Shiretoko Eco-Conservation Study Report

I. Exchange with Shari High School (Morning of March 9)

On the morning of March 9, we visited Shari High School and exchanged ideas with local high students. The students gave presentations about Shiretoko for simple introduction, covering local tourism and the fishing industry. We then introduced the concept of World Natural Heritage sites. We were impressed by their deep knowledge of their hometown. Although we come from different places, our shared interest in nature conservation connected us.Later, we joined a workshop with students from several schools. Our group's topic was "Designing a Food-Focused Travel Plan," targeting foreign tourists in their 20s with low interest in outdoor activities. At first, we thought this was a bit contradictory—most people visit Shiretoko for nature and outdoor experiences. But after discussion, we realized that even visitors who don't like outdoor activities can still experience local culture by tasting seafood, trying fisherman-style dishes, and learning about traditional food processing. We also asked the students about recent changes in Shiretoko, such as reasons for the decline in salmon catch, why kelp is now cultivated, and the differences between cultivated and natural kelp. They shared insights we hadn't heard before—like how salmon decline might be linked not only to global warming but also to illegal fishing, and that fishing regulations allow up to three fishing lines at a time. The brainstorming across different backgrounds generated many fresh ideas.

This workshop broadened our understanding of Shiretoko as a World Natural Heritage site. It gave us a chance to see how young local people view environmental protection and ecotourism. We believe this is important because sustainable development needs local participation—it also builds community identity and helps retain and attract talent.

II. Visit to the Shiretoko Nature Foundation (Afternoon of March 9)

In the afternoon of March 9, we visited the Shiretoko Nature Foundation. Mr. Akiba explained their daily work in detail. The foundation manages the balance of the natural ecosystem and operates the nature reserve. He explained the current situation of the Shiretoko deer population and the controlled culling carried out to maintain ecological balance. He also discussed bear management, including its current state and main challenges.

(A) Main Work of the Foundation

The foundation's work covers several areas. In ecological protection, they promote forest restoration through long-term land protection efforts like the "100㎡ Movement." In visitor management, they control access and vehicle flow at key sites like the Five Lakes, using monitoring systems to reduce human impact on nature. In wildlife management, staff regularly patrol the park to track bears and deer, install bear-proof trash bins, remove food scraps that attract animals, and set up and maintain electric fences to improve safety and separation between humans and wildlife.


(B) Scientific Management of Deer

Mr. Akiba focused on deer population control. Deer are overabundant in Shiretoko—monitoring data shows numbers are still slightly increasing, damaging vegetation. Therefore, scientific culling is needed. Mr. Akiba stressed that reducing deer numbers is not the goal itself; the real aim is to assess and control their impact on the ecosystem and vegetation. "Monitoring and evaluation" and "culling control" are essential. Even though this requires significant funding, data collection is always necessary, just like in scientific research—nature changes, but decisions must rely on data. This reminded us that ecological protection is not about protecting one species, but about keeping the whole ecosystem balanced.

We were deeply impressed by the detailed rules for deer culling. To limit reproduction, the focus is on culling female deer. Since deer are social animals, shooting one within a group makes the others fearful and alert—they become "smart deer." So workers first separate the herd into smaller groups using vehicles or snow banks, then shoot from close range aiming at the neck or head for instant, painless death. A recovery team immediately removes all blood and traces to avoid warning other deer. Small-caliber rifles are used to minimize sound and vibration. Every step is scientifically based. This is not simple hunting—it's professional, careful ecological management. Still, deer gradually become more cautious, making it hard to maintain target population levels over time.

(C) Core Management Concepts

According to Mr. Akiba, Shiretoko National Park operates on two core concepts:

Collaborative Management (Co-management): Communities, local residents, local governments, the central government, and private groups all take part in park management. This system takes time to coordinate and can be less efficient, but it balances the top-down control of central government. Simply put, decisions aren't made solely by the government—many parties are involved. Although slower, this leads to more practical and reasonable decisions.

Adaptive Management: Instead of fixed rules, strategies are adjusted based on ongoing monitoring data. The detailed choices about culling methods, timing, and targets for deer in Shiretoko are a clear example of adaptive management—strategies are refined through practice based on real conditions.

We were amazed at how the foundation connects so many different groups. Cooperation isn't easy—different positions and views on nature can cause disagreements. These two concepts show how the foundation acts as a bridge between local and national levels, and between government and citizens.

III. Visit to the Ministry of the Environment (Afternoon of March 9)

Later on March 9, we visited the Ministry of the Environment office. Mr. Ito and Mr. Futagami explained their work, focusing on bear management in Shiretoko—its current state, challenges, and responses—and the Ministry's broader role in environmental protection.

Staff told us that due to factors like altitude and climate, Shiretoko has one of Japan's largest bear populations, making bear management a key challenge. Bears face a complex situation: bear sightings are increasing, and reports of attacks sometimes appear, reducing tourist numbers. Yet some visitors take risks, wrongly believing bears won't attack, and approach them—behavior that can actually trigger attacks. The staff noted, "Bears are an important tourism resource in Shiretoko." This made us think: balancing bear protection, visitor safety, and local tourism is a major challenge.

We asked whether global warming delays bear hibernation, making them search for food longer and increasing encounters with humans. The staff confirmed this. Warming means bears need more time to feed, delaying hibernation and raising how often they enter human areas. While some tourists come specifically to see bears, this also raises safety risks.

The Ministry's core work addresses these issues: monitoring bear populations and behavior, studying climate change impacts on local ecosystems and wildlife, teaching visitors safe practices through lectures and outreach, and coordinating with the foundation, local government, and residents for integrated bear and ecosystem protection. This was our first real sense that climate change isn't abstract—it directly affects bear hibernation, tourism, and daily safety.

IV. Reflections and Takeaways

Through this study, our group came to several key understandings:

(1) Ecological conservation must be grounded in science. Every detail of the deer culling process is scientifically designed. This reminded us that environmental protection requires not only passion, but also professional knowledge and rigorous methodology.

(2) Conservation requires balancing multiple interests. For example, bears in Shiretoko hold multiple roles—they are a protected species, a unique tourism resource, and a potential safety risk. There is no single answer in ecological conservation; the goal is to find the optimal balance amid competing priorities.

(3) Scientific intervention is sometimes necessary. Conservation does not mean leaving nature completely untouched. When deer populations exceed sustainable levels and damage vegetation, or when bear activity increasingly affects human communities, carefully planned human intervention becomes essential to maintaining ecological balance.

(4) Effective conservation depends on collaboration among different actors. The foundation focuses on on-site management and daily operations, while the Ministry of the Environment handles policy research, ecological monitoring, and stakeholder coordination. Each plays a distinct role, and only through clear division of responsibilities can the protected area be managed efficiently.

(5) Public education is a vital part of conservation. Many human-wildlife conflicts stem from a lack of understanding. By providing accurate information through lectures and outreach, visitors can learn how to respond appropriately to wildlife, reducing risks at their source.

V. Conclusion

This day of visits and exchanges was very rewarding. We learned not only about Shiretoko's detailed ecological and wildlife management but also about Japan's conservation philosophy and current challenges.

At the foundation, Mr. Akiba's explanation of deer management showed us the professionalism and care of natural conservation workers. At the Ministry, Mr. Ito and Mr. Futagami's talk on bears highlighted the difficulty of coexistence. At Shari High School, talking with students showed us young people's love for their home and commitment to nature.

It was an incredibly valuable experience. It gave us new thoughts on coexistence with nature and many insights. Our time in Shiretoko taught us not just technical knowledge, but an attitude toward nature: respect science, seek balance, keep learning, and promote collaboration. In the future, we'll look at environmental issues with fresh eyes and take more active part in conservation.

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