

OCTOBER 2021

NEWSLETTER

Sarah Sirica, Quarterly Newsletter Manager | s.m.willarderoh@gmail.com

An Ig Nobel Prize for a Very Noble Wildlife Conservation Research Team



*A desert-adapted black rhinoceros (*Diceros bicornis bicornis*) being airlifted into the remote Damaraland and Kaokoveld regions of Northwestern Namibia. Photo Credit: Namibian Ministry of the Environment, Forestry, and Tourism.*

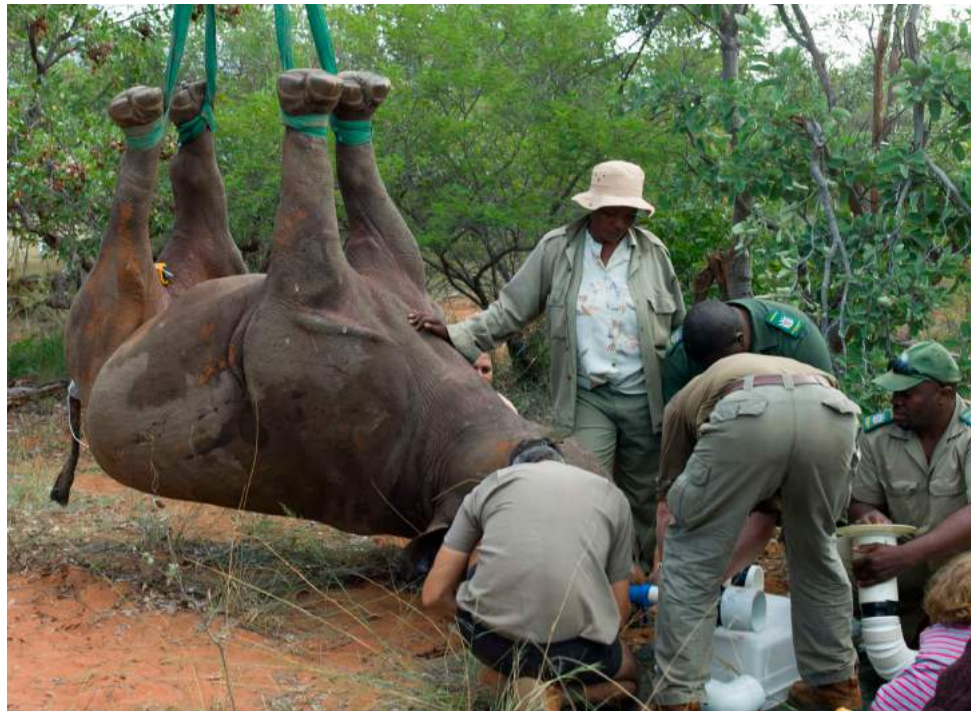
Wildlife Disease Association member and wildlife veterinarian Dr. Robin Radcliffe received an interesting invitation recently—for a virtual awards ceremony, a ceremony which annually takes place at Harvard University’s Sanders Theatre. The coveted Prize was awarded to Robin and his team by none other than Nobel Laureate and pioneer of physiology and medicine, Sir Richard Roberts. But what kind of prestige were they offering? Would it be added to his and his colleague’s CV’s? That last part is yet to be determined, but the excitement

will continue—Robin and his team were thrilled to be the recipients of this year’s Ig Nobel Transportation Prize for their work in hanging rhinoceroses upside down. That’s right, hanging rhinos upside down!

This parody-version of the world-famous Nobel Prizes is put on by the science humor magazine [Annals of Improbable Research](#). The prize is meant to “first make you *laugh*, then make you *think*” according to the editors and staff of the magazine and blog. They chose the

research done in Namibia on rhino transportation that was published in our own Journal of Wildlife Diseases in [April of 2021](#). The journal article was titled “The Pulmonary and Metabolic Effects of Suspension by the Feet compared with Lateral Recumbency in Immobilized Black Rhinoceroses (*Diceros bicornis*) Captured by Aerial Darting.” The Ig Nobel committee described the research as “determining by experiment whether it is safer to transport an airborne rhinoceros upside down.”

Of course, this doesn't seem at all to be an improbable research question to WDA members, or those involved in wildlife conservation of megafauna. Aerial movement of rhinoceroses and



Caption: One of the Ig Nobel team's black rhino subjects hanging from a crane as part of experiments to study the effects of aerial suspension on respiratory physiology. Photo Credit: Robin Radcliffe



Caption: A rhinoceros subject in Waterburg National Park, Namibia suspended under a crane to mimic helicopter slinging. Photo Credit: Robin Radcliffe

other large creatures has become a critical aspect of conservation over the last few decades and ensuring that the animals are safe during and after transport is vital to the long-term success of these operations. The Namibian Ministry of Environment, Forestry, and Tourism has been using aerial transportation since 2010 and has adopted the practice of suspending the rhino from their feet for periods of up to 30 minutes to accomplish these translocations. Although Namibia was not the first country to move rhinoceroses by aerial transport under a helicopter, they pioneered the use of slings to move rhinos upside down. The rhino slinging technique is now standard practice across Africa and is even being used to move elephants!

Recently, Robin and his colleagues conducted research into the physiology of this translocation technique. The research team, many of whom are WDA members, was multinational, with representation from Namibia, South Africa, Tanzania, Zimbabwe, Brazil, UK, and the US. Members included Robin Radcliffe, Mark Jago, [Peter Morkel](#), Estelle Morkel, Pierre du Preez, Piet Beytell, Birgit Kotting, Bakker Manuel, Jan Hendrik du Preez, [Michele Miller](#), Julia Felipe, Stephen Parry, and Robin Gleed. This project is a great example of international partnerships that bring the best science to wildlife health to support conservation.

The team used a crossover design to trial 12 anesthetized black rhinoceroses in two conditions—suspension by the feet versus suspension in lateral recumbency, and sampled various physiologic parameters to determine what was the safer method. In this species it was determined that the current method of suspension of the animals by the feet was the most physiologically stable and safe practice. The full impact of the Namibia Team’s research on hanging rhinos remains to be seen. It took nearly 30 years for Rich Roberts Nobel Prize winning research on introns to make a splash, but today it has made possible the messenger-RNA COVID vaccines we all are thankful for. Time will tell how hanging rhinos upside down may change the world, but one thing is for sure, this team will continue thinking outside the box!

It turns out that this ground-breaking research is not only lifting feet, but turning lots of heads.



*Black rhinos transported by aerial slinging are given a soft landing on a mattress, carefully placed beneath the swinging animal by field rangers.
Credit: Namibian Ministry of the Environment, Forestry, and Tourism.*



An important goal of the Namibian Government rhino operations is to return black rhinos back to the people for poverty alleviation and realization of their own cultural heritage. Credit: Namibian Ministry of the Environment, Forestry, and Tourism.

The work was reported by [BBC Science News](#), CNN [Call to Earth](#), National Geographic in Russian, Atlas Obscura, Italian Science magazine [Focus](#), and a German [radio science show](#). All this attention has been exciting not just for the research team and Namibian conservation, but also for a much larger audience. The team's work has moved endangered species to the forefront of our conversation by capturing the interest to all kinds of people, which will elevate the causes of conservation and wildlife health as a priority for everyone.

In this season of award presentations for WDA, this one is certainly an exciting one. When asked about the Ig Nobel Prize by the BBC, Robin stated "When I first

heard about the Ig Nobel, I wasn't sure if this was good or bad. But I think the message of the Ig Nobel—that 'it makes you laugh and then think'—this is what it's all about for us. More and more people should understand the exceptional efforts going on to try to help save these amazing animals that live here on Planet Earth with us."

The excitement does not end here- stay tuned for an upcoming podcast from Cornell University in the coming months!