# **Tokai Hilly Land Spring-fed Mires**

# **Spring-fed Mire**

Geographical Coordinates: 35°08'N, 137°21'E (Yanami-shicchi), 35°12'N, 137°24'E, Kamitaka-shicchi), 35°11'N, 137°24'E (Onshinji-shicchi) / Altitude: 111-168m (Yanami-shicchi), 190-244m (Kamitaka-shicchi), 194-254m (Onshinji-shicchi) / Area: 22.5ha / Major Type of Wetland: Spring-fed mire / Designation: Special Zone of Quasi-National Park / Municipalities Involved: Toyota City, Aichi Prefecture / Ramsar Designation: July 2012 / Ramsar Criteria: 1, 3



Flowers of Tokai Hilly Land Elements (Photo by K. Ohata)



Yanami-shicchi



Nature watching in Yanami-shicchi (Photo by K. Ohata)

#### **General Overview:**

In the Tokai region on the coast of the Pacific Ocean, and in central Honshu, there are a few small wetlands formed by spring waters from the ground, in an area that consists of sandy gravel layer and granite. There are some species endemic to this region and others that have disjunct distribution across the Asian Continent. These species are represented by 15 plant species, which are collectively called the "Tokai Hilly Land Elements".

A group of three mires, Yanami-shicchi, Kamitaka-shicchi and Onshinji-shicci, that represent the mires in this region, was designated as a Ramsar site named "Tokai Hilly Land Spring-fed Mires".

These mires are situated in the neighborhood of the urban area of Toyota City in Aichi Prefecture. Yanami-shicchi (5.13ha) is located in a corner of the park "Toyota City Nature Sanctuary", approximately 4km east of the urban area; Kamitakashicchi (5.45ha) and Onshinji-shicchi (11.92ha) are situated 4km northeast of the park.

### Invaluable Flora and Fauna:

The distinctive characteristic of this site is that it has a high density of plants. Typical examples of Tokai Hilly Land flora are *Eriocaulon nudicuspe Maxim*, *Pedicularis resupinata var. microphylla*, Star Magnolia, and *Veratrum stamineum Maxim*. *var. micranthum Satake*, all of which are



Star Magnolia (Photo by K. Kawashima)

endemic to the Tokai Region, and *Eulalia* speciosa, a plant of disjunct distribution from the Asian Continent. The community of *Pedicularis resupinata var. microphylla*, in Yanami-shicchi, is one of the largest in the world. It forms a beautiful flower garden, together with *Eriocaulon nudicuspe Maxim*, in autumn.

There are a large number of dragonfly species including the smallest dragonfly in Japan, *Nannophya pygmaea*, and some other rare aquatic species such as *Nepa hoffmanni* and *Lefua echigonia*.

There used to be a number of such mires in the Tokai Region. However, most of them were lost to agriculture or for other development purposes. The wetlands in this Ramsar site are invaluable in retaining its original natural character.

#### Conservation by the Citizens in the Town:

In 1973, when a local plant study group revealed the importance of the mire, with plant species such as *Eriocaulon nudicuspe Maxim*, the local government of Toyota City started the conservation management of Yanami-shicchi.

When the mires were recognized as one of the "500 Important Wetlands in Japan", these unique mires in the Tokai Region attracted a lot of attention and have been protected comprehensively since then. Some local organizations take charge of the maintenance and conservation work such as mowing in the three mires.



Kamitaka-shicchi (Photo by K. Ohata)

Yanami-shicchi became open to the public for certain days every year, which offers a good opportunity for many citizens to understand the importance of wetlands and enjoy them.

In accordance with these movements, the "Tokai hilly Land Spring-fed Mires Conservation Plan" was developed in 2011. It is a framework for the people and organizations, including governments, to promote conservation and the wise use of the mires. The stakeholders organize meetings regularly, to promote and exchange co-learning.

## **Contact Information:**

Toyota City Office https://www.city.toyota.aichi.jp/

