

Collaborative Removal of an Invasive Alien Aquatic Weed



International Volunteer University Student Association
(IVUSA)

3rd grade in Kansai University

Haru Shimada

Hello everyone. I'm Haru Shimada, in the 3rd grade at Kansai University. I belong to the International Volunteer University Student Association. I've done a lot of volunteer work after I became a university student and joined IVUSA. I've had many good experiences through IVUSA's activities. But, what is IVUSA?

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What is IVUSA

70 Universities
2,500 Students

Disaster
Relief



Environmental
Protection



International
Corporation



Community
Revitalization



Child Education
Support



This is one of the biggest volunteer organizations in Japan, consisting of university students. We hold many kinds of volunteer activities, especially, we put effort into disaster relief, which we aim for the restoration with local people.

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Introduction of projects of IVUSA in Shiga

We hold a lot of activities which are related to MLGs goals



Cleaning activity

Child education support



Removal of invasive weed

By making use of the range of the places where students in IVUSA live, we hold volunteer activities all over Japan. Especially in Shiga Prefecture, which has Lake Biwa, we hold some activities such as cleaning activities, child education support, removal of invasive weeds and so on.

They are contributing to achieve MLGs goal.

I'm going to focus on the last one, the removal of invasive weeds project today. It is one of the biggest projects in ivusa.

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Removal activities of Invasive weed



Before I start, I will ask you a question.

Did you know one of the invasive weeds from South America has been spreading and causing serious problems in Lake Biwa?

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Removal activities of Invasive weed

Ludwigia grandiflora subsp. *hexapetala*

Blooms **Yellow** flower

Introduced from
South America



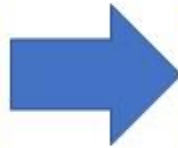
The invasive weed's name is *Ludwigia grandiflora* subsp. *hexapetala*. It's a really long name, isn't it? So, I'm going to call this plant "invasive weed" in this presentation. As you can see from the picture, it blooms yellow flowers. It looks so pretty! However, this invasive weed has a strong and scary power in it.

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Removal activities of Invasive weed

Features

Explosive growth and propagation



yum yum



Bad effect

1. Bad effect on **ecosystem**
2. Negative impact on **fishing industry**



It has some striking features, but the most surprising one is the explosive growth. In 2016, the coverage area of invasive weed reached some 300,000m² in Lake Biwa.

But what is the bad effect?

There are mainly 2 bad effects. First one is the adverse effect on the ecosystem. The invasive weeds exclude native species. The second one is the negative impact on the fishing industry. So people who were struggling with this invasive weed tried to remove them.

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Removal activities of Invasive weed

The reality was...

Removing the invasive weed
is **hard work**



People who were engaging in
the project were **elderly**

However, most people who were struggling with the weed were fishermen, and most of them were elderly.
In addition, removing the invasive weed is hard work.
So it was really hard to remove it for them.

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Removal activities of Invasive weed



We want to **SAVE** Lake Biwa
by the power of youth!!

So, students rose up to solve this problem.
We want to save Lake Biwa by the power of youth!
This was the start of our project.

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Removal activities of Invasive weed



But

3

Removal activities of Invasive weed

We had many difficulties holding removal activities



Lack of tools



Operation of ship



Disposal

What we can do was

just to remove invasive weed by manpower

We had many difficulties holding removal activities
Because we didn't have tools, couldn't operate ships, and couldn't pay for disposal.
We noticed that what we could do was just to remove invasive weeds by manpower.

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Removal activities of Invasive weed

In 2013

Shiga Prefecture



Moriyama city

Local started the project of removing invasive weed



IVUSA was invited to join project as one of the member of the team, and **local people welcomed students**

On the other hand, a local environmental npo named Akanoi-Biwako Environmental Citizens Initiative made a removal invasive weeds project team with the government and fishermen to aim at removing invasive weeds and raising awareness in Moriyama city, and they also welcomed us to join the team.

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Removal activities of Invasive weed



We held removal activities **5 times**
and around **250 people** joined them

By cooperating with each other, we could hold removal activities 5 times in Moriyama city and 250 people including local residents participated in it in the first year.

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Removal activities of Invasive weed

In 2013

In Moriyama

Distribution of tools by the government



Local environmental NPO

Call for the residents



IVUSA

Removal activity by manpower



Fishermen

Operation of ship



The government

Dispose removed weed for free

Through this project, each stakeholder made use of their strengths and built a cooperation system in Moriyama city. The environmental NPO, fishermen, students, and the government cooperated with each other. This led to the successful result in stopping the spreading Invasive weed in Moriyama city.

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Removal activities of Invasive weed

In 2014

The **awareness** has increased!!



In 2014, it was designated as
Specific Alien Species

**The Council for Controlling
Invasive Aquatic Plants in Lake Biwa**
was established, In March 2014.



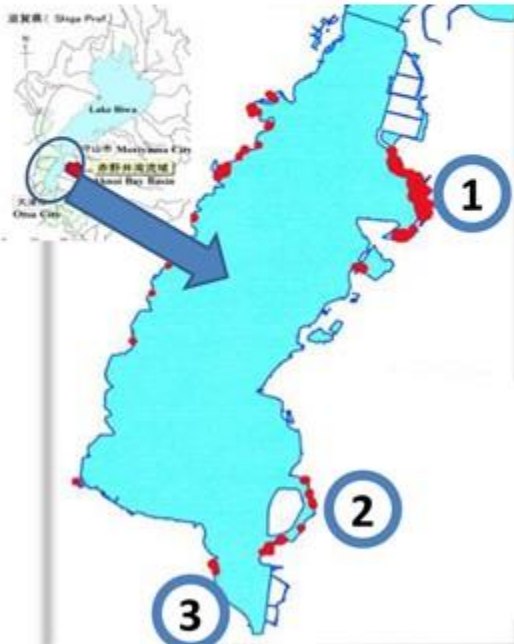
Our removal activities in the first year resulted in steering the nation,
so in 2014, the Invasive weed was designated as a specific alien species
and the council for controlling Invasive aquatic plants in lake biwa was established, of which IVUSA was one of the members since it started.

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Removal activities of Invasive weed

In 2014

The **propagation area** of the weed had been **spreading** all over the **southern Lake Biwa**



The propagation area of *Ludwigia Grandiflora* subsp. *Hexapetala*, in southern Lake Biwa (Researched by Lake Biwa Environmental Research Institute (LBERI) and Omi Wetland Research Group)



While we were hardly working on the project in Moriyama city, the weed was found in many places in southern Lake Biwa. We had strong sense of crisis, So we ivusa planned a large-scale removal activity.

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Removal activities of Invasive weed

In 2014

The **propagation area** of the weed had been **spreading** all over the **southern Lake Biwa**



Let's remove them!



The propagation area of *Ludwigia Grandiflora* subsp. *Hexapetala*, in southern Lake Biwa
(Researched by Lake Biwa Environmental Research Institute (LBERI) and Omi Wetland Research Group)



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Removal activities of Invasive weed

In 2014

The **propagation area** of the weed had been **spreading** all over the **southern Lake Biwa**

BUT

Let's **remove them!**



The propagation area of Ludwigia Grandiflora subsp. Hexapetala, in southern Lake Biwa
(Researched by Lake Biwa Environmental Research Institute (LBERI) and Omi Wetland Research Group)



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Removal activities of Invasive weed

In 2014

We had **two** obstacles to carry out the removal activity

Most of stakeholders **didn't know** what the invasive weed is.

Hard to **find the place** to put removed weed for drying and **pay for disposal**



Again, we faced problems. Although the awareness of the weed had been increasing, most of the people whose cooperation is necessary didn't know about the dangerousness of the weed. In addition, since the invasive weed needs to be dried before they will be burned, we needed to find a huge temporary storage place and money to pay for disposal.

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Removal activities of Invasive weed



In 2014

Increase
the
awareness



Local radio



Mother Lake Forum



Disposal



Temporary storage place

Support
for drying
and
disposal

For these obstacles, many people supported us.
To raise awareness, we got chances to talk about the problem on local radio and at a big conference in which people think about Lake Biwa.
And the government lent us a temporary storage place to dry removed invasive weed, and they took over the payment for disposal

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Removal activities of Invasive weed

In 2014

600 students joined!!



Kusatsu City



Karasuma Peninsula



Otsu City



People of Ministry of Land, Infrastructure, Transport and Tourism joined



Fishermen watch over us

120 tons
of invasive weed was removed for 3 days!

Thanks to the support from many people around us, we could hold a big removal project in 3 different cities at the same time and 600 students joined in it.

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Removal activities of Invasive weed

In 2014



Karasuma Peninsula



Kusatsu City



Otsu City

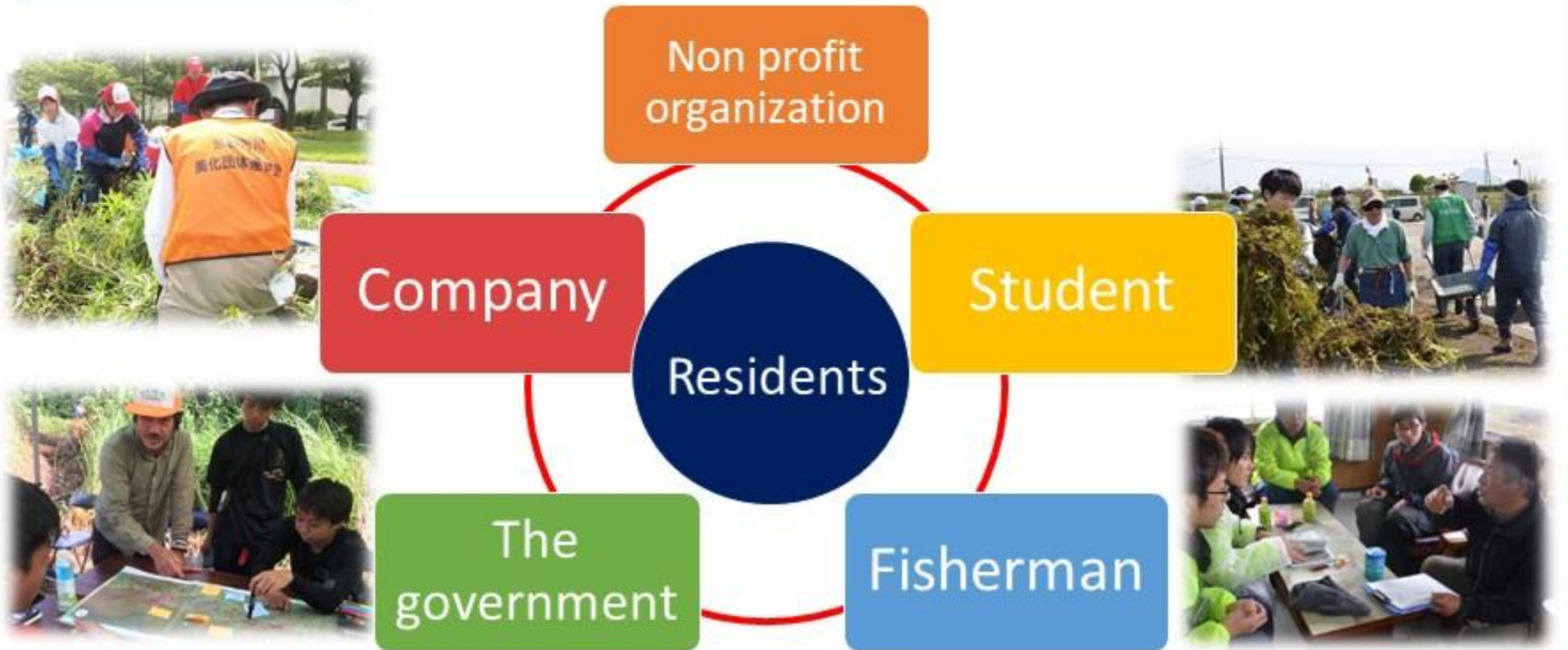
Look at these pictures! This is the result of this project.

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Removal activities of Invasive weed

Recent years

Throughout shores of Lake Biwa



A lot of people has been trying to solve this problem
A lot of stakeholders joined this project

Through these activities, a number of people in different positions joined this project. Like this figure, we have been working on this project in cooperation. Resulting in continuous removal activities in this cooperation system, we have been suppressing the propagation of the weed.

Not only that, but they were really supportive.

When students tell people around us what we want to do, they thought about it together though we students didn't have specific skills or knowledge at that time.

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For the future



What I told you today was a story in the past. Today, we cannot hold such big removal activities because of Covid-19, but I won't give up.

We IVUSA held an MLGs workshop with Shiga prefecture last June, and

I was a leader of the event. Around 30 students joined and thought about what they can do to achieve MLGs goals.

To this workshop, around 10 government officials joined and discussed with students, and 8 unique project ideas were born.

This project didn't work without officials who made this workshop together. Thank you so much.

Like this, people around us support and think about what we want to do together. Thanks to this, we can challenge social problems.

Now, we are working on one of the project ideas from the MLGs workshop, and are excited to be one of the members of achieving the MLGs goals.

We won't give up and continue to think and try what we can do, what only we can do. Thank you for listening.