Hokkaido Shiretoko Field Study Report

HH Snow Walking Event

1. History and Future Development of Shiretoko National Park

According to the guide, the development of Shiretoko began approximately 152 years ago, and major development was completed about six years ago. What was particularly emphasized was the importance of prioritizing a long-term perspective over short-term outcomes. Current management and decision-making are not based on decades, but rather on envisioning conditions 200 years into the future.

Changes in land use were also a key point. In the past, there was a period when farmland was extensive; however, efforts are now being made to convert farmland back into forests (reforestation of abandoned agricultural land). As farmland decreases and forests recover continuously, habitats for living organisms expand and ecological functions are gradually restored. In Shiretoko, restoring forests itself is regarded as a fundamental approach to supporting the natural environment in the future.

Regarding biodiversity conservation, a notable strategy is the method of tree planting. Rather than simply increasing the number of trees, spacing between trees is intentionally maintained, creating “gaps” and avoiding excessive density. This results in variations in sunlight and undergrowth conditions, which in turn create diverse microenvironments. Consequently, a wider range of species can inhabit the area, contributing to enhanced biodiversity. In other words, the goal is not only to increase forest area but also to improve forest quality and environmental diversity.

2. Snow Walking in Shiretoko National Park

While walking along the trail from the Shiretoko Nature Center to Furepe Waterfall, we observed many birch trees. The guide explained tree rings using birch, and we learned that each ring represents one year of growth. Hearing this explanation in the forest made it particularly fascinating to understand how the age of a tree can be determined.

We also observed holes in tree trunks made by woodpeckers. One memorable observation was a tree with two holes. At first, they appeared separate, but the guide explained that they were connected internally. Through these observations, we were able to experience firsthand how trees and animals coexist and interact

within the forest ecosystem. This experience allowed us to appreciate the richness of Shiretoko's natural environment and provided valuable learning.

3. Interaction with Local Stakeholders

From interviews with local stakeholders, it was revealed that one of the current challenges is the excessive population of deer. When deer populations become too large, they consume undergrowth and young trees, making forest regeneration difficult and negatively affecting the ecosystem. As a result, hunting and capture have been introduced to control their population. This demonstrates that environmental management in Shiretoko does not rely solely on natural processes but also includes human intervention when ecological balance is at risk.

Figure 1: Introduction by the guide

Figure 2: Methods of capturing Ezo deer

The utilization of captured deer is also notable. The approach is primarily local production for local consumption. Approximately 20–30% of the deer, which are of higher value, are used for food or processed into products. The remaining parts are utilized as pet food. This indicates that population control is not merely about reducing numbers but also about minimizing waste and utilizing resources efficiently. Compared to deer in Honshu, Ezo deer are larger, with adult males exceeding 150 kg. We also observed many deer while traveling.

Figure 3: Utilization of Ezo deer

- Seasonal color changes:
- Summer: Bright brown with white spots, blending into the green forest
- Winter: Thick gray-brown fur adapted to cold conditions
- Antlers: Shed around April and regrow as velvet antlers, hardening before the breeding season

Additionally, tasting deer meat was a memorable experience. Observing the chef preparing different cuts, such as separating outer and inner thigh meat, and explaining their characteristics was particularly interesting.

Through discussions with officials from the Ministry of the Environment, we gained insights not only as visitors but also into the perspectives and daily experiences of local residents, including their long-term relationship with brown bears.

Overall, this field study provided us with valuable environmental knowledge and a clearer, more comprehensive understanding of the roles played by various

stakeholders in ecosystem conservation and environmental protection. As students, this was an extremely meaningful experience.

4. Future Perspectives

Through this field study, several important issues became apparent.

First, although Japan has a low food self-sufficiency rate, farmland in Shiretoko is being converted back into forest. This policy is highly intriguing, and further analysis is needed to understand the background and reasoning behind such decisions.

Second, balancing wildlife activity and the safety of human tourism is a trade-off. This balance is not fixed and must be continuously adjusted according to changing conditions.

Therefore, environmental management in Shiretoko requires both a long-term perspective and flexible responses to real-world challenges.

5. Conclusion

During this field study, we visited the Shiretoko region, interacted with various local stakeholders, and participated in activities that are rarely experienced in everyday life.

We found that environmental management in Shiretoko emphasizes long-term forest restoration and biodiversity conservation, while also addressing practical issues such as the increasing deer population through human intervention.

This report has summarized these efforts and challenges, highlighting the characteristics of environmental conservation in Shiretoko. This experience was highly valuable in helping us understand environmental issues not only in theory but also through real-world practice.