

Learn about Lake Biwa

Photograph (Nejiremo) Minako Ashiya

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Biwako Handbook **Fourth Edition** Overview

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Various activities related to Lake Biwa
Discover "Biwactivities"!

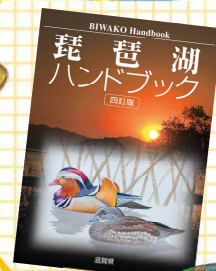
Shiga Prefecture Lake Biwa
Information Website
Biwactivities Guide

Name

Do you know about the Lake Biwa pearls ?
There're species that only live in Lake Biwa ?
Let's learn about Lake Biwa with this book !

Biwako Handbook **Fourth Edition** Overview

The Biwako Handbook (main book) can be viewed at prefectural libraries,
municipal libraries in the prefecture, as well as on the prefecture's website
★Please main book is provided in Japanese only. We appreciate your understanding.★



Foreword

Lake Biwa is the biggest lake in Japan.

Is there anything else that you know about Lake Biwa?

Where does the water in Lake Biwa come from?

Is it true that there are some species that only live in Lake Biwa?

Let's learn about Lake Biwa!

What kind of lake is Lake Biwa?

■ Lake Biwa Data

- **Lake Biwa Area** 669.26 km²
(Northern Lake: Southern Lake = 11:1)
... It is approximately 1/6th the area of Shiga Prefecture
- **Lake Biwa Circumference** 235.20 km
... Going around once with a bicycle would take you approximately two days and one night
- **The deepest part**
Northern Lake Approximately 104 m
Southern Lake Approximately 8 m
- **Reservoir Capacity** 27.5 billion m³
... It would take approximately 19 years to replace all of the water

While there are approximately 460 rivers that feed into Lake Biwa, the only ones that feed out are the Seta River and the Lake Biwa Canal!

■ Have You Heard of Ancient Lakes?

Ancient lakes are those lakes that have a very long history of over a hundred thousand years. There are only about 20 in the world, and Lake Biwa is one of them. Lake Biwa, including the lake it started as, has a history of approximately 4 million years. Normal lakes will often dry up after about 10,000 years, but Lake Biwa is a lake with an incredibly long history. Additionally, ancient lakes have endemic species, which are rare species that live only in that place. Lake Biwa is a miracle lake that has many endemic species living in it.



Make the water clear



Restore bountiful seafood resources



Maintain biodiversity

About the Mother Lake Goals (MLGs)

The Mother Lake Goals (MLGs) are goals that were created through talking with everyone to ensure that Lake Biwa is able to continue to have clean water and have a lot of different species in it. In addition to goals for water quality and different species, we also have a variety of other goals, such as for forests and greenhouse gases.



Work together to achieve our goals



Teach the next generation how to live life in harmony with water



Encourage more people to enjoy and love Lake Biwa



Turn the local community and lake area into a place to learn



Utilize local resources in agriculture and industry



Create a community resilient to climate change and natural disasters



Reduce greenhouse gas emissions to save Lake Biwa and the environment



Create a beautiful waterfront and lake bottom



Conserve forests serving as rich water sources



Create a healthy relationship between forest, river, community, lake, and sea



Protecting the Water in Lake Biwa

Every day, we use water in a variety of situations, and we can get clean water simply by using the faucet. However, water is by no means an unlimited resource. We should remember that it is an important limited resource.

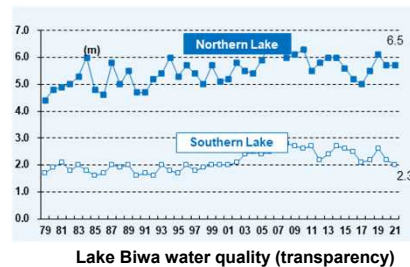
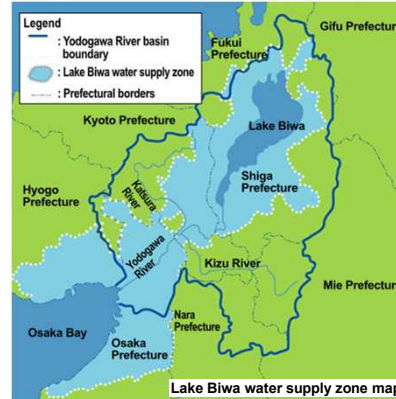
Water That Supports 14,500,000 People

Lake Biwa is surrounded by mountains, and the majority of the rain that falls flows into Lake Biwa. The people who live in Shiga Prefecture use the water from rivers and Lake Biwa in their daily lives, in factories and in agriculture.

The water stored in Lake Biwa flows through the Seta River, Uji River and Yodogawa River into downstream areas such as Kyoto and Osaka, **supporting the lives of approximately 14,500,000 people.**

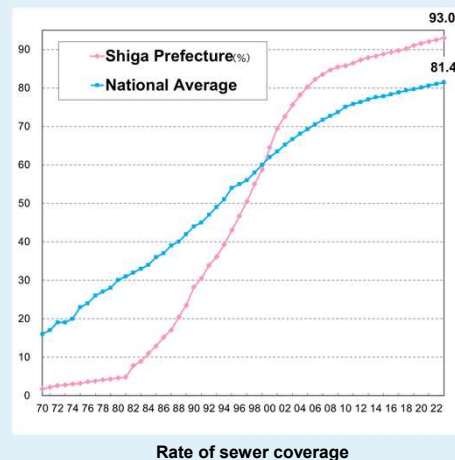
Lake Biwa Water Quality

The graph on the right is a transparency graph that shows the clarity of water. It can be said that transparency has been improving in the long term, and that water quality is improving. However, for a lake to have a good environment, it's not enough for water to just be clear. Rather than thinking it terms of "clear is good" and "cloudy is bad", it is important to think of the environment from a variety of perspectives and search for a means of co-existence for everyone.



The role of sewers

Sewers that process dirty water play an important role in preventing Lake Biwa's water from getting dirty. Shiga Prefecture has systematically progressed with the installation of sewers so that they cover a wide area. As a result, **the rate of sewer coverage is 93% (2023)** and **the rate of the population with access to waste water treatment is second in the country at 99.2%.** However, this does not mean that it is okay to flush anything down the sewers. Let's give thought to what we can do to keep from polluting water with the water used at home.



Lake Biwa Fish and Fisheries

Lake Biwa has many fish, with people receiving that blessing by working in fisheries from long ago. However, lately, the amount of fish catches from Lake Biwa has dropped significantly. Let's protect the habitat, increase the fish and shellfish populations, buy and eat a lot of fish from the lake and support the Lake Biwa fishing industry.

Endemic Species

Species that live only in certain areas are known as **endemic species**. Lake Biwa is a Japanese lake with a particularly high number of **endemic species living in it**, totally 66 varieties. Of those, there are 17 endemic fish species.

Non-Native Species

Shiga Prefecture is advancing initiatives to eliminate invasive fish, like the **black bass** and the **bluegill**. This is because the severe damage they cause, by eating things like the native species of fish, disrupts the balance of the ecosystem.



Lake Fish Cuisine

The fish and shellfish caught in Lake Biwa can be prepared and eaten in a variety of ways, including boiling in soy sauce, as sunomono (vinegared dish), grilling, putting in miso soup, as sashimi and as fermented sushi. **Biwa Salmon, Ayu, Nigrobona, Honmoroko and Setashijimi (seta clam)** are famous.



Biwa Salmon sashimi



Nigrobona fermented sushi



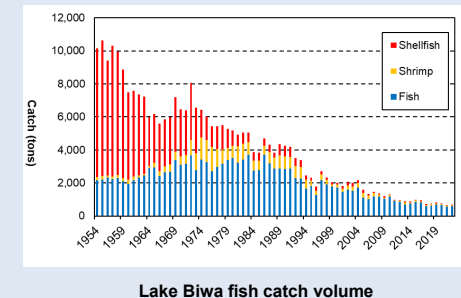
Grilled Honmoroko



Setashijimi miso soup

Efforts to increase volume of fish catches

While Lake Biwa is showing signs of increased fish catch volume for certain species, **it is showing an overall decrease**. To increase the number of fish in Lake Biwa, we must restore the areas where fish lay eggs and develop. Additionally, even supporting the Lake Biwa fishing industry by buying and eating a lot of Lake Biwa fish will tie into the revitalization efforts to increase Lake Biwa fish.





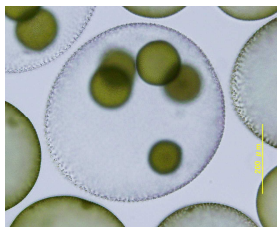
Species of Lake Biwa

Small fish eat plankton, big fish eat small fish, and those fish are eaten by birds. Species live in a delicate balance, living lives by adapting to each of their environments. So now, let's learn more about the species that live in Lake Biwa.

■ The Big Role of Small Species

Small organisms that live their lives floating gently in water are known as plankton. Phytoplankton are eaten by zooplankton, which are an important food for small fish.

While phytoplankton can occasionally cause water bloom and red tide, they are incredibly important as a fundamental element of the food chain.



Volvox biwakoensis
(Photograph: Courtesy of NIES)

■ Species That Live at the Bottom

Shellfish, shrimp and aquatic insects that live at the bottom of the ocean, lakes and rivers are known as **Benthos**. There are approximately 800 animal benthic species in Lake Biwa, of which 39 species are endemic. This accounts for roughly 60% of Lake Biwa's endemic species.

These benthos support the ecosystem of Lake Biwa, such as the endemic amphipod* *Jesogammarus annandalei* *as food of the endemic Biwa Trout.



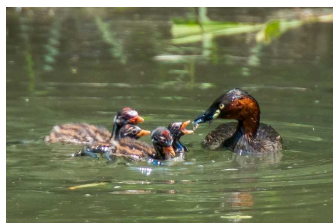
Jesogammarus annandalei
(Photograph: Machiko Nishino)

■ A Waterfowl's Paradise

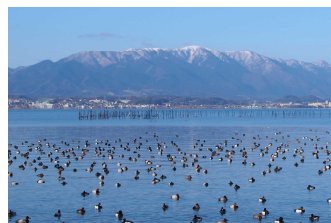
Lake Biwa and Lake Biwa's largest attached lake, Lake Nishinoko, are registered under the **Ramsar Convention on Wetlands** as internationally important wetlands. One of the registration standards of that convention is that the wetland regularly supports over 20,000 waterfowl. Winter in Lake Biwa sees a number that far exceeds the 20,000 requirement, with 100,000 waterfowl coming to Lake Biwa to eat and rest. Lake Biwa is an important habitat to waterfowl.



Tundra swan
(*Cygnus columbianus*)



Grebe parent and child
(*Tachybaptus ruficollis*)



Lake Biwa waterfowl

(Above three photographs: Shigefumi Kanao)

■ 100 Species of Dragonflies

Approximately **100 species of dragonflies** have been recorded in Shiga Prefecture, with its good and abundant water environments. Japan has approximately 200 species of dragonflies recorded, which means that roughly half of the dragonflies species that live in Japan can also be found in Shiga Prefecture.

However, in recent years, environmental changes have brought a reduction in the distribution of certain varieties of dragonflies, such as the Miyamaakane and the Hanebiroezotonbo dragonflies.



Natsuakane
(*Sympetrum darwinianum*)
(Photograph: Shigefumi Kanao)

■ The Habitat of Frogs

Amphibians such as frogs and reptiles such as turtles live in the reed belts that spread wide in swamps and watersides at the mouths of rivers, making them important places.

However, in addition to being limited, these wetlands have been reduced in recent years through the installation of concrete bulkheads and roads, so there is demand for the protection of the habitats of these native amphibians and reptiles.



Nagoya Daruma pond frog
(*Pelophylax porosus brevipodus*)
designated as Endangered species of the Ministry of Environment (Photograph: Shigefumi Kanao)

▶ Taking care of the animals we keep

Regardless of the reason, even if taking care of an animal is difficult or you have lost interest, it is important to take full responsibility for your pets. In particular, letting loose animals not originally from that area runs the risk of disrupting the balance of the ecosystem. The **red-eared slider** and **red swamp crayfish** that both live in Lake Biwa and are kept as pets were designated as **Conditionally Designated Invasive Alien Species**. While they can still be kept as pets, it is forbidden to let them out into the wild, and doing so can incur stiff penalties.



Sunbathing red-eared slider

■ To Protect Living Things

While we live by consuming a variety of blessings from nature, in the pursuit of a more convenient and comfortable life, we are creating an environment that is difficult for other living things to inhabit. Currently, the number of endangered species listed in the "Red Data Book of Shiga Prefecture" is increasing.

Biodiversity belongs to all of us. To protect a diverse array of living things, we need to appreciate the forests and Lake Biwa, rivers and satoyama (mountains near villages, used as part of daily life) that these species live in and pass them on to the next generation.



Let's Look at the Environment of the Water's Edge

By paying a little attention and being a little inventive in our day to day lives, we can live in a way that is kind to the environment. It is important not to destroy or pollute nature for our own convenience.

■ Reed Beds, the Habitat of Living Things

The long plants shown on the right that grow on the water's edge of Lake Biwa are known as **common reeds**. The areas where these reeds gather are called **reed beds**, are used by birds and fish as places to find food and rest, and are an important place for different animals.

Additionally, in winter, reed cutting is conducted to prune dried reeds. Cutting old reeds helps new buds sprout in spring.

■ Invasive Aquatic Plant Species

While the plant on the right looks beautiful at first glance, it is an invasive aquatic plant species known as **water primrose**. This plant is very good at reproducing and it covers a wide area of the water's surface, which leads to a variety of damage, such as interfering with the growth of other plants and making sailing difficult.

Additionally, they can regrow from pieces of stems and leaves, so in addition to the mass extermination of these plants using machines, they also need to be carefully eliminated by humans. Even now, we are working to eliminate these plants together with many organizations, such as local NPOs and student volunteers.



Reed cutting ▶



Water primrose
(*Ludwigia grandiflora*)



Elimination work



Garbage that has drifted to the Lake Biwa lakeside

Invasive species

Invasive species are non-native species that run the risk of having a significant effect on the local natural environment and threaten biodiversity.

▶ Lake Biwa garbage

In the prefecture, litter or garbage that has blown in at some point will enter rivers due to rain and wind, and then flow into Lake Biwa. This garbage will gather in the lakeside and lake bed and can harm the living things.

Don't just throw it away assuming that someone else will pick it up. Let's all take care to protect Lake Biwa by properly disposing of our garbage.



Let's Protect Water Source Forests

Lake Biwa and forests are connected by rivers, so we must protect the forests to protect Lake Biwa. What's important is maintaining the forest and making the most of the resources borne out of it. There are many things that we can do to protect the forests that support Lake Biwa and our lives.

■ Let's Ensure the Abundant Forest Is Around in the Future!

Currently, in Shiga Prefecture, there are many forests that are not properly managed, and whose owners or boundaries are not known. On the other hand, forests are the source of water for Lake Biwa, are the home for a diverse array of life, and they not only prevent landslides but also provide lumber and act as recreational spots.

They are important places that provide a variety of blessings. Even when living in urban areas, there are a lot of ways to interact with forests, such as using utensils made of wood and going hiking on days off. You can get started with whatever interests you and seems fun!



Healthy forests being maintained by people



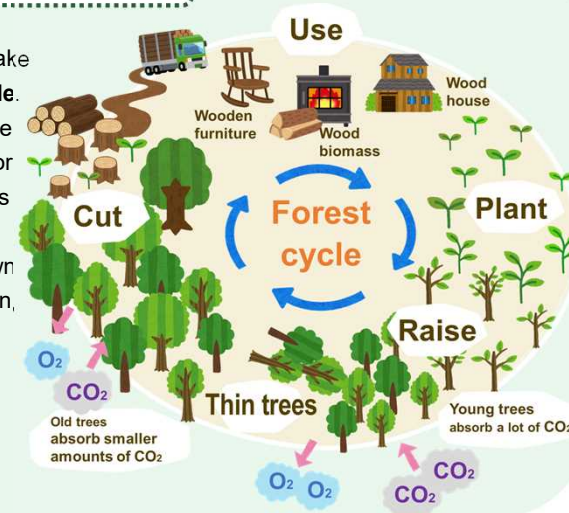
Buildings that use lumber



Walking through forests

▶ Let's use trees to protect forests

The forests that act as water sources for Lake Biwa are **60% natural**, and **40% man-made**. Man-made forests are forests that are made to be used, with trees planted and grown for lumber, however, utilization of this lumber is stagnating. Trees need to be methodically thinned, cut and used once they have grown to keep man-made forests in good condition, and it is also important to plant new trees. While it might seem like using trees and protecting forests would be contradictory, it is a portion of the important cycle that protects forests.





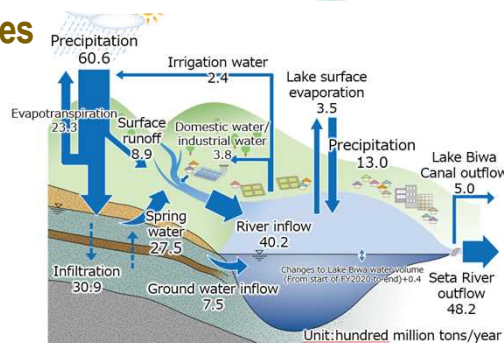
Let's Think About Forests, Rivers, Villages and Lakes

Rain water is stored in forests, eventually becomes rivers and those rivers finally flow into Lake Biwa. Fields stretch out in the surroundings and we live with a variety of different living things. Protecting the environment around Lake Biwa is tied to protecting Lake Biwa.

Forests, Rivers, Villages and Lakes Are All Linked by Water

Roughly half of the rain and snow that falls around Lake Biwa seeps into the ground of mountains and forests and eventually reaches Lake Biwa, either by spring out as river water or flowing in as ground water.

In this way, **water connects forests, rivers, villages and lakes**. Suitably preserving the forests and rivers that are in the upstream portion is important to maintaining a healthy water cycle.



Lake Biwa basin water cycle (FY 2020 estimated value)

Let's conserve the fish cradle rice paddies

Among the fish that live in Lake Biwa, there are those that swim upstream in waterways to spawn in rice paddies, like the Nigorobuna, Koi carp and catfish. Fish babies grow in rice paddies and return to Lake Biwa via waterways once they are big enough. Rice paddies have warm water, are full of food and don't have many natural enemies in them, which allows the fish babies to quickly grow up safely. It is almost like a comfortable cradle, which is why these sort of rice paddies are known as **fish cradle rice paddies**.



Fish babies swimming in a rice paddy

Since 2006 in Shiga Prefecture, they have been making headway with the **Fish Cradle Rice Paddy Project**, which allows fish to come and go between Lake Biwa and rice paddies, and allows humans and animals to live with peace of mind.

The rice grown in these rice paddies is sold as fish cradle rice paddy rice.

Forest and River Cultivation to Increase Fish Numbers

Rivers bring water and sediment to Lake Biwa from forests, and the Ayu and Biwa trout that live in Lake Biwa come to rivers to spawn.

If the water and sediment link gets cut between forests, rivers and lakes, fish will lose the areas they spawn. **Installing fishway** and restoring the water system link is one important part of conserving native fish.



Making a fish ladder

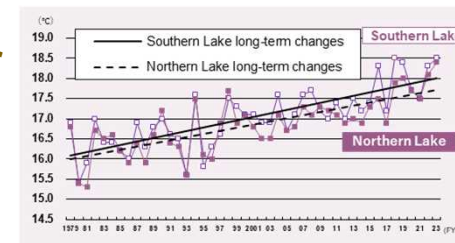


Lake Biwa and Global Warming

Global warming is having a significant impact on Lake Biwa and the living things of Lake Biwa. We should understand the relationship between Lake Biwa and global warming and think about what we can do to help prevent global warming.

Increase in the Surface Temperature of Lake Biwa's Water

The effects of global warming can also be seen in Lake Biwa's water temperature. As can be understood from the graph on the right, **Lake Biwa's water temperature is slowly rising**.



Lake Biwa water surface temperature (yearly average)

Will Lake Biwa stop breathing?

Did you know that Lake Biwa takes a "deep breath" once a year? In the same way that a deep breath delivers oxygen to the inside of the human body, the natural phenomenon of **all-layer circulation** delivers oxygen to the bottom of the lake.

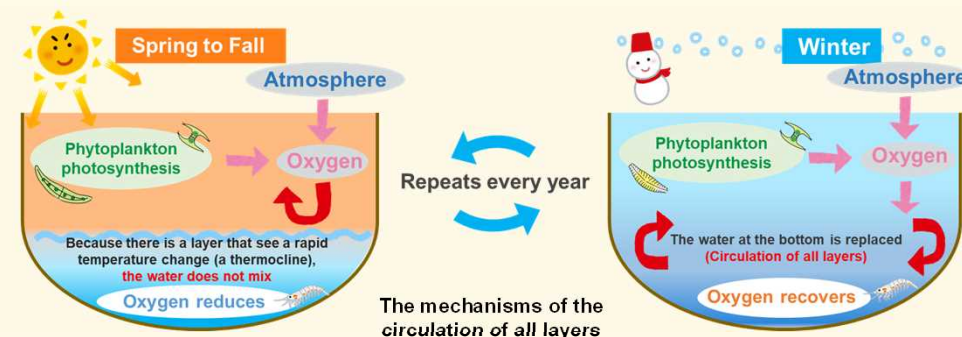
This phenomenon occurs when the water near the surface of the lake cools and gets heavier in the middle of winter and mix with the water at the bottom of the lake. The surface water, which is rich in oxygen, circulating to the bottom supports the animals living at the bottom of the lake.

However, in recent years, global warming has led to the surface water not cooling completely, and there are years in which the circulation of all layers does not happen.

On years where a full circulation of all layers did

not occur, oxygen at the bottom of the lake was insufficient from summer to fall, leading to a drop in the animals that live at the bottom of the lake. If warming continues to increase, it is thought that years in which the circulation of all layers does not occur will increase, and there is a concern that as a result, not only will the animals that live at the bottom of the lake see their numbers decrease, but the quality of the mud there will change, causing a deterioration in water quality.

However, there are things that we can each do to protect the future of Lake Biwa. To ensure that Lake Biwa can continue to "breathe" every year, we should think about what we can do and take steps to counter global warming.





Protecting Our Daily Lives

As people started living around Lake Biwa, river floods became disasters. Currently, in Shiga Prefecture, construction and initiatives with consideration given to the environment are being taken to protect our lives from floods and make it easy to use water. You should take a look into disasters and disaster prevention initiatives in your local area.

■ Flood History

Shiga Prefecture has many raised bed rivers, in which the riverbed is higher than the surrounding ground. This has led to many water disasters since the past, where levees crumbled or flooding occurred due to typhoons and heavy rains.

Additionally, the only river that flows out of Lake Biwa is the Setagawa River, so if there is heavy rain and the water level rises, it will take time to return to normal. This has caused flooding around the lake from long ago.



Lake Biwa major flood
(September 1896)

■ Green Infrastructure

Nature has a variety of features. For example, forests stop the flow of sediment and the plants on riverbanks prevent flooding. The approach that attempts to incorporate this natural power into infrastructure development and utilize it is called **Green Infrastructure**. Green infrastructure doesn't simply prevent and mitigate disasters, it also protects the environment and promotes regional development by offering animals a place to live and creating beautiful natural landscapes.

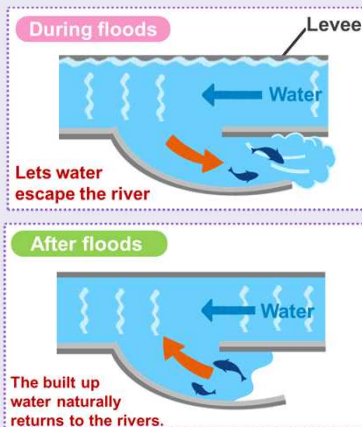
Infrastructure

The foundational systems and structures that support our lives, such as public facilities like roads, gas, waterworks, hospitals and parks, are known as infrastructure.

▶ Open levees, protecting our livelihoods and nature

Kasumitei, or open levees, are a traditional Japanese method of river improvement construction. When the water volume in rivers or waterways has increased through heavy rain beyond what was expected, they decrease the power of the water by letting it escape to things like rice paddies from the gaps in the levees. Additionally, when flooding begins to subside, these allow the flood waters to flow back into rivers.

However, kasumitei are capable of even more. During flooding, river animals can take temporary shelter in rice paddies through the gaps in the levees and can return to their original river once the flood has subsided. They function in this way as green infrastructure, as they provide animals with a place to live and protect the link between rivers, rice paddies and satoyama.



The mechanisms of kasumitei



Protect Local Industry

What wonderful local resources are available in your local area? Let's work together to spread information about the appeal of resources in your local area.

■ Work That Has Continued for Over 1,000 Years: Biwa Lake to Land Integrated System

The **Biwa Lake to Land Integrated System** is work that has continued for over a thousand years, such as agriculture, forestry and fishing and food culture, that also values the environment and animals of Lake Biwa. The Biwa Lake to Land Integrated System was recognized globally as being of importance and has been certified as a **Globally Important Agricultural Heritage System**.

Globally Important Agricultural Heritage Systems

This is a system that certifies agriculture, forestry and fishing work that supports the livelihoods of people while maintaining a close relationship with the unique culture, landscape and biodiversity of the territory.

▶ Protect Lake Biwa by eating

Many farmers in Shiga Prefecture are engaging in **Environmentally-Committed Agriculture** to protect the environment and animals of Lake Biwa. Agricultural products that are grown with methods that are kind to environment, such as reducing pesticides and chemical fertilizers by half or more and not letting muddy water from rice paddies flow into Lake Biwa, are known as **Environmentally-Committed Agricultural Products**. Regularly choosing and eating these sorts of rice and vegetables is connected to supporting farmers that engage in environmentally-committed agriculture.

Look for this mark!



Environmentally-committed
agricultural products

■ Miracle Jewels Born at Lake Biwa

Freshwater pearl aquaculture has continued from the 1930s, originally by using *Hyriopsis schlegelii*, a mussel endemic to Lake Biwa.

However, issues with the growing of these mussels persisted, and the freshwater pearl production volume saw a dramatic drop off. Recently, the value of freshwater pearls has been given another look and Shiga Prefecture and related parties have been cooperating to revive the freshwater pearl production.

The finished pearls are a variety of colors like pink and orange, and their shapes include not just orbs but also those that are oval-shaped and those that are cylindrical. These unique pearls, all of which are different from one another, are miracle jewels born at Lake Biwa.



Pearl mussel cultivation management



Freshwater pearls



Lake Biwa Study Spot

Take a trip to Lake Biwa, rivers and forest to experience nearby nature and learn more about the wonder of nature. When experiencing the wonderfulness of your local area, you'll want to communicate that to those around you, and you'll all want to know more about the environment that surrounds you.

■ “Uminoko,” the School Floating on the Lake

Uminoko is a boat for studying that all fifth grade elementary school students in Shiga Prefecture will ride. Through a two-day sailing voyage, students learn about Lake Biwa and environmental problems from a variety of perspectives. This is called the **Lake Biwa Floating School** and is something unique to Shiga Prefecture and rare even in a global sense.

Students are able to observe plankton and fish, investigate water transparency and learn about a variety of problems Lake Biwa faces at Lake Biwa.



Second generation study boat
“Uminoko”

■ Learn About Forests With Yamanoko Program

Yamanoko program deepens forth-grade students' understanding of and interest in forests, and fosters in them the power to form rich relationships with people by providing them with experiential learning, in which they observe trees and experience tree thinning.

In this program, students learn about the important role that forests play as a water source for Lake Biwa, which ties in to the Lake Biwa Floating School “Uminoko” that they will experience in fifth grade.



Tree thinning experience

■ Making Environmental Learning a Daily Habit for Everyone

The environmental education center was established with the goal of promulgating and promoting environmental education. It offers information and provides support so that people that are interested in the environment can easily talk about and take action in their lives and in their surrounding natural environments.

The **Ecoloshiga** website allows users to search for environmental education events being held in the prefecture, people who can teach things they want to learn or provide experiences and to borrow tools used in environmental learning for free.

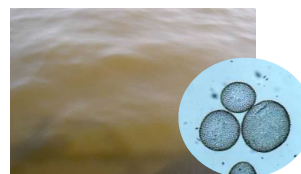
Visit the Ecoloshiga
website here



Let's Enjoy Lake Biwa Even More

Lake Biwa is said to be a mirror that reflects our lifestyles. Let us not forget the dedication of the people of the past who worked to protect Lake Biwa, such as the soap movement meant to fight off large scale red tide, so we can continue to venture forth together with Lake Biwa.

■ July 1 Is “Lake Biwa Day”



Red tide

In 1977, waste water from homes caused a major problem when pollution in Lake Biwa led to a massive occurrence of **fresh water red tide**.

◀ The phytoplankton (uroglena americana) that cause red tide



Soap Movement

Once the people of Shiga Prefecture understood that the phosphorus in synthetic detergents was one of the causes of red tide, they started the **Soap Movement**, in which they cleaned up Lake Biwa themselves by switching from synthetic detergents that include phosphorus to soap powder.

Additionally, regulations were established to keep Lake Biwa clean, and lately red tide has not occurred.



Keeping Lake Biwa beautiful

These regulations were established in 1981, and it was decided that it would be celebrated once a year on **July 1 as “Lake Biwa Day.”** As an important day to protect Lake Biwa, this day is still treated as a day for activities that protect the environment, with things such as simultaneous cleaning activities being conducted in the prefecture.



▶ Let's do Biwactivities!



Biwaichi
(Lake Biwa cycling route)



Ebimame making
experience



Suigo SUP



Lakeside cleaning

Biwactivities are a variety of activities related to Lake Biwa. Playing at Lake Biwa, savoring the blessings of Lake Biwa, taking pictures at scenic spots and collecting litter at the lakeside are all Biwactivities. The Biwactivities Guide on the Shiga Prefecture website has a variety of Biwactivity events listed. Why not take advantage of Lake Biwa Day and find a way to interact with Lake Biwa that is suited to you?



Culture and Regions Bound by Water

The regions surrounding Lake Biwa have inherited a lot of culture and life related to water. Let's have a look at those roots. You'll discover the wishes of the people that have not changed from way back and the wisdom of everyday life that has always been held dear.

■ The Otorii Floating in Lake Biwa

The **Shirahige Shrine** is said to be one of the oldest shrines from the Ohmi Province that would become Shiga Prefecture, and it is famous for the Otorii (a large shrine gateway) that floats in Lake Biwa. It is a scenic spot in Shiga Prefecture that gets a lot of shrine visitors who come to worship a god of long life.

Famous for its "Narukomairi," a Shinto ritual in which children in their second year are given names and prayers are said for their healthy growth. People from all over the country visit the shrine for this ritual on September 5 and 6.



Shirahige Shrine (Takashima City)



Investigating the Harie-Hama Remains

■ Historical Remains Submerged in the Water

At the Lake Biwa waterfront and bottom of the lake, approximately 80 historical remains have been discovered. These historical remains are known as **underwater ruins**. In addition to earthenware, farm tools and dugout canoes, shell mounds and places where offerings were made as prayers towards water were discovered, making it possible for us to know the rich lives and culture of the people who lived their lives alongside Lake Biwa.

■ Life on the Water's Edge Harie's Kabata

In Takashima City's Harie district, water from the Hira Mountains flows through the earth and gushes out as spring water. This spring water is called **shozu (raw water)** and it has been carefully used from long ago. The local residents call the places where people use this shozu **kabata**, and have inherited the convention of not polluting the water that flows in the waterways while both drinking and using the water for washing.



Kabata water spring



Solving Environmental Problems With Everyone's Help

To protect Lake Biwa and the surrounding environment, it is important to have a variety of people cooperate and have discussions. To ensure that we can continue to live in harmony with nature, we should first think about what we should do, as individuals, as households and as schools.

■ All-Hands BIWAKO Conference

This meeting is held every year to confirm the status of completion of MLG goals and to learn from one another looking towards the future. A variety of groups from within the prefecture gather, including high school and university students, farmers and fishermen, and freely exchange opinions on the environment of Lake Biwa. No matter who you might be, if you are looking for hints related to activities and projects related to the MLGs and the Lake Biwa environment, please participate.



All-Hands BIWAKO Conference
(September 6, 2024)

■ Conversing With the World

▶ An international meeting that started in Shiga Prefecture

World Lake Conference is an international meeting with its origins in Shiga Prefecture that they can be proud of on a world level. The First World Lake Conference was held in 1984 in Shiga Prefecture, and even now, it is held roughly every two years all over the world. Those participating from Shiga Prefecture are not only government officials, but also researchers and municipal organizations, as well as highschoolers. Many people participate, sharing information about initiatives at Lake Biwa to the world. Further, at a December 2024 United Nations General Assembly, the date of the First World Lake Conference, August 27, was decided on as **World Lake Day**.



19th World Lake Conference
(Subcommittee)


▶ World's largest international meeting related to water

The **World Water Forum** is one of the world's largest international meetings, seeing people related to water from around the world gather once every three years to discuss the problems surrounding water. At the tenth World Water Forum held in Bali, Indonesia, in May 2024, topics related to Lake Biwa initiatives, including the MLGs, were presented.




10th World Water Forum

Triya Corner




Biwa-Ko-Ha-Hon-Ni-Su-Go-I (Lake Biwa Really Is Great)

Biwa Salmon, Koayu, Hasu, Honmoroko, Nigorobuna, Sujiebi Shrimp, Gori, and Isaza are the eight varieties of fish known as the Eight Delicacies of Lake Biwa. This is a brand of fish from Lake Biwa, including endemic species, used in local dishes. By the way, the eight (8) in the Eight Delicacies of Lake Biwa is also intended to mean ∞ (infinity), incorporating the notion that the culture of eating fish from the lake will help Lake Biwa's future to be inherited and also of the endless possibilities that it might bring. Make sure to remember it as Biwa-Ko-Ha-Hon-Ni-Su-Go-I (Lake Biwa really is great)!




Isogaba Maware (More Haste, Less Speed)

"Isogaba maware (more haste, less speed)" means that, in particular when in a rush, taking a roundabout way will result in a quicker arrival. Little known is the fact that its origin is from Lake Biwa. In the past, when going from Kusatsu, which lies on the opposite side of Lake Biwa, to Otsu, going by boat was quicker, but there were often times when boats could not leave port due to the weather. So, when traveling in a rush, it was more reliable to rely on your own feet than on a boat. This is what spawned the proverb.



Land and Lake Breeze

Give standing on the shore of Lake Biwa and feeling the breeze a try. There is a special breeze blowing around Lake Biwa called a land and lake breeze. This breeze blows from the lake to the shore during the day, when the land warms up faster than the top of the lake. At night, as the land cools faster than the lake, the breeze blows from the land to the lake.



The Island People Live On

Did you know that Lake Biwa has an island known as Okishima Island where people live? This is the only island on a freshwater lake that people are living on in Japan. This sort of island is rare even globally, garnering even scholarly attention. As of 2023, Okishima Island has over 200 people living on it.

Learn This and That About Lake Biwa With Videos

12 things to know

Awesome Lake Biwa!

Watch the video here —just scan the QR!

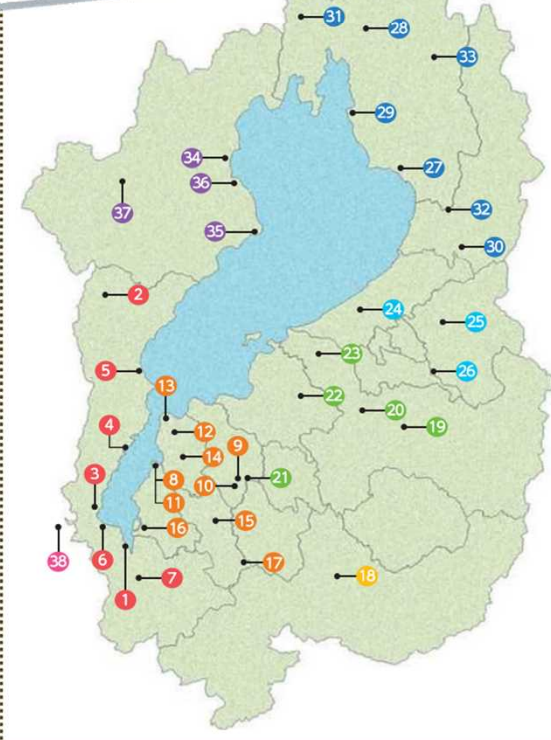


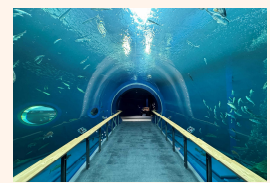
Biwa Lake to Land Integrated System (GIAHS)

Watch the video here —just scan the QR!



Here are facilities where you can learn more!





Lake Biwa Museum (Tunnel Aquarium)



You can learn about what Lake Biwa was like long ago in the past, how people lived and the animals of Lake Biwa.



Lake Biwa Environmental Science Center



You can view the results of water quality surveys and more from the website.

	Facility Name
Otsu	1 Otsu City Science Museum
	2 Otsu City Katsuragawa Youth Nature Learning Center
	3 Otsu City Museum of History
	4 O'PAL OPTEX Co., Ltd.
	5 BSC Watersports Centre
	6 Biwako Kisen Co., Ltd
	7 Mizu-no-Megumikan Aqua Biwa
Southern Portion	8 Lake Biwa Museum Environmental Learning Center
	9 Shiga Prefecture Forestry Information Center
	10 Shiga Prefectural Ohmifuji Karyoku Park
	11 Shiga Prefectural Lake Biwa Museum
	12 Biwako Chikyu Shimin no Mori Natural Park
	13 Misaki Natural Park
	14 Moriya Firefly Forest Museum
	15 Ritto Nature Observation Forest
	16 Ohmi Environmental Plaza /Shiga Prefecture Konan Chubu Water Treatment Center
	17 Nature Experience Learning Center Mori-no-Miraikan
Koka	18 Minakuchi Children's Forest Nature Park and Museum
Higashiohmi	19 Aito Ecoplaza Nanohanakan
	20 Riparian Forest Ikimono-no-Mori
	21 Shiga Prefectural Kibogaoka Cultural Park
	22 Shiga Prefectural Azuchi Castle Archaeological Museum
	23 Higashiohmi City Notogawa Museum
Koto (Lake Biwa East Area)	24 Hikone City Mt. Kojin Shizen-no-le Nature Center
	25 Taga Town Museum
	26 Mt. Takatori Fureai Park
	27 Nagahama Castle Historical Museum
Kohoku (Lake Biwa North Area)	28 Woody Pal Yogo
	29 Kohoku Wild Birds Center / Biwako Waterfowl & Wetland Center
	30 Shiga Prefecture Samegai Trout Farm
	31 Oku Biwako (Northern Lake Biwa) Yamakado Water Source Forest
	32 Yamanba-no-Mori Forest
	33 Takayama Camping Ground of Waterfalls and Mountain Streams
Takashima	34 Lake Biwa Shuko-no-Uta (Rowing Song) Archives Museum
	35 Shiga Prefectural Lake Biwa Children's Land
	36 Shin-Asahi Bird Watching Center
	37 Forest Park Kutsuki-no-Mori
Kyoto	38 Lake Biwa Canal Museum