



ANNUAL REPORT 2014

GEORGE ADAMSON WILDLIFE PRESERVATION TRUST
For the board directors of the Suzuki Rhino Club

**Working plan for the Mkomazi Rhino Sanctuary
and the African Wild Dog programme for 2015**

17th January 2015

Dear Board of Directors of the Suzuki Rhino Club,

Thank you once again for all your tremendous support over the past year, and for your commitment to the rhinos, wild dogs and the local communities here through these harsh economic times.

We were very pleased to welcome some of the Board of Directors of the Suzuki Rhino Club here in July when His Excellency The Prime Minister of Tanzania laid the foundation stone for the Vocational Training Centre. It was good also to hold meetings and discuss various aspects of the whole programme and we hope the board directors were able to gain an overall update on the field-work that has taken place over the past year. We will soon be preparing the report for the Suzuki Rhino Club to cover the past six months.

We are looking forward to 2015 with the ongoing programmes for the endangered species and the proposed opening of the VTC.

Please find attached our target operating budgets for 2015 as follows for your perusal and thank you for giving us this opportunity to present this to your board for consideration.

- a) Mkomazi Rhino Sanctuary General Operating Costs
- b) Mkomazi Rhino Sanctuary Projects
- c) African Wild Dog Programme
- d) Summary 2015

From the overall 'ideal world' target budget (which is the best-case scenario), we have once again extrapolated a suggested amount for the Suzuki Rhino Club column, based on your generous donations of last year 2014.



Mkomazi Rhino Sanctuary – General Operations

We will continue to keep all systems in good shape to ensure the rhinos are secure and breeding. With 21 animals, the Mkomazi population is the third-largest of Tanzania's six rhino populations, and the Sanctuary is therefore an integral part of Tanzania's efforts to breed and recover numbers of black rhino. 21 black rhino represents 2.4% of the global population of this subspecies and 21% of the national population. We were thrilled when Deborah gave birth to her second calf (female) called Tunu, and Suzi gave birth to her first calf (female) called Maxima.

Security measures will continue to be upgraded. We have added a further security outpost to the Sanctuary and are planning a further two for the coming months as follows:- a) one in the Jamie/Deborah section of the Sanctuary and b) at Kilo Zulu for the new canine unit – this one is already underway.

TANAPA are continuing to develop their plans for the construction of a small rhino sanctuary here in Mkomazi, close to their HQ. We know you are well aware of this and the fact that this will enable them to raise tourist income from visits to their sanctuary and will also ensure that our Sanctuary remains undisturbed as a secure breeding area with security uncompromised. We continue to advise the TANAPA rhino management group and the engineers on the construction for this sanctuary and to have a good working partnership with them.

Personnel

All personnel (Operations manager, Rhino Sanctuary manager, rhino tracker team, fence maintenance team and mechanics) will continue their working duties according to the normal systems and protocols. We have good medical insurance in place for the managers, the machine operators and drivers, including air evacuation and ambulance support and we support staff medical costs. If possible we would like to make some small increases to salaries in 2015. The operations manager recruited three trainee trackers and one fence maintainer

in 2014 and will now recruit two further members of staff for the tracker dog unit. TANAPA continue to support the salaries of the security team.

Fuel and Engine Oils

The underground and overground fuel tanks are operational. Puma Energy supplies the bulk fuel. Detailed books on fuel useage are kept by the camp manager and checked weekly by the operations manager and myself.

Equipment / Maintenance / Spares

We are enormously grateful to Suzuki Rhino Club for their past support of the workshop, which is the heart of all of our operations. As usual, the big workload is the ongoing maintenance and this work will continue through 2015. The plant machinery, water bowsers and vehicles will all continue their daily duties. The machines are used continuously for fence replacement and repair of the fence line. Roads and tracks have to be cleared and maintained.

The Suzuki quad and motorbike continue to be of enormous value to the Sanctuary and much is achieved by Sanctuary personnel on these bikes. I have recommended to TANAPA that they also begin to use such bikes for their proposed rhino sanctuaries in both Mkomazi and another rhino sanctuary they are planning in northern Tanzania as they are incredibly efficient and practical. We understand that TANAPA have already approached the Yamaha agents (Karimjee) here to quote for this.

Water collection goes on apace in the dry season. A wildlife foundation replaced the Scania's water tanker and overhauled the Scania in workshops in Arusha. The Scania undertakes the 90 km round-trip to Zange HQ twice a day for two weeks to fill up with water from their overground tanks there. It then fills up the water storage tanks at Kisima which have to be kept full at all times. The Scania then it goes in for maintenance for one week. Then the cycle repeats itself.

We are once again short on Fastrac, JCB tyres so this has been a huge worry as these tyres are so expensive, but this forms a part of the budget for 2015. We are unable to import these tyres from Europe or the USA as our tax exempt status has not yet been reinstated. Grader tyres have been obtained locally. We still have a couple of scraper blades in stock.

The Suzuki Vitaras continue to operate reliably as always with no signs of cracking or body damage, and still appear almost new.

Security. MRS Fence. Infrastructure, Upgrade, Maintenance.

The Sanctuary has a number of layers of security in place. Aerial surveillance, security team, tracking team and fence maintenance team, the electrified and alarmed fence, the newly installed digital radio system, a TANAPA ranger outpost close to the Kisima base camp, and the TANAPA intelligence network. The community programmes (the vocational training centre, the environmental education programme and the Mkomazi outreach programme and) play a great part in winning the hearts and minds of the communities neighbouring Mkomazi.

We are continuing with the enormous task that is the replacement and repair of the perimeter fence. We managed to raise a grant for fence posts for 2014 but will need to continue with a new order for 2015.

We installed four more heavy-duty internal gates between all the separated areas in 2014. These gates are used for access to the internal sections; for the possibility of movement of rhinos into areas of better vegetation when necessary; movement of the water bowser and tractor and other plant machinery between sections; and to move the translocated rhinos onwards into larger areas, thereby making way for new rhinos coming in.

We are planning to put in place the tracker dog canine unit in 2015 to bolster security efforts.

One of the other fencing tasks possibly ahead of us in the coming year is to construct another internal fence in the new extension area. This is covered in 'Rhino Sanctuary Projects' below. This was not undertaken in 2014 because of budget restrictions.

Solar Power, Electrical Power

Last year, we ended up having to fully replace the entire solar power system in both the main base camp and in the four main security outposts of the Sanctuary to upgrade the power to the perimeter fence and to boost capacity for radio system, which needs to be online 24 hours a day. The batteries supplied by Suzuki Rhino Club for this massive task were fantastic. DHL generously assisted by shipping in solar equipment from the USA (along with some JCB spares from the UK).

The four main outposts in the Sanctuary were fully re-equipped with solar panels, Vario Track controllers and new batteries and wiring for both the new digital radios, powering the fence and a couple of low-powered LED lights in the security outposts. This work was done throughout 2014.

Power supply to the fence was previously supplied overhead on poles. This was changed to underground cables with lightening divertors on the fence line. Should lightening strike the fence, the divertors would close any power going back to the energisers and batteries. The power system has also changed from sending power out along the cantilever and back along the main line system. Now all the wires on the fence are charged immediately from where the new wires come in from the energizers. This has helped to increase the fence voltage, but in many incidences we found that it meant we had lost the alarm capacity along some of the fence line length. We did manage to sort this out and in the two places where the problem still exists, we have ordered bigger energizers to sort it out.

By upgrading the solar power system properly in the base camp, and having the Sanctuary security outposts with fence energizers, alarms, radio chargers, lighting and radio base stations in an integrated system, we have improved the integrity of the whole operation and the security of the Sanctuary, further reinforcing that the work really had to be done. I'm hopeful that we will not have a power outage even in the months of low sunshine. Fence power is now up to nearly 6,000 volts, even in the evenings.

As an added benefit, we are using the better-quality old solar panels to boost the power systems in the tracker outposts throughout the Sanctuary. Again, this improves overall security.

We do seem to be well set up with solar power for this year, but we still need to install these systems in two further outposts. However, as the fence wires become even older, instead of replacing the whole fence with new wire, it might be a lot cheaper and more cost effective just to boost the solar systems and install larger energizers in the outposts. We are not totally sure about this yet, we do seem OK at the moment and we are seeking advice from other sanctuaries with fences as to what they do at this stage of the game.

Water

We also need to continue to develop the dedicated water storage and piping systems for each water hole. With the expanding population of rhino in all the various sections of the Sanctuary and the sub-adult bulls becoming bigger, we will have to build more water pans.

In the UK/Czech mixed section, we will plan to build a water catchment, trapping the flow-off from good catchment hills. We will also be undertaking this in the main section. We are not so sure what to do in the bulls-only section, as there are no hills with good flow-off, but we might be able to dam the koronga (which is a cross between a ditch and a seasonal water course).

All this work is to reduce the Scania water tanker and Fastrac / bowser useage and, once again, make savings.

Communications

The radio system is a great addition to both the management and security of the Sanctuary. We are able to check the screen at all times to check where everyone is, make sure personnel are where they say they are and that they have completed their section work or patrol and this is of great help. It has increased the capacity of the staff and managers to react to any poaching threats or incidents through the immediate analysis of the personnel and distribution in the sanctuary and has been an enormous boost to the morale of everyone.

A team from The Netherlands is investigating the possibility of the 4G tracking system to pick up kinetically charged transmitters in the rhino horns, thus nullifying the need for replacement transmitters every two years or so. Real-time positions can then be shown on a bigger screen system, thus coordinating personnel and rhino positions.

Supporters in the UK are also looking into radar, which sounds wonderful but we have no idea at the moment what it entails and how it would work. But we do know that vast advances are being made almost monthly in this field and it might be something that could be looked into in the future as it could link up to the new transmitters in the horns as well. This needs further discussion.

We have bought 30 foot treated eucalyptus posts, which are to be used for the triangulated towers for the proposed tracking systems. These are at the main gate of the rhino sanctuary and have not yet been installed because the technology is still not ready and we have to wait

for the eventual 4G system to be put in place. However, we are not sure if we even need these extra antenna posts up.

We would still like to upgrade the radio systems in 2015 and buy another six handheld radios for the Sanctuary outposts and new display handhelds. We would also like to replace a few of the base stations and handhelds and purchase the usual spare radio batteries.

Existing security outposts, uniforms, consumable supplies

We will continue to maintain the existing security outposts and continue to tailor two sets of uniforms per person for all sanctuary personnel. Boots are purchased from Arusha and we will buy two pairs of new boots per person.

Veterinary

We will continue to keep active the 210 tsetse targets which have to be sprayed every month or after the rains. The new canine unit needs to be a tsetse-free zone so this will add to the overall work on this facet of operations, with another 80 flags going in.

We always have to keep a veterinary budget in place for any trip to Tanzania that might need to be made by a veterinary officer in close communication with TANAPA.

We are enormously grateful to Dr Morkel for working alongside Dr Idrissa Chuma and Dr Emmanuel Macha in rhino veterinary work, and Drs Chuma and Macha were able to come to Mkomazi in 2014 to remove the GPS foot collars from Jonah and James, as a TANAPA contribution to the project. Both immobilisations went very well and the two bull rhinos continue to remain in good shape.

Jabu and Monduli have settled well into the extension area and it is hoped to divide this area into two sections to either a) create a separate area for each bull and a female; or b) keep it as an inevitable 'excess bull only' area.

Grumeti and Zawadi, the two females from Port Lympne in England, have settled into the Dvur Kralove section (along with Deborah, Jamie and their offspring Hilla and Tunu).

We do need the vet officer to return in 2015 to continue with the horn transmitter work. I will discuss this further with TANAPA and if the trip can be made, will order more horn transmitters for this.

Aircraft

Flying patrols will continue as a major part of security for the Sanctuary. The aircraft underwent had a mandatory engine replacement in 2014 and the new engine really has made all the difference to take-off, climb, landing and gross weight take-off and also put another 12 knots on the cruise, which is very handy.

The aircraft continues to have a multi-purpose role. Patrols, surveys, sightings of new tracks, game counts, follow up on torches seen at night and tracks seen in the day, or information received on areas surrounding the Sanctuary and general daily observational flights around the Sanctuary are to name just a few. We continue to work closely with TANAPA on relay of information to their HQ. It is positive that this national park in Tanzania has had the benefit of an aircraft to back up the field work. In spite of our efforts over many years in putting in over 800kms of roads and tracks, regular patrols in the aircraft also give an instant picture of what is going on. Where there are areas of conflict or illegal incursions, ground forces can be directed immediately. Whenever we establish a remote outpost, an airstrip goes in straight away in case of injury or sickness for the personnel based there, to access them during the rainy season when the odd section of road is impassable, to resupply their camp or to undertake repairs at the outpost. Likewise, whenever the big machines are out in the field operating, the operators immediately put in a short airstrip both for their own safety and also for me to access the machines for maintenance. The Cessna 206, especially now that it has a bigger engine, can carry welding machines, compressors, tool boxes, everything except spare tyres.

TANAPA have asked if we could, together with them, make an airstrip at the far end of the Park by the Uмба River and it looks like this year big efforts will be made by them to get much more of 'a handle' on that part of the Park which has to date been remote and a fairly empty buffer zone.



Mkomazi Rhino Sanctuary – Projects

a) Security Outposts

We need to continue to increase Sanctuary security by constructing two new outposts. We constructed two new outposts during 2014; one in the extension area where Jabu and Monduli are; and the bunker outpost was upgraded to a larger uniport.

We are planning on constructing a trackers' outpost in the Jamie/Deborah section to protect the current population of 5 rhinos.

We are constructing an external outpost at the Kilo Zulu area to the north of the Sanctuary (in the Superbowl) for the canine unit. Tracker dogs will be discussed for the first quarter of 2015. The area is currently being cleared and cleaned by the JCB and tractor / trailer. The airstrip has been cleaned and drainage ditches are being put in place for both the airstrip and the tracks in that area. The old lion camp is being upgraded to house the dogs. A uniport will be put in place along with a stone built kitchen, stone built food preparation and food storage area, soak pits, extensive water systems (including storage tanks and piping), kennel area and exercise area. The entire area has to be a tsetse free zone and this involves the placement of 80 tsetse flags.

b) Internal Fence Line

We are still considering whether we should construct a new internal fence line in the large extension area, where Jabu and Monduli currently are. This was not possible in 2014 because of essential fence repair and replacement taking place on the main peripheral fence. If the area is divided by an internal fence, it will enable us to either a) separate them out when the time comes for them to receive a female each; or b) to have an 'excess bull-only' separated area.

But we are not sure if this is a priority this year and await the veterinary officer's next visit to brain storm with him and TANAPA on the next stage of the management of the rhinos here.



Dvur Kralove Zoo, Czech Republic

We have been offered a female rhino (Eliska) from the Dvur Kralove Zoo in the Czech Republic and I went over there in 2014 to discuss this further with the zoo directors. Funds would need to be raised by the Zoo for the transport of Eliska to Tanzania. We have discussed this with TANAPA.

We will continue to do as much as we possibly can to protect these rhinos and to continue to maintain the established systems which have, so far, proved to be so effective. With the ever-increasing slaughter of rhinos and elephants throughout Africa, we remain vigilant at all times.

We are extremely grateful to the Suzuki Rhino Club for your incredible support.



African Wild Dog Programme

As always, we need continuity and perseverance over many years with this programme. We will continue to manage the breeding and release of these wild dogs and to follow the systems established over all these years. We have the infrastructure in place to look after the dogs, manage their captive breeding, undertake veterinary work, reintroduce them back into the wild and track them once they are released. We have the staff and equipment, vehicles, the aircraft and all the experience of the past years. With thanks to TANAPA's management, there is a lot of standing water in Mkomazi, no domestic stock and abundant prey species, so conditions are good.

With thanks to your support, we have been able to continue increasing the meat supply to our African wild dogs in the breeding programme here. We bring in four cows a week to mix with rice, fish and eggs, but they can never have enough meat. Adding on one extra cow per week really adds to their nutrition and improves their overall health. There is nothing wrong with them being as lean and mean as the land, but the additional meat has definitely put them in better shape. We have to drive over 100 miles per week to the local cattle market to bring their meat supply in so it is a big undertaking and there can never be any failure in their daily supply of food. This increased meat supply will continue through 2015.

We put together two new breeding groups in 2014. We reintroduced seventeen wild dogs back to the wild in January and April 2014. They started off well and we were able to follow them for a few weeks until they took after into Tsavo National Park. We now have another six due for reintroduction in March 2015; and then a further entire pack of nine dogs which we are intending to reintroduce to the wild in May or June 2015. We need to start two new breeding groups as our old alpha females pass the age of 10 years old and the end of their breeding lives.

We have two 'wild' wild dogs based at our camp – both female. They have linked up with a male that we released onto them and hunt every day, using Kisima as their base. The veterinary work continues with vaccinations and the two-monthly worming system with Drontal (sourced by the Suzuki Rhino Club).

The production of the safe vaccine for CD is technically very difficult and the manufacturers have not been able to produce the material (antigen) that can be formulated into the product for quite some time. They are now launching a monovalent formulation of the canine distemper vaccine which is the same antigen as that found in the ferret distemper. We have been in touch with both Dr Aart Visee and Dr Idrissa Chuma about this. We are hoping to work with TANAPA and TAWIRI to do some serology on this vaccine to see its effectivity.

We will construct a new breeding compound at the Kisima base camp. This will enable us to start a new breeding group. The plant machines will go out soon to clear the line for the compound fence and we are hoping to start work on this in March 2015. We will continue to maintain the six breeding compounds and the two reintroduction compounds.

We will continue to fly on follow up on wild dogs that have formed part of our reintroduction programme. A wildlife conservation trust based in Tsavo West National Park and are happy to support the follow up of the reintroduced wild dogs using their aircraft.

We will import more urethane telemetry collars for the wild dogs. We are also looking into the satellite collars which are much more expensive (circa \$4,000 per collar) but which give a real-time reading of the position of the reintroduced dogs. However, these collars are currently very heavy and we are going to wait until they have refined the design to a much lighter weight before we consider this option.

Dr Emmanuel Masenga and Dr Robert Fyumagwa of the Tanzanian Wildlife Research Institute (TAWIRI) have established three packs of wild dogs back on the Serengeti and we remain in touch with them on the possibility of the Mkomazi wild dogs forming part of their programme there. We continue to share our experiences with TAWIRI and TANAPA for the betterment of their project and we are keen to help their efforts and their project.

Dr Emmanuel Masenga visited our camp the other day tracking (using satellite collars) a pack of wild dogs who had travelled from Loliondo Game Controlled Area (next to the Serengeti) to Mkomazi. This is big news for us as it shows that there is a circuit and in the future, there is a possibility that we could translocate wild dogs from the Mkomazi breeding programme to the Serengeti to help them with their efforts too.

The reintroduction of African wild dogs is a highly complex operation due to their unique and complicated social structure and their requirement of a large home range within which they can roam nomadically. The programme can encounter problems but given the time and experience of our work with these animals, we are confident that our methods are leading to long-term success. No real success can ever be determined in programmes like this unless they are continuous and take place over a very long period of time. To re-establish a species in the wild takes time, perseverance and continuity. We are heartened to hear that wild dog sightings have increased in the Tsavo / Mkomazi ecosystem.

We are enormously grateful to Suzuki Rhino Club for all their incredible support for this endangered species programme.



The Vocational Training Centre is almost the apex of everything that we have been doing amongst the local communities within their villages over the past 20 plus years. From a small request by your board of directors to look at the possibilities of establishing a classroom where car mechanics could be taught, it has taken on much larger proportions. We are grateful indeed that you all worked really hard and generously, as always, found other sponsors and entered into this venture with the enthusiasm and support that it so badly needed. We do feel the legacy that we will leave around Mkomazi will be enormous. So much of wildlife conservation really is all about people. The Chairman of the SSRC was able to attend the last site / board meeting and will pass on both his impressions and comments to the board of directors.

Thank you all again, especially the dealers that came in so generously in such hard times to ensure that we had enough support to finish it by our March start date.

Tony Fitzjohn
Field Director - George Adamson Wildlife Preservation Trust