African Wildlife Conservation Fund

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2020 Annual Report

By: Dr Rosemary Groom and Ms Jessica Watermeyer

African Wildlife Conservation Fund Annual Report
January 2020 – December 2020

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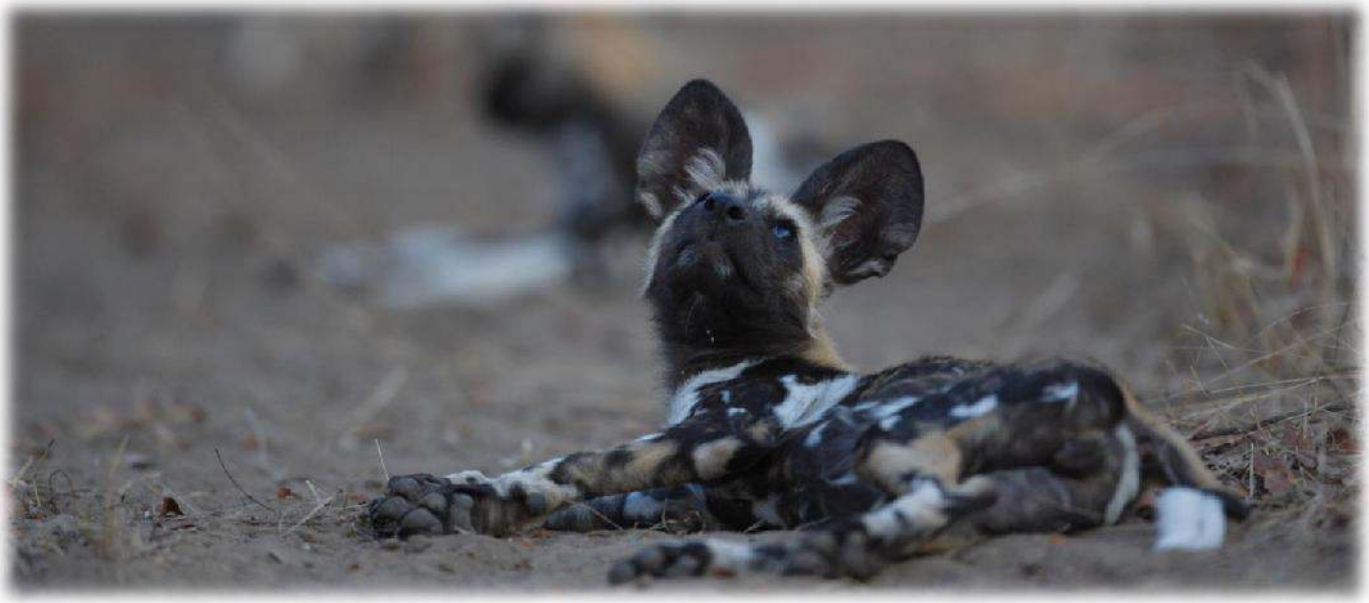
Summary

Whilst the world continues to fight the Covid-19 pandemic, the African Wildlife Conservation Fund (AWCF) continues to fight to protect Zimbabwe's wildlife and uplift her people. The past year has been an unprecedented one, and compounded by challenges of a weakened economy, has put a significant strain on the people and resources of the country. Over the past year and more than ever before, we, AWCF have worked incredibly hard to meet targets and goals, and are proud to have achieved a considerable amount despite the unpredictable year. We report consistently strong number of African wild dogs (our flagship species), and all large carnivores, in both Savé Valley Conservancy (SVC/the conservancy) and Gonarezhou National Park (GNP/the Park) – our two key areas of work - as well as many significant project deliverables in terms of research, capacity building, and providing multiple benefits to local communities.

We have been working on site in the Zimbabwean Lowveld for over a decade, and our track record and long-term results speak for themselves. We run highly effective and multidisciplinary programmes, and have immense capacity to continue to contribute significantly to the future of conservation and research in Zimbabwe.



Cover photo by Kim Wolhuter ©

African wild dog conservation, population monitoring and research

We focus on two key conservation areas in the Zimbabwean part of the GLTFCA; Savé Valley Conservancy (SVC/the conservancy) and Gonarezhou National Park (GNP/the Park).

Savé Valley Conservancy

As reported consistently for the past few years, the African wild dog population appears to have stabilised at between 90-100 individuals, with slight natural fluctuations. **From our comprehensive and direct monitoring of the species, there are 94 adult wild dogs in the conservancy (3.9 wild dogs / 100km²)** – *counts taken from April 2020*. Average wild dog densities across their range are generally lower (average 2.5 wild dogs / 100km² across five populations; Pole 1999).

To note, we have seen the pack structure of our resident wild dog packs change over the last couple of years. We now have more and smaller packs, as opposed to fewer and bigger packs in previous years. Less experienced and younger alpha females are likely to give birth to smaller litter sizes, and have lower pup survival to one year of age. Smaller packs will also find it harder to compete with resident lions and hyena. The latter may affect recruitment and the stability of some packs moving into 2021 and beyond. This however is a natural dynamic and of no concern unless the packs do not strengthen and increase in size with subsequent denning seasons.

In our 2020 denning season, 10 resident packs denned and gave birth to puppies (compared to 7 denning packs in 2019). A total of 69 puppies were born (compared to 50 in 2019). We have recorded 45% pup survival to date, with 31 of the 69 puppies born still alive. See Figure 1 below for the population trend for wild dogs in SVC.

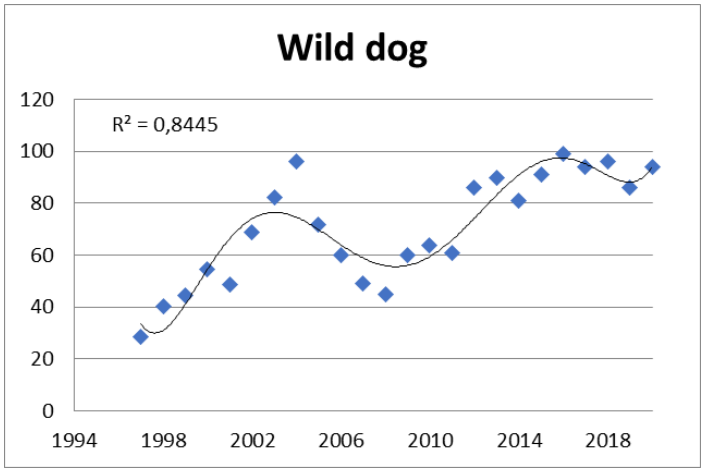


Figure 1: The African Wild Dog population trend in Savé Valley Conservancy (counts include adult and yearling wild dogs only from April each year).

Gonarezhou National Park

African wild dogs in Gonarezhou National Park continue to do well. From comprehensive and direct monitoring of the species, we reported a minimum of **105 adults in the Park** across 9 packs (6 packs denned in 2020, and 3 packs are assumed not to have denned) – *counts taken from December 2020*. An estimated 51 puppies were

born in the 2020 denning season (amounting to a total of 156 individuals). This equates to a density of **2.7 adult wild dogs/100km²** which is comparable with average known densities for the species (2.5 dogs/100km^2). Given the recent concern over the stability of the resident wild dog population in Mana Pools, and even Hwange National Park, GNP, alongside neighbouring Savé Valley Conservancy (3.9 wild dogs/100km^2) represents a stronghold for the species in the south of the country.

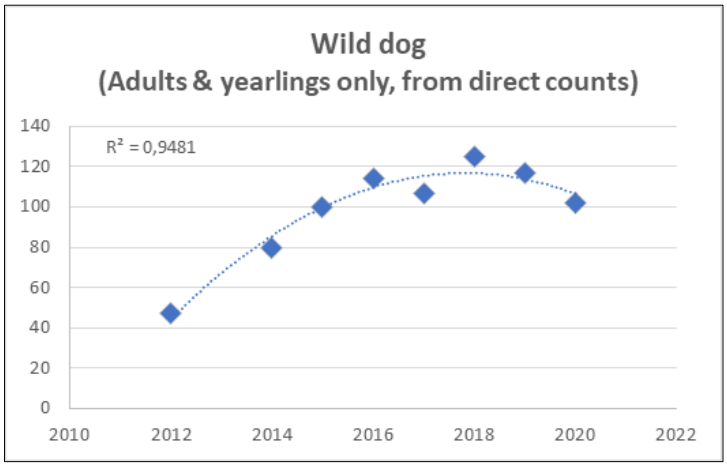
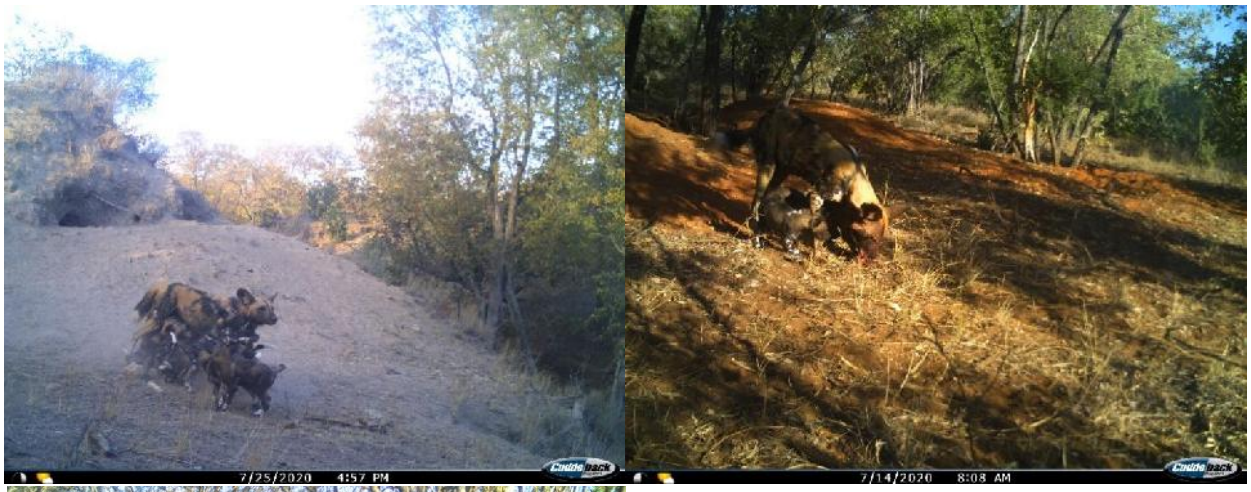


Figure 2: The African Wild Dog population trend in Gonarezhou National Park.

Some highlights from the 2020 wild dog denning season in Gonarezhou National Park!



Clockwise from top left: Smuggler pack alpha female feeding her puppies at the den, an adult wild dog regurgitates meat for a puppy, and a leopard is captured moving through a wild dog den site.

Monitoring trans-boundary movements and anthropogenic impacts on wild dogs – *to ensure well-connected and sustainable large carnivore populations in both SVC and GNP, and surrounds*

It is of the utmost priority for AWCF, firstly, that the large carnivore guilds in both SVC and the Park continue to thrive, and secondly, that we focus on understanding better to what extent our conservation efforts can contribute at the transfrontier landscape level. Many of the pressing threats (e.g., habitat loss in surrounding areas, by-catch in wire snares set by bushmeat poachers, human persecution and rabies) facing large carnivores in protected areas, SVC and GNP included, are exacerbated by restricted connectivity with neighbouring protected areas.

African wild dogs are the second most endangered carnivore in Africa, and cheetah have been identified as a priority species for conservation outside of protected areas. Further, Zimbabwe has been flagged as a priority country for conservation investment. As such, we need to continue to promote connectivity for wildlife between our study sites and neighbouring wildlife areas.

We continue to strive towards this overarching goal, and even though our planned wok for 2020 was disrupted by the Covid-19 pandemic, the following areas of focus remain a priority for AWCF:

- We were able to carry out the **13th and 12th annual large carnivore spoor survey** in SVC (October 2020) and GNP (September 2020) respectively, contributing to a long-standing data set and providing valuable data for ecologists and management.

- Plans were unfortunately thwarted in 2020 due to Covid-19 disruptions, but **investment into the Sengwe-Tchipise Wildlife Corridor** south of GNP (pending relevant permissions and approvals) continues to be a primary objective of AWCF. This is something we hope to be able to progress with in the upcoming year (providing research capacity support and community engagement), through a partnership with the Chiredzi Rural District Council (RDC) and Chief Sengwe.

  This is building on information collected in 2019 when AWCF and partners carried out a critical baseline spoor survey in the Sengwe Corridor. The results found limited evidence of sustainable resident populations of large carnivores in the area, as well as significant pressure from human-induced threats, which, if left unmanaged, will undoubtedly and significantly affect the potential for Sengwe to serve as an effective corridor for wildlife.

- Over the past year, whilst normal operations were disrupted, we **collated and analysed preliminary data collected from our support of Mutemba safari area in Mozambique** (on the eastern boundary of the Park) in 2019, and early 2020. Initial findings revealed (1) a clear need for awareness and education of large carnivores (wild dog and cheetah in particular) amongst the community, (2) the need for continued security support to reduce the threat of poaching, and (3) that if there is mutually beneficial engagement and genuine partnerships formed with the community, there is the potential to increase

individuals' tolerance and understanding of predators, and for the area to serve as a buffer zone to the Park and key range for cheetah and wild dogs.

We are anxious to delve deeper into this work and to continue providing financial and scientific support to this project being led by Mutemba Safaris. This is something we hope to be able to progress with in the upcoming year, Covid-19 dependent, and pending relevant permissions and approvals.

We also continue to prioritise monitoring priority wild dog packs and likely dispersers through collaring (when funds permit). We did not deploy any tracking collars in 2020, but we **collated previous dispersal and satellite collar data, as well as data on reported wild dogs carrying snares, to better understand linkage and connectivity between GNP, SVC and neighbouring wildlife areas**. This has become increasingly important following reports of human-wildlife conflict with wild dogs outside of GNP during 2020. Further, accidental snaring by bush meat poachers continues to threaten the survival of resident wild dogs in both SVC and GNP. Reported incidents of wild dogs carrying snares came from the south of the Park in 2020, emphasising the need for future collaring efforts to focus on 'edge packs' or packs close to the boundaries of the Park, as well as the significance of the planned work in Sengwe Corridor.

Destructive snare wires removed from 2 wild dogs in Zuva Pack in SVC – February 2020.

Over the next two years we will be increasing our efficacy in collaring, monitoring and knowledge about how anthropogenic factors influence wild dogs through a collaborative and international study which is aimed at understanding, projecting, and mitigating the impacts of climate change on the endangered African wild dog. This work was supposed to go ahead in 2020, but was postponed as a result of the Covid-19 pandemic. We hope to be able to progress with the study in 2021 or 2022 (Covid-19 permitting).

This is a multi-site study, and the research team includes researchers from the UK, South Africa, Kenya, Botswana, USA and Switzerland, in addition to the AWCF team in Zimbabwe. The title of the project is: '*Hot Dogs: climate change impacts in an endothermic predator*'. We will be using state of the art collar technology (including 'daily diary units') and temperature loggers on the wild dogs, as well as collecting detailed climatic data from weather stations. A separate but related project to fit tiny cameras to the wild dogs' collars will help to calibrate the daily diary units (as well as giving us an insight into how the dogs move, hunt and interact at night).

Although primarily focussed on African wild dogs, this study will have wider implications for ecology and conservation. Specifically, it addresses three of the most important fundamental questions in ecology identified by top ecologists internationally. First, we shall "upscale detailed processes at the level of individuals into patterns at the population scale", using novel empirical and modelling methods. Second, we shall test "how… interspecific interactions affect species responses to global change" by characterising how predation changes in response to climate. Finally, we shall explore "what determines whether species adapt, shift their ranges or go extinct in the face of rapid environmental change" through insights into mechanisms of climate change impact and adaptation. By informing these three fundamental questions, our findings will have general applicability to multiple species and ecosystems.

Separately, this Zimbabwe Parks and Wildlife Management Authority-supported research will have major implications for the conservation of African wild dogs, because it will help to target conservation action for this endangered species under climate change. Specifically, we anticipate that our work will also benefit populations of African wild dogs throughout Zimbabwe, by helping to indicate how the national wild dog population might best be managed over time, and by helping to predict its likely impact on ungulate populations.

We anticipate both academic and conservation outputs from this work, and it will undoubtedly put Zimbabwe on the map as a leader in international conservation and climate science for endangered species.

Interspecific competition – investigating the impact of lions on wild dogs

Through our annual large carnivore spoor surveys, we have 13 and 12 years of long-term population trend data for lions and wild dogs in SVC and Gonarezhou, respectively. With the densities of wild dogs and lions still comparably low in GNP we infrequently record incidents of lion and wild dog conflict, however this is not the case in SVC where the densities of both species is notably higher (Figures 1 and 2 above, and Figures 3 and 4 below).

In the 2020 denning season in SVC, lions impacted 70% (7 of the 10 denning packs) of wild dog dens either through disturbance or direct persecution (killing of puppies), which in many cases resulted in smaller or less experienced packs abandoning their dens or carrying out premature and energetically costly den moves. Whilst our research shows that lions undoubtedly impact wild dogs in the lowveld, lions do not appear to have a significant negative affect on wild dog persistence / survival, with wild dog numbers remaining stable and with higher than average densities (but this relationship does need to be watched).

The 2020 spoor survey estimated **251 lions** in SVC at a **density of 10.3 lions / 100km²**. This is higher than densities recorded elsewhere (9.6 lions / 100km² - average over Kruger, Hwange, Selous and Serengeti), and in areas notably larger than SVC. See Figure 3 below.

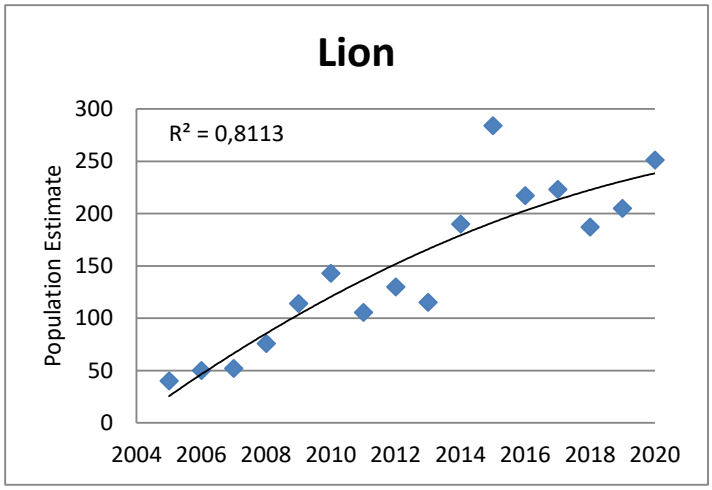


Figure 3: Population trend for lions in the Savé Valley Conservancy

In GNP, the 2020 spoor survey results estimated a population of **155 lions** in the whole of the Park, at a **density of 3.1 lions/100km²**. The lion population displays a positive trend, supported by anecdotal evidence – regular tourist sightings, and Rueben attests to a strong presence of lion in the Park. However, relative to other populations (average over Kruger, Hwange, Selous and Serengeti = 9.6 lions/100km^2), the estimated density of lions in GNP is still fairly low. Interestingly, the density of lions appears to be higher in the south of the Park.

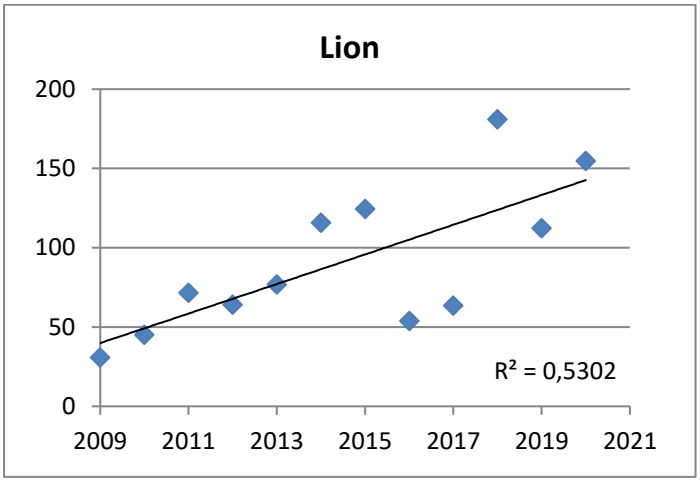


Figure 4: Population trend for lions in the Gonarezhou National Park

Importantly, and following strategic review and discussions, we will be initiating and overseeing (in partnership with the Gonarezhou Conservation Trust) a focused lion research project to better understand the dynamics of the resident lion population in the Park. This study with involve various methodologies and will aim to better understand pride structure (including identifying individuals) and population counts, as well as lion home ranges and dispersal behaviour, and potential human-lion conflict.

Lions are the biggest inter-specific threat to wild dogs, so a comprehensive understanding of the lion population in the Park will allow for better comparisons and research conclusions with regards to how lions may impact wild dog survival in GNP.

Notably, two relevant papers have been published in the course of this project;

1. *Groom, R. J., Lannas, K. and Jackson, C. R. (2016), The impact of lions on the demography and ecology of endangered African wild dogs. Animal Conservation DOI:10.1111/acv.12328*
2. *Tensen, L., Groom R.J., Khuzwayo, J. & Jansen van Vuuren, B. (2018) The genetic tale of a recovering lion population (Panthera leo) in the Savé Valley region (Zimbabwe): A better understanding of the history and managing the future. PLoS ONE 13(2): e0190369. https://doi.org/10.1371/journal.pone.0190369*

Education and Outreach in the schools surrounding GNP and SVC

Alongside our important predator monitoring and research, we also have a multifaceted and effective education and outreach program (focused on rural schools' education). This work previously also included a human-wildlife coexistence project / element around GNP which was a joint initiative between us (AWCF), the Gonarezhou Conservation Trust (GCT), and the WILD Programme, and carried out under the auspices of the Chilojo Club.

The Chilojo Club, however, underwent some restructuring in 2020 following strategic review. It was agreed between the three partners - us (AWCF), GCT, and Sustainable Agricultural Technology (SAT) WILD Programme - that AWCF will assume responsibility of the schools' environmental educational programme (in partnership with GCT) and GCT will do the same for the Human Wildlife Conflict Programme (still with input from AWCF as necessary).

Key to this restructuring was a comprehensive and strategic review of the content, delivery and scope of the existing schools' education program – through which we **currently support 108 primary schools and 10 secondary schools**. This process (overseen by a professional evaluator and educator) involved extensive engagement with, and feedback from, our supported schools, teachers, and DSI's, and also supported the training and development of our education team and the employment of a new education officer (Godknows Nyuwani from Ndali area) for work around GNP. Unfortunately, school closures and disruptions during 2020 as a result of the Covid-19 pandemic delayed plans to roll out the new program in schools (full program outline and plan is available upon request). However, we are ready and waiting to get started as soon as we can this year.

Wildlife conservation cannot happen in isolation, and it is imperative that community education, engagement, and opportunities for livelihood development and improvement go hand in hand with conservation work and research. All of our work with schools and communities is done under permits from the Ministry of Education, and we have formal support letters from the Provincial Education Director, the District Education Officers, and signed MOUs with the Rural District Councils.

Please see below for a summary of our major achievements in 2020 - **all of which were carried out in strict accordance with guidelines from the Government of Zimbabwe with regards to Covid-19 prevention, and with necessary permissions**.

Unfortunately, due to the pandemic, we were unable to carry out our usual conservation lessons in schools, and weren't able to conduct any training workshops, day trips or field trips, but we continued to support our students and teachers as much as we could remotely.

Annual Cluster Competitions

We did, however, manage to carry out our **annual cluster competitions** in December 2020. The competitions included 23 primary schools (3 schools were unable to travel on the day due to bad weather) and directly involved 276 children, 68 teachers and 207 community members. During these competitions groups of students competed against each other on several tasks. Including; using their creativity to make life-like carnivore models, their knowledge of the ecosystem to create posters, their passion to write and recite conservation poems, and their understanding of AWCF delivered conservation lessons to complete a final quiz.

Left to right, top to bottom: Students from Mkwasine primary school presenting their poster on human-wildlife conflict, Chipiwa primary school students with their life-like lion model, Representatives from Matezwa and Muteo primary school collecting prizes on behalf of their respective schools.

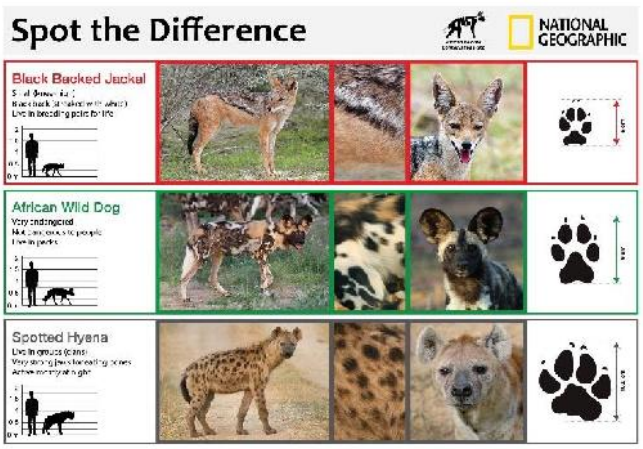
The competitions not only create an entertaining and competitive ground for pupils to test their knowledge, it also creates an educational ground for the wider attending community to learn about large carnivore conservation. Our annual cluster competitions are recognized and loved by the schools and communities we support and undoubtedly help to engender positive attitudes towards wildlife, conservation and African wild dogs. Please see below from Mr John Mutapurwa, village headman from the Mutapurwa community;

"When the headmaster invited me to attend the competitions, I was reluctant to come, I thought it was just going to be a waste of my valuable time. However, I decided to attend, to my surprise the competition was an eye opener for me, I did not know that primary school kids could possess such wildlife conservation knowledge. I learnt a lot; I did not know that human wildlife conflict is the negative interaction between people and wild animals. Thanks to these students I am now aware of HWC and how to prevent it. As a leader I will encourage my people to build kraals that are 2 m high to protect their livestock against predators".

In the recent and professional strategic review of our school's education program the cluster competitions were identified as a critical activity for promoting conservation awareness and capacity building in students and teachers. As such, it will be our priority moving forward (funding dependent) to increase the number of cluster competitions held each year.

Conservation Awareness Posters

In November 2020, we also **printed and distributed 1,000 educational posters detailing how to 'Spot the Difference' between African wild dogs, jackals and spotted hyena** to all our supported schools. This poster was developed upon request of the schools and after teachers' feedback that students often confuse the predators, resulting in incorrect reports of human-wildlife conflict with African wild dogs.



Scholars educate their peers about the distinct differences between African wild dogs, jackal and spotted hyena.

Additional Student and Teacher Training

Further, in December 2020, **AWCF education officers assisted with the second round of trainings for the Peace & Changemakers Generation Project** in/around GNP. This project is a formal cooperation between the World's Children's Prize Foundation and Peace Parks Foundation Sweden, funded by the Swedish Postcode Lottery. The

project is implemented in cooperation with Peace Parks Foundation, SYS (Shamwari Yemwanasikana), Gonarezhou Conservation Trust and AWCF.

The training sessions targeted communities living adjacent to GNP and which are part of the Greater Limpopo Transfrontier Conservation Area (GLTFCA). The aim of the training sessions were to:

1. Develop wildlife conservation ambassadors and advocates by educating community members and students about wildlife conservation and its importance.
2. Create awareness about the purpose and importance of the GLTFCA to both conservation and community development.
3. Nurture students and the youth into responsible future community leaders and conservationists.

Three sessions were scheduled in December 2020. All the sessions were graced by Mr Mangove who is the District Schools Inspector (DSI) for Chiredzi District. Each of the three sessions was attended by 40 students (both secondary and primary school students), 10 youths from the communities, 20 teachers and 10 parents.

Left to right and top to bottom: AWFC's Ezekia Chauke explaining the geographical location of the GLTFCA to the students, GCT's Herbert Phikela explaining to the students the importance of participating in wildlife conservation and community development, and students from Mwenje Primary school posing with their wildlife conservation magazines.

We hope to be able to achieve much more in 2021 (Covid-19 permitting) with regards to educational support and teacher training, including carrying out many of our very popular and highly sought after day trips into GNP and SVC. For now, and whilst we wait for schools to open, we are busy preparing resources, and our staff, for when the education program can be fully operational again.

Evidence of Community Support

We have been working with the schools for a decade now, and it is wonderful to see how the children and teacher's passion for, and knowledge of, conservation has been enriched! We are starting to report on **many examples of behavioural change and tangible benefits for the schools**, including; children from Pore Pore rescuing drowning wild dog puppies in 2016, schools creating conservation themed murals at their schools, and Mbuya Nehanda Primary developing a vegetable and tree garden at their school in 2019. Examples from 2020 are detailed below:

Clockwise from left:
Joshua Chandimara, one of scholarship students, decides to continue in the path of conservation and elects to study a BSc Wildlife Ecology and Conservation degree; Munashe Puzi, one of our A Level scholarship students, supports our rabies campaign in Chiredzi District; and 3 staff members - conservation teacher from Mbuya Nehanda, and Mwanyisa and Rimbi primary school Heads – volunteered to form part of our team for the World Ranger Challenge in October 2020, and to show their support for conservation!

Establishing Libraries in Schools

By the end of 2018, and after a four year process, **libraries were established in all 107 primary schools** (there is one satellite school which cannot support a library) **and 10 secondary schools around SVC and GNP**. This initiative has been achieved through a very fruitful partnership and collaboration with the Zambezi Schoolbook Project, and aims to assist with literacy and improve student's reading skills, as well as a love of learning through access to fun and interesting books with a conservation bias.

Unfortunately, disruptions to the school year from the pandemic prevented us from collating additional data from schools in 2020. However, as reported in 2019, it is very encouraging that preliminary data shows

significant benefits with regards to the improvement of scholar's literacy and comprehension since the establishment of libraries in schools (Figure 5).

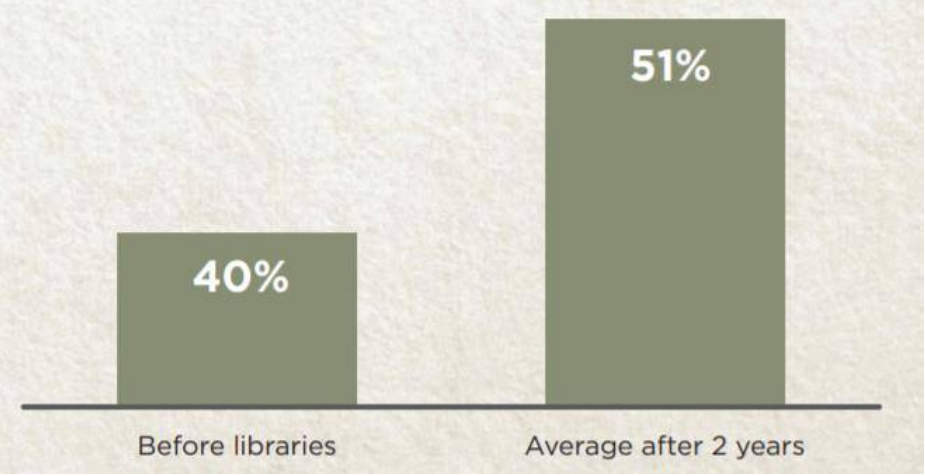


Figure 5: Schools with AWCF established libraries show improved Grade 7 end of year pass rates. N = average across 62 schools

In 2020, we secured another 2 full container loads of library books (c. 40,000 books). With most of the libraries from our supported schools already at capacity, a large percentage of the books, in collaboration with partners, will go towards supporting many other rural schools in the lowveld!

The first container of books was offloaded at the AWCF base in the SVC in December 2020, and we expect the second container to arrive in early 2021.

Literacy Solar Lamps and Solar Panels

As an extension of our 5-year partnership with the Zambezi Schoolbook Project, and thanks to very generous donations of the Bourke Family Foundation, **we have been able to provide the schools we support with 6,000 solar lamps and 14 schools with solar panels for lighting entire classrooms/libraries** (benefitting > 5,000 community members). The solar lights are helping children to continue their studies at night or when

borrowing library books to read at home (most of the students in our schools program live in rural areas where there is no electricity), and the solar panels are a significant help in facilitating the use of the school libraries for after hours studying, and to assist with adult literacy in community members.

Solar lamps (950 lamps) delivered to supported schools in October 2020, and there are an additional 950 solar lamps, and 2 solar panel sets which were received in December 2020 and will be distributed in early 2021.

There is strong evidence to support the noticeable and positive impact of AWCF's literacy resources in schools, both with regards to comprehension and literacy in students, as well as improved pass rates in schools. The Chishinya Primary School Head had the following to say about the importance of the solar panels for his school and neighbouring community:

"The solar system has been helpful to us as a school and the community as a whole. Apart from using the lit room for student studies, the community also uses the room for school development meetings".
-Chishinya Primary School Head-

Providing Scholarships for Students to Attend Secondary School

Our support of our scholarship students is perhaps one of our most impactful programs, or significant aspect of our work! We offer scholarship bursaries to excelling students among the selected primary schools in our schools' program. Students under the scholarship programme have their secondary tuition fees paid for, and are provided with uniforms at the beginning of form 1, 3 and 5. Our support also extends to providing extra lessons and stationery supplies (where needed) for the students, and to help pay for accommodation should children need to attend schools far from their family homes.

These children are all needy, and none of the students would have had the opportunity to attend secondary school without our support. The students are known as Predator Scholars, in order to maintain the link between the wildlife and the benefit. **We currently support 29 students – 17 from schools around SVC and 12 from schools around GNP**. Importantly, in 2020, 3 of our students were accepted to university – we are so proud of them! Further, throughout 2020, and in the absence of normal schooling, we covered the costs of tutoring for our students scheduled to write their O and A-level exams.

AWCF supported scholarship students who were accepted to university in 2020. Left to right: Joshua Chandimara, Misheck Dibha, and Edline Mashava (with their AWCF supplied laptops).

Unfortunately, we were unable to host our annual conservation and leadership training field course in 2020 due to Covid-19 restrictions, but we hope to be able to welcome the children back to our AWCF project site in SVC soon!

Community Support and Engagement – *partnering with neighbouring communities*

Our engagement with, and support of, the communities neighbouring SVC and GNP has progressed well past the provision of education resources and conservation awareness. Fundamental to our work in the landscape, alongside our conservation research, is engaging with neighbouring communities through legitimate and mutually beneficial partnerships, and with genuine support for livelihood improvements. We made significant strides towards this goal in 2020.

Support for Fresh Water Supply to Muvava Primary School and Community

In September 2020, with support from a very generous donor, AWCF provided financial support for the **provision of fresh running water to Muvava primary school and the surrounding community**. The project entailed laying piping and establishing a free-standing tank and pumping water from a borehole 3 km away from the school using a generator powered water pump.

Beneficiaries for this project include 750 students, 17 Muvava primary school staff members, 5 nurses and about 120 households. Apart from improving sanitation and access to clean water, the project has long-term benefits for the school, clinic, and community at large. In the community the project will encourage small income generating projects like gardening and horticulture. For the school and clinic, the availability of water will encourage staff retention and infrastructural development. This project was also implemented at a critical time, and fresh running water will assist the community in protecting themselves against Covid-19.

Left to right, top to bottom: water pipes and equipment being loaded for transport in Harare, community members pulled together to assist with the digging of trenches – even women and children helped, the 5000-litre water tank at Muvava primary school, and women from the teachers' cottage and community singing and dancing as a way of appreciating tapped water which is a rare sight in rural communities.

The local leadership expressed their gratitude for the support and care of their community. Mr Manhondo, ward councillor for Ward 25 had the following to say:

"We had a water crisis for years; our school and clinic did not have a reliable source of clean water. This water project is a blessing to us, and it will benefit us in ways we cannot even imagine. Now that we have water, development is inevitable. On behalf of the Muvava community, I would like to thank the AWCF for their support during these hard times. As a community leader I will encourage my people to support and participate in AWCF's conservation initiatives and programs".

Provision of PPE to Community Clinics

With schools closed and community gatherings banned, we invested time in supporting community clinics and those on the frontline of the pandemic. In May 2020, we **provided PPE, infrared thermometers and vital supplies to assist with personal hygiene and sanitation to eight rural clinics** around SVC. Further, December 2020, we printed and distributed **600 local-language posters on Covid-19 awareness** to community clinics and centres, as well as DA and DSI offices around SVC and the Park.

Clockwise from left: local language poster on Covid-19 awareness, AWCF's Victor Chibaya ready to offload PPE to community clinics, and a doctor takes a patient's temperature with their newly donated infra-red thermometer.

We secured additional funding in 2020 for further community engagement programs and vocational training, but were unable to carry them out due to disruptions from the pandemic. We hope to be able to progress with outstanding activities in 2021, and achieve so much more!

Reducing the threat from rabies through domestic dog vaccination campaigns

Given the close proximity of high density communities, and associated domestic dog populations, to the boundaries of both SVC and GNP, regular rabies vaccination campaigns are a must. We carried out two rabies vaccination campaigns in June 2020 in Chiredzi and Bikita Districts. The campaigns were carried out in collaboration with Veterinarians for Animal Welfare Zimbabwe and Government District Veterinarians. **A total of 4,865 domestic dogs vaccinated** – 4,001 dogs in the Chiredzi campaign, and 864 dogs in Bikita.

We were incredibly pleased with the turnout and vaccination rate in the Chiredzi campaign. We vaccinated 4,001 domestic dogs from a censused 5,955 in the area; vaccinating just shy of 70% of the domestic dog population - which is the percentage needed to significantly decrease the chances of a rabies outbreak. This was our third follow up campaign in Chiredzi. We hope that with repeat campaigns in other priority areas, Bikita District included, we will reach more people and their dogs and receive more support from the communities.

The benefit of these campaigns extends beyond just reducing the chance of disease transmission from domestic dogs to wildlife, but brings about positive change for the human welfare and livelihoods of the affected communities.

Left to right: A positive turnout by the communities, a VAWZ member vaccinates a dog, and AWCF's Victor Chibaya engages with a community member during the campaign.

Supporting anti-poaching efforts to mitigate snaring as a cause of wild dog decline

African wild dogs are the flagship species of our organisation, and the sustainable conservation of resident packs is central to all of our efforts. Death and injury from wire snares (set by bushmeat hunters) is the greatest cause of known adult wild dog mortality in SVC (impacting between 5 and 10% of the adult population each year), and continues to threaten wildlife throughout the south-east lowveld. Worryingly, this threat has increased significantly over the last couple of years as Zimbabwe has battled with economic collapse, mass unemployment and drought, leaving rural communities without food security or options to legally improve their livelihoods. Both SVC and GNP are surrounded by impoverished rural communities that depend on subsistence farming and natural resources for survival, thus **pressure from bushmeat hunting is very real**. This is the conservation issue and threat we continue to combat.

As reported last year, in 2019 alone we attended to more than double the (5-year) average number of wild dogs caught in wires snares; almost one per month. In 2020, we darted and treated 2 wild dogs for snare-related injuries. However, our monitoring operations and staff capacity was hampered last year as a result of Covid-19, and it is likely that there were more individuals affected by wires than what we recorded. For example, in July 2020, we attended to a snared female in a pack in SVC. She was the only remaining member of her pack (once a pack of 5) and was trying to raise the packs' 3 remaining puppies alone. After an extensive search and sweep for the rest of the pack, they were never seen again. It is highly likely, given that the remaining female was carrying a wire, that the rest of the pack (including the alpha pair) succumbed to wires. None of the puppies survived and this entire pack disintegrated – a significant loss for an endangered species and evidence of the utterly devastating and wasteful impact of snaring.

We do not foresee the threat from snare wires decreasing anytime soon as Zimbabwe continues to grapple with a crippled economy, with the situation compounded by the immense human-welfare issues resulting from the ongoing Covid-19 pandemic. As such, we continue to support and extend current anti-poaching efforts - removing snares from the field, reporting criminal activity and supporting local anti-poaching units where possible (logistical support, manpower, financial support for intelligence operations) to mitigate the threat from snaring as a cause of wild dog decline, and to reduce the threat of snares to other wildlife.

Conclusion

AWCF is invested long-term in the conservation of African wild dogs and all wildlife, and we are fully dedicated to our work and programs in the Zimbabwean lowveld. As illustrated above, we are producing many meaningful and significant benefits for the conservation of local wildlife, and for the upliftment of the local people. We will never stop striving to find ways to improve or adapt our approaches so that we may continue to make a tangible and sustainable contribution to the conservation of Africa's precious wildlife.

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AWCF's main partners are: