

Kyoto-Miyazu Summit Field Program Report

京都・宮津サミット 実地研修プログラム報告書

Participants will bring the results of discussions from the "Main Seminar," which began in February 2024, and refine their ideas through cross-group discussions. Additionally, by collaborating with various stakeholders in Miyazu, "Umi no Kyoto (Sea of Kyoto)," and implementing programs emphasizing on-site learning, participants will deepen their understanding of global environmental issues. Based on the discussions at this summit, participants will submit final outcome such as videos and aim to present at various events, including the EXPO 2025 Osaka, Kansai, Japan after August 2024.

Dialogue for the Future of the Earth

Earth Youth Summit in Kyoto 2024



The Earth Youth Summit in KYOTO is designed to nurture global talent focusing on environmental issues, including SDGs. Through year-long programs, youth from around the world engage in discussions and dialogues in English, developing skills to work towards achieving SDGs by 2030 and creating a sustainable society envisioning 2050. Join us from February 2024 for a six-month "Main Course" and a 2-night, 3-day stay at the "Kyoto-Miyazu Summit" in August. Our goal is simple: understand societal issues, discuss solutions, and take practical steps. We also plan to share the future envisioned by youth globally on different occasions.

Organized by



Supported by Miyazu City and a subsidy from Kyoto Prefecture and Kyoto Convention & Visitors Bureau



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この冊子は、「地球環境ユースサミット2024 in KYOTO」のプログラムのうち、2024年8月8日～10日に開催した「京都・宮津サミット」の実地研修プログラムについてまとめたものです。

This booklet summarizes the field programs of the "Kyoto-Miyazu Summit" held from August 8 to 10, 2024, as part of the "Earth Youth Summit 2024 in KYOTO" program.





実地研修プログラム作成にあたって Creating the Field Programs

この冊子は、宮津のステークホルダーのみなさんにご協力いただき作成した4つの実地研修プログラムの詳細をまとめたものです。いずれのプログラムも、協力してくださった団体が普段されているプログラムを、ユースや外国人に合わせて調整し、英語対応したものです。冊子の内容からおわかりいただけるように、普段地域でされていることも、他の地域や海外のユースたちにとっては非常に新鮮で学びの多いものです。一種の「サステナブルツーリズム」として、このような地域×ユースの取り組みが他の地域でも展開されることを願います。

This booklet summarizes the details of four field programs that were created with the cooperation of stakeholders in Miyazu. Each program was adjusted to suit youth and foreigners, incorporating the regular programs conducted by the cooperating organizations, and was made available in English. As you can understand from the contents of the booklet, activities that are typically done in the local community can be very fresh and educational for youth from other regions or overseas. As a form of "sustainable tourism," we hope that similar regional × youth initiatives will be implemented in other areas as well.



「京都・宮津サミット」では、京都府立青少年海洋センター「マリーンピア」を会場として、本講座で半年間議論してきた内容のポスター発表を行うほか、「海の京都」宮津において地域の課題や地球環境問題について実地で学ぶプログラムを実施しました。中高生約50人（うち10人がマレーシア、インドネシア、ベトナム、インド、中国などから渡航）に加え、地元の京都府立宮津天橋高校から23人、京都府海洋高校から17人が参加し、大学生・院生20人以上とスタッフを含めて計140人での開催となりました。

At the "Kyoto-Miyazu Summit," held at the Kyoto Prefectural Youth Marine Center "Marinepia," poster presentations were given on the topics discussed during the six-month program. In addition, field programs were conducted to learn firsthand about local issues and global environmental problems in "Umi no Kyoto" (Sea of Kyoto). Around 50 junior and senior high school students participated (including 10 students from Malaysia, Indonesia, Vietnam, India, China, etc.), along with 40 students from the local high schools, and more than 20 university and graduate students, along with staff, bringing the total to 140 participants.

大手川コース / Otegawa Course

協力: 京都府立宮津天橋高等学校フィールド探究部

Supported by Kyoto Prefectural Miyazu Tenkyo High School Field Exploration Club

大手川に生息する動植物の多様性を実感するとともに、人の手によってその多様性・川の環境を守る技術を学びました。

The participants realized the diversity of plants and animals inhabiting the Ote River and learned about techniques to protect the diversity and the river environment by human hands.

時間 / Time	内容 / Program
30 min	自己紹介、大手川・バーブ工の説明 Self-introduction, introduction of Otegawa and barbed structure
40 min	水生生物の採集 Catching aquatic creatures
20 min	捕まえた生き物の観察と解説 Observation and explanation of creatures
50 min	バーブ工の設置 Building a barbed structure

生き物採集 / Catching living things

宮津天橋高校フィールド探究部の見本を参考に、川端の草むらに網を構えて水生生物の採集を行いました。テナガエビ、メダカ、ハゼの仲間など魚を中心に多様な生き物を捕まえることができました。水槽に入れて、フィールド探究部の方から生き物の説明を聞きながら観察したのち、川に放しました。

海外から参加したユースの中には、川のきれいさや、生き物の多様性に驚き、感動したと話すメンバーもいました。

Following the model acted by the Miyazu Tenkyo High School Field Exploration Club, the participants set nets in the grass at the river's edge to catch aquatic creatures. They were able to catch a wide variety of creatures, mainly fish, such as shrimp, killifish, and gobies. After placing them in a tank and observing them while listening to an explanation of the creatures from Miyazu Tenkyo, they were released into the river.

Some of the youths from overseas said they were surprised and impressed by the cleanliness of the river and the diversity of the creatures.



バーブ工造り

Building barbed structure

木の杭と土嚢で主流の流れをせき止めることで、流れ方を変えることができます。専門用語でバーブ工と言い、川の流れに逆らうように設置することで、ゆるやかな流れと速い流れが同じ川の中で混在する複雑な環境を作れます。また、バーブ工の設置前には干上がっていた支流にも水が流れ込み、このような複雑な環境の下で、川の生物多様性が守られます。

今回のプログラムでは、土を掘って麻袋に詰めて土嚢をつくったり、杭を打ち込んでそこに土嚢を並べるといったバーブ工造りを行いました。実際に自分たちが作った装置で川の流れが変わっているのを見て、達成感を感じたと言っている参加者もいました。

Wooden piles and sandbags are used to dam the mainstream flow, thereby changing the way it flows. The technical term for these barbed structures is “barbed construction,” and by installing them against the flow of the river, a complex environment is created in which slow and fast currents are mixed in the same river. In addition, water also flows into tributaries that had dried up before the installation of the barbed structures, and under such a complex environment, the biodiversity of the river is protected.

In this program, participants dug out soil and packed it into jute bags to make sandbags, and then drove stakes into the ground and lined up the sandbags to create the barbed structures. Some participants said they felt a sense of accomplishment when they saw the river actually changing its flow with the devices they had built.



滋賀県立大学のみなさん、大手川サポーターズクラブの安田肇さんにお礼申し上げます。
We would like to thank students at University of Shiga Prefecture, and Mr. Hajime Yasuda.

上世屋コース / Kamiseya Course

協力: 京都府立宮津天橋高等学校フィールド探究部

Supported by Kyoto Prefectural Miyazu Tenkyo High School Field Exploration Club

世屋川流域の自然の連続性を体感し、上世屋地区で里山の自然と暮らしについて学習を行います。道中、漁船で宮津湾を横断します。

We will experience the nature in the Seya River basin and learn about the relationship between satoyama nature and local life in the Kamiseya. On the way, we will cross Miyazu Bay by fishing boat.



時間 / Time	内容 / Program
20 min	漁船タクシーで日置漁港へ Take a fishing boat taxi to Hioki Port
20 min	バスで移動 Get around by bus
30 min	世屋川の源流付近を散策 Walking near the source of the Seya River
15 min	農家の方にお話を伺う To hear a farmer
15 min	バスで移動、絶景スポットに立ち寄る Get around by bus, Stop at a spot with a spectacular view
30 min	藤織り伝承交流館へ Visit the Fuji-ori Tradition Exchange Center
10 min	民家を見学 Visit a private home
20 min	漁船タクシーでマリンピアへ戻る Return to Marinpia by a fishing boat taxi

世屋川源流付近を散策

Walking the source of the Seya River

漁船タクシーで日置漁港に到着後、バスで世屋川源流まで移動しました。ガイドの安田さん、宮津天橋高校フィールド探究部顧問の多々納先生にお話を伺いました。

After arriving at Hioki fishing port by fishing boat, participants traveled by bus to the headwaters of the Seya River. They interviewed Mr. Yasuda, our guide, and Mr. Tatano, advisor of the Miyazu Tenkyo High School Field Exploration Club.

世屋川流域は、「生物多様性保全上重要里地里山」に選定されており、30種ほどの稀少動植物が見られます。「サンショウモ」もその一種であり、保全に努めているそうです。

The Seya River basin has been selected as an “Satoyama landscape that is important for biodiversity conservation,” and about 30 species of rare plants and animals can be seen in the area. The “Sansho-mo” is one of them, and they are making efforts to preserve it.



日本古来の織物「藤織り」を学ぶ Learn about "Fujiori", an ancient Japanese textile

藤織り伝承交流館にて、丹後藤織り保存会の方にお話を伺いました。「藤織り」は、藤の繊維からできた糸を使った日本古来の織物です。上世屋では、近年まで数人のおばあさんたちの手によって藤布が織られ続けてきました。参加者は藤布で作られた服を身につけ、満面の笑みがこぼれました。

We spoke to a member of the Tango Fujiori Preservation Society at the Fuji-ori Tradition Exchange Center. Fuji-ori is an ancient Japanese textile that uses threads made from wisteria fibers. In Kamiseya, several elderly women used to weave wisteria cloth until recently. The participants wore clothes made of "Fuji-ori" and grinned from ear to ear.



海外のユースからのコメント Comments from international youth

Being honest, that was the first time I took a boat ride in Japan. I was very impressed with how the locals of Miyazu keep their traditions alive. For me, Miyazu is a really great town with good locals and immersive traditions. Moreover, the boat ride was pleasant, and the sea was really beautiful! I instantly fell in love with the city from that moment on. When we arrived in Kamiseya, I found the nature there to be amazing. It was unlike anything I had ever seen, and when we went to the fujiori class, I was most impressed by how they can turn wisteria bark into clothing! Despite the language barrier, I can understand the gist of it through the brochure. Overall, I had a really great time in Kamiseya. I'd come again if I could! Thank you so much!

多々納智先生と宮津エコツアーリズムガイドの会の安田潤さんにお礼申し上げます。
We would like to thank Mr. Satoshi Tatano, Mr. Megumu Yasuda.

マイクロプラスチック調査コース / Microplastic Survey Course

協力: 京都府立海洋高等学校海洋科学科

Supported by Kyoto Marine High School Marine Science Department

京都府立海洋高等学校を訪問し、マイクロプラスチックに関する実習を提供していただきました。海洋水産系に特化した海洋高校の学内設備や実習船などの施設見学も実施しました。株式会社リコーの樹脂判別センサーも用いてプラスチックに関する知識も深めました。

We visited Marine High School and participated in a hands-on workshop on microplastics. As a high school specializing in marine and fisheries studies, we also toured the school's facilities, including on-campus equipment and a training vessel. Additionally, we deepened our knowledge of plastics using Ricoh Handy Plastic Sensor.

時間 / Time	内容 / Program
20 min	学校紹介、部活紹介 Introduction of school and club activities
50 min	施設見学 Facility tour
10 min	ワークショップの説明 Introduction for workshop
10 min	リコーの樹脂判別センサーの説明 Introduction of
20 min	マイクロプラスチック採集 Collection of microplastics
35 min	マイクロプラスチック観察 Observation of microplastics
30 min	振り返り Reflection

海洋高校の見学 / School Tour

海洋高校生がウェルカム学校紹介・部活紹介を英語で行い、お互いに自己紹介もしました。施設見学では、学生寮、潜水プール、栽培漁業実習棟、実習船を順番に巡りました。

The Marine High School students gave a welcome speech and introduced their school and club activities in English. We also introduced ourselves to each other. During the facility tour, we visited the student dormitory, diving pool, aquaculture training building, and training vessel in order.





マイクロプラスチック調査 Workshop on microplastics

次に、海洋プラスチック問題やプラスチックの基礎知識を学び、海洋高校に隣接する栗田浜でマイクロプラスチックを収集しました。収集したマイクロプラスチックを持ち帰り、どんなものがあるか分析しました。また、樹脂判別センサーを用いて、どのような種類のマイクロプラスチックがあるのか理解を深めました。

Next, we learned about the marine plastic problem and the basics of plastics. Then, we collected microplastics at Kunda Beach, which is adjacent to the Marine High School. We brought the collected microplastics back and analyzed their types. Additionally, we deepened our understanding of the different types of microplastics using a Ricoh Handy Plastic Sensor.



リコーの樹脂判別センサーB150 / Ricoh Handy Plastic Sensor B150

スマートフォンと連携してボタンを押すだけで、プラスチックの種類を判定できる装置です。今回、海洋高校でのワークショップにご協力いただき、実際に使用しました。

It is a device that connects to a smartphone and identifies the type of plastic with just the press of a button. During the workshop at the Marine High School, we had the opportunity to use it with the support of Ricoh Co., Ltd.

<https://industry.ricoh.com/handy-plastic-sensor>

長岡智子先生と株式会社リコーのみなさんにお礼申し上げます。

We would like to thank Ms. Tomoko Nagaoka and members at Ricoh Co., Ltd.



海底ごみ調査コース / Underwater Garbage Survey Course

協力: 京都府漁協、所属漁業者

Supported by Kyoto Prefectural Fisheries Cooperative

宮津湾では、海底に生息するトリガイやナマコを「けた網」という道具を用いてとる漁業が盛んにおこなわれています。けた網には漁獲物のほかにも様々な海底ごみが混入し、漁師はそれらのごみを分別して産業廃棄物として処分しています。

本コースでは、けた網漁の操業から海底ごみの分別までを実際に体験し、自分たちに何ができるかを考えました。

In Miyazu Bay, fishing is thriving, with a fishing net called “keta-ami” to catch cockles (torigai) and sea cucumbers that live on the seabed. In addition to the catch, various types of seabed debris get mixed into the keta-ami net. Fishermen sort out the debris and dispose of it as industrial waste. The youths experienced operating of keta-ami and sorting of seabed garbage, and considered what we could do.

時間 / Time	内容 / Program
朝 morning 1 hour	船上からけた網漁の操業を見学 Observing the operation of the keta-ami
30 min	バスで宮津地区漁業会事務所へ移動 Go to Miyazu District Fisheries Cooperative Office by bus
2 hour	海底ごみの洗浄、分別 Cleaning and sorting of seabed garbage
30 min	振り返り、漁師の方と交流 Review and interaction with fishermen
30 min	バスでマリンピアに戻る Return to Marinpia by bus

けた網漁の操業見学

Observing of the keta-ami

早朝に漁港へ行き、船上からけた網漁の様子を見学させていただきました。漁師の方に、その場でとれた貝やヒトデを紹介していただき、参加者は興味津々の様子で聞き入りました。

We went to the fishing port early in the morning and observed the keta-ami. The fishermen showed us the shellfish and starfish caught there, and the participants listened with great interest.



海底ごみの洗浄・分別作業の体験 Experiencing the cleaning and sorting of seabed garbage

午後からは、宮津地区漁業会事務所へ移動し、海底ごみの洗浄・分別作業を体験しました。プラスチックや缶、衣服等の多岐にわたる海底ごみを一つ一つ分別する作業と、産業廃棄物として処分するために、大型ごみからフジツボなどの付着生物を剥がす作業を体験しました。20人以上で作業しても2時間以上かかる、かなりの重労働であり、普段は漁師の方のみでこの作業を行われているということに、参加者からは驚きの声が上がりました。

途中の休憩時間には、漁師の方からお話を伺う機会があり、宮津の漁業や海底ごみの現状について詳しく学ぶことができました。

In the afternoon, we went to the Miyazu District Fisheries Association office and experienced cleaning and sorting seabed garbage. We experienced the work of sorting a wide variety of seabed garbage, including plastics, cans, and clothes, one by one, and

the work of removing attached organisms such as barnacles from larger garbage in order to dispose of it as industrial waste. During a break time, we had the opportunity to talk to fishermen and learn in detail about fishing industry in Miyazu and the current situation of seabed garbage.

ユースが提案する解決策

Solution proposed by Youth

1. New technology: Integrate new technology that is sustainable, save time and affordable to collect the underwater garbage. Technological companies can collaborate in order to achieve this.
2. Advertisement: Young generations can advertise the consequences of reckless action of throwing garbage in the water through SNS. This can increase the rate of awareness among the collective community.
3. School authority: School can schedule a garbage sorting activities that is compulsory for all grades during long school holidays. This can provide a hands-on experience for students so that they can learn more about underwater garbage.
4. Individual habit: Each individual can reduce the usage of single use plastic throughout daily life in order to lessen the plastic thrown everywhere.



ご協力くださった漁業者のみなさんにお礼申し上げます。
We would like to thank all the fishermen who cooperated.

Summary by Youth Participants through Short Videos and Brochure

Otegawa RIVER

LOCATED FROM NORTH MIYAZU TO AND OVER OTEGAWA RIVER

WHAT WE LEARNT

- 1 TEAMWORK IS THE KEY TO SUCCESS
- 2 ENVIRONMENTAL PROTECTION IS ALL ABOUT NATURE
- 3 HOW TO MAKE A BARB
- 4 HOW TO CATCH FISH
- 5 THERE ARE FISH THAT CAN ONLY BE FOUND IN CLEAN RIVERS

Otegawa

ABOUT KAMISEYA

INTERACTION BETWEEN HUMAN AND NATURE

What is Kamiseya?
Kamiseya is a kind of region which is called "satoyama". "Satoyama" is a place where humans and nature live together. Humans protect the local ecosystem and receive many blessings from nature, which is a sustainable ecosystem cycle.

The origin of the river
You can feel the connection between the mountain and the river as it flows from the mountain's summit down to its base. Rainwater that falls in the forest seeps into the soil, becoming groundwater, which then emerges to the surface to form the river.

A fault and cliffs
The Tango Peninsula was uplifted by a fault, creating a clear, straight division between the elevated land and the subsided sea, resulting in cliffs like those seen in the photo.

Comments
It was a time filled with learning where I could experience the charm of Kamiseya through the river. I was especially moved by how the coexistence between nature and humans has persisted through the wisdom of the local residents.

Kamiseya

Microplastic Survey

Do you know what microplastics are?

- small pieces of plastic
- from the disposal and breakdown of consumer products and industrial waste.

Microplastic Survey

Support Sustainable Brands

Use Microfiber Filters

ways to solve microplastic pollution

Use Natural Fibers

Reduce Plastic Use

-About Kaiyo High School-

<https://www.kyoto-be.ne.jp/kaiyou-hs/cms/>

• 10 m deep pool for diver training.

• Carefully bred living creatures →

Located in Miyazu, Kyoto Prefecture

Features

- Many students are interested in the sea and marine life and aspire to work in jobs related to the sea.
- The school is surrounded by the beautiful nature of Miyazu and has a peaceful atmosphere.

Handy plastic sensor

FUNCTION
determine the types of plastic
Exp: polypropylene (PP)
polyethylene (PE)

EFFECT
Those with microplastics in will be eaten by people

UNDERWATER GARBAGE SURVEY

Our One Day

MORNING ACTIVITIES

AFTERNOON SORTING OUT GARBAGES

What is in them?

Our Journey to

What's a thought?

I want to continue preserving the beauty of the seabed!

How technology Integrate new technology that is sustainable, save time and affordable to collect the underwater garbage. Technological companies can collaborate in order to achieve this.

Advertisement Young generations can advertise the consequences of reckless action of throwing garbage in the water through SNS. This can increase the rate of awareness among the collective community.

School authority School can schedule a garbage sorting activities that is compulsory for all grades during long school holidays. This can provide a hands-on experience for students so that they can learn more about underwater garbage.

Individual habit Each individual can reduce the usage of single use plastic throughout daily life in order to lessen the plastic thrown everywhere.

We love Miyazu-city!

About Miyazu-city

- Located: north of Kyoto prefecture
- Area: 172.74 km²
- Population: 16,071
- Recommendations: Souvenir 天龍寺のうさぎ inside the jar are two layers of moose and reindeer, rare chawanabe, the flavor of which changes with the season!

Activities for the environment

DOYO KYOTO?

- Miyazu City has been selected as an "100% Future City" in 2023 as a city that proposes excellent solutions toward achieving the SDGs.

Clean-up activities

We cleaned near the sea side using "2 in 1" apparatus.

Also we found that a lot of plastics. It was so surprising to find trash from other countries. For example, Japan's can. We thought that we should clean up activity anywhere periodically.

Field work

Before going to field work, We took a lecture about UNEP's efforts on plastic in the ocean problem. And we did

is the shopping mall, excessive plastic was being used. Looking at various products, it made us think about the amount of plastic used in products.

Underwater Garbage Survey

Green Job & Plastic Pollution

地球環境ユースサミット2024 in KYOTO 京都・宮津サミット

主催: 京都超SDGsコンソーシアム 後援: 宮津市

協力: 京都府立宮津天橋高等学校、京都府立海洋高等学校、京都府漁協・所属漁業者、国連環境計画アジア太平洋州事務所

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Earth Youth Summit 2024 in KYOTO Kyoto-Miyazu Summit

Organizer: Kyoto Beyond SDGs Consortium Supporter: Miyazu City

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Cooperated by Kyoto Prefectural Miyazu Tenkyo High School, Kyoto Marine High School, Kyoto Prefectural Fisheries Cooperative, United Nations Environment Programme (UNEP) Regional Office for Asia and the Pacific

Created by Yuta Ando, Ikumi Kamatani, Yuzuki Kojima, Haruhi Nagata