IVEP

Hokkaido University-The University of Zambia

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
University of Zambia
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The University of Zambia

Ryota TSUTSUI, 5th year

During my stay in Zambia, I was able to learn various things. The most impressive thing for me was the virological practice on rabies. Rabies was the topic I had been most eager to learn in Zambia since I decided to join this program, and through the practical sessions I was able to gain new knowledge and perspectives about rabies.

In the practice, we conducted diagnostic exercises using brain samples from a dog infected with rabies in Zambia. I was first surprised by the diagnostic methods themselves, which involved using Lateral Flow Device (LFD) for quick diagnosis and real-time PCR to confirm the diagnosis. I did not know at all that the diagnostic kit like LFD existed for rabies, and I was even more surprised to learn that it had been developed in Japan. I had studied rabies many times in lectures in Japan, but I realized that, since rabies no longer occurs in Japan, I could not truly understand what kinds of measures were being carried out in countries where the disease is still present. On another day of the program at the animal hospital in UNZA, I also had the opportunity to see a cat hospitalized for rabies, which enabled me to feel much more familiar with rabies.

Figure 1 Virological practice.

Regarding rabies, one of the things I was most curious about was what kinds of countermeasures are taken in terms of legislation and vaccination, how effective these measures are, and whether there is any cooperative effort with neighboring countries or across Africa as a whole. When I tried to get information from Japan, I mainly came across information suggesting that a lack of vaccines and insufficient education which resulted from poverty were the primary reasons for the prevalence of rabies. However, I was not entirely convinced, and I wanted to see the reality for myself.

I found that vaccines for both dogs and humans are available at prices that are not too high, and that annual vaccination of owned dogs is legally required. However, the vaccination rate is not so high and stray dogs were still commonly seen while we were driving in the city. I thought that perhaps these situations made it difficult to eradicate rabies. I also learned that LFD was in use in Kenya, but It seemed that neither country was extending its efforts to support rabies control measures in other nations.

I came to understand that the issue is not a shortage of vaccine supply but lack of awareness and knowledge toward vaccination. Also, there are many cases in which owners start to have dogs just as guard dogs rather than companion animals so owners may lack sufficient understanding of rabies prevention. Since such background factors likely differ from country to country, I felt that infectious disease control cannot be addressed through financial measures alone and cultural and educational aspects are equally important.

This practice shifted many of the impressions I had before traveling. At least in terms of diagnostic methods of rabies, I felt that the systems in place were more advanced than those in Japan. In addition, having the chance to see a cat infected with rabies directly also helped me form a more concrete image of the disease, although I only had had an abstract image. Of course, just one experience of seeing an animal infected with rabies will not directly contribute to diagnosis when I work at animal hospital in the future, but it was exactly a rare and valuable experience. It reminded me of the importance of learning through direct observation and hands-on experience.

Moreover, I really enjoyed national parks. They offered breathtaking opportunities to observe many kinds and enormous amounts of wildlife. I was able to see elephants, rhinos, zebras, lions, hippos, crocodiles, buffaloes, impalas, kudus, hyenas and so on. I have never seen all these animals in wild, so I was glad to find them and captivated by the sight of them. I also learned about wildlife conservation and especially, I was able to gain detailed knowledge about elephants. The number of elephants has been increasing and there are a lot of human – wild elephant conflicts. In some other African countries, elephants are culled and used as a source of food in order to reduce their population, and I wondered why culling was not carried out in Zambia. The answer was not that “it is not done,” but rather that “it cannot be done.” Zambia is not able to conduct such culling because the country is a member of CITES.

Figure 2 Elephants in the national park.

In Japan as well, brown bears sometimes attack humans and then they are culled, while at the same time there are a certain number of people opposing such culling. I felt that the situation was partly similar between Zambia and Japan: even if those who are directly affected by the animals wish to take certain measures, those who are not directly affected are opposing the proposals. The most impressing thing for me was that the lecturer repeatedly used the expressions such as “it should be done” or “it must be done.” I realized that it is difficult to take truly effective measures while listening to the opinions of both supporters and opponents. Therefore, such situations may be the time when veterinarians should play an active role as professionals of animals, I think.

My stay in the national park was not only enjoyable but also deeply meaningful because I was able to learn about conservation efforts as well as seeing many animals. Although I could not see every species I hoped to find, the experience of searching for wild animals itself was extremely exciting and fascinating.

Through this program, I realized that I had had little information about Africa and that I imagine Africa mostly by assumptions without enough knowledge. Indeed, I found Zambia was a wonderful country, where people greeted us warmly everywhere even if we were strangers and center of the city was well developed with many excellent restaurants, so the food was great. Visiting JICA and the Japan Overseas Cooperation Volunteers also deepened my interest in their work and inspired me to think more broadly about the various paths I could take as a veterinarian in the future.

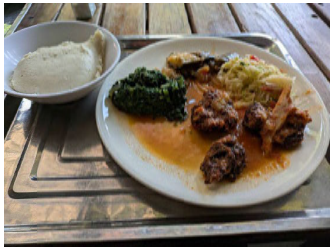


Figure 3 Zambian food (Nshima and Game meat)

Finally, I would like to thank the professors in UNZA who provided wonderful lectures and practical training, and all those who supported us during our stay. Thanks to everyone’s support, this program became an extremely precious experience for me.

The University of Zambia

Taku OTSU, 5th year

The reason why I applied IVEP is that I'm so curious about the interaction between human and animals in Zambia. In Africa, the number of wildlife is higher than one in Japan, so I thought there would be many conflicts among them. I wanted to know what kind of feeling local people have, then what kind of problem happens there and how they make efforts to avoid conflicts. Also, I'm interested in relationships between human and animals such as domestic and pet.

From the lectures in UNZA, I learned a lot about my curiosity. Especially in bacteriology class, I realized unique action, culture and situations in Zambia can be cause of zoonosis. The most interesting account what I learned in the class is the diseases related to domestics because the situation is totally different from Japan. Beyond the lecture, I saw so many domestics walk around freely while driving near cities. This scene shows me how close relationships between humans and animals are here and makes me realize what I learned in class. In terms of epidemiology, we should separate the habitat areas of human and domestics, but I didn't think we should do it. Of course, we must prohibit some actions related to zoonosis, but I also thought this close relationships are the culture here and should be respected in some part. I don't know true or lie, but some people said the meat in Zambia is delicious because they can move freely. Exactly, I thought the meat was delicious and I like the boldness of people in Zambia.

The disease among wildlife is also interesting for me. One of the most impressive slide shows that tsetse fly transmits Anthrax among them. This way of transmission seems unique in Africa where many kinds of wildlife exist. I also learned that this transmission reaches carnivore or scavenger along with the food web. I worried about the impact on carnivore because their population is lower than that of herbivores. If once it happens, they could be extinct. The professor told me that they conduct surveillance research and grasp the population dynamics to avoid it. I realized that it is important to detect before it becomes irreversible. I also realized that my way of thinking gives weight to pre-actions, but it is also useful that let it be and when it happens, we try to stop it. This notice was meaningful for me.

I learned about the issues related to wildlife in Lower Zambezi national park visiting CLZ, an NPO. This NPO is run by local people mainly and they do educate the people in GMA which surrounds the national park and arrest pouching. The staff told us about their activities and their progress. It seems important that getting local people involved in conservation to protect wildlife. Before visiting Zambia, I thought it would be hardest part for us to make local people who are annoyed by wildlife realize the preciousness of the wildlife and the importance of conservation. One of surprising things I learned from CLZ is that they also educate local people how to get along with wildlife. I thought local people must know wildlife in details and conflicts must happen despite their effort to avoid it. However, the stuff told me they don't know the way, so they also need to educate how to do it. The real situation is totally different from my image, so I was very impressed to know that local people do conservation by themselves and thanks to their activities local people's way of thinking is gradually changing. I also learned that foreign countries are getting involved in poaching. We should conserve wildlife by cooperating with all over the world, but other countries that are not related to Africa interrupt conservation. This situation is so annoying. To punish this foolish activity, we have treaty. However, this could also be problematic. In Zambia, there are too many elephants to get along well, but elephant is registered as CITES 1 of Washington convention, so we cannot do anything to address the issues. Thorough visiting CLZ, I realized some situations are better and other parts are more complicated than I expected.

While these two weeks in Zambia, I had many opportunities to talk with people in Zambia, and I also learned many things from the conversation. Not everyone in Zambia is familiar with wildlife. They often eat game meat for special days, and they like the flavor. Some of them like wildlife and others not. These things may be common sense or just a matter we can know from the internet. However, I realized in detail by talking in person and trying by myself. Even in Japan, we are not familiar with thought of not veterinarians, so this experience to talk with resident in Zambia about veterinary stuff was so precious for me.

Through these experiences in Zambia, I notice the importance of thinking from several perspective. One issue is not caused by only one problem, and we can solve the problem in several ways. I also realized how wonderful relationship with animals are in Zambia. The situation related animals are totally different from Japan, so I can notice good point of each other. Moreover, it is interesting that Japan and Zambia have same problem despite they are in different situation. This acquiring knowledge can only be achieved by visiting actual places. So, if there were some students who are really interested in Zambia or Africa, I want them to try IVEP. This would be good experience for you.

Finally, I appreciate Prof. Ishizuka, assistant Prof Maezono, Doya san and Kawashima san for management and arrangements our schedules. Thanks to you, we could concentrate on our studies and enjoy staying without any unconscious. Also, I'm grateful to Prof. Victor C. Zulu, Prof. Kabemba E. Mwape, every teacher in UNZA and every driver I saw for accepting us and giving wonderful opportunities to learn. Thanks to you, we could learn many things that we cannot learn in other countries. Thanks Zambia!!

The University of Zambia

Shogo IZU, 4th year

During my study abroad experience in Zambia, I had the unique opportunity to compare the practices, challenges, and philosophies of veterinary medicine in two very different contexts: Japan and Zambia. This experience was not only educational in a technical sense, but also eye-opening culturally and socially. It allowed me to see that veterinary medicine is shaped not only by scientific knowledge but also by economic realities, cultural attitudes, and national priorities. In reflecting on what I observed, I have organized my impressions into several areas: small animal practice, large animal practice, wildlife conservation, fisheries, and the influence of financial constraints. Together, these themes illustrate the contrasts and connections between the two systems and show how veterinary knowledge can remain valuable even under severe limitations.

In the field of small animal practice, the difference in attitudes toward pets was immediately striking. In Japan, pets are typically regarded as family members, with owners investing significant emotional and financial resources into their care. Veterinary clinics in Japan are highly organized, sterile environments, and the culture strongly emphasizes hygiene, efficiency, and respect for both patients and their owners. By contrast, in Zambia, I observed a much more utilitarian view of pets. Some owners valued their pets, but many treated them more casually, sometimes even harshly. I was told of cases where people accidentally ran over their own dogs with cars and then simply brought them to the animal hospital. Such stories illustrated to me a gap in cultural understanding of animal welfare. Inside the hospital, I noticed that hygiene standards were inconsistent. Instruments were not always cleaned or stored properly, and disinfectants were sometimes misused, for example, people drank the alcohol meant for sterilization. These differences underscored how cultural norms shape professional practices, even within the same discipline.

Large animal practice offered another striking contrast. In Japan, many veterinary students choose to focus on small animals or enter corporate roles in fields like pharmaceuticals or food safety. At the University of Zambia (UNZA), however, many students intend to become cattle veterinarians. This reflects Zambia's economic and agricultural landscape, where livestock is central to livelihoods. Zambia also faces diseases unfamiliar to Japan, such as certain parasites and infectious conditions. Preventive methods include practices like medicated baths for cattle, which are rarely used in Japan. While Zambia deals with more aggressive and widespread diseases, the facilities supporting disease control were often inadequate. The slaughterhouse I visited, for instance, had windows left open and no real system to prevent outsiders from entering without disinfection. Such lapses would be unacceptable in Japan, where strict regulations govern hygiene. These observations reminded me of the close connection between infrastructure, resources, and public health outcomes.

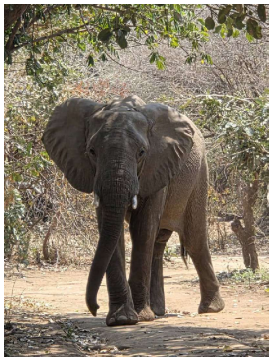
Wildlife conservation and fisheries provided additional dimensions of comparison. Zambia is home to diverse ecosystems and iconic wildlife species, which require specialized forms of veterinary involvement. One notable practice was the use of police dogs to detect poachers, demonstrating how veterinary knowledge intersects with law enforcement and conservation. In fisheries, the differences were equally telling. Japan, surrounded by oceans, has a long history of fishing and aquaculture, with numerous institutions providing education and training. In contrast, Zambia is landlocked and has very few schools devoted to fisheries. Those who do graduate with such training often take positions at large commercial farms rather than supporting small or medium-sized fisheries. This creates a shortage of skilled professionals in the very areas where they are most needed. It struck me as an example of how geography, education, and economics combine to shape the structure of an entire industry.

Amid all these differences, the factor that impressed me most was the influence of money—or rather, the lack of it. Financial limitations explained why university hospitals struggled with shortages of basic supplies, why slaughterhouse equipment remained broken for long periods, and why even disposable protective clothing and gloves were highly valued despite being reused. In Japan, such shortages would seem unimaginable. Yet in Zambia, they were normal. However, I came to realize that veterinary medicine is not defined solely by expensive equipment or abundant funding. At its heart, it is about applying knowledge wisely and creatively, often in ways that cost little but make a tremendous impact. For example, I observed that at the slaughterhouse, the esophagus and colon were tied off before butchering, exactly as in Japan. This simple procedure prevents contamination and maintains food safety. Likewise, at Lower Zambezi National Park, a guide used a stick to point at a skeleton rather than touching it with his hands. This cautious behavior protects against diseases such as anthrax. I also learned that carcasses of animals suspected of anthrax infection are buried in deep pits to prevent floods from spreading the bacteria during the rainy season. These examples show that effective measures can be implemented even in the absence of financial resources, so long as knowledge is present.

Through these observations, I developed a deeper appreciation for the true value of veterinary medicine. It is not merely a science dependent on technology and money, but a discipline that teaches creativity, adaptation, and problem-solving. Even in contexts like Zambia, where conditions are financially and logistically difficult, veterinary knowledge provides tools for protection and improvement of both animal and human lives. This realization made me respect even more the educational activities of the senior veterinarians working in Zambia. Their efforts directly contribute to building capacity and empowering local communities. I also began to see veterinary education as an essential force in shaping resilient systems that can withstand cultural, financial, and environmental challenges.

In conclusion, my study abroad experience in Zambia not only highlighted the differences between Japanese and Zambian veterinary practices, but also revealed the universal strengths of veterinary knowledge. While financial resources certainly matter, the ingenuity and wisdom embedded in veterinary science allow for practical solutions that transcend economic boundaries. I left Zambia with a renewed sense of respect for the profession and with gratitude to the professors who made the experience possible, both in Japan and Zambia. This journey showed me that veterinary medicine is not just about treating animals; it is also about protecting public health, supporting communities, and fostering international understanding. In every context, regardless of wealth or resources, it remains a vital discipline that teaches us resilience, compassion, and responsibility. (1,043 words)

（Picture 1）"Hello, my neighbor."



（Picture 2）Me and the bone of aardvark

（Picture 3）Malaria

The University of Zambia

Wakaba FURUTA, 5th year

My life and practical training in Zambia were a continuous series of valuable learning experiences that reshaped my perspectives. In this report, I will focus on the observations that left the strongest impression on me, focusing on the connections between veterinary science, public health, and the socioeconomic fabric of a nation.

The most impactful part of my training was the internship at the Kafue slaughterhouse. This facility served as a microcosm of Zambia's challenges. The process began with an ante-mortem inspection of the cattle arriving for slaughter. Veterinarians checked for issues such as inadequate body size, pregnancy, or visible skin lesions. These checks are a critical first line of defense against zoonotic diseases like Foot-and-Mouth Disease (FMD) or Lumpy Skin Disease. Following this inspection, the slaughter and butchering process began. The skin was removed, and the sternum and pelvis were split with heavy, axe-like tools before the internal organs were extracted.

The first thing that surprised me was that almost every part of the animal, including the organs, was sold on-site immediately following evisceration. The intestines, for example, were sold after their contents were simply flushed out with a hose, a cursory process. Organs vital for post-mortem inspection—such as the liver, spleen, kidneys, lungs, and trachea—were incised by inspectors to check for internal abnormalities. I was told by the supervising veterinarian that parasites are frequently found, though I did not observe any on that particular day. This highlights the risk of parasitic zoonoses if inspection is not thorough. It was also memorable when the veterinarian mentioned that the lungs and trachea are considered "very delicious," which made me curious about local culinary practices.

Post-mortem inspection was also crucial. Inspectors observed the size, color, and consistency of lymph nodes and the nature of fluids from cut surfaces. These indicators are essential for detecting systemic diseases. If any signs suggestive of tuberculosis, FMD, or anthrax were suspected, the entire carcass was condemned and destroyed.

What struck me next was the stark difference in fundamental hygiene standards. Many workers operated with their bare hands, without gloves, handling both raw meat and contaminated surfaces. I was particularly shocked to witness someone drinking directly from the same hose that was being used to wash the contents out of the intestines. This act symbolized a different understanding of contamination and disease transmission.

In Japan, the meat processing industry is governed by stringent regulations, often based on HACCP principles. Carcasses are processed while suspended from an automated crane system, minimizing contact with the floor. Internal organ inspections are conducted on designated stainless-steel tables. However, at the Kafue facility, the crane had reportedly been broken for about five years. With no funds available for repair, all butchering, evisceration, and inspection work was done directly on the concrete floor. This contaminated floor posed a massive risk for cross-contamination of the meat. I felt strongly that improving this basic infrastructure—a matter of funding—could significantly reduce the risk of infection and foodborne illness for both the workers and the end consumers.

Additionally, the small animal clinical rotation at the University of Zambia (UNZA) highlighted a major cultural difference in attitudes toward companion animals. This experience complemented the lessons from the slaughterhouse. In Zambia, I learned that cats and owls are sometimes associated with "witchcraft." As a result, they are often feared or despised, and I was told they are even stoned if seen on the street. Consequently, very few people own cats as pets. Dogs, therefore, reportedly make up about 80% of the patients at the veterinary hospital. Most of these dogs are mongrels (mixed-breeds).

Unlike in Japan, where pets are often treated as integral "family members" receiving advanced medical care, the prevailing impression in Zambia was that dogs are kept primarily as guard dogs or simply exist on the periphery of human life. Their value is primarily functional.

This was reinforced by a shocking sight: people selling puppies by the roadside from car windows, alongside vegetables and crafts. The price was around 200 Kwacha (about 1200 JPY). Apparently, it is not uncommon for people to purchase animals in this manner. This unregulated trade signals a profound lack of awareness regarding animal health management. This trade lacks traceability, vaccination history, or deworming. I was told by the UNZA clinicians that most dogs are heavily infested with ticks, leading to a high prevalence of tick-borne diseases such as Babesiosis and Anaplasmosis. Furthermore, the lack of widespread vaccination protocols poses a persistent risk of zoonoses like rabies.

Throughout my time in Zambia, I realized that the issues I observed—in both food safety and animal welfare—were not simply due to "undeveloped systems or culture." These deficiencies are inextricably linked to a lack of resources: funding, technology, infrastructure, and widespread public education. At the root of this lies poverty.

In such circumstances, poor hygiene and improper animal handling practices translate directly into public health risks and economic losses. When meat safety is compromised, it can lead to outbreaks of food poisoning and infectious diseases. This increases the national healthcare burden, reduces labor productivity, and erodes public trust in the food supply. Similarly, the condemnation of a single carcass for a preventable disease represents a devastating financial loss for a small-scale farmer. Furthermore, the low utilization of veterinary services and the prevailing perceptions of pets create a reservoir for zoonotic diseases.

This experience abroad made me strongly realize that the systems, hygiene standards, and animal welfare concepts I took for granted in Japan are by no means universal. They are the product of a foundation built upon decades of economic stability, investment in infrastructure, universal education, and specific cultural developments.

My time in Zambia was an invaluable, humbling opportunity. It forced me to understand firsthand the significant, foundational role that economic systems, cultural norms, and public awareness play in public health, animal welfare, and poverty reduction. A veterinarian's role in such a context is linked to the health and stability of the entire community.

Finally, I would like to express my sincere gratitude to everyone who made the University of Zambia dispatch program possible: the faculty at Hokkaido University, including our supervisors; the staff at IVEP; the dedicated faculty at the University of Zambia; all our hosts at the various training sites; and the fellow students I had the privilege to work with. Thanks to your support, I was able to complete the program safely and gain knowledge and perspective. I will use this experience as a foundation for my future efforts. Thank you very much.

(1086 words)

Visit to the Kafue Slaughterhouse

Commemorative Photo at the National Park

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今回のザンビアでの 2 週間では様々な内容を学ぶことができたが、特に印象に残った授業は狂犬病を扱ったウイルス学の実習だ。狂犬病は渡航前から最も学びたいと思っていたことでもあり、実際に実習を受けて新しく知ることができた部分や考えが変わった部分が多くあった。

図 1 ウイルス学実習

狂犬病の実習では、実際にザンビアで狂犬病に感染した犬の脳サンプルを用いて診断を行う実習をした。まず驚いたのが、迅速診断キット（LFD）とリアルタイム PCR を使って簡易診断と確定診断を行うという診断方法そのものについてだ。狂犬病に対してそのような診断キットが存在することは知らなかったし、それが実は日本で開発されたものだと聞いてさらに衝撃だった。狂犬病についてはもちろん授業でも何度も学習していたが、現在日本には狂犬病が存在しないため、実際に発生国でどのようなことが行われているかについては何も分かっていなかったと実感した。さらに動物病院での実習の日にはちょうど狂犬病の猫が入院しており、狂犬病をかなり身近に感じることができた。

狂犬病関連で最も気になっていたのは、法律やワクチンなどの面でどのような対策が行われていてどの程度効果があるのか、陸続きの周辺国やアフリカ全体との共同の取り組みはあるのかといったことなどだった。日本から自力で調べようとすると、貧困のためにワクチンや教育が不足していることなどが狂犬病蔓延の原因として見つかるが、それが本当なのか疑問に思う所があり実情を確かめてみたいと思っていた。

実際のところ、ワクチンはそれほど高すぎない額で犬用と人用ともに提供されているようだし、飼っている犬への毎年のワクチン接種も法律で定められていた。ただし 100%接種済みとはいかず、車で走行中には普通に野犬も見られたため、そういった面で狂犬病の撲滅はまだ難しいのだろうかと感じた。また、同様の検査キットはケニアでも利用されているが、どちらも他国の狂犬病対策に手を貸すところまでは至っていないようであった。

物資としてのワクチンが足りないというよりは、ワクチン接種に対する意識が足りていなかったり、伴侶動物ではなく単に番犬として飼い始めたためにあまり飼い主の知識がなかったりすることの方が原因として大きいのだと知った。そういった背景は、また別の国に行けば異なるのだろうと思うと興味深く、感染症対策には金銭的な面だけでは不十分で、文化・教育的な面も重要な要因だと感じた。

図 2　国立公園のゾウ

この実習では渡航前と印象が変わった部分も多かったし、少なくとも検査方法に関しては日本よりも体制が進んでいると感じた。実際に狂犬病の猫を見られたことも含め、何となくのイメージしかなかったのがより具体的なイメージを持てるようになった気がする。もちろん、1 回見ただけでそれが将来小動物臨床で働く上で診断などに役に立つかと言われると難しいが、間違いなく貴重な経験であったと思う。実際に見て感じて学ぶことの大切さを実感した。

この 2 週間を通して、アフリカという遠い地の情報は手に入りづらく、何も知らずに想像だけで考えてしまっている部分が多かったと感じた。知り合いでなくても多くの人が気さくに挨拶してくれるような国民性だったり、街の中心部は発展していて美味しい店も多かったりなどとても素敵な場所だった。国立公園まで行けば数多くの野生動物を見ることができ、その壮大さには圧倒され興奮した。見たかった種を全て見られた訳ではないが、探し回っているだけでも十分に楽しく魅力的な時間だった。訪問させて頂いた JICA や協力隊の活動にも興味を持つことができたし、将来どのような獣医師になりたいかを選択肢を広げて考えてみたいと思う。

図 3　シマとバッファロー肉

最後になりますが、引率して頂いた先生方をはじめ、様々な形でお世話になった全ての方に心から感謝申し上げます。皆様のおかげで非常に充実した派遣となりました。

学生氏名：大津 大空（獣医学部 5 年）IVEP ザンビア大学派遣

私はザンビアにおける動物と人との関わりに興味があり IVEP に申し込みました。アフリカは日本に比べ野生動物の数が多いため、その分人と動物の軋轢が多く起こります。その結果人々はどのような感情を動物に対して抱いていて、それがどのような問題に発展しているのか非常に興味がありました。また家畜やペットのような動物に対する認識においても、日本に比べてどのような違いがあるか知りたいと考えていました。

ザンビア大学での講義においては人と動物の関係について多く学ばせて頂きました。特に細菌学の授業は人、家畜と野生動物が関わる感染症について学ぶ中でアフリカ独特の行動、文化や状況が感染症の伝播に関わっていることを学びました。特に家畜が関与している感染症については日本と状況が全く異なっており興味深く感じました。講義外で移動中に家畜が街中を自由に移動している様子を幾度と無く見る機会があり、人と家畜の距離が近いことを実感し、座学で学んだ内容を身を持って体感できた貴重な経験でした。もし感染症を防ぐという観点から言えば家畜を人や野生動物の居住エリアから除くのがベストではありますが、実際に見てみるとそこまで徹底する必要はないのではないかと思うようになりました。もちろんある特定の行動は辞めるよう啓蒙する必要は感じましたが、この家畜との距離感がこの土地における文化であり尊重されるべきものだと感じたためです。嘘か本当かはわかりませんがザンビアの家畜は自由に動き回れるから美味しいと言っている方がいました。確かに食べてみると美味しい気がするので面白いなと思います。

野生動物に関することは lower zambezi 国立公園で活動する CLZ という NPO を訪れることで学ぶことができました。この NPO は現地の人を中心に運営されており、GMA と呼ばれる国立公園周辺地域の村での啓蒙教育活動や密猟の摘発を行なっていること、またその成果が徐々に出てきていることを教えて頂きました。野生動物保全においてはその地域の人を如何に巻き込むかが重要であり難しい点でもあると思います。アフリカの野生動物は世界から見ればとても貴重なものですが、現地の人がそのことを理解することは難しいのではないか、野生動物から多くの不利益を被っている人たちを保全に巻き込むことは不可能なのではと派遣以前は考えていました。そのため現地の人によって保全活動が行われていること、さらにこの活動によって地域住民の考え方が徐々に変化していることは私がアフリカに来る以前に考えていたものと大きく異なっており印象的でした。

ザンビアで 2 週間近く過ごす中で多くの現地の人と話す機会があり、その些細な会話の中からも大きな学びがありました。ザンビア人全員が野生動物との関わりが頻繁にあるわけではないこと、ゲームミートを頻繁に食べていること、野生動物が好きな人も好きではない人もいることなど、言われてみれば当たり前なことやネット上でも知ることのできることでも座学で学んだ内容や自分が実際に経験したことと結びつけることでより深く理解できたと思います。こういった実際的な学びは現地に行くことでしか得ることのできないものです。ぜひザンビアやアフリカに興味がある学生には挑戦して欲しいと思います。

最後に石塚先生、前園先生、川島さん、銅谷さん、旅程の調整やアレンジメント等をありがとうございました。皆様のおかげで一切の不安なく勉学に集中することができました。ズール先生、カベンバ先生はじめザンビア大学の先生方、ドライバーの皆さん私たちを受け入れ貴重な授業・実習の機会を提供して頂き本当にありがとうございました。皆様のおかげで本当に貴重な経験をし、多くのことを学ぶことができました。この経験を糧に世界で活躍できる獣医師を目指していきます。

学生氏名：伊豆 匠吾（獣医学部４年）IVEP ザンビア大学派遣

私は、今回のザンビア留学で、日本とザンビアの獣医療には様々な違いがあることを体感した。

まず、小動物臨床に関する違いについて述べる。最も印象的だったのは、ペットに対する態度の違いだ。日本人と同様のペット観を持つ人もいるが、多くは日本人より雑な扱いに思えた。大学の動物病院で働く方によると、ザンビア人の中には自分の車で犬を轢いておいて、病院に連れて来る人がいるようだ。家の中で大切にペットを飼う日本人とは大違いだ。院内では、衛生観念や整理整頓に関する考え方が異なると感じた。アルコール除菌のアルコールを飲む人がいる、使用した器具を片付けない人がいる、など文化の差が垣間見えた。

次に、大動物臨床に関する違いについて述べる。日本の獣医大学では多くの獣医学生が小動物臨床や企業に進むが、UNZA の獣医学生はほとんどが牛の獣医になるそうだ。疾病対策に目を向けると、ザンビアは、日本にいない寄生虫や日本にない感染症の対策をしなければならない。今回は残念ながら見学することができなかったが、薬浴は日本ではあまり見られない感染症対策の１つである。日本よりも凶悪な感染症に対処しなければならない一方で、見学させていただいた屠畜場の設備は、窓が開けっ放しで部外者が消毒なしで誰でも入れるなど、衛生的に不十分だった。

他にも、野生動物保護や漁業に関しても違いが見られた。例えば、野生動物保護では密猟者を見つけるために警察犬が用いられていた。漁業に関しては、漁業を学ぶことができる学校が少ないことを学んだ。ザンビアは内陸国であるため、四方を海に囲まれた日本と比べるのは酷なことかもしれない。しかし、その少ないザンビアの漁業を学べる学校で教育を受けた人は、卒業後、大農場に就職してしまう。そのため、中小規模の漁場では高度な人材が不足するという問題が発生しているようだ。

これら日本とザンビアの獣医療の差異の中で、私が注目した違いは金銭に起因する差異だ。例えば、大学の動物病院における物資は不足していたし、屠畜場の設備は壊れたまま放置されていた。それらの理由はお金がないからであった。実際、使い捨てであるはずの防護服やグローブは、たとえ使った後でも欲しいと言われ、ありがたがられた。

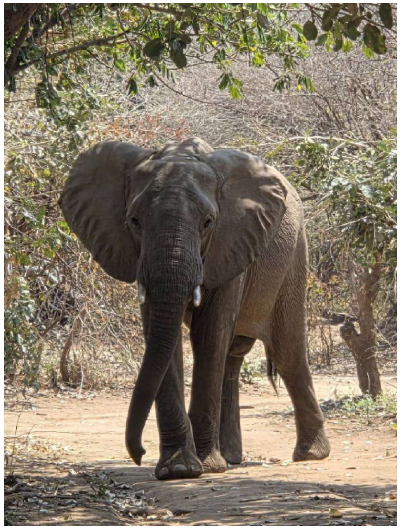
しかし、ここで私はお金がある日本がすごくて、ザンビアがだめだという話をしたい訳ではない。むしろ、獣医療が教えてくれる知恵や工夫はお金をかけずして、大きな効果をもたらしうる素晴らしいものであると再認識した。

例えば、屠畜場では、日本における屠畜場と同様、食道の先と結腸の終わりをきちんと結紮していた。この操作は、腸管内容物があふれるのを防ぐため、食肉を衛生的に保つことができる。また、ローワーザンベジ国立公園では、ガイドさんが園内で白骨化した死体を紹介する時、直接触れること無く、少し遠くの木の棒を使って説明をしてくれた。この行動によって、炭疽を始めとする感染症から身を守ることができる。他にも、炭疽によって死んでしまった可能性のある野生動物は深い穴を掘って埋めるそうだ。この処置は、雨季に洪水が炭疽菌を広げてしまうことを防いでくれる。

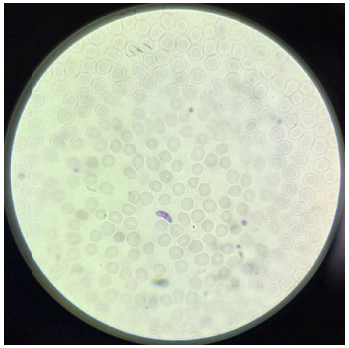
これらは獣医療やそれに関する知識の賜物であると私は思う。たとえ、ザンビアのように金銭的にきつい条件下であっても、獣医療の知識によってその悪条件を少し埋めることができる。獣医療の教育によって金銭的なコストがかからない対策を施すことができると感じた。この点で、獣医療は価値があると再認識した上、先輩方の教育活動は素晴らしい貢献だと思った。

最後に、この機会を与えてくださった先生方、受け入れてくださったザンビアの先生方に心より感謝申し上げます。

（写真１）”Hello, my neighbor.”



（写真２）ツチブタの骨と僕



（写真３）マラリア原虫

学生氏名：古田 若葉（獣医学部 5 年）IVEP ザンビア大学派遣

ザンビアでの生活と実習は、貴重な学びの連続でした。本レポートでは、その中でも特に印象に残った出来事について報告します。

最も印象に残った実習は、カフエのと畜場での実習です。と畜場ではまず外貌検査を行い、体格や妊娠、皮膚病変の有無を確認します。その後、と畜が行われ、解体が始まります。まず皮を剥ぎ、胸骨と骨盤を割って内臓を取り出します。最初に驚いたのは、内臓を含むほとんどの部位がその場で販売されているという点でした。腸は内容物をホースで洗い流してから販売され、肝臓・脾臓・腎臓・肺・気管などは割を入れて異常の有無を確認します。寄生虫がよく見つかるそうですが、この日は観察できませんでした。担当の先生が「肺や気管はとてもおいしい」と話されていたのが印象的で、味にも興味を持ちました。販売前にはリンパ節の大きさや色、割面から出る液体の性状などを観察し、結核や口蹄疫、炭疽などが疑われた場合にはその動物は全廃棄となります。 次に強く感じたのは、衛生観念の違いです。作業員の多くは手袋を着用せず、素手で作業していました。さらに、腸を洗うためのホースから直接水を飲む人を見たときは非常に衝撃を受けました。日本では枝肉をクレーンで吊るしながら解体し、内臓検査も台の上で行われますが、ここのと畜場ではクレーンが約 5 年前から故障したままで、修理資金がないため、すべて床の上で作業していました。こうした環境が改善されれば、作業者自身や消費者への感染リスクを大幅に減らせるのではないかと感じました。

また、ザンビア大学での小動物臨床実習では、愛玩動物に対する意識の違いを強く感じました。ザンビアでは猫やフクロウが“witchcraft（魔女の生き物）”とみなされ、道で見かけると石を投げられることもあるそうです。そのため猫を飼う人は少なく、動物病院を訪れる動物の約 8 割は犬だといいます。犬も多くはモングレル（雑種）です。日本のように「家族の一員」として飼う人は少なく、番犬あるいは単に飼われているだけの存在として扱われている印象を受けました。車窓から野菜などと共に子犬を売る人を見た時も強い衝撃を受けました。価格は 200 クワチャ（約 1200 円）ほどで、実際に路上で購入する人も少なくないそうです。動物の健康管理に対する意識は低く、ほとんどの犬にマダニが寄生しており、バベシア症やアナプラズマ症などのダニ媒介性疾患が多く見られるとのことでした。

全体を通して私がザンビアで感じたのは、「制度や文化の未整備」だけでなく、それらが資金・技術・インフラ・教育などの資源不足と密接に関係しており、貧困がその根底にあるということです。こうした状況下では、衛生管理や動物の適切な取り扱いの問題が、健康被害や経済的損失にも直結します。食肉の安全性が保たれなければ、食中毒や感染症の流行を招き、医療負担が増加し、住民の生活や信頼にも悪影響を及ぼします。動物病院の利用率が低く、ペットへの意識が低いことも、動物由来感染症のリスクを高める要因だと感じました。 この留学を通して私が強く実感したのは、「日本で当たり前」と思っていた制度や衛生観念は、決して自明のものではなく、資源・教育・文化・経済力といった基盤によって支えられているということです。ザンビアでの経験は、公衆衛生・動物福祉・貧困削減のために制度・文化・意識が果たす役割の大きさを、身をもって理解する貴重な機会となりました。

最後になりますが、ザンビア大学派遣プログラムの実施にあたり、引率してくださった石塚先生、前園先生、銅谷さんをはじめ、北海道大学の先生方、IVEP 関係者の皆様、ザンビア大学の先生方、見学先の皆様、そして共に活動した学生の皆さんに心より感謝申し上げます。皆様のおかげで無事にプログラムを終え、多くの学びを得られました。この経験を糧に、今後も努力を重ねてまいります。ありがとうございました。

（1590 字）

以下、写真

カフエと畜場見学

国立公園で記念撮影