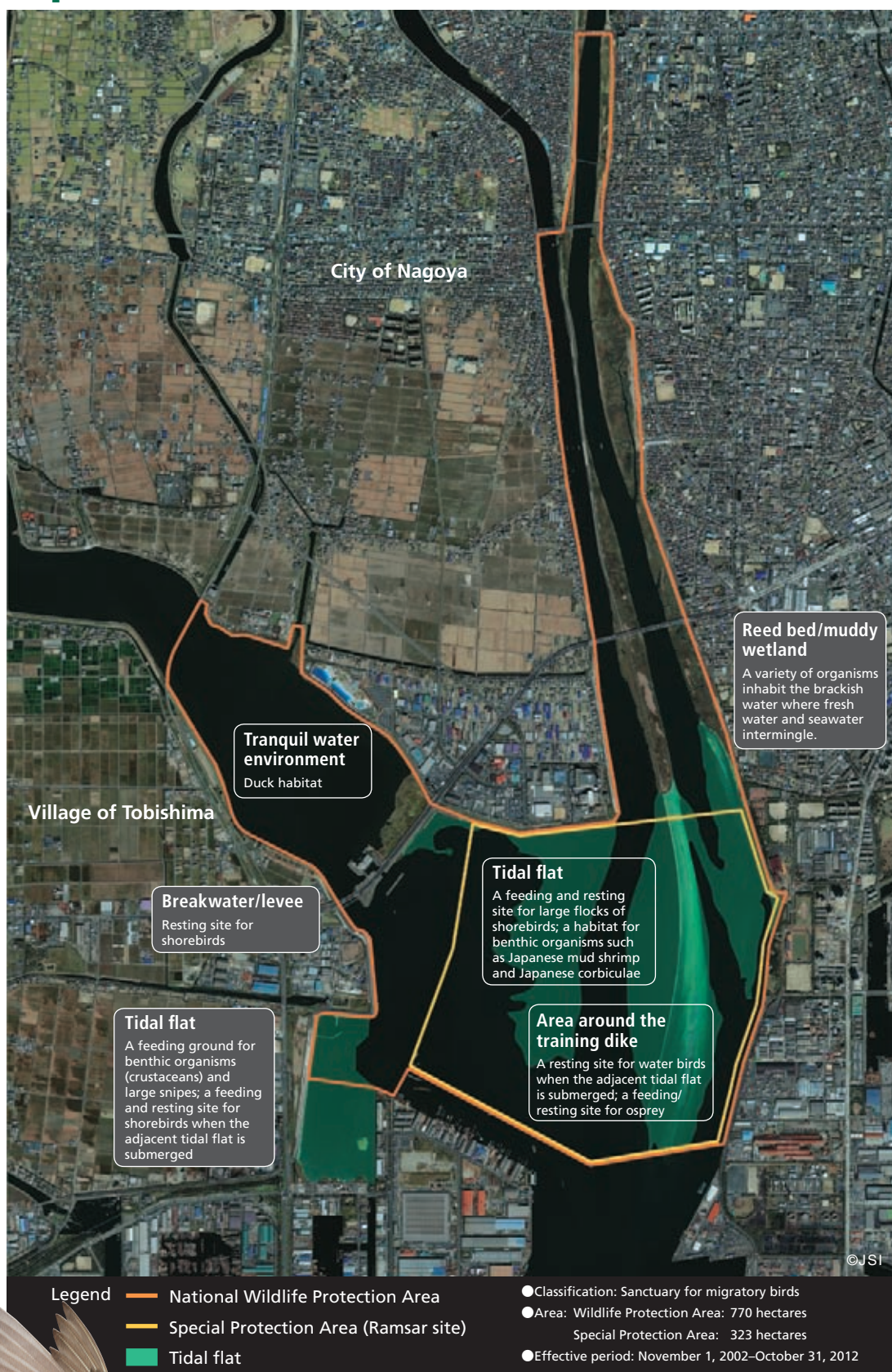
Little tern

Shorebird flyway



The Fujimae-higata serves as a critical stopover for the migratory birds that travel about 10,000 km between their breeding sites in Siberia and wintering sites in Australia.

Fujimae-higata and surrounding areas: A precious Wildlife Protection Area in an urban environment



Reed bed/muddy wetland
A variety of organisms inhabit the brackish water where fresh water and seawater intermingle.

Tranquil water environment
Duck habitat

Tidal flat
A feeding and resting site for large flocks of shorebirds; a habitat for benthic organisms such as Japanese mud shrimp and Japanese corbiculae

Tidal flat
A feeding ground for benthic organisms (crustaceans) and large snipes; a feeding and resting site for shorebirds when the adjacent tidal flat is submerged

Area around the training dike
A resting site for water birds when the adjacent tidal flat is submerged; a feeding/resting site for osprey

Legend
National Wildlife Protection Area
Special Protection Area (Ramsar site)
Tidal flat

● Classification: Sanctuary for migratory birds
● Area: Wildlife Protection Area: 770 hectares
Special Protection Area: 323 hectares
● Effective period: November 1, 2002–October 31, 2012

Overview of National Wildlife Protection Areas

- A National Wildlife Protection Area is an area designated by the Minister of the Environment as a critical area for wildlife protection from both a national and international perspective.
- Hunting is prohibited in a refuge. An area deemed of particular significance for the protection of wildlife or its habitat is designated as a **Special Protection Area** in order to restrict development for a specific period.
- A protected area is classified into one of four categories: large habitat, site for migratory birds, breeding site, or wildlife habitat for endangered species.

*Applicable law: Wildlife Protection and Hunting Law (Act No. 88 of 2002)

*As of March 31, 2003, 56 locations spanning a total of 495,000 hectares have been designated as National Wildlife Refuges, of which 44 have been named Special Protection Areas covering 117,000 hectares.

Classification	Wildlife Protection Area (Article 28 of the law)	Special Protection Area (Article 29 of the law)
Objective	The Minister of the Environment designates wildlife protection areas as areas deemed of particular significance to protect wildlife in an international and national context.	An area deemed of particular significance for the protection of wildlife or its habitat within a wildlife protection area
Restrictions	<ul style="list-style-type: none"> • Hunting is prohibited • Residents are prohibited from interfering with the construction of the nesting and feeding facilities required for wildlife breeding and habitat. 	<ul style="list-style-type: none"> • Activities requiring government permission • Construction, renovation, and expansion of structures • Landfilling or reclamation of the water environment • Tree cutting
Effective period	20 years max. (renewable)	With in the effective period set for a wildlife protection area

Tidal Flats — Purifying Water and Sustaining Wildlife

Wastewater generated by human activity contains a large volume of inorganic nutrients and organic substances — including phosphorus and nitrogen — that feed phytoplankton. Prolonged warm weather produces phytoplankton blooms and triggers a phenomenon called "red tide," which significantly harms fish and shellfish. On tidal flats and shoals, however, benthic organisms such as Japanese mud shrimp, corbiculae, crab, and lugworms purify the water by consuming phytoplankton. Holes created by these organisms

in the mud also help to bring oxygen into the seawater to promote water purification. These benthic organisms also provide a food source for migratory birds; thus, tidal flats play a critical role in sustaining the life cycles of a great number of diverse creatures.

The Tidal Flat Ecosystem

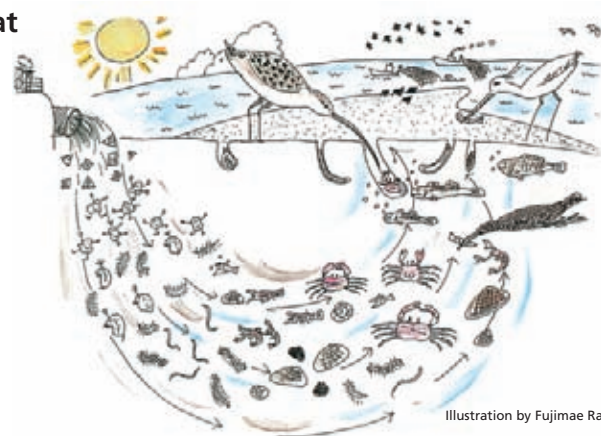
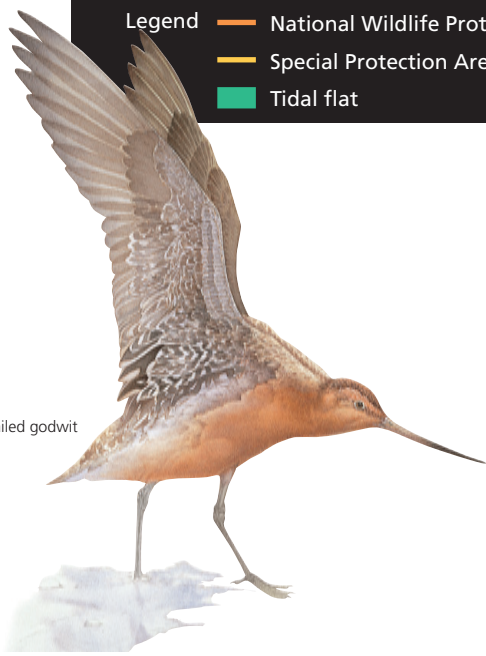


Illustration by Fujimae Ramsar Society, an NPO



Bar-tailed godwit

Surrounded by large cities, harbors, and industrial areas, the Fujimae-higata has barely escaped plans for large-scale landfill projects in the surrounding area. In fact, part of the tidal flat had once been proposed as a waste disposal site. Thankfully, this proposal was abandoned due to a public movement to save the tidal flat and the City of Nagoya's recognition of its importance. This situation inspired the City and its residents to undertake a major waste reduction effort. The Fujimae-higata is significant not only as a symbol of environmental conservation but also as a model for the commitment of large cities to a sustainable society. In fact, the Fujimae-higata has unlimited potential as a stage from which to observe the wonders of nature, enjoy the beauty and richness of the tidal flat, and enjoyably learn about a model for a sustainable society.

Environmental Research and Eco Tours

The Fujimae-higata is a precious natural habitat situated in an urban environment. An important site for migratory birds, this tidal flat has been designated a national Wildlife Protection Area and has been registered as a Ramsar site.

Extending across the mouths of the Shonagawa, Shinkawa, and Nikkogawa Rivers, the Fujimae-higata is the last remaining broad tidal flat in the deepest reaches of Ise Bay. It serves as an important stopover for shorebirds on the East Asia-Australia flyway. During the spring and autumn migrations and wintering seasons, vast numbers of shorebirds use the tidal flat as a feeding and resting area. Notably, the number of shorebirds observed at the Fujimae-higata is among the largest in Japan. In

winter, numerous ducks from Russia, the Far East and Alaska gather here. This area is also inhabited by many herons (Ardeinae), seagulls (Laridae), and eagles and falcons (Falconiformes), including rare species such as Saunders' gulls and peregrine falcons. At the same time, the lower reaches of the Shonagawa, Shinkawa, and Nikkogawa Rivers provide habitat for many prairie birds and freshwater ducks. Consequently, the area plays an important role, both nationally and internationally, in the protection of migratory birds. Deserving, in November 2002 the area was designated a Wildlife Protection Area and its core, including the tidal flat, was named a Special Protection Area by the Ministry of the Environment.

In November 2002, the Special Protection Area was registered as a Ramsar site because it is used regularly by endangered species, supports a critical phase in the shorebird life cycle as a stopover, regularly sustains more than 20,000 water birds, and regularly supports more than one percent of seven species of shorebirds worldwide.

Access to Fujimae-higata

Fujimae Area

●By bus
From Meitetsu Bus Center (Nagoya Station)
Take the Mie Kotsu bus bound for Sunbeach Nikkogawa, Nagashima Onsen, or Minami-kuwana. Get off at Nanyo-cho Fujimae and walk for 15 minutes.

Inae Area

●By train
Get off at Noseki Station on the Aonami Line and walk for 10 minutes.
●By bus
Get off at Tsukijiguchi Station on the Meiko Subway Line. From Exit 3,
●board a City Bus bound for Inae Sports Center, get off at Inae Sports Center, and walk for seven minutes.
●board a City Bus bound for Noseki or Ferry Futo, get off at Noseki, and walk for 10 minutes.
You can also board a City Bus bound for Noseki from Nagoya or Kanayama Stations, or board a City Bus bound for Inae Sports Center from Takabata Station on the Higashiyama Subway Line.



One of Japan's Largest Shorebird Sites

Fujimae-higata

Government-Designated Wildlife Protection Area

A Ramsar site



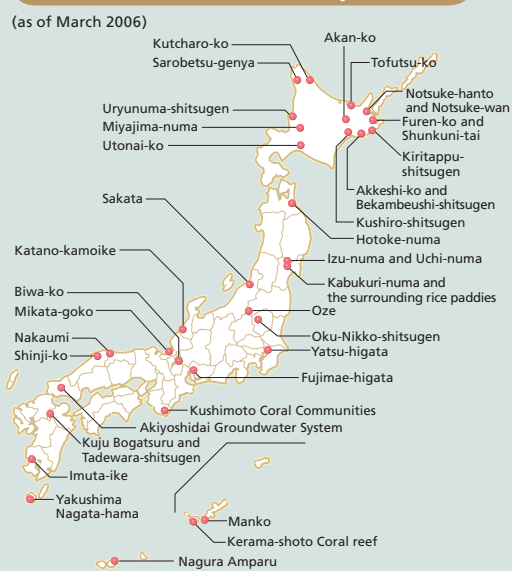
Dunlins in flight

Grey Plover

The Ramsar Convention and Fujimae-higata

The Convention on Wetlands of International Importance Especially as Waterfowl Habitat is popularly known as "the Ramsar Convention" because it was signed at an international conference in Ramsar, Iran. (The convention was signed on February 2, which has been designated "World Wetlands Day"; a one-week period spanning February 2 has been designated "World Wetlands Week.") The convention is intended to protect wetlands of international importance as well as the plants and animals that inhabit these wetlands. The parties to the convention are expected to designate wetlands and register them with the convention secretariat. As of March 8, 2006, the 150 countries listed as parties to the convention had registered 1,591 wetlands spanning a total of 134 million hectares. Japan became a party to the convention in 1980 and designated Kushiro-shitsugen (an area of low moors, freshwater lakes, and rivers) as a registered wetland. On November 18, 2002, Fujimae-higata and Miyajima-numa (a freshwater lake) in Hokkaido were registered. As of March 8, 2006, Japan had registered 33 wetlands spanning a total of 130,293 hectares.

Ramsar Sites in Japan



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<http://chubu.env.go.jp/>

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Photos: Toyohisa Morii

