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Hokkaido University-The University of Edinburgh International Vet Exchange Program 2025 Achieving Global Standards of Excellence in Veterinary Education

Student Report from School of Veterinary Medicine,
Hokkaido University
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Project Managers

The University of Edinburgh

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Yukino TADA, 5th year

The University of Edinburgh, located in the capital of Scotland, has a history of nearly 400 years. Its veterinary school, the Royal (Dick) School of Veterinary Studies, was founded in 1823 and is now based at the Easter Bush campus. The campus hosts a variety of facilities, including the university's small animal and equine hospitals, the Roslin Institute (famous for the cloning of Dolly the sheep), the Large Animal Research and Imaging Facility (LARIF), and Langhill Farm. These institutions play key roles in advancing animal science, life sciences, and animal welfare not only in Scotland, but also all over the world.

In the United Kingdom and many other western countries, animal welfare standards are generally high, and public interest in the subject is strong. The University of Edinburgh is leading this field globally by education and research in animal welfare.

During my programme, I had the opportunity to take lectures, visit research facilities, and take part in medical treatments at the animal hospitals. I also visited Edinburgh Zoo. These experiences provided a valuable chance to observe animal welfare practices in action and reflect on their significance.

It takes about 30 minutes to reach Edinburgh Zoo from the city centre. Walking through the zoo's hillside park, I saw otters running along a small river, a tiger strolling slowly through a tunnel above visitors, and red pandas napping on high branches. The experience felt almost like encountering wildlife in their natural habitats. The animals appeared to enjoy their lives in enclosures that provided much larger spaces, abundant vegetation resembling their native environments, and enrichment features that allowed them to hide from human view. It was an entirely new experience for me to see such natural behaviours, and I was deeply impressed. These observations made me reflect on the situation in Japanese zoos, which I decided to focus on in my presentation.

On the third day of the training, I was given the opportunity to deliver a presentation. I chose to speak about the current state of animal welfare in Japanese zoos. In preparing for this, I considered that although efforts to improve conditions are being made in Japan, there are limits to what zoos alone can achieve. For more significant progress to take place, broader societal involvement is essential—bringing citizens, governmental institutions, and the wider community into the conversation. This realization seemed to extend beyond zoos and it applies across the entire animal industry in Japan.

The high public interest in animal welfare can be seen in everyday life. For instance, in supermarkets, meat products are often labeled with the RSPCA certification mark, indicating compliance with animal welfare standards. Packaging also specifies the conditions in which animals were raised, such as indoors, outdoors, or free-range. I realized that public demand drives institutional and governmental action, and this correlation creates lasting improvements in animal welfare.

Raising public awareness is not simple. The World Organization for Animal Health (WOAH) has stated that “Animal welfare is a complex and multi-faceted subject with scientific, ethical, economic, cultural, social, religious and political dimensions.” I would like to propose two important perspectives in Japan. The first one is the cultural difference. Rather than simply importing the Western concept of “animal welfare”, we must carefully develop and adapt a form of animal welfare that matches Japanese society. It is essential that the principles are accepted, internalized, and made meaningful within Japan's cultural framework. The second one is historical difference. Hokkaido University will celebrate its 150th anniversary next year. By comparison, the University of Edinburgh's history spans nearly 400 years, leaving a difference of about 250 years. This historical gap reminded me that building animal welfare in Japan requires a long-term, culturally grounded effort.

I believe that zoos can serve as a starting point. Zoos are accessible to people of all ages and backgrounds, and they can attract public interest. Small-scale initiatives within zoos, such as enrichment activities that encourage natural behaviors, can spark awareness among visitors. Such moments of recognition may gradually develop into broader social movements that shape national and even international attitudes toward animal welfare of the entire animal industry.

For my generation of veterinary students, this responsibility feels especially significant. Animal welfare has recently been incorporated into our curriculum, meaning we are among the first to receive structured education in this field in Japan. As such, we carry both the expectation and the responsibility to advance animal welfare in our country. I strongly feel that we must take the initiative to build a uniquely Japanese understanding of animal welfare—one that acknowledges global standards but is also grounded in the values and perspectives of Japanese society.

Through this programme, I not only deepened my understanding of animal welfare but also came to appreciate the broader cultural and societal contexts that shape it. I returned to Japan with new perspectives, renewed motivation, and a stronger sense of responsibility to contribute to the advancement of animal welfare in my country.

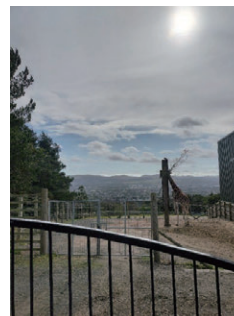
I would like to touch a little on my life in Edinburgh. I was overwhelmed by the cityscape of cobblestone streets and brick buildings. On the very day of my arrival, September 14, I happened to come across a ceremony celebrating the 900th anniversary of Edinburgh, where I watched a parade of horses and bagpipes. Listening to live bagpipes had long been a dream of mine, so I was truly delighted.

While walking through the city, I always saw medium- to large-sized dogs. What surprised me even more was that dogs were not only present in the streets but also inside cafés and even on buses. Speaking of buses, I was also excited to ride a double-decker bus. Sitting in the very front seat on the upper deck was especially exciting. Each traffic light and every curve in the road gave me a rush of thrill, and I thoroughly enjoyed the ride.

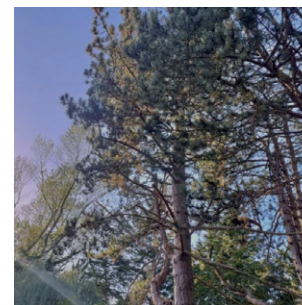
People in Edinburgh seemed to have a relaxed lifestyle. They took daysexcited off frequently, and even on working days people often finished early and went home, giving me the impression that they had a good work-life balance. Another difference in working style that I noticed was at Tesco (a supermarket) during the busy dinner hours. A staff member was restocking shelves with a large cart, moving customers out of the way without hesitation. I thought this would be rare to see in Japan.

Finally, I would like to express my deepest gratitude to those who supported me throughout this invaluable training experience. To Nicola and the faculty and staff of the University of Edinburgh, who so generously shared their time and expertise, to the five exchange students from last year, and to the faculty members of my own veterinary school who organized and coordinated the programme, including Professor Tsubota and Levi. Without their guidance and support, this experience would not have been possible.

Can You Spot Two Red Pandas?



The View from the Giraffe enclosure



A whole chicken labeled 'CORN FED' and 'FREE RANGE' with the RSPCA mark

The University of Edinburgh

Chiharu WATABE, 5th year

During my ten days in Edinburgh, I was able to gain many valuable insights into animal welfare, both in large animal husbandry and in the care of zoo animals. Through observations at the university farm and the zoo, I was able to directly see husbandry methods that consider animal behavior and living environments. These experiences made me much more aware of the perspectives I should attach importance to when I work with animals in the future. In addition, during lectures at the University of Edinburgh, I had the opportunity to learn about animal welfare in relation to fish.

Through behavioral observations of fish, I realized that the scope of animal welfare has expanded to include fish, a group that has traditionally been neglected. During the observations, I confirmed that when fish were placed in environments considered stressful, they became restless and displayed more behaviors that suggested fear. From this experience, I learned that fish also respond sensitively to their environments, and that their behavior reflects their internal state. In recent years, animal welfare on farm animals began to attract interest in Japan, but we need to start thinking about animal welfare about fish. It is important to Japan which fisheries are an important industry.

In terms of large animal husbandry, what left the strongest impression on me was the rearing environment for calves. The barn I visited was kept extremely clean, and each calf wore a device resembling a long collar that monitored its milk intake, ensuring that each calf received the appropriate amount of milk. I had thought that group rearing, compared to the individual rearing of calves which is common in Japan, was effective for developing social behavior but made individual management difficult. For example, in the individual rearing, it is difficult to monitor the amount of milk consumed and to manage health conditions. Therefore, I was surprised to learn about this method, which balances both. Grazing also presents challenges in nutritional management because it depends on the condition of the local pasture. However, by grazing cows during their dry period, farmers prevented a direct impact on milk yield. I was impressed by this method, which balanced giving cows freedom to spend in a wide environment with maintaining production efficiency.

Furthermore, during milking, cows were provided with highly nutritious feed as a reward, depending on their milk yield. This approach was designed to ensure that milking did not become a painful or stressful experience for the cows, and I learned from this animal-centered management style. As evidence that this method is working well, it is said that cows naturally come to the milking area when it is time for milking. In addition, large brushes were installed in the barn so that cows could scratch their heads and necks on their own. I felt that such enrichment plays an important role in reducing stress and ensuring comfort for the animals.

At Edinburgh Zoo, I also had the opportunity to learn about husbandry practices that prioritize the welfare of display animals. What impressed me most overall was that animals were given choices in their environment. For example, they were able to move freely between indoor and outdoor spaces or hide from people if they wished. I felt that this freedom of choice reduced stress and encouraged natural behaviors. Therefore, none of the animals in the zoo exhibited stereotypic behaviors. One particularly memorable case was the enclosure for the Visayan warty pig (*Sus cebifrons negrinus*). Compared to the adjacent deer enclosure, the soil in their habitat was deeper, allowing them to root with their snouts. I observed this rooting behavior multiple times during my visit. Since these pigs are omnivorous, being able to search for insects in the soil encourages their natural foraging behavior. This left a strong impression on me as an example of a husbandry environment designed with animal welfare in mind.

Another memorable part of the lectures was the phrase “*output, not input.*” This means that we should not be satisfied simply with what we provide to animals but instead focus on the outcomes—how the animals behave and change as a result. It is not enough to simply practice what textbooks or manuals describe as good welfare, the true measure is whether the animals' lives and behaviors are actually improved. I found this perspective to be essential, and it is something I want to keep in mind in my future learning and practice.

One thing I noticed while spending time in Edinburgh was difference in people's way of thinking. In supermarkets in Edinburgh, it was prominently displayed that the eggs came from free-range chickens. I had already felt a strong awareness of animal welfare from the fact that battery cages are banned, but I was still surprised to see it emphasized even in local supermarkets. Another thing that left an impression on me, though not directly related to animal welfare, was something I saw in the supermarkets. There was a space where people could donate food. By putting food that they could not finish consuming themselves, they were able to provide it to the local community. In addition to food, there was also a place to donate dog food. I realized that a culture of passing on surplus food to others so that it does not go to waste has taken root here.

Through this study abroad experience, I learned that animal welfare is not merely about creating environments that look comfortable, but about designing systems that allow animals to express their natural behaviors and fulfill their intrinsic needs. The true measure of welfare is whether their quality of life is genuinely improved as a result. In the future, whenever I am involved with animals, I want to maintain this output-focused perspective and strive to objectively understand their conditions.

I would like to express my heartfelt gratitude to Professors Tsubota, Dr. Yanagawa, and Dr. Otani, as well as all the faculty members of the Faculty of Veterinary Medicine at Hokkaido University, Ms. Kawashima, and Dr. Nicola and the other staff at the University of Edinburgh. Thanks to your guidance and support, I was able to make the most of this valuable opportunity and learn as much as possible. I am truly grateful.



figure 1 The Visayan warty pigs at Edinburgh Zoo

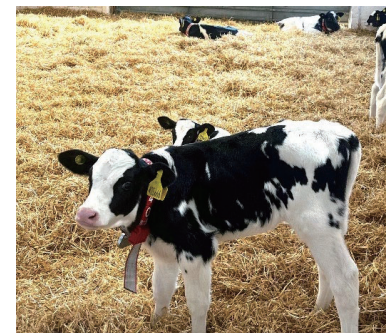


figure 2 The calves that were on the farm



figure 3 Grazing cows

The University of Edinburgh

Masako KATO , 4th year

I participated in this program to study animal welfare, especially the welfare of companion animals, in Edinburgh. I also wanted to observe how local pet owners and people in the city perceive and treat their animals. During my stay, I found significant differences from Japan in three main aspects: the handling of animals at the University of Edinburgh Small Animal Hospital, the diversity of clinical departments, and the way pets live in the city and how people interact with them.

First, I attended a lecture on animal welfare in clinical practice for companion animals at Royal (Dick) School of Veterinary Studies Small Animal Hospital. In the lecture, it was emphasized that the hospital makes every effort to minimize the pain, fear, and anxiety animals may feel during treatment. For example, when giving an injection, one staff member distracts the animal while another performs the procedure quickly and smoothly.

Before attending this lecture, I believed that ensuring the animal's safety was the top priority, even if it caused some fear or restraint. However, this belief was completely changed. I was deeply impressed by their attitude of always prioritizing the animal's emotional well-being, even though many different kinds of animals visit the hospital every day.

I was also surprised by the relaxed behavior of the dogs in the hospital. The patients walked around the consultation rooms calmly and appeared to enjoy being there. In Japan, it is common to see dogs that are afraid to even enter a veterinary hospital. In contrast, at the University of Edinburgh, the dogs wagged their tails happily as they entered and waited quietly and peacefully in the waiting area.

I realized that this atmosphere is the result of the daily efforts of veterinarians and staff members to avoid giving animals any negative experiences such as fear or anxiety. Their consistent efforts to consider the animals' emotions were clearly reflected in the calm behavior of the animals visiting the hospital.

The hospital also has a wide variety of clinical departments. Among them, I had the opportunity to observe the Exotic Animal Department. In Japan, practical training in companion animal medicine at veterinary schools mainly involves dogs and cats. However, at the University of Edinburgh, students can take part in clinical training that includes exotic animals such as rabbits, guinea pigs, mice, and turtles.

On the day of my observation, I saw those animals being examined. It was my first time watching the diagnosis and treatment of such species, and I realized that each requires a different handling method, living environment, and diet. I felt the unique difficulties involved in treating exotic animals.

During the practical session, students took medical histories directly from the owners, performed blood sampling, and filled out medical records. Through these activities, I could sense their strong sense of responsibility and commitment that come from engaging in real clinical practice.

I was also impressed by their mindset. The students were not only interested in dogs and cats, which are the most common companion animals, but also eager to become veterinarians capable of treating a wide range of species. They were active participants, not just assistants to veterinarians, and they approached each case with enthusiasm and curiosity.

Another major difference I noticed was in the way dogs live in the city. Many dogs I saw during walks were off-leash, yet they followed their owners closely and behaved calmly. Dogs are allowed to ride buses and trains for free, and many cafés and restaurants welcome dogs inside. I was amazed by how naturally dogs and humans coexist in everyday public life.

I rarely saw dogs barking or running away from their owners. This showed that they were well-trained and socialized. I realized that proper dog ownership and training practices are widely shared and socially accepted in the community.

Owners take responsibility for their dogs' behavior, and this mutual understanding forms the foundation of a society where dogs are welcomed everywhere.

I learned that dog owners in Edinburgh actively train their pets from puppyhood. They expose their dogs to public transportation and busy places such as cafés so that the dogs can get used to being around people and learn to stay calm in any environment. This practice helps dogs become comfortable and well-behaved in public spaces.

Through this program, I strongly felt that animals are given a high priority in Edinburgh society. This awareness is supported by the mindset of individual owners, veterinarians, and educators.

At the university, professors repeatedly emphasized the importance of animal welfare in their lectures. In practical training, students are encouraged to use models as much as possible instead of live animals. When live animals are used, they are healthy adult dogs owned by university staff, ensuring that no animals are harmed for educational purposes. I also learned about the university's system for canine blood donation. Only healthy dogs under seven years old and weighing more than 20 kilograms are accepted as volunteer donors. This system demonstrates the university's commitment to ethical medical practice and the responsible involvement of pet owners in supporting clinical care.

I was impressed by the high level of ethical awareness and responsibility shown by everyone involved. The consistent effort to minimize animal suffering and respect animal welfare is deeply rooted in their educational philosophy and clinical environment. I felt that this attitude directly contributes to building a society that is tolerant and compassionate toward dogs and other animals.

Through this experience, I gained a deeper understanding of what true animal welfare means—not only minimizing physical pain, but also respecting the emotional state and individuality of each animal. I realized that creating an animal-friendly society requires continuous awareness and responsibility from both professionals and the public.

This program also encouraged me to rethink my future as a veterinarian. I hope to apply what I learned in Edinburgh to promote better welfare standards and practices in Japan. I believe that by valuing the feelings and comfort of animals in daily clinical work, we can improve both the quality of veterinary medicine and the relationship between people and animals.

Finally, I would like to express my sincere gratitude to all the people who supported this program. I am deeply thankful to Professor Tsubota, Ms. Kawashima from IVEP, and Drs. Nicola and Holy for their kind guidance and hospitality in Edinburgh. I also appreciate the professors at the University of Edinburgh who shared their expertise and the students from Hokkaido University who learned alongside me.

This program gave me precious experiences that I could never have gained without visiting the site in person. I am truly grateful for this opportunity, and I will continue to apply the lessons I learned in Edinburgh to my future studies and career in veterinary medicine.

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45 Y. Vet	Abused when used	
46 Y. Vet	Abused when used	
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patients of Exotic Animal Department



Farm of Royal (Dick) School of Veterinary Study

The University of Edinburgh

Hitomi KAWAMURA, 3rd year

I had a very rewarding experience during the dispatch program to Edinburgh. I took the lectures on animal welfare, visited animal hospitals and research facilities, and had a guided tour of Edinburgh Zoo. In addition, we prepared our presentations and delivered them in front of professors and students.

For the presentation at the University of Edinburgh, we chose the different topics and beforehand. I decided to talk about retired racehorses and their second career as riding horses. After the presentation, I asked students what they felt of thought about horse racing and horse riding. I was pleased that some students shared their feelings and experience with horses. Giving a presentation in English was challenging for me, but was a great experience. The lectures we took at the Royal (Dick) School of Veterinary Studies focused on the welfare of animal patients in clinical settings, the euthanasia of companion animals, the welfare of poultry, and that of salmonids. Among them, the lecture on the euthanasia of companion animals was the most impressive to me. I've felt that Japanese people try not to say even the word "euthanasia" regarding companion animals, but I learned that veterinarians in the UK explain euthanasia as an option when there is no possibility of recovery or relief from pain. I also learned that it is important for veterinarians to be considerate of the owner's feelings and be objective toward the situation. This lecture made me reflect not only on the way I treat the animals, but also on how to interact with their owners. Furthermore, the lecture on the welfare of salmonids was interesting for me because I had never evaluated the welfare level of fish. I was surprised to see fish behaving differently when they were deprived of food. Also, this lecture was a good opportunity to be aware of the production structure of cultured fish.

Animal hospitals in the University of Edinburgh have three departments, small animal, large animal and equine. We visited Hospital for Small Animals and Equine Hospital.

At Hospital for Small Animals, I observed a femoral head resection in a dog and an ear cleaning under general anesthesia, accompanied by anesthesiologists. This was my first time to observe a surgery and I was impressed by veterinarians conducting the procedure interactively with students, as they asked questions about the anesthesia equipment and the treatment itself.

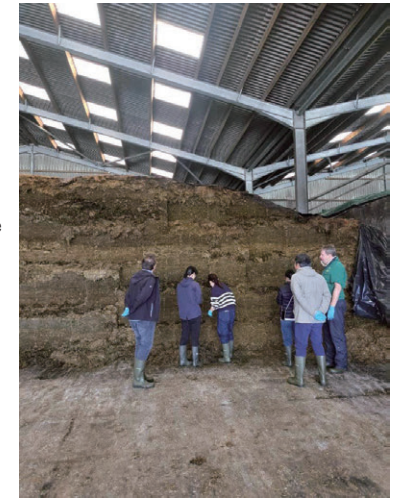
At Equine Hospital, I had an opportunity to watch an ultrasound examination and an abdominal fluid test on a horse that had undergone colic surgery the night before, as well as examinations of a foal that was brought in as an emergency. I found that this hospital was well-equipped, because there were a glassed-in room that enables students to observe two surgery rooms at the same time, a stable where a foal and its mother can stay together while being separated by a partition for individual treatment, and some CT rooms. Furthermore, the skills laboratory of Equine Hospital had a horse model that reproduced the shapes and places of digestive organs at almost actual sizes. I realized that students are able to practice with models before their clinical training in a way that closely simulates actual practice. At the hospital, I saw veterinarians and students discussing the details of the procedure afterward. I was impressed that teachers and students interacted closely with each other.

The lecture on the behavior of horses was really intriguing for me, because I have a strong interest in animal behavior. The lecturer, who was a veterinarian working at the Equine Hospital and had her own horse, explained how to assess emotions of horses from behavior in order to improve their welfare. I thought that this assessment is also useful for other animals. The environment of horses under captivity is widely different from that of wild horses, which graze for sixteen hours and walk more than ten kilometers a day. I learned that it is important to give them multiple options to improve their welfare. The lecturer showed us an example that horses could choose which grass they ate and which water they drank.

In addition to animal hospital, we visited Langhill Farm, where dairy cows are kept, and LARIF, a large animal research facility, both of which belonged to the University of Edinburgh. At Langhill Farm, we could see cows scratching their body with electric brushes and lying down comfortably on the soft floor in the free stall barns.

Additionally, they can spend time in the large grazing fields. I was impressed that the radio was kept on to prevent animals, which were used to living in groups, from feeling lonely in the housing area of large animals at LARIF. Moreover, LARIF was equipped with the pens with a transparent panel that allows laboratory animals to see others in the adjacent enclosure, and barns whose size can be adjusted according to the number of animals.

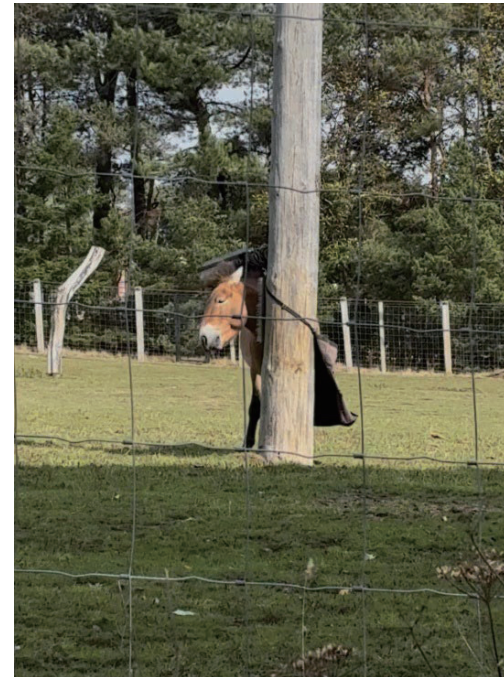
During the guided tour of Edinburgh Zoo, I was able to see a lot of natural behaviors of animals. For example, a red panda was climbing up high into the trees, pigs were digging in the soil with their snouts, and Przewalski's horses were running in a large pasture. I was amazed that most of enrichments in the zoo were made from natural materials. Furthermore, there were many displays focusing on endangered animals in the zoo, which I thought would encourage visitors to think about their conservation. I felt that this zoo was



Learning about silage, Langhill Farm

a good place to learn how animals behave in the wild and to consider issues related to animal conservation.

Through this dispatch, I had the opportunity to consider and compare the approaches to animal welfare and the efforts to enhance it in Japan and the UK. During the program, I often felt the limits of my English skills and professional knowledge, but thanks to the faculty and students at the University of Edinburgh, I was able to have an enjoyable and extremely rewarding experience. I would also like to express my heartfelt gratitude to Dr. Tsubota, faculty members at Hokkaido University who gave us advice on our presentations before the program, the administrative staff, and all others who supported this program.



A Przewalski's horse scratching its neck on a brush, Edinburgh Zoo