



Community Engagement

Newsletter

Faculty of Veterinary Science | Winter: 2023



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Reaching out to the Rust de Winter community: In commemoration of World Animal Vaccination Day 2023

Monde Mzamani (VetSCO: Community engagement), Prof Chris Marufu and Dr Alfred Kgasi.

On a cold morning at 06h20 on Tuesday 25 April 2023, just over 100 Faculty of Veterinary Science students and three academic staff members set out on an excursion to conduct an outreach in Rust de Winter.

This was a resuscitation of the COVID-19 hampered, annual Rust de Winter vaccination campaign which is a collaborative effort between the Gauteng Department of Agriculture and Rural Development (GDARD), Faculty of Veterinary Science (Community Engagement Group, Onderstepoort Veterinary Student Committee [OPVSC] and Veterinary Student Community Outreach [VetSCO]) and the Farmers' Association of Rust de Winter.

the farmers. Vaccines are instrumental in preventing the transmission of diseases among animals, which could potentially impact humans as well. This day provides an occasion to recognize the crucial role vaccines play in safeguarding both animals and humans.

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This year's event was initiated by Prof Chris Marufu, Prof Musafiri Karama, Mr Ali Makgato of GDARD, and student leaders from OPVSC and VetSCO.

The other academic staff member who volunteered to assist in this outreach was Dr Alfred Kgasi. The main objectives of the outreach were to vaccinate smallholder farmers' livestock while providing students an opportunity to gain practical skills, and to educate and upskill emerging farmers.

World Animal Vaccination Day is observed on 20 April every year to raise awareness about the importance of vaccinating animals against various infectious diseases. The day also aims to promote the welfare of animals and their role in human society.

For that reason, during the outreach students were conducting vaccinations, and sharing some of their knowledge with



During the outreach, the students, who were composed of undergraduate veterinary science and veterinary nursing students within different years of study and a couple of postgraduate MSc and PhD students, were divided into 13 teams of about eight students each. Each team of students travelled with a veterinarian or an animal health technician who supervised them. Student groups were assigned to different rural farms to vaccinate livestock and educate the farmers. It was a great experience for many students considering that this outreach allowed them to utilize their skills and share their knowledge with the farmers.

This also was a great opportunity for some students to improve their confidence and communication skills. On the other hand, farmers gained more information about animal handling, disease prevention and disease management.



Through this collaborative effort, we were able to vaccinate about 4000 animals (cattle, sheep and goats) against anthrax, blackleg and lumpy skin diseases, while a small group of students also vaccinated twenty dogs against rabies at the nearby Vergenoeg Mine. Farmers were also equipped with knowledge and skills on animal husbandry, animal handling and welfare. Therefore, it is evident that community engagement is a crucial transformative tool that can be used to address some of the major One Health challenges.

SPECIAL THANKS GO TO:

- Mr Ali Makgato, Dr Farah Abdool-Khader and the GDARD veterinary team for liaising with farmers and arranging the vaccination campaign.
- Rust de Winter Farmers' Association for their support and affording us the opportunity to engage in this activity in their community.
- Dr Eugene Machimana for assistance with funding the Onderstepoort's (OP) delegation's trip and catering.
- Ms Metse Mdlongwa and Department of Security Services for assistance with security clearance.
- Dr Alfred Kgasi and Prof Musafiri Karama at the Faculty of Veterinary Science for supervising farm visit activities.
- The Faculty of Veterinary Science and OPVSC (Veterinary Student Committee) for permitting and mobilising students to participate in this event.
- South African Police Service (SAPS) Rust de Winter for providing safety and security services during the event.

Exploring and learning cultural heritage through a visit to Freedom Park

Faith Nkosi (Senior Research Assistant: Department of Veterinary Tropical Diseases)

On 23 February 2023, second-year Bachelor of Veterinary Science (BVSC II) students from the University of Pretoria visited Freedom Park as part of the Veterinary Professional Life course (VPL 201). They were accompanied by Prof Melvyn Quan and Ms Faith Nkosi from the University's Faculty of Veterinary Science's Department of Veterinary Tropical Diseases, Ms Londiwe Mahlangu from the Unit for Community Engagement, and Mr Pierre Brouard and Ms Christi Kruger from the Centre for Sexualities, AIDS and Gender.

The VPL module focuses on life skills development and covers personal wellness, self-awareness, societal roles, leadership, cultural diversity, and financial and veterinary communication skills. The theme of cultural diversity and transformation is used to enhance the understanding of the wide range of people with whom veterinarians interact professionally. Freedom Park is a site that is rich with South African history, culture, heritage, indigenous knowledge and spirituality. It is divided into two parts: the Garden of Remembrance (S'khumbuto and Isivivane) and the //hapo – Freedom Park Museum with exhibits that focus on the earth, ancestors, peopling, resistance and colonisations, industrialisation and urbanisation, nationalism, the Struggle and nation, and continent building.



The students' visit started with a guided tour through the Museum and the Garden of Remembrance. This was followed by a lecture presented by Pierre Brouard and Christi Kruger, which led to an open discussion on cultural diversity, gender equality, power, privilege, and how South Africa has transformed. Such discussions are crucial eye-openers to the different professionals trained by the University and help to raise awareness of their surroundings and equip them for their future roles.

Growing pigs, growing a future!

Cassendrah F Gamede, Andrew McAdam and Leonie van Niekerk (BVSc V students – Faculty of Veterinary Science)

Nine veterinary science students from the University of Pretoria's Onderstepoort Campus visited a pig farm on the outskirts of Centurion.

Doornrandje (Kenosi's Farm), an emerging small-scale pig producer, currently houses 91 sows and weans, on average, 40 piglets a week. The students were allowed to evaluate the farm according to the Management, Environment, Nutrition, Disease (MEND) guidelines and the PORK 360 (Pig farm standards) objectives. PORK 360 is a private quality assurance system that aims to standardize the welfare, traceability, and quality of pig products in South Africa.

The students were encouraged to ask questions about the farm and make recommendations based on their findings. Community engagement is an essential service for small-scale farmers who cannot afford to pay a local private veterinarian for a herd health package. This article aims to highlight and evaluate the mutual benefit of such community engagement between small-scale farmers and students.

"It became increasingly clear that there was a disconnect between what we learned in the classroom and the needs of emerging rural farmers. In other words, having 'book knowledge is one thing, but being able to effectively communicate that knowledge to rural farmers in the language they understand and persuade them to apply your advice can be problematic", the students said.

We are taught that the key to giving advice is to be realistic and justify your argument. We, therefore, combined our advice with an explanation of the importance of combining our suggestions with existing practices.

We identify areas of improvement as either short or long-term goals, depending on the farmer's current ability to change their management practices and upgrade their facilities, and the impact of the intervention on the production system. Some of the short-term interventions we recommended included vaccination of sows and gilts before farrowing and breeding, the removal of construction



rubble from the farrowing pens, more frequent cleaning and disinfection of facilities, with the bending away of rusty metal fences, and the removal of scrap metal from the pens.

Such improvements are quick and easy to implement as they require mainly effective management oversight of labour.

In the long term, we would like to see the renovation of the pen facilities to include higher walls with proper drainage and adequate shade for all the pigs, but this will require a significant financial investment. Short-term recommendations included treating the sarcoptic mange outbreak among the adult pigs with Ivermectin-based medication, and the suspected *Streptococcus suis* cases in their grower pigs with penicillin antibiotic and a non-steroidal anti-inflammatory drug.

We also recommended the keeping of written records of all pigs to assist in making managerial decisions, avoiding overuse of boars and double-treating pigs, and strictly keeping to withdrawal periods for marketed finisher pigs. We also encouraged the securing of feed stores and pig pens from rats, as rodents

'eat into' a small-scale farmer's profit margin. "Although emerging pig farmers in South Africa face significant challenges, their willingness to improve is inspiring and we believe that community outreach can have a significant impact on their circumstances" the students said.

During our tour of the farm, we learned that in the highly competitive local pig sector South African small-scale farmers with limited resources are struggling to survive, rather than striving for excellence. We realised that there is a critical need for more veterinary visits to teach and provide oversight to our small-scale farmers.

This is essential if they are to be enabled to grow and be successful in a market dominated by intensively managed larger-scale farmers. Although our local market for pig products is significant and lucrative, the industry favours larger-scale farmers who are supported by the benefits of the economics of scale.

Due to their limited resources, small-scale farmers find it difficult to keep up a regular relationship with veterinarians to obtain essential farm-related advice. Our farm tour showed us that small-scale

farmers can start small with few resources, raising only a handful of marketable pigs per month, while at the same time having the drive and ambition to expand their farms into larger-scale operations, but it was clear that this would be impossible without veterinary oversight. The pig industry needs to inspire future veterinarians who can advise prospective farmers with confidence and encourage wise investment in porcine production.

In conclusion, there is a mutually beneficial opportunity for students and small-scale farmers during these community outreaches. On the one hand, farmers will receive free recommendations on how to improve infrastructure and the welfare and health of their pigs, which will ensure better production, while on the other hand the students, who are taught all the necessary management, environment, nutritional, and disease standards that will guarantee a successful, profitability of the farm, will gain exposure to real-life veterinary practice and can learn valuable lessons about the feasibility of the recommendations they suggest. They learn that small changes over a long period are more feasible and will be met with better compliance, cooperation, and communication. We believe that this professional confidence and inspiration are what we will take away from this experience.

The farm visit was conducted under the supervision of Dr Japhta Mokoale, Senior Lecturer and Pig Veterinary Specialist, based at the University of Pretoria Onderstepoort Campus.



Catch them in the crèche: A collaboration to improve education

Dr Jeanette Wentzel and Dr Sunday O. Ochai (Faculty of Veterinary Science)

Community engagement is at the centre of any meaningful impact on a society. Constructive interactions with the community make the need for engagement not only desirable, but very necessary as it brings about more sustainable, equitable and viable change within the community of interest.

The University of Pretoria, through the Faculty of Veterinary Science, has been carrying out various research activities on veterinary and medical diseases in the Mnisi community in Bushbuckridge for the past decade.

These research activities have been conducted at the Hans Hoheisen Wildlife Research Station, one of the University's





shop' visited the crèche to further assess the progress of the engagement activities.

During the visit, the kids welcomed them with a song about the coronavirus and how to keep safe, but even more interesting was the song they sang about the importance and place of One Health in their community. There is no better time to capture the minds of the little ones than while they are still available to be 'caught'.

This crèche does not serve only the children and the community, but has become a centre where students from the University of Pretoria, especially from the Department of Veterinary Tropical Diseases, are taught about the need and place for community engagement in building sustainable and equitable communities.

In February 2023, a group of students and employees from the master's programme in Global Health which is a degree offered jointly by the University of Pretoria and the Institute of Tropical Medicine (ITM) in Antwerp, visited the day care centre. The students and staff, who came from different countries across the world, visited the Mnisi community and more importantly the crèche, as part of their orientation workshop.

They were welcomed to the facility and informed on the history of the place and the roles of other individuals, societies, organisations and the University in sustaining the facility and how this has impacted the kids. The students reflected on how motivated they were to establish such engagements in their various communities and places of endeavour.

To conclude, parents would be well advised to consider what Charles Portis says in his novel *True Grit*: 'If I had received good instruction as a child, I would be with my family today and at peace with my neighbours.'

I hope and pray that all you parents in the sound of my voice will train up your children in the way they should go.' It is safe to say that it is cheaper and easier to raise a child well than to repair an adult, and this can only be done through collaboration as it takes a village to raise a child.

satellite campuses. The Faculty has been able to establish a community veterinary programme that supports many farmers and provides health care and clinical support to pets and livestock in the Mnisi community. Since the rural community of Bushbuckridge experiences a high level of unemployment and high dependence on grants, collaborations and community engagement activities are needed to bring about sustainable change and improvements.

Through the collaboration and engagement activities undertaken in 2017, the team developed a collaborative relationship with the Ngalava 'Noah's Ark' crèche in the community. The crèche was founded in 2014 by a community health worker from the area who offered home-based care for children who were left alone at home while their mothers went to fetch water from the community water point, or went to search for jobs. Initially the crèche was attended by only three children, but over the past years the number has grown significantly to more than 103 children ranging in age from a few months to six years.

The school, which is staffed by very committed and energetic community volunteers led by a very passionate principal, relies on school fees paid by parents to cover running costs and the provision of two daily meals for the children. Many parents are unable to pay, and no considerable funding support from the Department of Education or the

Department of Social Development. As part of the collaboration, funds have been raised through personal donations, the Friends of Ngalava and Rotary member support from a club in Johannesburg. To demonstrate their buy-in and how invested they are in this project, members of the local community have donated some building materials and manual labour to improve the state of the school.

This collaboration has resulted in the installation of a Jojo tank-water system, the building of a new classroom, new toilets to replace the pit latrines, repairs to the original classrooms and the provision of learning materials, carpets, curtains and cushions. The building and renovation projects also provided much-needed work opportunities as only labourers from the community were employed.

Since this is a farming community that resides at the wildlife-livestock-human interface, the kids in the crèche are taught and exposed to the importance of the One Health concept, which is a collaborative approach to common health that emphasises the fact that the health of humans and that of animals are interlinked as they live in a shared environment.

It is therefore clear that many benefits could be derived from working across and within disciplines to confront issues that are prevalent at the interface of different sectors. In July 2022, a group of delegates from the Faculty of Veterinary Science, under the auspice of the 'Dean's walk-

The Bahananwa Donkey Welfare Project

Dr Quixi Sonntag (Faculty of Veterinary Science)



A Donkey Care Worker came across this donkey that had been stuck in mud for more than a day, and fed, watered and cleaned the animal.

The 15th of May 2023 saw the culmination of an exciting community engagement project, the Bahananwa Donkey Welfare Project in the Blouberg municipality in Limpopo.

At a community meeting in Thalahane Village, Blouberg, Limpopo, the people who made the project successful, namely the Bahananwa Donkey Care Workers, were celebrated.

The Donkey Care Workers (DCWs) all received certificates and each one said a few words about how they had experienced the project. They pointed out that they benefited from the knowledge and skills they gained which they were able to use in service of the community, in particular donkeys and donkey owners. They could see the difference their work was making with regards to donkey health and welfare.

This project ran over 12 months and was funded by The Donkey Sanctuary UK. The project team consisted of myself, on behalf of the University of Pretoria, and two colleagues – Dr Isabel Meyer (veterinarian and logistician representing One-Revolution NPO) and Prof Leanne Scott (professor of statistics at the University of Cape Town). As researchers one of our aims was to explore transdisciplinary collaboration.

Following an earlier 6-month project that helped us understand the context of donkeys and donkey-owning in this community, in the new project we trained twenty DCWs from 10 villages. By providing the DCWs with wound-cleaning and parasite control products, we could facilitate the provision of primary animal health care in this community. Via a WhatsApp group they are in constant contact with the project leaders so that issues can be addressed in real time.

They now form a tight network within and between their villages and they can call on the local compulsory community service (CCS) veterinarian who has a Donkey Day once or twice a month to treat the animals that were identified by the DCWs.

The project has also provided the community veterinary clinic in the nearby town, Bochum, with some medications over the past two years to ensure improved veterinary care for the local donkeys (and other species as needed). This connection that was established between the DCWs and the CCS

veterinarians was a prominent feature of the project as this community had not had significant prior contact with the CCS clinic.

During this period, two DCWs found permanent employment, leaving us with 18 active workers. The DCWs workers as well as the community coordinator, Japhter Mashaba, all received monthly stipends for 10 months. We furthermore secured the services of an animal welfare assistant, Daphney Mhuntane, for the last four months of the project. Japhter did a sterling job of informing all the headmen in the villages we worked in about the activities of the DCWs and getting Tribal Council approval for the different aspects of the project.

Daphney expertly coordinated Donkey Days with the vets and DCWs. All the participants were highly committed to their work and have made a significant difference in the way that donkeys are perceived and cared for. They have all undertaken to continue with their work as volunteers even though the project has officially ended. They will receive a last batch of free products soon and may then charge a small fee from the donkey owners in order to be able to continue acquiring products from the local co-op.

Apart from establishing a network of DCWs, the project also aimed to finance a co-created innovation that would leave the community with something tangible and sustainable. Lots of ideas



A DCW treating a wound on a donkey's head.



Collaboration between CCS vet, animal welfare assistant and DCW.

were discussed and three ideas were seriously considered: A network of donkey crushes that would assist the veterinarian on Donkey Days and help with general handling of donkeys; learning how to make donkey-friendly harnesses from Netflon or discarded plastic bags; and reflective ear tags to protect donkeys in the road (motor vehicle accidents appear to be a leading cause of death of donkeys here and obviously have significant impact on humans too).

The group decided to prioritise the donkey crushes and have already built the first prototype in Matoana village and are in the process of building a further four crushes in different villages, with even more being planned. The work done so far by the DCWs, assisted by donkey owners and other community members, is quite

impressive. After building and testing the first crush, the original design was tweaked and now they are experts at crush building.

The DCWs were trained in data collection and administered two surveys during the project. The latest survey, which was paperless using a telephone app, revealed that 2737 donkeys were assessed by DCWs and over 150 animals received professional veterinary care (from zero pre-project) in the past year. The donkey owners are very happy with the service provided by the DCWs.

Donkey owners reported the following changes since the inception of the project: Less beating of donkeys, more food and water for donkeys, working donkeys are getting more rest, owners know more about the correct products/medications

for donkeys and there is a greater awareness of the value of donkeys. The biggest challenge the owners reported was the loss/theft of donkeys - this could be the subject of an interesting new study.

Although the project is ending now, we are still looking for further funding to help the DCWs develop their entrepreneurial skills, learn more about primary animal health care also in other species and possibly cover the stipends (or part thereof).

We are busy putting finishing touches to a short educational video co-produced with the DCWs. This will be made available on social media platforms to increase awareness of donkey welfare.

As project leaders/researchers, we have learned many lessons. The importance of



Veterinary services are now available to the local community.



Donkey Care Workers and members of the community building a crush in Matoana village.



Donkeys provide many useful services for the Bahananwa community. Here they are pulling a cart with water. Most homes do not have piped water.



A DCW recording information from a donkey owner.



Candidate Donkey Care Workers learning how to measure the pulse during the training in June 2022.

effective communication was highlighted several times. We have learned to be more mindful of the words we use when engaging with people whose first language is not English and whose home language does not have words for many veterinary terms.

Our lack of Sepedi speaking ability was frustrating at times and has solidified for us the importance of learning to speak an indigenous language. We have developed a new perspective of what it is like to live in an underserved rural area. We had to question many of our existing assumptions and be open to learning from the people we engaged with.

The mind shifts we experienced were profound and have led us to new questions that need to be answered. We were often humbled by the goodwill and sense of community we experienced among the participants in the project. It was a privilege to be able to work with these exceptional people and their animals.



Proud Donkey Care Workers post-training.



Training in the Bahananwa Community Hall in June 2022.



The Donkey Care Workers receiving certificates at the culmination of the project in May 2023.

ANNOUNCEMENTS

Legislative framework and literature reviews support the incorporation of community engagement into teaching, learning, and research in higher education institutions in South Africa.

The Faculty of Veterinary Science invites you to submit articles on community engagement activities for publication in our Community Engagement Newsletters.

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