Fujimae-higata

National Wildlife Protection Area

A Ramsar site

Ramsar

Ministry of the Environment

Contact Information

Chubu Regional Environment Office, Ministry of the Environment

2-5-2 Sannomaru, Naka-ku, Nagoya-shi, Aichi 460-0001
TEL: +81-52-955-2130
URL http://chubu.env.go.jp/

Nagoya Ranger Office for Nature Conservation

4-11-2 Noseki, Minato-ku, Nagoya-shi, Aichi 455-0845
TEL: +81-52-389-2877 FAX: +81-52-389-2878
mail: WB-NAGOYA@env.go.jp
URL http://chubu.env.go.jp/wildlife/fujimae/about/index.html

Tidal flat ecosystem illustration credit: Fujimae Ramsar Society
Photo credit: Network of Tokai-Inae Area, designated administrator, Nagoya City Wild Bird Observation Center

Publisher: Ministry of the Environment Publication year: 2020

What is a wildlife protection area?

Wildlife protection areas are designated on the basis of the Protection and Control of Wild Birds and Mammals and Hunting Management Law, which was established in order to protect wildlife.

There are two types of wildlife protection areas: National Wildlife Protection Areas designated by the national government (Minister of the Environment), and Prefectural Wildlife Protection Areas designated by prefectural governments (governors). Fujimae-higata is a wildlife protection area designated by the national government.

Hunting is prohibited within the boundaries of a wildlife protection area. Additionally, areas deemed to be particularly important for protecting wildlife and their habitats can be designated as Special Protection Areas. Certain development activities are regulated inside Special Protection Areas.

At Fujimae-higata, the tidal flat located near the Inae Visitor Center and Fujimae Active Center has been designated as a Special Protection Area.

What is the Ramsar Convention?

The Ramsar Convention is a treaty related to wetlands that was adopted at an international conference hosted by the city of Ramsar in Iran on February 2, 1971. Its official name is the Convention on Wetlands of International Importance especially as Waterfowl Habitat, but it is more generally called the Ramsar Convention, named for the city where it was adopted.

The countries that signed the Convention designate their own wetlands in accordance with international standards stipulated by the Convention, and these wetlands are placed on the List of Wetlands of International Importance. These wetlands are called Ramsar Sites. The Fujimae-higata Wildlife Protection Area that was designated as a Special Protection Area in 2002 was also registered under the Ramsar Convention that same year.

The Ramsar Convention incorporates three basic approaches.

These include the conservation and restoration of wetlands, the wise use of wetlands, and international cooperation and study (the CEPA programme) to promote such efforts.

Land creatures

More than 170 species of birds inhabit the tidal flats. Migratory dunlins and Far Eastern curlews can be seen in spring and fall; in summer, black-tailed gulls and striated herons; and in winter, Eurasian wigeons and northern pintails. Additionally, birds of prey such as ospreys, and group hunters such as common cormorants and large great egrets with snow white backs can be seen throughout the year.

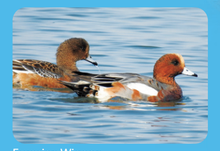

Greenshank


Far Eastern Curlew


Mallard


Great Egret


Northern Pintail


Eurasian Wigeon

Striated Heron

Living Creatures of the Tidal Flats

Sea creatures

You can find many sea creatures in the mudflats, including tidal flat crabs with their distinctive antennae eyes, Japanese mud crabs, and small ocypodoid crabs, as well as mudskippers, a near-threatened species that breathes through both its skin and gills, Japanese eels, and Japanese basket clams.


Japanese Eel


Japanese Mud Shrimp


Japanese Mud crab


Japanese basket clams


Helice tridens


Mudskipper

Plants

Reeds are the plants most typically found at Fujimae-higata. These members of the grass family grow to be 2–3 m in height in summer, and they are home to many other creatures. Living in some reed fields at the base of the reeds are salt marsh plants like Carex scabrifolia Steud., which can live in salty water, and coastal plants like Calystegia soldanella.


Phragmites australis (reeds)


Calystegia soldanella (bindweed)

Description of Fujimae-higata

Fujimae-higata is a natural tidal flat that is situated at the innermost part of Ise Bay and extends across the estuary where three rivers converge: the Shonai River, the Shin River, and the Nikko River. Only a small tidal flat remained after most of the area was landfilled for harbor facilities, factories and agriculture. When Fujimae-higata was targeted for use as a garbage landfill by the city of Nagoya, there was an outcry by citizens who wanted to protect the tidal flat, and that led to its preservation.

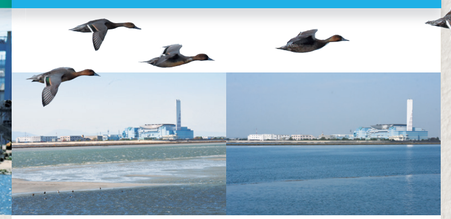
Fujimae-higata is well-known for migratory birds, being an important stopover for sandpipers and plovers on their migration between East Asia and Australia. The reed beds that grow along the riverbanks are inhabited by grassland birds and and a well-known fish, the mudskipper, as well as numerous crab varieties and shellfish. In November 2002, the diverse natural environment of Fujimae-higata was designated by the Ministry of the Environment as a Wildlife Protection Area. Afterward, the central area that includes the tidal flat was designated a Special Protection Area. In the same month, this Special Protection Area was listed under the Ramsar Convention as a wetland of international importance for the following three reasons.

International listing criteria* applicable to Fujimae-higata

Criterion 2: A wetland should be considered internationally important if it supports vulnerable, endangered, or critically endangered species or threatened ecological communities.
Criterion 4: A wetland should be considered internationally important if it supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.
Criterion 5: A wetland should be considered internationally important if it regularly supports 20,000 or more waterbirds.

*Ramsar Sites are established according to nine selection criteria and guidelines.

What are tidal flats like?


At low tide

At high tide

Have you ever gone clam-digging? Visualize in your mind what that place was like. A mud plain extending for several kilometers from the shoreline, a place where even boots can't keep your feet from getting stuck. These locations are expansive mud plains at certain times of day and covered by the sea if you visit at other times. This is a natural phenomenon caused by large differences in the ocean tide. Shallow seabeds appear and disappear according to the tide. When the seabed appears and becomes an expansive mud plain, it is called a "tidal flat." Tidal flats are drained and submerged by water twice a day due to the effects of the tide.

The definition of "tidal flat" according to a Ministry of the Environment study*

1. The maximum width of the drainage area between the shorelines at high and low tide must be at least 100 m.
2. The area of continuous drainage during the spring tides must be at least 1 ha.
3. The ground must be easy-to-move sediment (sand, gravel, silt, or mud).

*Tidal flat distribution survey (existing tidal flats)

The Tidal Flat Ecosystem

Keeping Water Clean to Cultivate Life

The three rivers that converge at Fujimae-higata — the Shonai, Shin, and Nikko Rivers — are rich in phosphorus, nitrogen, and other organisms as well as organic matter such as dead organisms and fallen leaves that provide a source of nutrients for marine phytoplankton. Additionally, in the tidal flats, benthic organisms such as Japanese mud shrimp, basket clams, crabs, and ragworms consume these substances and purify the water. The tidal flat surface is home to countless burrows belonging to benthic organisms. The mud is supplied with fresh oxygen in the seawater from these burrows, which improves the environment of the tidal flat. Migratory birds and fish then congregate at the tidal flats to feed on those benthic organisms. The existence of abundant benthic organisms supports the activities of diverse living creatures. However, if this balance is disrupted even once, a number of problems occur, including "red tide," which is caused by an overabundance of phytoplankton, and "hypoxia," a condition in which sludge accumulates along the ocean floor, causing the oxygen in the area to be consumed. This causes a vicious cycle of environmental degradation. The tidal flat is an important place that cleans the water and cultivates the lives of many living creatures.

Action plan 1 Teaching others about tidal flats

Lecture visits and nature walks

At the Nagoya Ranger Office for Nature Conservation, which oversees Fujimae-higata on behalf of the Ministry of the Environment, we host the Ranger Photo Exhibition and other events in cooperation with local government and private organizations to teach large numbers of people about tidal flats. We also visit elementary schools in Nagoya and teach children about tidal flats in a fun manner.

In addition, there are nature walks with private organizations at Fujimae-higata.


School visit

Action plan 2 Protecting Fujimae-higata together

Helping out with environmental conservation activities

One example: The Fujimae-higata Coastal Cleanup Campaign

Twice a year at Fujimae-higata, the Fujimae-higata Coastal Cleanup Campaign Executive Committee, which is made up of citizens and various other groups, holds an extensive coastal cleanup. Environment Agency staff help out with these activities.

Fujimae Tidal Flat Meeting

This meeting is open to anyone who is eager to raise public awareness about Fujimae-higata and to participate in its conservation. It is a place for sharing issues related to public works taking place in the Fujimae-higata Wildlife Protection Area and the environment of Fujimae-higata, and for discussing how to promote the conservation and utilization of Fujimae-higata.

Nature Programs — Where to Enter the Tidal Flat

Fujimae-higata increases greatly in size from spring through summer. During this time, it becomes easier to access the tidal flat at Fujimae-higata, and various nature programs are available. These programs not only allow visitors to actually feel the mud on the tidal flat but also let them see living creatures up close in their natural habitat.

Sunset Spots

The estuary at Fujimae-higata opens up toward the west, so at sundown, visitors can observe the beautiful sun setting behind the distant mountains and ocean. Watching the setting sun from Meiko Nishi Ohashi Bridge (nickname: Triton) toward the Suzuka Mountains, we can see the silhouettes of giraffes (gantry cranes for loading shipping containers) lined up along Tobishima Pier and experience nature on the only tidal flat that remains in Nagoya.

The Allure of the Tidal Flat

A Stopover Site for Migratory Birds

Fujimae-higata is a well-known stopover site for migratory birds. Numerous species of sandpipers and plovers, including the dunlin, visit in spring and fall, and ducks visit in large numbers in winter. People can enjoy the sight of birds feeding and resting on the expansive tidal flats throughout the four seasons. The birds that visit here include rare birds as well as birds that use Fujimae-higata is large numbers throughout the year such as herons and common cormorants.

A Location for Encountering Precious Plants and Animals

Fujimae-higata is the only natural tidal flat remaining at Nagoya Port, a logistics port that supports a huge metropolis. It is an important place for people to observe precious plants and animals. For example, it is home to the Far Eastern curlew*1 with its distinctively long beak, the Saunders' gull*1 which flies leisurely in the sky, the osprey*2 which can be seen all year round, and the mudskipper*2, a beloved tidal flat fish.

*1 Ministry of the Environment Red List: Threatened II species
*2 Ministry of the Environment Red List: Near-threatened species

What kinds of birds are sandpipers and plovers?

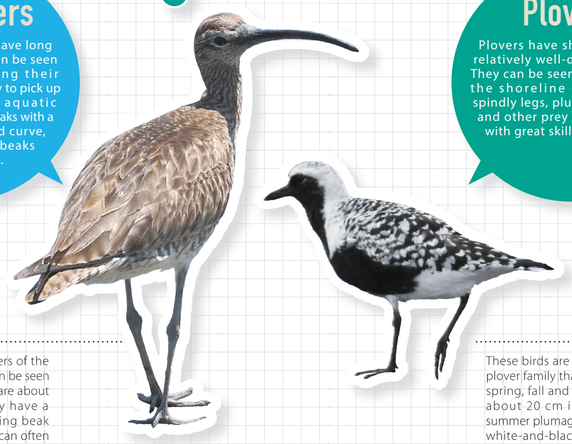
These are birds that are often seen near water, including tidal flats, coastal beaches, and rice paddies. Frequent observation will reveal many different species that vary in color, shape, and body design.

Sandpipers

Sandpipers typically have long beaks and legs. They can be seen along the shore using their distinctive beaks skillfully to pick up shellfish and other aquatic creatures. Some have beaks with a significant downward curve, while others have beaks that curve upward.

Plovers

Plovers have short beaks and relatively well-developed eyes. They can be seen darting around the shoreline on their long, spindly legs, plucking ragworms and other prey out of the mud with great skill.



Whimbrel

These birds are members of the sandpiper family that can be seen in spring and fall. They are about 40 cm in length. They have a long, downward-curving beak that is distinctive. They can often be seen in tidal flats feeding on crabs.

Grey Plover

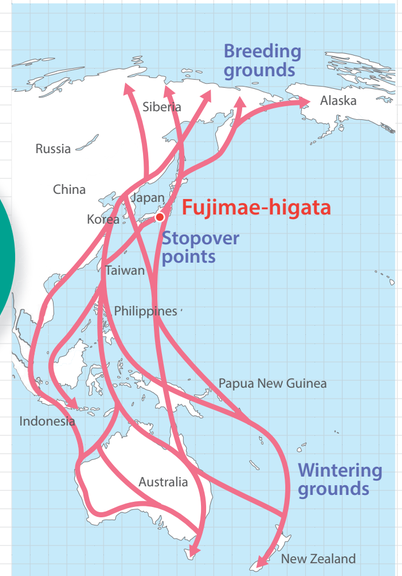
These birds are members of the plover family that can be seen in spring, fall and winter. They are about 20 cm in length. Their summer plumage exhibits a vivid white-and-black contrast. They can be seen on the tidal flats mingling with dunlin flocks while they feed.

Common Snipe

Dunlin

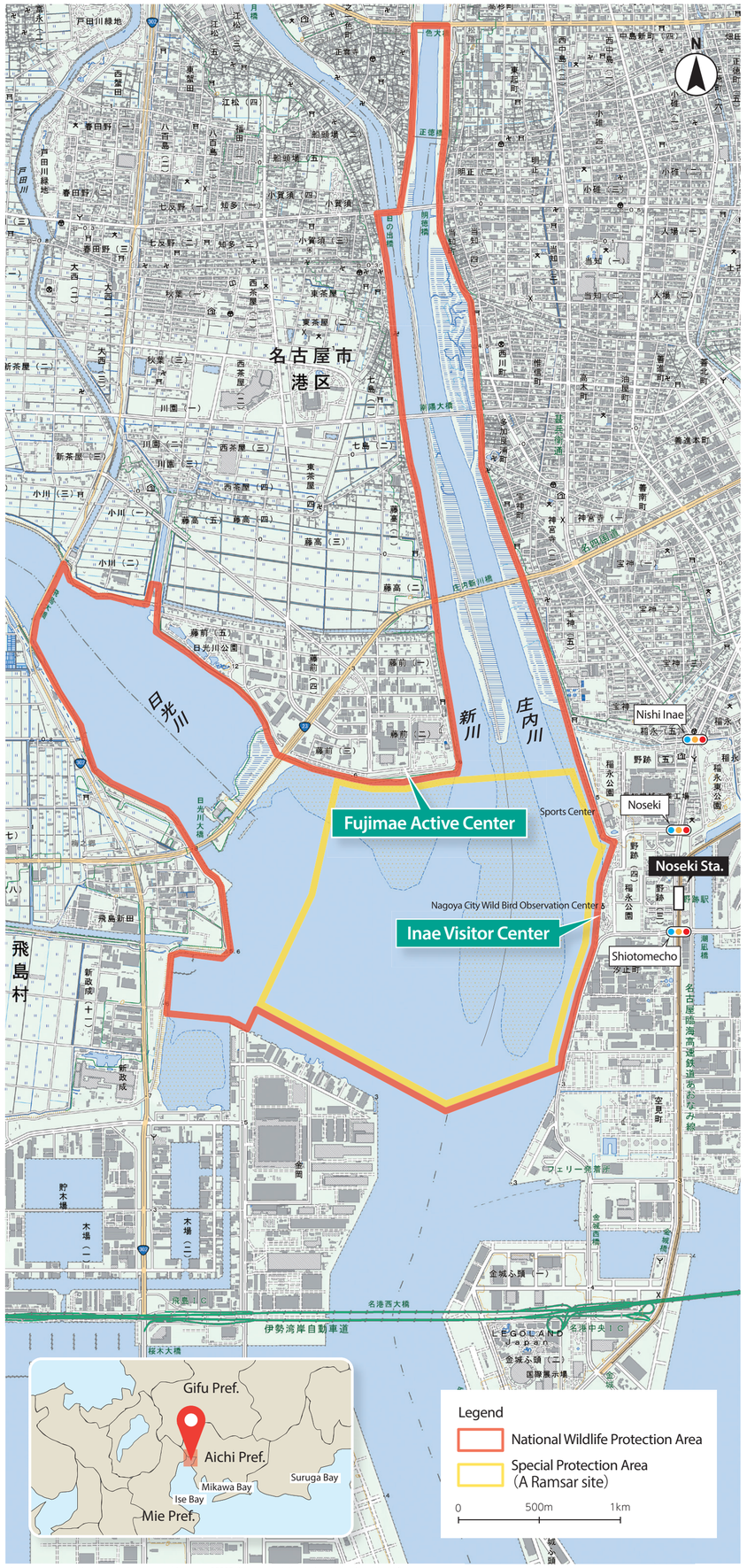
Grey-Headed Lapwing

Little Ringed Plover



Migratory routes

Sandpipers and plovers are often seen in Japan in the spring and fall because they visit Japan on their way from Siberia, Alaska, and other breeding grounds to Australia and other wintering grounds. In order to travel this distance, about 10,000 km each way, they make stopovers in Japan and elsewhere in order to feed and store up nutrients.



*Created by processing electronic topographical map 25000 (Geospatial Information Authority of Japan)

Tidal Flat Rules

Please show proper regard for nature at the tidal flat and obey the following rules to ensure that everyone can enjoy it.

- Do not litter. Take your garbage home with you.
- After you have looked at a living organism that you found, return it to its original place.
- When you enter the tidal flat, be aware that you have entered the home of living creatures, and return any stones that you move to their original position.
- When taking photographs, be considerate of living creatures and don't get too close.
- Do not step on small creatures or their burrow holes.

Facility Information

Fujimae Active Center

P Parking available

TEL: +81-52-309-7260 FAX: +81-52-309-7261
2-202 Fujimae, Minato-ku, Nagoya-shi, Aichi

〈 Directions 〉

Nagoya Sta. — Kanayama Sta. (Subway (Approx. 8 min.)) — Minato Kuyakusho Sta. (City bus bound for Sun Beach Nikkogawa (Approx. 35 min.)) — Sun Beach Nikkogawa (Walk (Approx. 20 min.)) — Fujimae Active Center

Nagoya Sta. — Mie Kotsu bus bound for Sun Beach Nikkogawa (Approx. 40 min.) — Nanyo-cho Fujimae (Walk (Approx. 15 min.)) — Fujimae Active Center

Inae Visitor Center

P Parking available (Inae Park)

TEL: +81-52-389-5821 FAX: +81-52-389-5822
4-11-2 Noseki, Minato-ku, Nagoya-shi, Aichi

〈 Directions 〉

Nagoya Sta. — Kanayama Sta. (Subway (Approx. 9 min.)) — Tsukiji-guchi Sta. (City bus (Approx. 20 min.)) — Noseki Sta. (Walk (Approx. 15 min.)) — Inae Visitor Center

Nagoya Sta. — Aonami Line (Approx. 20 min.) — Noseki Sta. (Walk (Approx. 15 min.)) — Inae Visitor Center

Open hours	9:00 A.M. – 4:30 P.M.
Closed	Mondays (the following day if Monday is a public holiday) 3rd Wednesday of the month (the 4th Wednesday if the 3rd one is a public holiday) New Year (December 29 – January 3)
Admission	Free (Visits by organizations require an advance reservation.)