

IVEP

Hokkaido University-The University of Edinburgh
International Vet Exchange Program 2024
Achieving Global Standards of Excellence in Veterinary Education



Polar bear at Highland Wildlife Park

**Student Report from School of Veterinary Medicine,
Hokkaido University
September 15th to 23rd**

Project Managers
The University of Edinburgh

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Misaki BAMBA, 5th year

In this exchange program between The Hokkaido University and The University of Edinburgh, I learned about veterinary medicine in Edinburgh such as the facilities, research, education and conservation with a focus on animal welfare. I was particularly interested in the concept of animal welfare and small animal clinic in Edinburgh, which is why I joined this exchange program.

First of all, I want to talk about small animal clinic. On the morning of the second day, we visited the department of neurology at the small animal hospital and observed the medical examinations. I am a member of the laboratory of small animal internal medicine at the Hokkaido university and have many opportunities to be involved in small animal clinic on a daily basis. Therefore, I had been looking forward to seeing small animal practice in Edinburgh. The visit lasted just half a day, so I was only able to see part of the examination, but I felt that the small animal clinical practice at the University of Edinburgh was similar to that in Japan in terms of consultation and examination procedures, equipment, and the level of diagnosis and treatment. On the other hand, there are many differences. At the Hokkaido University, the departments in the hospital are largely divided into internal medicine and surgery, while, at the University of Edinburgh, the departments at the University of Edinburgh are more divided, with each department having its own medical examination room and specialized staff including specialists, residents, nurses, and so on. I felt that the number of staff was large, and medical work was clearly divided into different roles. Furthermore, although it is a university hospital, it also serves as a primary care facility, and patients with various levels of illness come to the hospital, so I thought it was good for students that they could experience many kinds of diseases.

What impressed me the most during the hospital tour was the active participation of the students in the clinical trainings. At the University of Edinburgh, students participate in clinical practice. They interviewed patients on their own, made examination plans, and discussed the examination results with the faculty. I was affected by the students, so that I wanted to be more proactive in my daily participation in clinical practice and understand much more about matters.

Next topic is animal welfare. The program provided many opportunities to think about animal welfare. On the first day, we visited a farrowing pen at the pig farm of the university. Sows enter the farrowing pen for lactation four weeks after giving birth. In conventional farrowing pens, sows are housed in cages as small as their body size to reduce the risk of their piglets being trampled by the sow, with a narrow pathway for the piglets to move next to them. We observed a sow and her piglets in this conventional pen and felt that the sow's space was small and her freedom of movement was restricted except for standing and sitting. Therefore, in order to improve the welfare of sows in farrowing pens, a new farrowing pen has been developed at the research level with the aim of improving the living environment of sows while ensuring the safety of their piglets. The structure of this new pen is well thought out and very interesting. I hope many farms introduce animal friendly pens in the future.

At the Highland Wildlife Park, which we visited on the fifth day, we were also touched by the view of animal welfare in Edinburgh. In this facility, the breeding environment, displaying, and feeding are tailored to each animal based on the idea of five domains of animal welfare (nutrition, environment, health, behavior, and mental state). The breeding area for all animals is much larger, and closer to the natural environment than those in Japan. For example, the polar bears are kept in a large area with natural grass, trees and ponds, which is very impressive and different from the general polar bear displays I have seen in Japan. I thought that in Edinburgh, allowing animals to live in a more natural way took priority over showing the animals to the visitors. That is to say, the purpose and approach to exhibits is fundamentally different from that of zoos in Japan. So, I found that people in Edinburgh had high awareness of animal welfare, and various efforts were being made to improve it.

Through this exchange program, I learned about the various initiatives of the University of Edinburgh for advanced veterinary medicine and animal welfare. Throughout the program, I had many opportunities to be exposed to new perspectives and ideas, and was able to realize issues that Japan should work on in the future. It was definitely very valuable and beneficial experience. I would like to make good use of this experience in my own career and in my efforts to improve animal welfare.

Finally, I would like to thank Dr. Nicola and the other professors at the University of Edinburgh, Dr. Yanagawa and Dr. Yamazaki who guided us, Ms. Kawashima in charge of IVEP, students in Edinburgh, and everyone involved in the program. Thank you very much.



Gelato after-dinner
With Edinburgh students

The University of Edinburgh

Yuta HIROI, 4th year

The reason why I wanted to go to the University of Edinburgh through the IVEP program was because I had heard that veterinary education in Japan is inferior to that in other countries. I really like the field of veterinary medicine, where you can learn everything related to living things, from micro to macro, and I am very satisfied with the classes. However, a doctor at a veterinary hospital said that Japanese veterinary students lack skills, and a director at a zoo said that Japanese veterinary students lack knowledge. When I asked them why, they said that it is because Japan's veterinary education program is inferior to those overseas. I was curious to know whether their opinions were based on fact, and if they are excellent, what I can do to become like veterinary students overseas, so I applied for the program. In addition, I always feel that animal welfare is not sufficient in Japanese zoos and farms, so I wanted to learn about animal welfare practices overseas and bring that knowledge back to Japan. It may seem like an afterthought to write this later, but as a zoo lover, I have an equal or even greater passion for this.

In conclusion, we found that the educational program is overwhelmingly superior, especially in the practical training at the veterinary hospital. This time, we visited the veterinary hospital for fifth-year students (the highest grade), so we did not see how the classroom learning is conducted, but attendance is not taken, and the lessons are apparently recorded, so we expect it will not be significantly different from that at Hokkaido University. However, the practical training at the veterinary hospital was completely different from that at Hokkaido University. The veterinary hospital at the University of Edinburgh is divided into departments, just like a human hospital. Each department has several specialist teachers, and students rotate between departments every week to carry out practical training in each field. The first thing that surprised me about the anesthesiology department that I visited was that each student was assigned a supervisor. (Picture 1)



Picture1: A anesthesiology student and her instructor

The students, who are on their fourth day in the anesthesiology department, are in charge of most of the anesthesia for surgery, from pre-operative induction to intraoperative condition management and post-operative care. The work proceeded in a conversational format, with the instructor next to them asking the student about the meaning of the work they were doing and the student answering. The students also repeatedly asked additional questions about it, so it was like they were constantly talking. The students will continue this for a week, so the learning they can gain is immeasurable. It seems that students would not be entrusted with such a large amount of work in a Japanese veterinary hospital, and since there are not enough veterinarians, they probably cannot be assigned a dedicated instructor. I realized that veterinarians who graduate from the University of Edinburgh will be able to immediately contribute. Also, the reason why the students look so confident is probably because they have a perfect understanding of what they are doing. It was very cool to see them without any hesitation. Also, as someone who deals with microplastics in the laboratory, I found it interesting that the entire university, including the affiliated research institutes, was working to reduce plastic waste. The veterinarians were instructed to use alternatives whenever possible and to put waste in the recycling box (Picture 2). Furthermore, I was impressed that the veterinarian did not take the stance of "We're trying, but it's impossible," but rather took the stance of "Even if it's difficult, we'll try to reduce it as much as possible." I feel a difference in the awareness of the people involved in environmental issues.



Picture2: Recycling bin in anesthesia induction room

I realized how wonderful animal welfare is when I visited Highland Wildlife Park. This was the biggest shock I received during my study abroad. The reason is, above all, its size. I'm not talking about the entire zoo. The size of the area given to each animal was enormous. It's not just large, but each habitat has large cliffs, ponds, and forests. When I was told that it was sometimes difficult to find an animal, I couldn't believe my ears and wondered if this was really a zoo. The reason why there is so much space for each animal is not only because the total area is so large, but also because there are only 20 species kept. This seems very small compared to Asahiyama Zoo, which keeps more than 100 species, but unlike Japanese zoos that care about the number of species kept, they care about how they display them. However, the satisfaction level was far superior. The reason is clear. Although there are many species in Japan, the animals you can see are the same wherever you go, such as giraffes, elephants, and lions, and by the age of 21, you don't discover anything new. It's easy to find animals, but most of the animals are lying down or behaving in a stereotypical manner. On the other hand, at the Highland Wildlife Park, in addition to the enjoyment of finding animals, you can enjoy the spectacular sight of the vast enclosure itself, and the variety of animal behaviors that can be seen due to its size and the variety of terrain. I felt embarrassed when I showed the staff member who was guiding me around the park a photo of a Japanese zoo. I realized that Japanese zoos are lagging.



Picture3: Herbivore exhibit area - only three species as far as the arrow leads!

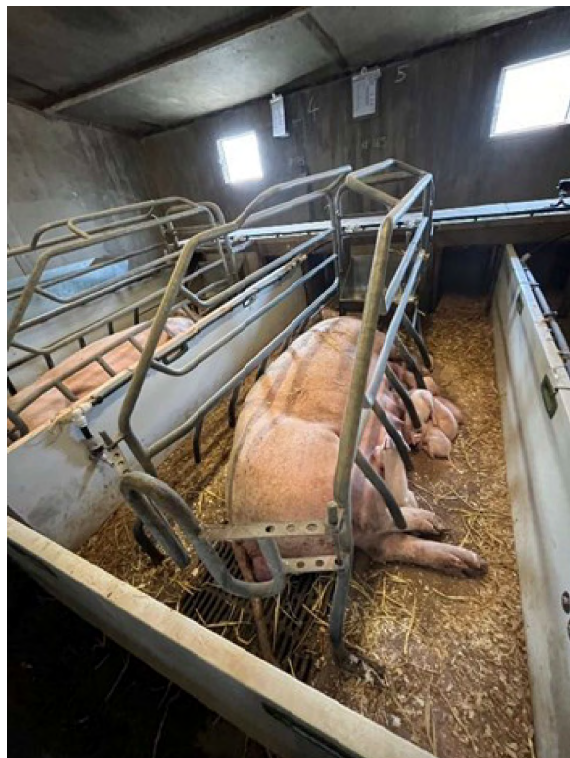
Every day of the nine days I spent in Edinburgh was truly fulfilling. I treasure the new knowledge, new friends, and many memorable photos. It was said that the Edinburgh program was mostly sightseeing, but that's a mistake. It's such a wonderful country that you'll want to try your best to sightsee in the evenings or in your spare time. If you have the motivation and energy, I hope you should study in Edinburgh, where you can also sightsee. Finally, I would like to thank Mr. Yanagawa and Mr. Yamazaki who accompanied us, Nicola, John, and Rachel who welcomed us, and the staff at the places we visited. I would also like to thank the Japanese/Edinburgh students who were with us for their help. Once again, I would like to express my gratitude to everyone involved.

The University of Edinburgh

Shizuku TERASHIMA, 5th year

I participated in about one week of practice in Edinburgh. The practice was divided into on-campus and off-campus components. At the University of Edinburgh, I had the opportunity to visit small animal and equine clinics as well as pig and cattle farms. Off-campus, I learned about large animal research facilities, animal conservation efforts, and the animal welfare of zoo animals. Through this training, I was able to directly experience differences in educational systems and encounter new perspectives that I had never been exposed to before, giving me a chance to reconsider veterinary medicine and my future. There are many things I learned during this training, but I would like to discuss three of the most memorable ones.

The first memorable point was about animal welfare in pig husbandry. We visited a research pig farm at the University of Edinburgh. There, they were conducting research to improve farrowing crates and using AI for individual identification to enable individual management rather than group management. What impressed me most was the discussion about how to replicate natural pig behaviors within the farm from an animal welfare perspective. To achieve this, they actually released pigs into a wild environment to observe their natural behaviors. I was completely surprised by this approach because I had never thought of such an idea before. I realized that it was crucial to consider animal welfare from the pigs' perspective, not just from a human viewpoint, and to achieve this scientifically. The results of these studies were then used to develop better husbandry practices. For example, they provided straw bedding to allow pigs to exhibit natural rooting behaviors and replicated the behavior of sows separating from the group before farrowing. Through this farm visit, I learned that it is essential to understand the animals themselves before considering animal welfare. I was also curious about the future development of farrowing crates, as the research was still ongoing. The second memorable point was about the small animal hospital at the University of Edinburgh. Each clinical department had its own room, and there was a specialist in each department. As a result, the roles of each department were clearly divided. I visited the anesthesia department. While the basic anesthetic procedures were similar to those at Hokkaido University, the education system was quite different. Specifically, I felt that the University of Edinburgh placed a greater emphasis on students thinking for themselves and taking initiative.



Students did not simply observe veterinarians administering anesthesia; they make their own anesthetic protocols beforehand, discuss them with veterinarians, and actively participate in the induction and maintenance of anesthesia. Compared to Hokkaido University, the education seemed more practical. This style of education may make it possible for students to anesthetize animals by themselves just after graduation. While it is difficult to say which approach is better, as it depends on what is valued in education, I found this approach very attractive as someone who aims to work in clinical practice in the future. Fortunately, I could get materials that is used for the clinical education, I would like to use them and study by myself. The third memorable point was about animal welfare for zoo animals. We visited the Highland Wildlife Park and learned about their animal welfare initiatives based on the five domains model. Two things particularly surprised me. First, I was amazed by their approach to feeding animals. They provide animals with high-quality food comparable to human food to promote health. Additionally, they change the food content daily to prevent the animals from getting bored. Furthermore, they vary the feeding locations and times to encourage natural behaviors and prevent the animals from becoming too accustomed to the routine of zoo life. I was surprised to learn how much can be done through simple adjustments to feeding practices. It also made me realize that animal welfare improvements can be made without always requiring new facilities or significant investments. For example, for carnivores like snow leopards, they drag the food around the enclosure before placing it to create a scent trail and provide stimulation. I was surprised by these innovative ideas and realized how limited my perspective had been. Second, I was astonished to learn that they were co-housing snow leopards and markhor (a type of goat). Although they don't coexist at the same time, the enclosure can be switched between the two species. This allows the snow leopard to enter the enclosure with the scent and feces of the markhor, providing valuable stimulation. Since zoos cannot provide live prey, there is inevitably a decrease in stimulation. However, I found it fascinating that they were able to compensate for this by using other exhibit animals. This made me realize that finding alternative methods to compensate for limitations is crucial.

Finally, through this practical training, I was able to gain a great deal of knowledge and new perspectives. I will be sure to apply what I have learned to my future studies. I would like to express my sincere gratitude to all the professors who led the program and to everyone who supported this program. Thank you very much.





Hikaru SAEKI, 5th year

As part of the IVEP program in the University of Edinburgh's vet school, the Royal (Dick) School of veterinary studies, following the study trip in eastern Hokkaido in August, a study trip to Edinburgh took place in September. The UK is not only the birthplace of horse racing but also a region where horses are popular in various sports like polo and equestrianism, as well as pets. Therefore, I assumed that the care and treatment approaches for horses might be diverse. I engaged in IVEP in Edinburgh because I wanted to see firsthand the differences between Japan and the UK in terms of horse-related culture and horse clinical practices. In this report, I would like to focus on the horse-related training content.

Exmoor Pony Farm

I had the opportunity to visit an Exmoor pony farm, which is a part of Edinburgh University Exmoor Pony Trekking, a student-led non-profit organization dedicated to caring for the wellbeing and livelihood of their Exmoor ponies. The Exmoor pony is a native breed from the Exmoor region in southern England and is the oldest purebred horse in the UK. During World War II, their population drastically decreased due to their use as food, and shortly after the war, only 50 ponies remained. However, after being designated as an endangered species and due to conservation efforts, their population has now recovered to about 4,000. It is said that the Exmoor pony has retained its form since Roman times and has several unique features that help it survive the harsh English winters. For example, in winter, they develop a two-layered coat: the inner layer consists of fine, moisture-retentive hair, and the outer layer is rough and oily, providing waterproofing. This allows them to stay dry and maintain their body temperature even when it snows. Additionally, their heads are slightly larger than those of other ponies, which is thought to help warm the air as it passes through their long nasal passages before reaching the lungs. I also found it interesting that their digestive systems are adapted to the vegetation in the cold climate of Exmoor, allowing them to digest plants like gorse, which other livestock cannot.

At the University of Edinburgh's vet studies, there are various extracurricular activities aimed at outreach-ing, such as the Exmoor Pony Trekking Society, wildlife conservation clubs, and student groups that provide advice to homeless people in Edinburgh who own pets. This left a strong impression on me.



Fig 1. the Exmoor pony/ They are popular as riding horses for children.

The Dick Vet Equine Hospital/Practice

William Dick, who is the founder of The Royal (Dick) School of Veterinary Studies, commonly known as "Dick Vet", was born to a blacksmith father who specialized in horseshoes. It is said that he became interested in equine medicine through his close association with horses from an early age and eventually aspired to become a veterinarian. With such roots in equine medicine, Dick Vet continues to serve as a leading equine medical institution in Scotland. I was surprised to learn that there is not only hoof care service in collaboration with farriers and dental treatments, but also the equine behavior services that provide training or guidance to resolve behavioral problems in horses. This time, I had the opportunity to observe treatments at the hospital. The facility includes an outdoor arena for lameness diagnosis, a CT scanner, an inpatient stable, an X-ray facility, multiple consultation rooms, and an indoor exercise area, all within the premises. This well-equipped environment allowed for multiple cases to be treated simultaneously, giving students exposure to a significantly higher number of cases compared to clinics in Japan. During my short observation, I witnessed the treatment of fungal sinusitis with a trephine, the diagnosis of laryngeal hemiplegia using ultrasound instead of an endoscope, and the diagnosis of proximal suspensory ligament desmitis. In the case of a horse with lameness caused by proximal suspensory ligament desmitis, X-ray imaging revealed inflammation in the joint surface. I was particularly impressed when the horse's owner discussed with the veterinarian whether to proceed with surgery for their 17-year-old horse, which had excelled in dressage and cross-country competitions. The owner said, "Considering her age of 17, I think she should retire peacefully without aggressive treatment, but she loves cross-country. If we take that away from her, she won't be happy. Even if she can't compete at a high level again, I want to do whatever I can to help her return to competition." In Japan, I observed that the decision to treat horses in clinics is often based on their economic potential, with surgery only being considered for cases with a high chance of full recovery. In the UK, however, many owners of pet horses opt for surgery and treatment even when full recovery is not expected, leading to more diverse treatment options. I realized that this attitude has contributed to the development of more advanced medical services.

In addition to equine-related activities, the Edinburgh study trip offered a variety of experiences, including a participation in the conference themed "Sustainable Futures for Veterinary Science", visits to the university's veterinary hospital, a pig research farm, the Large Animal Research and Imaging facility (LARIF), Scottish traditional dance, Ceilidh, for social activity, nature experiences in the Aviemore area, and a backyard tour of the Highland Wildlife Park. These experiences exposed me to new perspectives and values, which I hope to use in considering how I can contribute to society as a veterinarian in the future. I would like to express my gratitude to everyone involved in this program.



Fig 2. William Dick holding a horse hoof

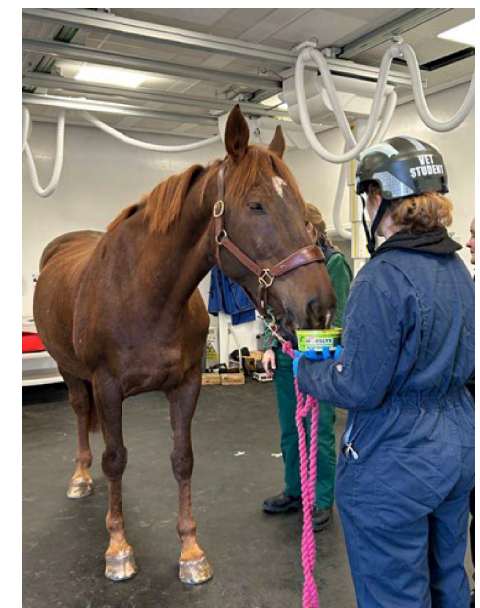


Fig 3. A horse staying calm during treatment by licking a palatable supplement

The University of Edinburgh

Sachika IWATA, 4th year

In this IVEP program, I realized that it is important to take actions on my own. I would like to introduce two situations in which I particularly felt this.

The first was, when I visited Highland Wildlife Park, the comment by the zoo's education staff who guided us around. I had known that zoos in Europe keep animals closer to their natural habitat than zoos in Japan, and that they give more consideration to animal welfare. However, when I visited the zoo in person, I realized that animal welfare is being improved in a very wide range of aspects. In terms of the facility, the zoo has been able to secure a large breeding space by limiting the number of animal species to be kept, and to select animal species suited to the climate in a breeding environment that makes the most of the original topography. On the other hand, in terms of daily practice, various efforts were made to stimulate the animals' instincts. For example, in terms of feeding management, not only nutritional balance was taken into consideration, but also a daily food was planned in detail for a month. Those things prevent the animals from being bored with the same food. In addition, in the snow leopard rearing environment, it was considered to stimulate their natural instincts. For example, the Himalayan tahr, the prey to be captured, was released into the leopards' facility, while they were isolated in a separate area, so that they could sense the presence of prey. And their food was intentionally dragged to a different spot each day before being hidden.

The education officer who guided us around the zoo repeatedly asked us how Japanese zoos are different from Highland Wildlife Park and what they should be like.



In Japan, the Japan Association of Zoos and Aquariums (JAZA) lists four roles of zoos: species conservation, education, research and survey, and recreation. While the three parts other than recreation should be important, I believed that the recreation part should not be lacking in consider of real financial situations zoos in Japan. Therefore, when he asked me what role of zoos in Japan is, I answered "recreation." but he admonished that that was not true. He said, until 30 or 40 years ago, zoos in the U.K. were kept animals in environments like those in Japan today. However, there had been a paradigm shift in what zoos should be like, spreading of animal welfare concept. He also said that if we want to change the status quo of zoos in Japan, we should make use of our position as veterinary students to speak out.

While I was impressed by the difference between zoos in the U.K. and Japan during my visit, I thought that it would be quite difficult to realize a zoo environment that takes zoo welfare into consideration in Japan, even if it is obvious that such an environment is better. That is because the roles that the public expects zoos to play are different in Japan and in the U.K. However, as I listened to the comment by the officer, I became more convinced that even in the U.K., the situation was able to change because there was a change in public opinion at some point, and that our generation should be the one to make a change.

The second was a lecture on "Sustainability in the Laboratory" at the Conference Day at the University of Edinburgh. At the Royal (Dick) school of Veterinary Studies, there is a group concentrated on sustainability, made up of researchers from different position, and there are a number of initiatives underway to reduce plastic waste in the laboratory. The first step was to examine all plastic products used in the university to see if they could be substituted for non-plastic products and how they could be recycled. If neither of these was possible, they would consider using the current plastic products repeatedly. They also examined how to prevent contamination so as not to lose the credibility of the research in every detail.

I had just started attending the laboratory and was surprised at the amount of plastic waste we make during experiments and wondered why no one was concerned about it. While listening to the lecture, I was impressed but felt that as A student I could not take any action and wished that Hokkaido University had a group of researchers like the University of Edinburgh. At a social gathering that evening, I shared this thought with a professor at the University of Edinburgh, who replied, "Students are also members of the university, and you should be able to change the entire university by expressing your opinions. If you feel that is a problem, you should act." I was very surprised by her words.

Through this program, including the two experiences I mentioned above, I realized that there are many things in my daily life that I think about but do not take actions. At the same time, I was inspired by the students of the same age that I met in Edinburgh, who not only can take action in their daily classes and clubs but are also able to make major decisions such as their own career paths by themselves. I felt that in my future life as a student and later as a veterinarian, I need to be conscious of the need to not only think and have doubts about status quo, but also to actually take action.

In concluding this report, I would like to express my gratitude. I was able to spend the most fulfilling time in a short period of time thanks to the help of many people, including Mr. Yanagawa and Mr. Yamazaki who accompanied us, teachers and students from the University of Edinburgh who took care of us there, Ms. Kawashima, who was in charge of IVEP, and so on. I would like to express my deepest gratitude to all of them and sincerely hope that this program will continue for many years to come.



IVEP

Hokkaido University-The University of Edinburgh International Vet Exchange Program 2024 Achieving Global Standards of Excellence in Veterinary Education



Student Report from
Royal (Dick) School of
Veterinary Medicine in Edinburgh,
August 16th to 22nd

From The University of Edinburgh to Hokkaido Uni

Tan Xuan Ni, 3rd year

It was such an honour to go on an exchange with Hokkaido University vet students, and to learn from the various veterinarians and professionals in the animal welfare and conservation scene in Hokkaido. Professor Tsubota, whom is also a professor of wildlife conservation, has pioneered the wildlife conservation movement in Hokkaido, and has taught and raised many vets who are enthusiastic and knowledgeable in the field of conservation that they are passionate about.

The spirit of education was very strong, as evidenced by our very first day's activities. We started the day off strong with a conference, getting to learn from the research of professors from Hokkaido University, Obihiro University of Agriculture and Veterinary Medicine, the University of Edinburgh, and even from University of Melbourne. Other than professors, we also had presentations from both Hokkaido University and University of Edinburgh students. This was exciting as we got to learn about the breadth of the students involvement in research. Shizuku's research regarding Pet Euthanasia was especially eye opening as I had not expected the statistics that she had provided. Other than students, we have also learnt about other research projects, such as the IIZC's research on sandflies and Leishmania, as well as their research on learning more about the viruses that causes fever and general malaise.

Not only do we have activities that are academically based, we also had a lot of learning that was hands on and in person. For example, we visited Asahiyama Zoo, and got to learn from behind the scenes, how the zoo vets handle and treat the wide variety of animals in their care. We also visited the Salmon museum, who gave us a lovely in person lesson on aquatic fish anatomy. We had also visited the Wildlife Center, whose vets are deeply involved in wildlife (especially wild birds) rehabilitation, care and research to prevent further harm.

Not only did we visit the veterinary side of wildlife conservation, we had also visited many sites that do more conservation education for the general public. This included a whale watching ride, which we managed to see many seabirds, a sperm whale, and copious porpoises, learning their diving habits, migration patterns and sizes! We had also gone to Shiretoko nature park, where we learnt about bear and deer management from the park rangers, understanding from them how they walk the fine line between conservation, population management, public education and public safety.

Throughout the trip, the students had really forged a deep connection, and respect for each other's culture. I was also able to learn more about Japanese culture and food, which I have always been a big fan of. This was a wonderful trip that would always bring good memories, and I would not hesitate to recommend someone to come on this journey.



From The University of Edinburgh to Hokkaido Uni

Yuhui Yang, 3rd year

Hokkaido is famous for its beautiful wilderness and leading agriculture. Due to my strong interest in wildlife conservation and Japanese culture, I attended the Hokkaido study tour in August. Our group travelled around Hokkaido and visited a range of places – zoo, national park, wildlife conservation centre, universities, etc. Below are my detailed reflections on this exchange experience.

We have appreciated that the profession of veterinarian is very versatile. They can work in small animal hospitals to help pets recover from illness, or practice in large animal settings to ensure food hygiene. They can also become wildlife vets to help with conservation, or do research in laboratories to prevent infectious disease outbreaks. Thus, I became more motivated to study and felt confident about my career prospects.

Besides scientific research and routine veterinary care, successful conservation also needs consistent public education. At Asahiyama Zoo, the feeding schedule is shown to the public, so that people can see how certain species are being fed. During the whale watching at Rausu, Shiretoko, a staff on the deck held a brochure and introduced basic information about different whales. When visiting Shiretoko Goko Lakes, we watched a detailed induction video about how to keep safe in this habitat of many wild animals. There were also cards available in several languages telling a tragedy of a fed bear being killed, to let people know why we should not feed bears and stay away from them once encounter. At Shibetsu Salmon Park, there are sinks where visitors can touch some sea creatures, like an experience of letting sturgeons (without teeth) mouth on people's fingers. These opportunities boost people's knowledge about wildlife, as well as improve their awareness of protecting the environment and living in harmony with animals.

It was also interesting to discover the influence of culture on veterinary education and practice. For instance, on the conference day, a student talked about the different attitudes in Japan and Western Countries towards pet euthanasia. In Western countries, owners choose to euthanize their seriously ill pets to end their pain, but people in Japan prefer their pets to have longevity and die naturally. Thus, in my opinion, when trying to learn about management strategies from other countries, it is important to take measures according to domestic conditions.

In the end, I would like to thank the staff and students at Hokkaido University for organizing and carrying out this study tour, as well as the demonstrators for their brilliant job when we visited their workplaces. Being impressed by your dedication and consideration, I learned a lot about how to treat people kindly and how to host social events smoothly. I look forward to seeing you again in my future veterinary journey!

Picture 1. Student Conference
(Photo courtesy of IVEP)



Picture 2. Whales watching in Rausu, Shiretoko (Photocourtesy of Kai Yin Tang)

From The University of Edinburgh to Hokkaido Uni

Taiga Onishi, 3rd year

Overall, the exchange program was nothing but excellent. Beginning from the joint conference, where a few of our students from the University of Edinburgh and our counterparts from the Hokkaido University presented their research or interest. They were all carefully curated and it was lovely to see colleagues across the globe sharing such a profound passion towards veterinary medicine. While the conference was the academic highlight of the day, the day could not have been better without the welcoming atmosphere of the university staff and students. I was frankly perplexed by how similar vet students are; you could not underestimate how such a simple conversation starter like "What is your favourite animal and why" can bring engagement and joy in the conversation, uniting students immediately.

The next highlight of the tour was the Asahiyama Zoo. We were greeted by the zoo veterinarian who has also visited Edinburgh as a part of the exchange program in the past, and was shown the backstage of zoo enclosures, notably the veterinary clinic and the polar bear enclosure. Seeing the result of husbandry training of the largest land predator was nothing but phenomenal. Although, with all honesty, seeing the large paw of such a beautiful creature ignited a strong urge to pet first before anything else.

My favourite of the tour was the visit to the Kushiro-Shitsugen Wildlife Center, where we were given a wonderful lecture on avian — predominantly raptor — conservation efforts in Hokkaido. The process of rescue, rehabilitation, and prevention of accidents, as well as the struggles involved in the conservation of migrating birds, Being able to learn first-hand experiences and challenges from the professionals in the field had been largely inspiring. Given my pre-existing personal interest in the field of avian conservation and research, such knowledge gained is simply irreplaceable and strengthened my passion for the field. As a side note, with a personal background of myself growing up in the far east of Russia, it was fascinating to see the signs of migration of species I have seen and remembered from my early youth from the perspective of wildlife conservation.

Needless to say, every aspect of the exchange program was unimaginably enriching. However, the highlight that I must express is the connection I have established with the students from Hokkaido University. I have not imagined making such invaluable friendships in a short trip of a week, and there is nothing more valuable than building such relationships with colleagues sharing the same passion. All in all, I cannot express my gratitude towards Hokkaido University, their staff, and our new friends that we have made of such an amazing experience. I am excited to see how our paths cross in the future!



From The University of Edinburgh to Hokkaido Uni

Ayley Thomson, 3rd year

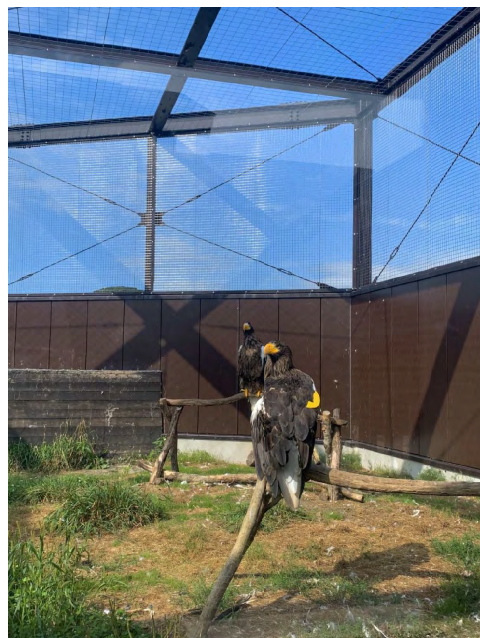
This year I took part in the International Vet exchange Programme (IVEP) at Hokkaido University. The programme started with a conference day focused on the topics of one health and equine diseases. This was a great start to the week as we got to meet everyone involved in the programme while learning about important topics! The Hokkaido University veterinary teaching hospital also gave us a tour of all the facilities they have available to their clients.

The next day we visited Asahiyama zoological park and wildlife centre. While at the zoo we listened to zookeepers talk about the animals at the facility before getting a tour of the veterinary hospital. In the veterinary hospital, we were able to see how anesthetic is delivered to animals and got to practice blow darting! Our next activity was whale and bird watching in Shiretoko Rausu! We were lucky enough to see a sperm whale! This was such a special experience to have.

After getting to see some marine wildlife we then moved onto learning about bear management in Shiretoko National Park. We learned about how the bears interact with their environment and how to safely be in the same habitat as a bear. This was followed by a walk around Shiretoko-goko Lakes. Then we headed to the Shibetsu salmon park to get some more information about the salmon in Hokkaido and they even gave us a demonstration of a dissection! This was very interesting as we got to see all the vital parts of the salmon and how these are relevant to their everyday life underwater!

The next stop of the trip was to Kushiroshitsugen Wildlife centre to learn about the work they do with raptors – their conservation and medical activities. We were able to see the Steller Sea eagles they have helped and how they were able to do this. They also showed us the work they are doing to help minimize the road traffic and electrical accidents that often happen to these birds. We travelled to Obihiro to visit Obihiro University of Agriculture and Veterinary Medicine. Here we were shown around the equine stables, surgical units, and farm animal operation rooms. They also have a dairy farm on campus! We got a tour and it was amazing to see these facilities available to the students who study at this University.

Our final day was spent at the International Institute for Zoonosis Control back at Hokkaido University. We listened to some amazing talks about the studies carried out at this research centre! Overall, this trip allowed me to have a one-of-a-kind educational experience, meet the most amazing people and make new friends!



From The University of Edinburgh to Hokkaido Uni

Kai Yin Tang, 3rd year

Attending this International Vet Exchange Programme (IVEP) with Hokkaido University was the best decision I have made in my veterinary education so far. I have always been interested in how veterinary medicine is practiced in different countries, and coming from an Environmental Biology background, this was the perfect programme for me. It was holistic, touching not only on small animals, farm animals, equine, but also wildlife and zoo animals of a wide variety, with good balance between lectures and activities. Over the 7 days, we were blessed with the opportunity to share our research at a conference and attend field trips visiting numerous facilities to discuss clinical cases, husbandry and management, animal welfare, and conservation and one health with experts in the field.

We visited the Hokkaido University Veterinary Teaching Hospital and International Institute of Zoonosis Control and Obihiro University Large Animal Hospital and Farms to see the teaching curriculum and facilities available for research, education and clinical practice for small and large animals and infectious diseases. It was impressive learning how involved the faculty was in grooming their students and the extensive global network that the university has established over the years in research and clinical work. I enjoyed seeing how farm operations differed in Japan and was elated to see and pat the Dosanko (Hokkaido Horse). It was also eye-opening how different (and similar) veterinary medicine is practiced in another country on the other side of the world, being influenced by multiple factors such as climate and natural resources, history, consumer demand, culture and beliefs, and human development. I was surprised to learn that around 70% of the horses in Japan were thoroughbred due to the huge horseracing market in Japan, that through good selective breeding practices in the past, temperament of cattle is not an issue for farmers, that euthanasia is currently not well-known nor received by the public and even amongst veterinary surgeons, and that eagles significantly injured by wind turbines and electric lines can be kept in captivity not only for educational purposes but also to aid in non-invasive research to help improve management interventions.

Furthermore, it was exciting seeing and learning about the rich biodiversity in Hokkaido and heartening to hear of the efforts made to conserve it and allow our coexistence with nature. We visited Asahiyama Zoo, Shiretoko National Park, Shibetsu Salmon Park, Kushiro Wetland Conservation Centre, Institute for Raptor Biomedicine Japan, and even did marine life watching at Rausu! It was my first time seeing native animals such as the Ezo Brown Bear, Red-Crowned Crane, Blakiston's Fish Owl, Stellar's Sea Eagle, White-tailed Sea Eagle, Dall's Porpoise and the Sperm Whale! It was so captivating and fascinating, making me reappraise the biodiversity we have on this Earth and reaffirm my love and passion for wildlife conservation. I was especially delighted to learn first-hand the various roles that veterinarians can be involved in in zoo and wildlife medicine, such as rehabilitation and repatriation, reproduction and breeding, infectious diseases, research, welfare, and education. Learning about blow-darting of animals for sedation, training of Polar Bears to be amenable to conscious blood draw, publicity efforts to consume game meat to curb exploding deer populations and public education and research efforts to prevent raptor injuries and human-brown bear conflict were some memorable highlights. It reminded me of how our actions can have lasting impact on the ecosystem and reinforced in me the importance of holistic understanding of the environment and animal species that we work with in order to ensure the best outcomes and prospects for them in the future.

Most of all, I thoroughly enjoyed myself amongst the company of all the Japanese staff and students involved, as well as Dr. Lee from Melbourne. The delicious meals and onsens were just the icing on the cake. Everyone welcomed us with open arms, teaching us so many interesting aspects of Japanese tradition and culture and local Hokkaido delights, sharing so much of their passion for veterinary medicine and conservation with us, meticulously planning the trip for us, and always making sure we were fine. The pride and love for the work they do and their beautiful personalities just shone through. It was wholesome and heartwarming to spend time together even in the evenings during our free time playing games, chatting, bonding and building long-lasting friendships and connections. I would not have wanted my Summer any other way and look forward to hosting the Hokkaido students in Edinburgh in September!

