HIGHLIGHTING Japan

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CYCLING JAPAN

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Photo: Courtesy of KAWASE Tatsuhiko

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Cycling Japan

Bicycles, with the multifaceted values associated with them, including addressing environmental issues, health improvement, and regional revitalization, play an important role in achieving a sustainable society. From the cycling boom of the 1950s to today, bicycle culture has developed in Japan along with various policies and legislative revisions. In this issue of *HIGHLIGHTING Japan*, we feature an interview with Dr. YAMANAKA Hideo about the history and development of Japan's bicycle culture. We also introduce various aspects of Japan's cycling culture, including policies supporting bicycle use, National Cycle Routes, types of bicycles deeply rooted in daily life, and a bicycle sport that originated in Japan.

Photo: Pacific Cycling Road National Cycle Route Designation Promotion Council

On the cover: The route along the coastline in Kamogawa Matsushima, Chiba Prefecture

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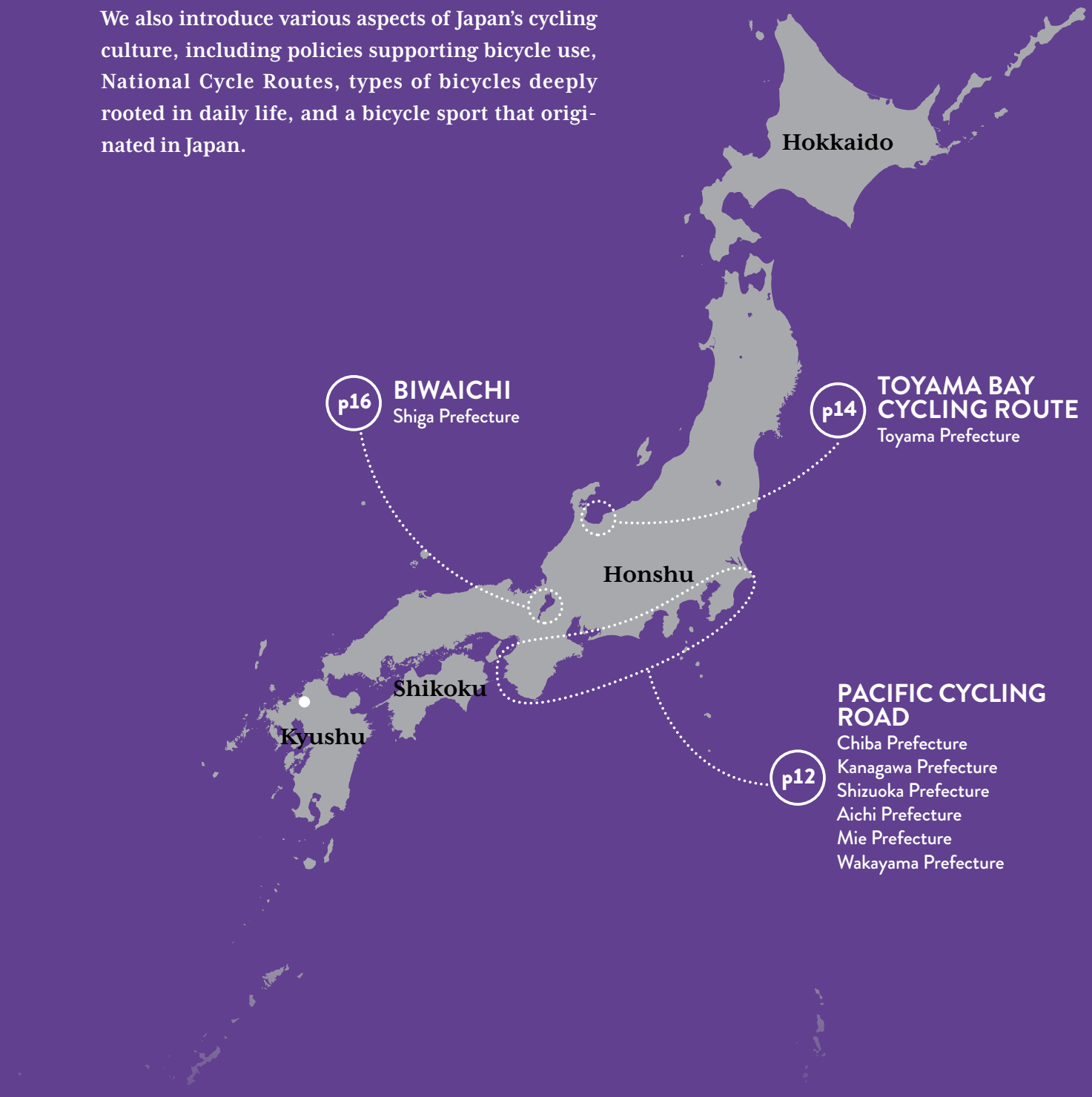
Cycling Japan

Above left: Some sections of the road in Wakayama Prefecture run near the World Cultural Heritage site Kumano Kodo.
Above right: Bicycles without brakes are used in KEIRIN races.
Below left: The Tottori Uminami Road offers access to “cycle trains” and “cycle buses.”
Below right: With the ability to carry children, electrically power-assisted bicycles spread among families with young children.

Bicycles, with the multifaceted values associated with them, including addressing environmental issues, health improvement, and regional revitalization, play an important role in achieving a sustainable society. From the cycling boom of the 1950s to today, bicycle culture has developed in Japan along with various policies and legislative revisions. In this issue of *HIGHLIGHTING Japan*, we feature an interview with Dr. YAMANAKA Hideo about the history and development of Japan's bicycle culture. We also introduce various aspects of Japan's cycling culture, including policies supporting bicycle use, National Cycle Routes, types of bicycles deeply rooted in daily life, and a bicycle sport that originated in Japan.



The Development of Bicycle Culture and Associated Values in Japan

Bicycles, with the multifaceted values associated with them, including addressing environmental issues, health improvement, and regional revitalization, play an important role in achieving a sustainable society. We interviewed Dr. YAMANAKA Hideo, who researches urban transport planning, about the development of cycling culture in Japan and ways to enjoy cycling in the country.

A scene from the 1960s cycling boom.

Could you tell us about the historical background of the development of cycling culture in Japan?

By the 1950s, the beginnings of a cycling boom could already be seen in Japan. With postwar reconstruction underway and road infrastructure improving, people began to enjoy various leisure activities, and bicycle use, among which cycling became increasingly popular. In an era when monthly salaries averaged between 20,000 yen and 30,000 yen, automobiles costing 300,000 yen to 400,000 yen were far beyond the reach of most people. While bicycles were by no means reasonable either, with prices around 100,000 yen, cycling activities flourished. Young people formed teams and spent half-days riding from Tokyo to the outskirts or a full week traveling the full length of the Tokaido[1] route.

In the 1970s, following the rapid economic growth in Japan, the development of so-called *mama-chari*[2] helped lower prices and accelerate their spread among ordinary households. It was also during this period that demand surged as a means of commuting to school among junior high and senior high school students. There was a dramatic increase in the number of bicycles owned in Japan, and over the next 30 years, bicycle culture continued to grow.

Could you explain more about the background and primary factors regarding the development of this bicycle culture?

For one thing, to start out with, I believe Japan's unique road

policies played a significant role. In 1970, several revisions to laws gave rise to the concept of creating pathways for the combined use of cyclists and pedestrians. This was an initiative rarely seen worldwide, with bicycles allowed to run on sidewalks under certain conditions. The 1978 amendment to the Road Traffic Act established rules allowing bicycles that met specific standards to run sidewalks under certain conditions. This, in turn, led to a nationwide increase in sidewalks jointly used by cyclists and pedestrians in Japan.

While this system of shared sidewalk by cyclists and pedestrians received a certain amount of recognition overseas, it also presented a challenge unique to Japan: unlike roadways for cars where driving on the left is the norm, on sidewalks, bicycles could travel in both directions, which led to an increased risk of accidents at intersections. Bicycles on sidewalks are less visible to drivers when entering intersections from the direction opposite to the flow of traffic. Accordingly, the proportion of bicycle accidents occurring at intersections is significantly higher in Japan compared to other countries.

YAMANAKA Hideo

Dean of Graduate School of Technology, Industrial and Social Sciences at Tokushima University. Specializes in urban transport planning. Conducts research on designing bicycle road environments with increased safety. In May 2025, he was recognized by the Minister of Land, Infrastructure, Transport and Tourism for his achievements in promoting bicycle utilization in FY2025. These included contributions in formulating the Bicycle Utilization Promotion Plan and implementing projects as a chairman and member of relevant committees, as well as an advisor for specific projects related to the improvement of bicycle utilization environments both in Tokushima Prefecture and beyond through his research on safe environments for bicycle use. His notable publications include *Machizukuri no Tame no Kotsu Senryaku* ("Transportation Strategy for Community Development").

In response, the Guideline for the Creation of Safe and Comfortable Bicycle Use Environments was established in 2012. This guideline clearly laid out the principle that bicycles are to be considered vehicles and should travel in a single direction on roadways, significantly changing the course of bicycle infrastructure development in Japan. The most important element of the guideline was the introduction of blue arrowhead marks. By installing these visually easy-to-understand marks on roadways, efforts began to explicitly indicate bicycle travel positions and promote left-side riding. Developed following a field trial in Tokushima Prefecture, these marks are now installed along approximately 10,000 km of roadways throughout Japan.

Photo: YAMANAKA Hideo

Blue arrowhead marks introduced on a roadway

Have the measures to ensure the safe and secure bicycle use of bicycles fostered the current popularity of cycling in Japan?

In addition, the Bicycle Utilization Promotion Law, enacted in 2016, brought a new perspective to bicycle-related policies in Japan. While previous policies had primarily focused on presenting countermeasures for problems, this law positioned bicycling as a transportation mode to be actively encouraged. It established the foundations for a national strategy promoting bicycle use from perspectives including environmental protection, maintaining transportation functions during disasters, and health improvement.

What kind of initiatives have been implemented specifically?

The Bicycle Utilization Promotion Plan formulated based on this law sets forth four goals: creating a good urban environment by expanding the role of bicycle transportation; realizing a vibrant, healthy and long-lived society by promoting cycle sports; realizing a tourism-oriented nation by promoting cycle tourism; and realizing a safe and secure society without bicycle accidents. Particularly notable achievements include

The Mikata Five Lakes[6] route runs along the lakes' edges in Fukui Prefecture's Reinan region

the proliferation of bicycle sharing.[3] With private-sector participation, bicycle sharing networks have rapidly expanded, especially in urban areas. Particularly in these cities, I think bicycles are increasingly seen as a convenient means of transportation for quick travel to destinations.

Another notable achievement is the National Cycle Routes[4] designation system, which aims to attract domestic and international cyclists to various regions across Japan. This system recognizes outstanding cycling routes, referencing standards like Europe's EuroVelo[5] selection process, while also introducing criteria unique to Japan. Several designation criteria are set forth in selecting routes, taking into account considerations of establishment of route, riding environments, hosting environment, information dissemination, and initiative frameworks. The focus is not merely on sites of scenic beauty, but on whether routes actually provide safe, pleasant environments for cycling. The level of commitment that local governments maintain the routes is also a crucial factor in the selection process. Since road improvements require significant budgets, the key to selection lies in whether there is the will at the prefectural level to make continuous investments.

What are some of the best ways for travelers from outside Japan to enjoy the National Cycle Routes?

Japan's cycle tourism is aiming to develop its unique model, while still learning from the European examples. European cyclists tend to enjoy a leisurely "bicycle journey" style, where they might cycle about 30 to 50 km in mornings, then spend afternoons in their destination. This seems like an ideal approach to me. Dedicating afternoons to sightseeing, dining, and shopping gives visitors deeper experiences of the local culture after riding, compared with long distance car drive passing through those experiences.

Are there any other cycling routes you would like to recommend to international visitors to Japan other than the National Cycle Routes?

A perfect one for beginners is a route around the Mikata Five Lakes[6] in the Reinan region of Fukui Prefecture, which offers a course that runs near the edges of the five lakes, taking advantage of the flat terrain that connects them. I also like to recommend the Wakasa Bay[7] Cycling Route (Waka-Cycle), which

Photo: Tottori Prefecture

The Tottori Uminami Road offers access to "cycle trains" and "cycle buses."

stretches approximately 126 km east-west along the coast of the Sea of Japan.

Tottori Prefecture is also actively developing routes between Sakaiminato City and Tottori City, most notably through a "Cycle Train" operated in cooperation with railway companies. This system allows cyclists to transport their bicycles on trains without packing them, providing an efficient approach to cycling enjoyment while enabling cyclists to bypass steep climbs and long-distance sections.

Are there any other ways to enjoy bicycling experiences in Japan that you would like to recommend to visitors from overseas?

I think it can also be enjoyable to explore cities and towns across Japan by bicycle, where you can get a sense of the history and the pace of daily life. Kyoto, for example, offers cycling tours led by English-speaking guides. These roughly three-hour tours take participants through backstreets and historical sites, providing commentary on Japanese culture along the way through the city. The appeal of these tours lies in how they connect participants with diverse topics that would likely be out of reach without a local guide—ranging from traditional culture, such as the difference between *geiko* and *maiko*,[8] to modern industrial history, like the birthplace of Nintendo.[9] Similar guided cycling tours are increasingly popular in other regional cities like Kanazawa. I hope visitors will have chances to discover the charms of various regions of Japan through activities making use of bicycles on their trips here.

1. One of the Five Highways established during the Edo period (early 17th to mid-late 19th century), a major route connecting the cities of Edo (present-day Tokyo) and Kyoto.
2. Literally a bicycle for mothers, using a shortened form of *charinko* (a slang word for bicycle); a bicycle designed for everyday use.
3. A system or method for sharing bicycles with others and using them when needed. A highly convenient transportation system allowing shared use of bicycles, with multiple cycle pick-up and return spots set up throughout cities.
4. A system promoting initiatives that combine outstanding tourist resources, cycling environments, rest/lodging facilities, and information dissemination with the goal of developing tourist regions involving the use of bicycles. As of January 2026, six routes have been designated National Cycle Routes.
5. A long-distance cycling route network project covering all of Europe, endorsed by the European Cyclists' Federation (ECF).
6. Mikata-goko: a collective name for a group of five lakes — Mikata, Suigetsu, Suga, Hiruga, and Kugushi — located near the coast of Wakasa Bay in western Fukui Prefecture.
7. A sunken bay in the Sea of Japan stretching from Cape Echizen in Fukui Prefecture to Cape Kyoga at the northern tip of the Tango Peninsula in Kyoto Prefecture.
8. Women who entertain at banquets performing traditional dances and playing Japanese traditional musical instruments are called *geiko*. Those training to become *geiko* are called *maiko*. Kyoto has an area called Gokagai (Five Geisha Districts) where *geiko* and *maiko* are active.
9. An international manufacturer of home video game consoles. Founded in 1933 as Yamauchi Nintendo. After starting out producing traditional Japanese *karuta* and *hanafuda* cards, the company grew into a global corporation with its 1983 release of a home electronic game console known as the Family Computer (Famicom).

Using cycling to create a happy life and society in Japan: The GOOD CYCLE JAPAN

GOOD CYCLE JAPAN, a collaborative initiative involving the national and local governments, companies and private-sector organizations, aims to proactively use cycling to create a happy life and society for the future. We spoke with IWABUCHI Taichi of the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) 's Road Bureau Secretariat of Bicycle Utilization Promotion Headquarters.

(Text: MOROHASHI Kumiko)

"GOOD CYCLE JAPAN" is a general term covering the various initiatives underway to promote the use of bicycles across Japan, with collaboration between government and private sectors, focusing on the four areas of "environment," "health," "tourism," and "safety." According to IWABUCHI, the Bicycle Utilization Promotion Law enacted in 2016 was a turning point for government policy on bicycles in Japan.

"Until then, laws related to bicycles were mainly regulatory, such as the Act on Promotion of Safe Use of Bicycles and Comprehensive Advancement of Measures for Bicycle Parking, the Road Traffic Act, which focused on bicycle safety and measures for dealing with abandoned bicycles. In contrast, the Bicycle Utilization Promotion Law recognizes the advantages of bicycles and calls for their proactive use. Based on this law, the "Bicycle Promotion Plan"

Photo: PIXTA

GOOD CYCLE JAPAN encourages everyone in Japan to use bicycles more and more, aiming to create a happy life and society for the future.

Photo: PIXTA

Lanes exclusively for bicycles are being developed to ensure safe cycling.

was approved by the Cabinet in June 2018. In response, local governments, companies, private organizations, and others came together to promote bicycle use, with the launch of the "GOOD CYCLE JAPAN" website, full-scale information dissemination and initiatives have begun.

GOOD CYCLE JAPAN carries out various initiatives across four areas as mentioned.

For example, in the "environment" area, initiatives are being carried out to create an environment in which bicycles can be used effectively as a means of transportation, such as creating safe and comfortable cycle lanes, promoting collaboration with public transport such as trains and buses, and encouraging the widespread use of bicycle sharing.

In the area of "health," efforts are being made not only to promote cycling as a sport but also to encourage everyday bicycle use. By increasing and raising the level of daily physical activity, these initiatives aim to prevent lifestyle-related diseases, improve quality of life (QOL), and support healthy physical and mental development as well as longer healthy lifespans. Bicycle commuting as a way to encourage everyday use of bicycles is also promoted.

Photo: PIXTA

GOOD CYCLE JAPAN promotes health through bicycle use.

Next, for "tourism," six cycling routes have been designated as National Cycle Routes so far, proudly representing Japan to the world. The National Cycle Route will play a pivotal role in GOOD CYCLE JAPAN's efforts, which aim not only to promote "cycle tourism" in which cycling is enjoyed for its own sake at travel destinations, but also to promote the use of bicycles as a supplementary means of transportation around sightseeing spots and for excursions within these regions.

Finally, regarding "safety," GOOD CYCLE JAPAN is working to reinforce understanding of traffic rules through traffic safety classes, which aim to develop safety awareness among all road users—including not only cyclists but also motorists—and to encourage cyclists to enroll in bicycle liability insurance.[1] These initiatives aim to realize a zero-accident society where everyone can enjoy safety and peace of mind.

Japanese cycling rules sometimes differ from those in other countries, so IWABUCHI hopes that visitors to Japan will pay particular attention to these rules when enjoy cycling.

"While right-hand traffic is the norm worldwide, Japan follows left-hand traffic. For those visiting Japan from countries with right-hand traffic, this is probably the biggest difference to bear in mind. As cyclists are not supposed to ride on sidewalks other than in exceptional circumstances, I hope that visitors enjoy cycling after checking Japan's traffic rules, including road signs. Also, unlike in many other countries, bicycles cannot generally be brought onto trains in Japan without proper packing. Please make sure to remove the front and rear wheels and put them into a *rinko* bag (carry-on bag for bikes) and similar carrier before boarding, we hope you will enjoy cycling after familiarizing yourself in advance with Japanese traffic rules, including road signs."

"There is a growing number of initiatives, such as bicycle-sharing schemes that allow visitors to borrow shared bicycles after arriving at their destination, so I strongly encourage them to make use of these systems," says IWABUCHI.

"I recommend National Cycle Routes for those hoping to enjoy long-distance rides. Even those planning a casual stroll around the city are encouraged to explore it by bicycle. A wealth of spectacular scenery and superb cultural assets are to be found in Japan. I hope that the bicycle can serve as a bridge connecting visitors with all these different aspects of this country."

Photo: PIXTA

Development of National Cycle Route where cyclists can experience the best features of each region is underway. (This photo shows the Shimanami Kaido cycling road.)

1. Insurance that covers damages to oneself and others resulting from bicycle-related accidents. It covers not only accidents caused by the bicycle ridden by the insured party, but also for incidents in which the insured is a pedestrian involved in a bicycle accident.

Reference: GOOD CYCLE JAPAN, on the MLIT website:
https://www.mlit.go.jp/road/bicycleuse/good-cycle-japan/

Photo: Pacific Cycling Road National Cycle Route Designation Promotion Council

Cyclists riding through Hamamatsu City and Omaezaki City in Shizuoka Prefecture

The Pacific Coast National Cycling Route: A 1,400 km Journey

The Pacific Cycling Road is about 1,487 km long, extending from Choshi City, Chiba Prefecture to Wakayama City, Wakayama Prefecture. Its path includes numerous sightseeing and scenic spots, including world heritage sites. In this article, we introduce the route that let riders cycle along while enjoying natural scenery, history, and culinary culture unique to Japan.

(Text: MOROHASHI Kumiko)

In 2021, the Pacific Cycling Road was designated as a National Cycling Route (See "The Development of Bicycle Culture and Associated Values in Japan," in *HIGHLIGHTING Japan* February 2026 issue) that proudly represents Japan to the world. Its roughly 1,487km path runs from Choshi City in Chiba Prefecture through Kanagawa, Shizuoka, Aichi, Mie prefectures, to Wakayama City in Wakayama Prefecture. We spoke with UNO Masato of the Pacific Cycling Road National Cycle Route Designation Promotion Council (Ministry of Land, Infrastructure, Transport and Tourism Kinki Regional Development Bureau).

Photo: Pacific Cycling Road National Cycle Route Designation Promotion Council

The route along the coastline in Kamogawa Matsushima, Chiba Prefecture

"The appeal of the Pacific Cycling Road lies in its diversity of natural scenery," says UNO. "You can experience numerous wonderful sights along the coastline, including the magnificent sandy beaches

of Choshi and Kujukuri; the mountain passes and coastlines of the Shonan coast, Enoshima Island, and the Izu Peninsula; and the coasts of Kumanonada and Shirasaki.

Covering the entire route requires about 25 days of cycling at an average of 60km per day.

"Since its travel by bicycle, taking about four weeks (20-30 days) in total, including sightseeing and rest stops, allows for a relaxed ride," says UNO.

Pedaling along the Pacific Cycling Road lets one experience the tourist attractions and scenic spots in each area.

Photo: Pacific Cycling Road National Cycle Route Designation Promotion Council

Some sections of the road in Wakayama Prefecture run near the World Cultural Heritage site Kumano Kodo.

"Famous sites that let you experience Japanese history and culture dot the route, starting with the Mount Fuji area in Shizuoka Prefecture and sections near Ise Jingu Shrine[1] and Kumano Kodo Iseji,[2] the World Cultural Heritage site, in Mie Prefecture. Next, Wakayama Prefecture offers stretches featuring Nachi Falls,[3] the World Cultural Heritage site, the Shirasaki Coast with its white limestone cliffs, and other scenic spots."

UNO also shared ways to enjoy traveling that are unique to the Pacific Cycling Road.

"The Pacific Cycling Road includes multiple ferry routes crossing straits, allowing cyclists to travel together with their bicycles. Some JR and private railway lines offer services that let riders load bicycles on trains without packing them, subject to advance reservations, designated trains, or other conditions. Such services can allay concerns about physical stamina or the weather. By combining these public transportation options with cycling, the Pacific Cycling Road accommodates not only riders focused on the physical strength to complete the entire route, but also those looking to enjoy tourism, as well as travelers looking for a safe and flexible trip."

Photos: Pacific Cycling Road National Cycle Route Designation Promotion Council

Ferries and liners running in Kanagawa Prefecture (top) and Mie Prefecture (bottom) allow passengers to load their unpacked bicycles onboard.

One example is the special bicycle-only train B.B.BASE (Boso Bicycle Base) run in Chiba Prefecture for limited periods. Sections of the Izu Kyuko Line running through Shizuoka Prefecture's Izu Peninsula and the Kisei Main Line in Wakayama Prefecture also have trains that allow bicycles under certain conditions. In addition, sea routes such as the Tokyo Wan Ferry between Kurihama Port in Kanagawa Prefecture and Kanaya Port in Chiba Prefecture; the Surugawan Ferry connecting Shimizu Port in Shizuoka City and Toi Port in Izu City; and regularly scheduled liners operating in Ago Bay within the Ise-Shima region of Mie Prefecture allow travelers to bring bicycles onboard.

UNO adds, "One way to enjoy traveling by bicycle is 'slow tourism,' that is, enjoying an area's nature and culture while getting around at a reduced speed. All along the Pacific coast of Japan, you can experience seafood and other regional specialties, as well as add a stop at an *onsen*, hot spring, resort."

Those who choose to take a trip on the Pacific Cycling Road are sure to enjoy a leisurely bicycle journey, stopping along the way to fully savor Japan's beautiful landscapes, regional character, and many other charms.

Photo: Pacific Cycling Road National Cycle Route Designation Promotion Council

A refreshing bicycle trip along the coastline

1. See "Ise-Shima: Mystical and Magnificent," in *HIGHLIGHTING Japan* December 2017 issue.
2. See "Exploring 'Kumano Kodo,' a Forest-Enveloped World Cultural Heritage Site," in *HIGHLIGHTING Japan* May 2024 issue.
3. One of Japan's Big Three waterfalls, located in Nachikatsuura Town, Higashimuro District, in southeastern Wakayama Prefecture. It was inscribed on the UNESCO World Heritage List in 2004 as part of the "Sacred Sites and Pilgrimage Routes in the Kii Mountain Range."

Reference: For detailed information on the Pacific Cycling Road, see:
https://www.kkr.mlit.go.jp/road/pcr/en/index.html

The Toyama Bay Cycling Route Showcasing the Sea of Japan and the Tateyama Mountain Range

The Toyama Bay Cycling Route, one of Japan's National Cycle Routes,[1] runs along the coastline of Toyama Bay, registered as part of the World's Most Beautiful Bays Club.[2] In this article, we spoke with an officer of Toyama Prefectural Government Office about must-see sights along this 102-km route and the best ways to enjoy it. (Text: IMAMURA Keiko)

The Amaharashi Coast, where cyclists can take in the sights of the Tateyama Mountain Range beyond the sea. The blue dashed line distinguishes the cycling route from the rest of the road.

Photo: PIXTA

Toyama Prefecture, located around the middle of the Japanese archipelago along the Sea of Japan coast, is known as the home of the Tateyama Mountain Range, a cluster of peaks standing at around 3,000m in height. It also has Toyama Bay, a coastline that forms a graceful curve around the Sea of Japan; with its beautiful scenery, this bay a member of the World's Most Beautiful Bays Club. The Toyama Bay Cycling Route offers a chance to enjoy the views these splendid natural views while cycling.

"We started improving road and cycling infrastructure from around 2014, so cyclists could enjoy the beautiful scenery of Toyama Bay. In 2021, the route was designated as a National Cycle Route. We have set out a blue dashed line that demarcates the cycle lane from the rest of the road, and established information boards and other facilities at various points, enabling people to cycle safely and without getting lost, even those visiting for the first time," says YAMAGUCHI Takuma of the Toyama Prefecture Tourism Resources Office, which promotes the cycle route for tourism purposes. "One of the appealing points of this route is that the path as a whole is mostly flat, with a maximum height difference of only 35m; it is therefore easy to cycle, even for beginners and those who are not

Map of the Toyama Bay Cycling Route

Photos: Toyama Prefecture Tourism Resources Office

Left: Koshinokata Ferry, a free ferry near the Shinminato Bridge; cyclists can bring their bicycles on board. Seeing the Shinminato Bridge from on board is the highlight of the ferry trip.

Right: A street in Iwase, where many old buildings suggesting the history of the town have been preserved. Visitors can also enjoy restaurants and stores located in converted historic warehouses.

confident in their physical strength."

The Cycle Route is divided into two courses: depending on their physical fitness level and available time, visitors can either take the westward route out of Toyama City which takes them to Himi City, or the longer eastward route toward Asahi Town, which borders Niigata Prefecture. Regardless of their starting point, cyclists have the chance to breathe in fresh sea air while pedaling at a comfortable pace. In particular, YAMAGUCHI recommends the westward route, where cyclists can take in the view of the Tateyama Mountain Range beyond the sea.

"The area around the Amaharashi Coast is the best place to see the mountains crowned with snow under a blue sky, forming a striking contrast with the dark-blue sea in front of them. Amaharashi Roadside Station[3] is also located here, with bicycle pumps and repair tools, making it a convenient spot to take a break," says YAMAGUCHI. On the way to Amaharashi Roadside Station, cyclists can view Shinminato Bridge, the largest cable-stayed bridge[4] on the Sea of Japan side. A pedestrian-only walkway known as the "Ainokaze Promenade" is installed underneath the bridge, offering an interesting view of the sea from above, although cyclists need to get off and walk their bikes. In Koshinokata area, beneath the Shinminato Bridge, a small ferry operates free of charge and allows unpacked bicycles on board, with a crossing time of about five minutes. As there are only a limited number of crossings each day, visitors should check the schedule in advance. The ferry is recommended as a way to take in the view of the bridge and nearby townscape from the sea.

By contrast, on the eastward route from Toyama City, highlights include the nostalgic streets of Iwase lined with the buildings and storehouses of the historic *kaisendonya*,[5] and Shinkiro (mirage) Road in Uozu City, where mirages can sometimes be seen over the waters of the bay, depending on the weather.

Shinkiro Road in Uozu City

Photo: Toyama Prefecture Tourism Resources Office

Asahi town, the furthest point of the eastward route, is home to the Asahi Funakawa "Spring Quartet" each spring: cherry blossoms, rapeseed flowers and tulips all bloom at the same time, creating a beautiful scene where white, pink, yellow and red are woven together against the backdrop of the Tateyama Mountain Range, still capped with snow (See "Asahi Funakawa "Spring Quartet," *HIGHLIGHTING Japan*, April 2022 issue). Toyama Bay Cycling,[6] a large-scale cycling event, is held every April along this course. It has earned enthusiastic reviews as an opportunity to enjoy cycling while sampling Toyama's cuisine at the supply stations along the route, selling local specialties and other goods.

In winter, Toyama's low temperatures and low humidity result in clear air, allowing views to stretch far into the distance. However, as some facilities such as rental bicycles may close for part of the winter, visitors should confirm their availability in advance. Early spring offers increased opportunities for seeing mirages, as temperatures fluctuate most widely at this time. Then, comes the Spring Quartet, during the season when flowers bloom. Cycling around Toyama Bay, a place offering a different kind of beauty with each season, is something every visitor should try.

The Spring Quartet: Bright colors—pink cherry blossom, yellow rapeseed flowers, and red tulips—are woven together against the mountains, capped with white snow.

Photo: Toyama Prefecture Tourism Resources Office

1. The National Cycle Routes aim to develop parts of Japan with excellent tourism potential by connecting these with various initiatives relating to road infrastructure, rest/accommodation functions and information dissemination etc., with the objective of making use of cycling to develop tourist areas. There are six designated National Cycle Routes in Japan (as of January 2026).
2. A non-governmental organization (NGO) headquartered in Vannes, France. Bays are required to fulfill various conditions in order to be registered, including superb natural scenery and rich ecosystems; their registration is recognized following a survey of local conditions by directors.
3. Roadside station: A rest facility established along a public road, aimed at delivering a safe and comfortable environment for road users and serving as a hub for regional revitalization etc. (See "Roles and Charms of Michi-no-Eki, and Prospects for a Global Brand," *HIGHLIGHTING Japan*, August 2023 issue)
4. A type of bridge distinguished by a structure in which cables strung diagonally from towers are directly connected to bridge girders for support.
5. Agents managing the buyers and sellers who engaged in distribution and trade using ships that operated at sea and along waterways, between the Muramachi Period (early 14th century to late 16th century) to the Meiji Period (1868 to 1912).
6. Held in April each year. Toyama Bay Cycling 2026, the 12th round of this event, offers four courses of varying lengths to suit different levels of physical fitness.

Reference: For detailed information on the Toyama Bay Cycling Route, see:
https://www.mlit.go.jp/road/bicycleuse/good-cycle-japan/national_cycle_route/toyama-bay.html

Biwaichi: A National Cycle Route Circling Lake Biwa, Japan's Largest Lake

Located in Shiga Prefecture, Lake Biwa[1] is the largest freshwater lake in Japan (See "Shiga Prefecture Booth Showcasing the Charms of Lake Biwa, Japan's Largest Freshwater Lake," *HIGHLIGHTING Japan*, July 2025 issue). The cycling route circling this lake, "Biwaichi," is designated as one of Japan's National Cycle Routes.[2] We spoke with an officer of the Shiga Prefectural Government Office about the unique features of this route, where visitors can enjoy natural scenery and historical streetscapes around the lake while cycling. (Text: TANAKA Nozomi)

Biwaichi is a cycling route which travels in a counter-clockwise direction around Lake Biwa; the location of this lake makes it easy to access from the major cities of the Kansai region such as Kyoto and Osaka. ONUMA Shoji, Assistant Section Chief of the BIWAICHI Promotion Office, Tourism Bureau, Shiga Prefecture, spoke with us about this route, designated in 2019 as a National Cycle Route representing Japan.

"'Biwaichi' is an abbreviation of 'Biwako-isshu' or 'circle around Lake Biwa,' and denotes the entire route — 200km or so — around the lake. The area around the lake has many flat sections, and the roads have

Map of the Biwaichi route

Photo: Shiga Prefecture

Cyclists riding along the lake, with the magnificent spectacle of Lake Biwa before them

Photo: Shiga Prefecture

Cyclists use the blue dashed lines on the road as a guide.

been developed with cycling in mind; as a result, the setup makes cycling easy for a whole range of people — from beginners to experienced cyclists. Facilities to support cyclists have been established at various points, including rest stops and bike maintenance shops. As well as the route around Lake Biwa, there are also 'Biwaichi Plus Routes,' which take cyclists around other sightseeing spots and scenic areas in Shiga Prefecture."

The shore running around the lake is home to rice paddies stretching across wide areas, as well as shrines, temples and historical streetscapes. Some well-known historical sites are found along the route, including Shirahige Shrine on the western shore, with its great *torii* gate standing in the lake, the traditional streets of Omihachiman City[3] which was originally developed as a castle town, the area at the foot of Mt. Hiei[4] where several *satobo*[5] residences stand, the *monzen-machi* or "gate-front town" in front of Hiyoshi Shrine, and the ruins of Azuchi Castle.[6] Visitors will also have the chance to try the local cuisine around the lake, including regional dishes featuring fish caught in the lake, and Omi beef, Shiga Prefecture's special variety of *wagyu* (Japanese beef).

Photo: PIXTA

Omihachiman City, which developed as a castle town, features the sightseeing spot "Hachiman-bori Canal"

"This route provides riders to experience the natural scenery, history and local culture of this area, including the opportunities to sample cuisine unique to Shiga Prefecture, and to interact with local residents when dropping into stores and other places," says ONUMA.

For those coming from the Kansai region, Otsu Station or Moriyama Station, and for those coming from the Kanto region, Maibara Station serves as convenient starting points. Lake Biwa is close to all these stations, making the Biwaichi course easy to access. In addition, some bicycle rental shops offer cloak service, allowing cyclists to start their ride unencumbered. The Biwaichi route is around 200km long in total, but depending on physical fitness level, schedule and places of interests, the cycling can be divided over a number of days, with overnight stay at accommodations along the route. Using a special app, a route can be planned freely to visit desired destinations, including scenic spots, accommodations where bikes can be stored without packing them, easily accessible restaurants, and cycle support stations fully set up with the equipment and facilities required for cycling. The northern section of the lake is a particularly popular part of the route, as it has many sections boasting beautiful landscapes, and wide areas where visitors can enjoy the beauty of the lakeside area while cycling.

Photo: Shiga Prefecture

The Lake Biwa Cyclist Monument is a popular photo spot. It stands in Daini Nagisa Park in Moriyama City, on the eastern shore of Lake Biwa.

According to ONUMA, many positive comments have been received from both domestic and international cyclists regarding the cycling environment and the lakeside scenery, such as "The route was very well laid out," and "The scenery was quite unforgettable." Part of the appeal of this route is that visitors can experience the history and culture of Shiga Prefecture and the beauty of the Lake Biwa landscape while cycling.

Photo: Shiga Prefecture

Banners indicate the cycle support stations.

1. Japan's largest freshwater lake, located in Shiga Prefecture. With a history of about 4 million years, it is the oldest lake in Japan.
2. The National Cycle Routes system aims to develop parts of Japan with excellent tourism potential by connecting these with various initiatives relating to road infrastructure, rest/accommodation functions and information dissemination etc., with the objective of making use of cycling to develop tourist areas. There are six designated National Cycle Routes in Japan (as of January 2026).
3. A city located in central Shiga Prefecture, on the eastern shore of Lake Biwa. Having originally grown prosperous as a merchant town, Omihachiman is characterized by its historic streetscapes, including several Western-style buildings.
4. A mountain located on the border of Kyoto Prefecture and Shiga Prefecture. Hieizan Enryakuji Temple (the *sohonzan* or "head temple" of the Tendai sect, a school of Buddhism) stands on the mountain.
5. *Satobo* are buildings originally created as residences for retired monks, which now function as centers for various temple activities.
6. The ruins of Azuchi Castle, which formerly stood in Omihachiman, Shiga Precture. The remains of this castle, originally constructed during Japan's Warring States Period (late 15th to late 16th century), are a nationally designated Special Historic Site.

Reference: For detailed information on the Biwaichi, see:
https://www.mlit.go.jp/road/bicycleuse/good-cycle-japan/national_cycle_route/biwaichi.html

Discover Local Charms through Cycling Events

Tour de Nippon organizes cycling tours across Japan, offering cyclists firsthand experiences of the unique charms of each region. We spoke with a representative of the organization working to promote local appeal through cycling events. (Text: TANAKA Nozomi)

Photo: Roots Sports Japan

Event participants cycling the Mt. Fuji loop route

Launched in 2012, Tour de Nippon is a comprehensive cycling leisure project, centered on a series of cycling events, that collaborates with local governments to showcase regional charms. Held across the country, these events are designed to attract visitors to local areas. NAKASHIMA Yoshimoto, representative director of Roots Sports Japan, the association organizing the project, explains what led to its launch.

"The 2011 Great East Japan Earthquake[1] significantly impacted all of Japan, and the challenge we faced was how to bring tourists back, particularly to the Tohoku[2] and northern Kanto[3] regions. This project was sparked by the idea of using the power of sports to draw people from all over the country."

The project initially focused on single day cycling events that attracted thousands of participants at a time. With the COVID-19 pandemic, however, a more diverse range of events came to be organized. In the Tour de Nippon initiative, in addition to hosting large-scale events, efforts have been made to organize periodic events and introduce easy weekend cycling routes. The TraVelo[4] smartphone app enables cyclists to enjoy these smaller events and easy cycling routes, with audio guides available at designated spots, offering an experience akin to a guided cycling tour.

NAKASHIMA says Roots Sports Japan currently hosts events throughout the year in about 30 prefectures across Japan.

"The routes that loop around Mt. Fuji, Awaji Island,[5] Lake Biwa,[6] and other spots are quite popular." (See "Biwaichi: A National Cycle Route Circling Lake Biwa, Japan's Largest Lake," *HIGHLIGHTING Japan*, February 2026 issue). He continues, "The approximately 380-kilometer course around the main Island of Okinawa is also popular, attracting cyclists from overseas. In the future, we plan to step up our outreach overseas so that more international visitors can experience the charms of cycling in local areas across Japan."

NAKASHIMA describes the appeal of cycling as the opportunity to "experience the local area through all five senses."

"Travelling by car or train from one point to another makes it easy to miss subtle changes in the scenery, shifts in the wind and humidity, the scent of the plants and the sea, the sound of the waves, local cuisine, and encounters with people from the local area. By contrast, bicycles bring riders closer to their surroundings and to people, allowing them to move in a way that blends naturally into the local community."

He also notes that cycling itself can be an activity, which is one of its greatest attractions.

"Physical activity creates a positive mindset, and the sense of accomplishment that comes from finishing a ride under one's own power makes the experience truly memorable. I believe the true value of cycling lies in encountering landscapes and people that can only be experienced in that particular place."

1. On March 11, 2011, a massive magnitude 9.0 earthquake struck off the coast of the Sanriku region, registering a maximum seismic intensity of 7.
2. The northeastern region of Honshu, Japan's main island, comprising six prefectures: Aomori, Akita, Iwate, Yamagata, Miyagi, and Fukushima.
3. The northern part of the Kanto region in mid-eastern Honshu comprising three prefectures: Gunma, Tochigi, and Ibaraki.
4. A smartphone app for cyclists operated by Roots Sports Japan. Part of the Tour de Nippon project, the app utilizes location information to provide guidance on cycling routes and points of interest across Japan.
5. An island in southern Hyogo Prefecture
6. Japan's largest freshwater lake, located in Shiga Prefecture. With a history of about 4 million years, it is the oldest lake in Japan.

At a Mt. Fuji cycling event, the most popular loop route

The Lake Kasumigaura loop offers expansive views of rural landscapes along the lakeshore.

Photos: Roots Sports Japan

Cycling the Awaji Island loop route

On the approx. 380km loop route around the main Island of Okinawa

The first model of the PAS electrically power-assisted bicycle, released in 1993

Photo: Yamaha Motor Co., Ltd.

The History of the Mass Production of Electrically Power-Assisted Bicycles, Pioneered by Japan

With the ability to carry children, electrically power-assisted bicycles spread among families with young children.

Photo: Yamaha Motor Co., Ltd.

Japan led the world in the mass production of the electrically power-assisted bicycle, which uses a motor to assist the rider's pedaling and make riding easier. We interviewed a representative of the manufacturer about the development and technological background behind the electrically power-assisted bicycle designed for hills and urban areas. (Text: TANAKA Nozomi)

Bicycles have become deeply rooted and widespread in everyday lives as convenient vehicles that support daily transportation. The advent of the electrically power-assisted bicycle triggered a major evolution for the bicycle. Yamaha Motor Co., Ltd. was the first company in the world to sell such bikes, and ISHII Kenji, who has been involved in the company's electrically power-assisted bicycle business for many years, recollects. "In the late 1970s, environmental and energy issues began drawing attention as challenges to Japanese society. As a motorcycle manufacturer, we also conducted research on environmentally conscious mobility solutions."

By the late 1980s, about 60 million bicycles were already in use in Japan. While many people used bicycles as a means of everyday transportation, many urban and residential areas in Japan are hilly, and slopes have posed a major barrier to the use of bicycles for commuting, shopping, and carrying loads. This led to the idea of adapting bicycles to better suit Japan's terrain and lifestyle, making them easier to ride on slopes. Yamaha believed that if technology could assist

with hills—considered a weakness of the bicycle—then a wider range of people could utilize bicycles in more situations.

These ideas led Yamaha in 1988 to begin full-scale development of the Power Assist System, which detects a rider's pedaling force and uses a motor to support it according to the strength applied. However, it was not easy to achieve a natural harmony between the rider's pedaling power and the motor's assistance. ISHII says, "We had to make it detect the rider's pedaling force and control the motor to respond smoothly according to its power. A jerky response would make the rider feel uncomfortable."

Photo: Yamaha Motor Co., Ltd.

The Power Assist System unit works by using a battery and an electric motor to supply power to the pedals.

After much trial and error, PAS, the world's first mass-produced electrically power-assisted bicycle, was born in November 1993. The name PAS stands for Power Assist System. The product was first released on a limited basis in Kanagawa, Shizuoka, and Hyogo Prefectures. After the product's effectiveness was verified, it went on sale nationwide the following year (1994). "When PAS went on sale, it was mainly used by elderly people," ISHII recalls. "I think they saw the value in being able to ride on hills safely and comfortably even with their reduced physical strength."

In the late 1990s, prices fell as improvements in battery performance and other technologies, economies of scale from upgraded production techniques, and rising sales took effect. As a result, electric power-assisted bicycles became more widely adopted in households. In 1997, awareness increased further through TV commercials, which drove up demand, especially among mothers. From the 2000s onward, the product took root in daily life, with expanded variations tailored to specific uses, including child-carrying models that enable children to ride in front and/or in back, as well as models for commuting and shopping.

Photo: Yamaha Motor Co., Ltd.

Electrically power-assisted bicycles now come in more color variations that target young people and are also used for school commuting.

"When we began development, we never imagined that parents would one day come to use electrically power-assisted bicycles for their children's daily drop-offs and pick-ups for kindergartens and nursery schools," says ISHII. "As one of those involved in this work, seeing how useful they are to people's everyday lives gives me a strong sense of accomplishment."

The technology behind electrically power-assisted bicycles has also spread overseas. The use of eBikes[1] has grown in Europe particularly, mainly for daily urban commutes and leisure, thanks to its foundational technology: the electrically power-assisted bicycle expertise cultivated in Japan.

"Three years after the PAS entered full-scale nationwide commercial sales, in 1997, we began to supply power units for electrically power-assisted bicycles to Europe. These were installed on locally-made bicycles, and sales began of electrically power-assisted bicycles equipped with Yamaha-made power units manufactured in Japan. Later, as the product caught on, the term "eBike" was born, and a Japanese technology became established as part of an overseas product."

Today, electrically power-assisted bicycles are no longer just for everyday use by mothers and the elderly. Their practical applications range from commuting to work and school, to sports and outdoor activities, as well as convenient rental bikes for sightseeing in towns and cities. ISHII shares his outlook for the future: "We want to continue to offer new concepts for electrically power-assisted bicycles that go beyond practical and leisure uses."

Photo: Yamaha Motor Co., Ltd.

An electrically power-assisted sports-type bicycle

1. The term used to describe a type of electrically power-assisted bicycle. It usually refers to sports-type bicycles equipped with a motor.

The Mama-chari: A Bicycle Rooted in Japanese Daily Life

Photo: PIXTA

An electric-assist *mama-chari* with a front basket and rear child seat

Designed specifically for use in daily life, the *mama-chari* is one type of bicycle often seen in Japan. Taking its name from a combination of the words "mama" and "chari" (slang for "bicycle"), the bicycle is used by all genders and ages, despite its name. We interviewed an expert about the background of the *mama-chari*'s development and functional improvements.

(Text: TANAKA Nozomi)

The *mama-chari* is a uniquely Japanese bicycle designed for daily use. Unlike a racing bicycle, it was developed to provide an all-in-one solution for daily needs: commuting to work or school, getting children to and from where they need to be, shopping for common necessities, and so on. MORISHITA Shoichiro, curator of the Bicycle Culture Center—a facility operated by the Bicycling Popularization Association of Japan that works to promote cycling culture—explains more about how the *mama-chari* came to develop.

Photo: Bicycle Culture Center

A scene in the 1960s, small loads are carried by bicycle, the primary means of transportation before motorization.

"Bicycles introduced from Europe in the late 1800s were mainly practical vehicles used for transporting goods and for work. As postwar reconstruction brought lifestyle changes, and bicycles for women came to be developed in the late 1950s for housewives. The Smart Lady, introduced in 1956, is considered the prototype of today's *mama-chari* models. Until then, bicycles featured triangular diamond frames,[1] which were sturdy, but also heavy, and could be hard for women to handle. The Smart Lady offered a lighter frame and a lower, step-through design, making it easier for women to get on and off while wearing skirts. It also included a cargo basket for carrying goods."

As Japan entered its period of rapid economic growth,[2] with the spread of household electric appliances, there was a growing demand for products designed for ease of use and handling in daily life. Further refinements came to the *mama-chari* design as well.

In the mid-1960s, a type called the "mini-cycle" appeared, featuring smaller wheels. MORISHITA explains, "Wheels ranging from 22 to 24 inches required less force to start pedaling and made it easier for riders to put their feet on the ground. Roadways in Japan tend to be narrow and have many traffic signals, requiring riders to frequently stop and start moving again. These bicycles made it easier and safer to ride in those conditions, leading to even broader popularity.

Photo: Bicycle Culture Center

The Smart Lady introduced in 1956: Considered the prototype of the *mama-chari*, a bicycle designed for women

I believe the *mama-chari* was born out of addressing everyday inconveniences, one-by-one."

As the *mama-chari* came to be equipped with standard features such as a front basket,[3] mudguards (fenders),[4] chain guards (covers),[5] and upright handlebars,[6] it took shape as a bicycle for everyday use. Having been used mainly for shopping, it eventually became a daily transportation method for people of all ages, including students commuting to school.

The electric assist bicycle,[7] introduced in 1993, can be positioned as an extension of the *mama-chari*. As MORISHITA explains, "The child-carrying type of electric assist bicycle, which has now become mainstream, often features small-diameter wheels. The design has undergone repeated improvements to ensure easier and safer riding even on hills, transporting loads, or carrying children."

Electric assist *mama-chari* with such features, has already gained a reputation overseas for its high convenience. As this type of bicycle has been developed in Japan for everyday use, it is attracting attention — London, UK even has a bicycle shop called Mamachari that specializes in them.

Photo: PIXTA

A student commuting to school by *mama-chari*. The sight of children riding bicycles to school on their own is relatively rare outside Japan.

Offering a mode of transportation easily accessible to all, the *mama-chari* has supported life in Japan. Behind its evolution lies a uniquely Japanese approach to craftsmanship: identifying minor inconveniences in daily life and continuously working to improve them.

Photo: Bicycle Culture Center

A woman pedals a *mama-chari*, carrying a child on back, likely around 1955 to 1959.

Photo: Bicycle Culture Center

A *mama-chari* featuring small-diameter wheels, equipped with a front basket and chain guard as standard accessories (c.1966)

1. The most orthodox bicycle design, featuring a diamond shaped frame with pairs of triangles.
2. The period from around 1955 to 1973, when Japan experienced rapid economic growth and the standard of living of its people rose sharply.
3. A cargo basket mounted on the front of a bicycle. Used for carrying shopping bags and items needed in commuting to work or school.
4. A component that prevents mud, water, and small rocks kicked up by the tires from spraying onto the rider's clothing.
5. A component that keeps oil or mud on the chain from coming into contact with the rider's clothing and helps prevent entanglement accidents.
6. Handlebars designed to be gripped while keeping the upper body upright. This provides a wider field of vision and reduces strain on the neck and shoulders.
7. A bicycle equipped with a motor that provides assistance in accordance with the rider's pedaling. Developed in Japan, the technology is characterized by its reliance on human power rather than fully electric operation.

A public sport[1] where spectators predict the finishing order of bicycle racers

Photo: Japan Keirin Autorace (JKA) Foundation/ISHII Cotaro

KEIRIN, An Original Cycling Sport from Japan

KEIRIN is a bicycle sport that originated in Japan and was established as the second public sport[1] after horse racing. We spoke with SATO Yuichi of the Public Relations and Promotion Department of the Japan Keirin Autorace (JKA) Foundation, the public interest incorporated foundation that organizes KEIRIN, about the characteristics of the sport, which is also an official Olympic event.

(Text: MOROHASHI Kumiko)

A distinctive feature of KEIRIN is riders working together in formations during the race.

Photo: JKA/MOCHIZUKI Shutaro

Photo: JKA/MOCHIZUKI Shutaro

Bicycles without brakes are used in KEIRIN races.

KEIRIN, a cycling sport that was born in Japan, has developed into a unique form of competition that combines speed and strategy.

"The first KEIRIN race was held in 1948 at the Kokura Keirin Track in Kitakyushu City, in an effort to boost morale and raise funds for reconstruction after World War II. Today, competitions are held at 43 KEIRIN racetracks throughout Japan. In the main race format, 7 to 9 athletes riding brakeless bicycles compete on a banked racetrack, racing a set number of laps as they strive to cross the finish line first. KEIRIN's subtlety and appeal lie not only in speed, but also in the intense tactical strategies among the competing riders," explains SATO.

During races, speeds often exceed 70 km/h, exposing riders to air resistance that can result in reduced speed and physical exhaustion. In the quest for victory, riders organize into formations called "lines" and work together.

"Multiple riders take on specific roles in a race, such as *senko* (front-runner) or *oikomi* (overtaker). Their strategic calculations intertwine intricately, sometimes resulting in a dramatic race development. Reading the riders' mindsets to predict the winner is the real thrill of KEIRIN."

These characteristics of KEIRIN racing were the basis for the international development of the sport, which has even become an Olympic event.

"NAKANO Koichi,[2] who was an active KEIRIN rider at the time, achieved many consecutive victories from 1977 at the world's premier track cycling competition organized by the Union Cycliste Internationale (UCI), it significantly increased KEIRIN's global recognition. Since 1980, KEIRIN has been a men's event at the UCI Track Cycling World Championships, and it is now an official Olympics event, with the men's event held since the 2000 Sydney Games, and the women's event added at the 2012 London Games."

The JKA Foundation promotes the appeal of KEIRIN as a sport while also taking on new challenges in response to changes in lifestyles and society.

"In recent years, many female riders have become active, and Girls' KEIRIN is also popular. We are also scheduled to host the KEIRIN World Series in 2026, which invites internationally renowned cyclists from overseas to come and compete in KEIRIN races in Japan."

A portion of the proceeds is used to support a wide range of initiatives that contribute to society, including the promotion of manufacturing, sports, and social welfare.

"We believe that the role of KEIRIN in society is to contribute to regional revitalization and the resolution of social issues through these initiatives. Going forward, we aim to further establish KEIRIN as a sport that is widely enjoyed, and underpinned by the trust of both society and audiences."

Photo: JKA/MOCHIZUKI Shutaro

An increasing number of women are competing in KEIRIN both in Japan and internationally.

SATO notes that KEIRIN racetracks are located not only in urban areas but also near *onsen* hot spring resorts and tourist areas, and that races are held all over Japan from morning until late at night. Close up opportunities for overseas visitors to experience KEIRIN — which is known as the fastest human-powered sport, with riders competing at extreme speeds using only their own strength — are also expanding.

1. A form of sports competition organized by a national or local government or other public entity, where people buy tickets to place bets on the order of finish, in compliance with legal regulations. In Japan, four types of public sports are held: KEIRIN, horse racing, boat racing, and auto racing.
2. Born in 1955. A former Japanese KEIRIN cyclist who excelled internationally. In 1977, he became the first Japanese rider to win at the UCI World Championships and went on to claim ten consecutive world titles, completing his run at the 1986 event held in the United States.

The Onigiri Project: Promoting the Appeal of Rice

Onigiri or rice ball, which can be enjoyed with a wide variety of fillings, are familiar to Japanese from childhood and may be the representative Japanese rice dish. Since onigiri are easily bought in convenience stores and elsewhere, in recent years it has also become popular with international tourists visiting Japan. In this article, we introduce the Onigiri Project, which is being run by the Ministry of Agriculture, Forestry and Fisheries (MAFF) to promote the appeal of rice.

Japan's culture has developed around rice cultivation. Rice is not merely a staple food to the Japanese; it has a special place, interlaced with rituals and economic activities.
Photo: PIXTA

Expanding rice consumption leads to the realization of a sustainable society

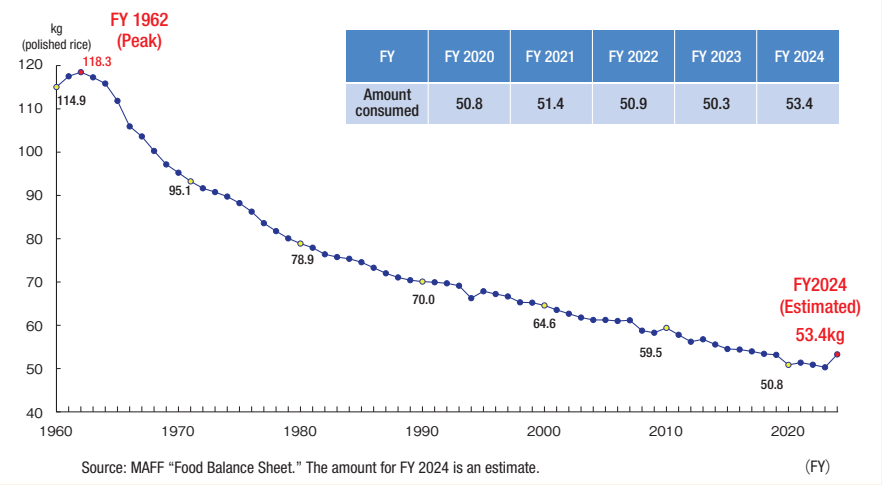
Since ancient times, rice has been an essential staple food for Japanese people. Recent research has revealed that there is a high likelihood that paddy rice cultivation was already practiced in Japan by around the 3rd century BC in the late Jomon period.[1] The rice cultivation cycle—seedlings planted in spring maturing in autumn for harvest—is well-suited to Japan's climate and geography, and became the foundation of Japanese life and culture. Along the events of the four seasons, *mochi* (Japanese rice cake), *dango* (rice dumplings), sushi, and other rice dishes have adorned dinner tables.

However, even as this traditional food culture continues to be passed down, per capita rice consumption in Japan has been trending downward due to the Westernization and diversification of diets (see Figure 1). Since rice is Japan's only self-sufficient grain, sustaining the domestic production base of paddy fields is a critical challenge in terms not only of sustainable development of rice cultivation and other agriculture, but also for handing over the foundation of our food culture to the next generation and preserving diverse ecosystems such as rural landscapes, frogs, and dragonflies. In this regard, the MAFF is promoting the Onigiri Project to expand rice consumption and promote the appeal of rice.

Project promotes the appeal of onigiri from various aspects

Onigiri are made by shaping cooked rice and fillings into triangles or rounded shapes and wrapping them in *nori* seaweed. One of the great attractions of onigiri is that one can choose fillings to suit individual tastes, and that they remain delicious even when eaten cold. Surrounded by sea and rich in mountains, Japan has plentiful seafood and mountain delicacies which can be used as ingredients for a wide variety of regionally distinctive onigiri fillings. As easy-to-eat sources of energy, onigiri are gaining attention for their healthy and nutritional aspects, with world-class athletes powering up with them before a match or during a rest. In addition, the growing number of onigiri shops and their sales at convenience stores have made them popular among international tourists in recent years, and the onigiri market is expanding (see Figure 2). The Onigiri Project aims to convey the appeal of onigiri from various angles so that people rediscover the great taste of rice. Compelling content is created to highlight the deliciousness, high nutritional value, and convenience of onigiri. This includes posting information on various social media platforms through collaborations with companies and students, and onigiri-related videos on the MAFF's YouTube channel BUZZ MAFF: *Yappari Gohan Desho!* ("Rice is the answer!"). The ministry's official Onigiri Project website introduces local onigiri shops and initiatives like "*Tabi suru Chimu Onigiri* ("Touring Team Onigiri")," which sends the mascot characters Team Onigiri and Team Omusubi (same meaning as onigiri) to schools and companies across Japan, where they collaborate with local residents to promote onigiri. We hope this project will create opportunities for all onigiri and rice stakeholders both in Japan and abroad, to connect, and drive lively information exchange on social media, thereby spreading the appeal of Japan and its rice and leading to greater domestic rice consumption. Details are available on the Onigiri Project official website [https://www.maff.go.jp/j/syouan/keikaku/soukatu/onigiri.html] (in Japanese only).

●Figure 1: Trends in Japan's Rice Consumption (Per Capita, Annual)

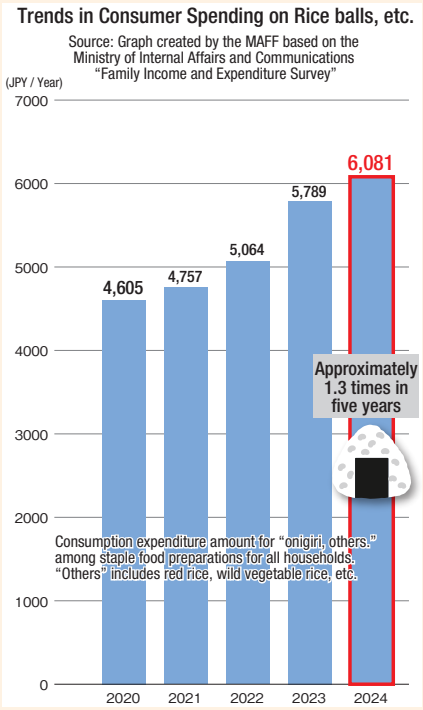


FY	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
Amount consumed	50.8	51.4	50.9	50.3	53.4

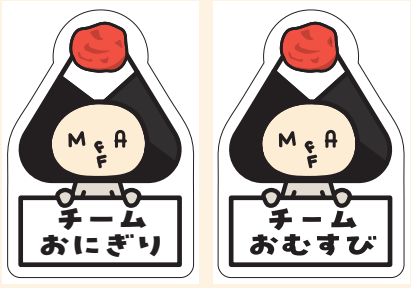
Source: MAFF "Food Balance Sheet." The amount for FY 2024 is an estimate.

Per capita rice consumption in Japan has declined steadily ever since peaking in fiscal year 1962. Over the last decade, it has stagnated at around half of that peak level.

●Figure 2: Trends in the Onigiri and Similar Products Market



Despite declining overall rice consumption, spending on onigiri, red rice, wild vegetable rice, etc., has increased, revealing an expanding market.



The mascot characters for the Onigiri Project, Team Onigiri (left) and Team Omusubi (right). They visit companies and schools across the country, and join with various people to promote the appeal of onigiri.

Group photo from the Japan #1 Onigiri Contest for High School Students, hosted by Kitakyushu City High School in Fukuoka Prefecture in December 2025. Eight teams from around Japan took part in the contest. They came up with original onigiri recipes using local ingredients, and prepared, presented, and held tasting sessions for their creations. The aim of the contest was for students to deepen their understanding of regional foods and interact with other high school students.

Photo: Kitakyushu City High School

In addition to Japan, the Onigiri Project mascot characters paid overseas visits. In Bangkok, where interest in Japanese food is on the rise, an onigiri PR event organized by the Thai Export Support Platform was held at Chulalongkorn University, where the mascot characters were surrounded by students.

Photo: JETRO Bangkok

A scene from the MAFF's YouTube channel BUZZ MAFF: *Yappari Gohan Desho!* ("Rice is the answer!") (Video is in Japanese only)

The video shows the mascot characters visiting a rice workshop for parents and children, taught by agricultural policy journalist TANI Lily (pictured) and held by Japanese restaurant and bento shop chain operator PLENUS Co., Ltd., in collaboration with the Gas Museum in Kodaira City, Tokyo.

Photo: MAFF

Use the QR code below to view the channel.

1. From around the 14th century BC to the 3rd century BC.

The Power of Fermentation

Ayaka is a culinary expert and fermented food specialist. In this issue, she speaks about the power of fermentation.

Meat or fish marinated in *shio koji* is tenderized through fermentation, enabling easier absorption of nutrients, such dishes are sometimes served in medical care and nursing care settings.

Photo: PIXTA

Ayaka

Fermented foods have developed in Japan over many years. They are drawing attention as a sustainable food culture, and are being promoted globally as a representative food of Japan, as seen in a fermented food restaurant at pavilions at Expo 2025 Osaka, Kansai, Japan (See "Expo 2025 Osaka, Kansai, Japan," *HIGHLIGHTING Japan*, July 2025 issue).

Fermentation's appeal goes beyond "deliciousness." It also has the potential to serve as a powerful technology that supports medicine, the environment, and addresses food issues.

1. Fermentation Supports Medicine Production

Some antibiotics, anticancer drugs, and antiviral agents are produced using fermentation. The same goes for vitamin supplements and intestinal regulators. Fermentation is an unsung hero that supports health. There are also high hopes for future applications of fermentation in regenerative medicine and personalized medicine.[1]

2. Expansion of Fermentation's Potential in Medical and Nursing Care

Fermentation softens food ingredients, making them easier to digest and absorb. This aspect is expected to play an increasingly vital role as a process that supports food intake for people with diminished chewing, swallowing, or digestive functions.

3. Fermentation Technology for the Environmental Protection

Fermentation is also gaining attention as a means of producing renewable energy from food resources, such as bioethanol, made by fermenting corn or sugarcane, and biogas, produced by fermenting livestock manure or food waste. This approach aligns closely with the needs of our future society: the recycling-oriented use of limited resources.

4. Contribution to a Stable Food Supply

As population growth and extreme weather impact the food supply, fermentation is gradually emerging as an important element in the future food systems, such as the development of alternative proteins[2] that replace meat and technologies that use microbial enzymes to break down fallen leaves and other fibers into glucose.

Thus, fermentation is both an integral part of traditional Japanese culture and a means of contributing to medicine, the environment, and industry. In an era of profound social and environmental change, the use of fermentation will expand into new fields and support a sustainable future for humanity and our planet.

I invite you to pay attention to the future shaped by fermentation.

Ayaka

Culinary expert and fermentation food specialist Ayaka was born in Okayama Prefecture, and moved to Tokyo after entering university. For about five years, she studied cooking while working at a company. She currently shares beauty and gut-health recipes using fermented foods and seasonal vegetables on Nadia and other popular recipe sites, runs cooking classes, and develops recipes. She is also author of the book *Karada ga yorokobu, demo kantan! Koji de minimal recipe* ("Simple Recipes with Koji That Your Body Will Love," published by KADOKAWA).

Ayaka Culinary expert

Fermented Food Recipe: Kinoko Tappuri Koji Supu (Koji Soup with Plenty of Mushrooms)

A warm, mushroom-rich soup, also recommended for breakfast.

Photo: Ayaka

● Ingredients (for two people)

・150g total of your favorite kinds of mushroom

Set of Ingredients A		Set of Ingredients B	
・Water	500ml	・Potato starch	1/2 tablespoon
・Dashi packet	1 packet	・Water	1 tablespoon
・*Shio koji* (salted rice malt)	2 teaspoons	・Egg	1
・Soy sauce	1/2 tablespoon	・Black pepper	To taste
・Grated ginger	1/2 tablespoon	・Chili oil	To taste

● Prepping

・Trim away any tough stem bases from the mushrooms.

Break *shimeji* and *maitake* mushrooms by hand into bite-sized pieces. Cut *enoki* mushrooms into 3 cm pieces.

・Mix set of Ingredients B together.

・Beat the egg.

● Instructions

1. Place the mushrooms and the set of ingredients A in a pot and heat. When it starts to bubble, reduce heat to medium-low and simmer for about 5 minutes. Take out dashi packet.
2. Turn off heat, and add and stir in potato starch slurry. Turn heat back on to medium and simmer for 1 minute.
3. Stir in the egg, and when it sets, gently stir once more.
4. Pour into bowls, and sprinkle in black pepper, and drizzle in chili oil to taste.

Bioethanol, which is drawing attention as a sustainable fuel, is produced by fermenting corn and sugarcane.

Photo: PIXTA

"Soy meat" is an alternative protein made from soybeans.

Photo: PIXTA

1. A type of medical care that tailors prevention and treatment based on the individual characteristics of patients with the same illness.
2. Proteins made from plants, fermentation, or animal cells that replace traditional proteins like meat and fish.

Yabusame: A Cultural Bridge Passed Down into the Future by Archers and the Horses

Michael No is a disciple (*monjin*) of Ogasawara-ryu,[1] a school that has systematized traditional Japanese etiquette (*reiho*), archery (*kyujutsu*), and mounted archery (*kyubajutsu*)—practices that have been faithfully passed down through the Ogasawara clan. In this final installment of the series, we spoke with Michael about *yabusame*,[2] the spirit at the heart of the tradition as it is passed on, and its significance in the present day.

For his first time Michael performs as the opening rider "ichi no ite" coinciding with the first yabusame ritual of the Reiwa era.
Photo: Courtesy of KAWASE Tatsuhiko

Michael No

Ogasawara-ryu *yabusame* has continued on to the present day due to the knowledge and techniques that have been passed down for over 850 years across 31 generations of *souke*[3] and their countless disciples. While the current Ogasawara-ryu *souke*, 31st-generation OGASAWARA Kiyotada, bears the sole responsibility of carrying on this legacy, the next heir to follow him, his eldest son Kiyomoto, plays a vital role in overseeing *yabusame* rituals and many functions of the school. The *souke* also has a nine-year-old grandson, Kiyochika, who is also already several years into his education in etiquette, archery, and horsemanship, developing a samurai mindset to prepare for the day when he will inherit the role from his father, Kiyomoto.

I sincerely admire the deep knowledge, exceptional leadership, endless drive, and quiet, unwavering demeanor of the *souke* and the heir. I feel that this spirit that resides within them, this "philosophy of the warrior," may be one of the most precious things to pass on to the future.

It is undeniable that *yabusame* has great value as part of Japanese culture. Yet, at the same time, some may question what significance shooting arrows from horseback has in contemporary society. Nonetheless, the etiquette cultivated by Ogasawara-ryu teaches us to be mindful of our actions; considerate of others and how we interact with them. We should be able to agree that this spirit represents a timeless, universal value worthy of passing down.

Also, when riding at full speed, bow drawn, rushing toward multiple targets, there is no room for distraction at all. The mind cannot be split or pulled into the past or future. Everything depends on being present in the moment and "at one" with the horse. Even while there is a dramatic motion, we aim to maintain inner composure. I feel this resonates symbolically with the ideal human experience: to travel through life with purpose and intent, balanced and composed, seeking harmony and success, regardless of what goes on around us.

While shrines play a vital and obvious role as hosts of the rituals, traditional craftsmen are also essential in carrying on the traditions with the specialized equipment they make. As artisans and materials become scarce, the special items used in *yabusame*, such as deer skin gloves, lacquered bamboo bows, ceremonial arrows, and special arrow heads, can take years to be made from the time of order. Some traditional skills, such as *kura*, Japanese saddle making, are already long lost. The saddles we use are Edo period (early 17th to the middle of the late 19th century) antiques. Due to their irreplaceable nature, they are carefully inspected and maintained after every ride. It is incredible that these saddles are still so functional, let alone beautiful, after centuries. One of the personal saddles I treasure was made in 1664, meaning it has a history of over 360 years. It is truly one of a kind, featuring a finely detailed pine tree design made of *kinmakie*.[4] I feel that such items will only become rarer with time.

Of course, we cannot forget the vital role of horses in *yabusame*,

Kiyochika, the grandson of the Ogasawara family *souke*, on horseback at Tsurugaoka Hachimangu Shrine
Photo: Courtesy of MORIYAMA Masatomo

Michael No

Born in Melbourne, Australia, Michael developed an interest in *yabusame* and moved to Japan in 2012. He has trained for over a decade as a disciple of Ogasawara-ryu, practicing daily and serving as a mounted archer in Shinto rituals and other events. He serves as an instructor of cultural experiences and a horse trainer in Nikko, Tochigi Prefecture.

Photo: Courtesy of TOYONAGA Kazuaki

Michael No

Young disciples (*monjin*), the future of *yabusame*, with the *souke*'s grandson, Kiyochika, at the front

Photo: Ogasawara-ryu

A young disciple receives instruction from her superior

Photo: Courtesy of MORIYAMA Masatomo

either. It is humbling to realize that the horses carry not only our weight on their backs, but the weight of tradition, for *yabusame* is not possible without the partnership of these beautiful, intelligent creatures that have shaped human history and are considered sacred in nature.

Spending time with other disciples the night before a ritual, gathering to make preparations and listen to knowledge and stories from seniors while sipping sake together, makes me so aware of how much more I have to learn myself. Even those who have stepped down from riding continue to dedicate themselves fully to this tradition in every way possible. I realize there are many roles to play in passing on the legacy of *yabusame* beyond that of the archer. It is a reciprocal relationship of giving and receiving, developing knowledge, and the mindset to enrich ourselves so we can serve others and pass on traditions.

The journey so far has already greatly enriched my life. I have had so many experiences that I will never forget, but some of the most memorable occasions include making my *yabusame* debut (*uijin*)[5] in 2015 at Tsurugaoka Hachimangu Shrine in Kanagawa Prefecture, performing *yabusame* in Moscow, Russia as a part of a Russia-Japan cross-cultural program in 2018, and serving as the opening archer at Shimogamo Shrine in Kyoto for the first time in 2019. The ritual held at Shimogamo Shrine, which happened to be the first of the Reiwa era, was unique in that the first three archers performed wearing the beautiful, decorative Heian-period costumes (*shozoku*)[6] of Imperial court nobles (*kuge*).

I have come to see how *yabusame* can also serve as a cultural bridge, a way for people to experience the depth of Japanese tradition and potentially find something meaningful in it. More and more foreign media and influencers have been taking an interest in *yabusame*, and international tourists travel to Japan not only to see this special tradition, but even to try it themselves in programs such as those offered at Shogun Stables in Nikko.

By ensuring the continuation of this beautiful art, we preserve a piece of Japan's cultural heritage that cannot be replaced. *Yabusame* will remain a source of pride and inspiration for future generations of Japan while people from all over the world will be moved by watching the horse and archer rush past and hear the crisp impact of the arrow striking the target. My hope is that this tradition will continue on, with the passion it inspires echoing into the future.

Michael performs *yabusame* in Moscow, Russia.

Photo: Courtesy of MORIYAMA Masatomo

1. The founder of Ogasawara-ryu, Ogasawara Nagakiyo, was the instructor of etiquette and mounted archery for Minamoto no Yoritomo (1147–1199), the Shogun who established the Kamakura shogunate. Thereafter, the Ogasawara family continued as instructors to the shogun's family, passing down the practices of *reiho* (etiquette), *kyujutsu* (*hosha*, foot archery), and *kyubajutsu* (*kisha*, mounted archery). *Reiho* refers to the refined and efficient manners of the warrior class; *hosha* is archery performed on foot, and *kisha* is archery performed on horseback.
2. A form of mounted archery in which archers shoot targets while galloping on horseback. Popular among samurai from the late Heian to Kamakura periods (late 12th to the first half of the 14th century), it is now preserved as a Shinto ritual performed at shrines.
3. Generally refers to the central family within a clan or lineage. In the Ogasawara school, it refers to the head of the Ogasawara family.
4. A unique Japanese lacquer craft. Patterns are drawn with lacquer, then gold powder is sprinkled onto them and made to stick.
5. To go into battle for the first time; by extension, to participate in a match or competition for the first time. Here, it refers to Michael's first time participating in a *yabusame* ritual.
6. Formal Imperial Court attire established during the Heian period (late 8th to late 12th century).

Schlegel's Green Tree Frog

A small native frog of Japan measuring about 3 to 5 cm in body length, Schlegel's green tree frog is found across Honshu, Shikoku, Kyushu, and surrounding islands. Preferring waterside environments such as rice paddies, wetlands, and forests, its diet consists largely of insects that it catches. Its back is a vivid green, sometimes featuring yellow markings or taking on a brownish hue for camouflage, and its belly is whitish. Its eyes have a jet-black pupil and a bright yellow iris.[1] Another distinctive feature is its suction cup-like fingertips, an adaptation allowing it to climb and live in trees. During the breeding season from spring to summer, it lays foamy egg masses in the soil or grass near the water's edge and the hatched tadpoles are washed into the water by rain. The name Schlegel's green tree frog originates from Hermann Schlegel,[2] a zoologist who served as director of the Leiden National Museum of Natural History.

1. A membrane covering the lens of the eye that determines eye color.
2. A figure who contributed to the writing of *Fauna Japonica*, a systematic work on Japanese animals based on specimens that Philipp Franz von Siebold — a physician who came to Japan in the late Edo period (late 18th to 19th century) — collected during his stay in Japan. A reference work describing Japanese animals in a European language, *Fauna Japonica* documented numerous new species.

Photos: PIXTA

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