



MISSION STATEMENT

To provide high quality support services to the Zimbabwe Parks & Wildlife Management Authority (ZPWMA), Forestry Commission of Zimbabwe, local communities and their authorities, and other land holders to help achieve high levels of environmental protection, law enforcement and wildlife management in the greater Hwange ecosystem



CWF anti-poaching patrol around a pan in Hwange

CONTENTS

| | |
|--|----------------|
| EXECUTIVE SUMMARY | 3 |
| INTRODUCTION & BACKGROUND | 4 |
| CO-OPERATION WITH AUTHORITIES | 5, 6, 7 |
| ACHIEVEMENTS ON SECURITY | 8 |
| Present Activities | 8 |
| Future Activities | 8 |
| MAPS OF CWF PROJECT AREA | 8, 9 |
| KENNEDY APU | 9 |
| HIDEAWAYS APU | 9 |
| INFORMER AND INFORMATION REWARDS | 10 |
| SNARES | 10, 11 |
| CYANIDE POISONING | 12 |
| ILLEGAL FIREWOOD | 12 |
| LAW ENFORCEMENT STRATEGY | 12, 13 |
| PROSECUTION OF WILDLIFE CRIME | 13, 14 |
| SECURITY INFORMATION DATABASE for APUs | 15 |
| CWF ANTI - POACHING DATA SUMMARY 2018 | 15, 16 |
| COMMUNITY INTERESTS | 16, 17 |
| Lessons From Problem Lions In 2018 | 17 |
| Problem Elephants | 17 |
| FACILITATION OF OTHER CONTRIBUTIONS TO CONSERVATION IN HWANGE | 18 |
| INVESTIGATIONS OF ANIMAL DEATHS | 19 |
| SUPPORTING WILDLIFE RESEARCH | 20 |
| Starting Up New Elephant Research | 20, 21 |
| Supporting Existing Lion Research | 21 |
| Initiating New Research Into Rabies | 21, 22 |
| INFRASTRUCTURE AND EQUIPMENT | 22 |
| CWF MEETINGS | 22 |
| Invited Meetings | 23 |
| International Meetings Publicity & Communications | 23 |
| FINANCIAL MANAGEMENT | 24 |
| Income Paid To CWF by Source, 2017 - 2019 | 25 |
| DONORS AND DONATIONS | 25 |
| STAFF COMPLEMENT | 26 |
| MEMBERSHIP OF CWF | 26 |
| FURTHER READING | 27 |
| ACKNOWLEDGEMENTS | 28 |

EXECUTIVE SUMMARY

'**Conservation & Wildlife Fund – Hwange**' (CWF) is a relatively new model of the private and NGO sectors in and around **Hwange National Park (HNP)** Zimbabwe, formalizing an alliance of individual members to materially and in kind assist authorities with vital conservation work, for which the latter lack many resources. Of the 11 CWF members, five are commercial photo-tourism operators, and six are NGOs – four of these local and two international. The alliance has drawn together previous commercial competitors and organizations with widely differing interests, for the common good of landscape-level conservation in Hwange. CWF is a registered Charitable Trust (Zimbabwe Reg. No. MA 1346 /2015) which started operations in the field in late 2017.

The categories of CWF activity are broadly: law enforcement (the initial main focus), training and various small-scale technical support initiatives to wildlife authorities: FCZ (**Forestry Commission of Zimbabwe**) and ZPWMA (**Zimbabwe Parks and Wildlife Management Authority**), local community conservation initiatives in the Communal Lands (CLs); and selected technical and scientific support to research.

After the first year of operation CWF has 14 employees in total: a Project Manager, a Field Co-ordinator, and a Finance Administrator; then a complement of 11 Rangers manning two anti-poaching units (APUs).

Many institutional and professional collaborations have been established in this new initiative at a bigger than previous scale, which has superseded smaller and less effective piecemeal conservation efforts. Relatively small but highly innovative new projects to support two state wildlife authorities (**FCZ and ZPWMA**) have been much appreciated, and as a result a solid platform now exists in the form of initial medium-term (5 year) MoUs between both of them and CWF.

CWF has demonstrated exceptional progress in its first full year of field activity in 2018 and made many achievements in its infancy. The prospects for wildlife in the Hwange region have already greatly improved via new efforts to control and prevent wildlife crime and simultaneously strengthen institutional capacity to manage these areas for the general benefit of wildlife and its associated tourism.

CWF has a funding strategy consisting of revenue raised from (i) tourist bed night levies via the membership; (ii) institutional grants obtained via written proposals and (iii) some donations from individuals. We aim for an approximate ratio of these three categories at 45% : 40% : 15%. In 2018 the CWF total project budget was around USD280 000. The support and involvement of prestigious international donors like PANTHERA, WCN LION RECOVERY FUND and SOUTHERN AFRICAN CONSERVATION TRUST in Hwange will help to reassure the international conservation community that **positive engagement with Zimbabwe** has emerged in the aftermath of the Cecil hunting incident in 2015 – which was one of the numerous catalysts for CWF's establishment.

This model of a 'local stakeholder alliance' from the private and NGO sectors has proven very effective, even after such a short time. So a technical and financial support model of public-private partnership in conservation, so well proven in Zambia (see www.conservationlowerzambezi.org / www.conservationssouthluangwa.org), has now been firmly established in Zimbabwe.

Considerable expansion is planned for 2019 starting with two further anti-poaching bases and APU teams. This will double the staff complement if funds can be obtained for these staffing requirements. Now that CWF has entered the Hwange conservation landscape and has plenty to show for it in a short time, it has been accepted by local stakeholders. So a realistic strategic plan can now be put together for collaboration and co-ordination of conservation activity in Hwange over the next five years.

Thus in the broader picture beyond Hwange, CWF is effectively trialing the longevity of one of the **models of public-private partnership** in national conservation efforts, that can be further replicated around the Southern African Development Conference (**SADC**) regional countries. In tandem with trans-boundary conservation initiatives (in our case the largest example in Africa – the Kavango-Zambezi Trans-Frontier Conservation Area [**KAZA TFCA – contiguous parts of Angola, Botswana, Namibia, Zambia and Zimbabwe**]), this the future of land use based on conservation of wildlife and other indigenous natural resources.

INTRODUCTION & BACKGROUND

The large peripheral area of around 6000km² surrounding the Hwange National Park (HNP) is a **mosaic of wildlife-related land use** comprising state forests with no human settlement, communal land (CL) with human settlement and privately owned land, lightly settled, which collectively has fairly low human populations and thus forms a ‘buffer zone’ for wildlife. But severe **macro-economic problems in Zimbabwe** have depressed economic activity and formal employment, leading to an escalation in wildlife crime which could potentially cause serious depletion of certain species. Without cross-sectoral collaboration, essential wildlife dispersal areas will be lost and wildlife will contract into the core areas of HNP, potentially depleting this resource to levels where its utilization for **revenue-earning tourism** will cease to be viable in the large peripheral zone.

CWF’s initial project area is designed to safeguard wildlife and tourism based land-use on the periphery of HNP and in so doing, simultaneously reduce the threat of illegal activity and poor land management on the core protected area of the park itself, plus contribute to improved livelihoods of communities adjacent to this buffer zone.

However, despite a depressed macro-economic situation in Zimbabwe, photographic tourism in Hwange is picking up strongly because of political changes, a solid tourism infrastructure and well-trained personnel. Securing buffer areas of Hwange will continue to **improve commercial tourism viability** in areas where wildlife-based land use is far more suitable than subsistence agriculture. Boosting local revenues and thus creating more jobs will nurture more goodwill for conservation among stakeholders in the public, communal and private sectors.

There were APU field patrols in some part of the project area on almost every day of the year and a wide network of intelligence on wildlife crime was developed. The project has and will continue to catalyze effort for the following law enforcement efforts:

- Curtailment of **bush meat poaching** resulting in maintenance of higher numbers of herbivore prey species required to support range expansion of predators.
- Elimination of **commercial harvesting and trafficking of wild animal products** through illegal use of firearms, traps or poisons – e.g. Elephant ivory, Pangolin scales, Lion skins or bones, and body parts of Vultures.
- Reduction of **illegal resource use**: cutting of hardwood timber or abuse of legal quotas for doing so sustainably; unauthorized livestock grazing; unacceptable levels of trespass and human disturbance.

And in other work areas the project is selectively supporting:

- A new **problem animal control strategy and human-wildlife conflict mitigation policy**.
- Relevant and innovative **research projects**, either existing or new.
- **Skills training** for wildlife personnel in **FCZ and ZPWMA**.
- **Small infrastructural projects** in **FCZ and ZPWMA**.

ACRONYMS

| | | | |
|----------|---|-----------|---|
| APU | Anti-Poaching Unit | IUCN | International Union for the Conservation of Nature (part of the UN) |
| CAMPFIRE | Communal Areas Management Programme for Indigenous Resources | KAZA TFCA | Kavango Zambezi Trans-Frontier Conservation Area |
| CL | Communal Land | L JMU | Liverpool John Moores University - UK |
| CWF | Conservation & Wildlife Fund – Hwange | LRF (WCN) | Lion Recovery Fund (Wildlife Conservation Network, USA) |
| EMA | Environmental Management Agency | NRZ | National Railways of Zimbabwe |
| FCZ | Forestry Commission of Zimbabwe ('Forestry') | PAC | Problem Animal Control |
| FFW | Flying For Wildlife | PDC | Painted Dog Conservation |
| FoH | Friends of Hwange | SMART | Spatial Monitoring and Reporting Tool |
| HLR | Hwange Lion Research (part of WILDCRU, Oxford University, UK) | UZ | University of Zimbabwe |
| HNP | Hwange National Park | ZPWMA | Zimbabwe Parks & Wildlife Management Authority ('Parks'). |
| HWC | Human Wildlife Conflict | ZRP | Zimbabwe Republic Police |

CO-OPERATION WITH AUTHORITIES

The various authorities have been extremely supportive and collaborative in the early stages of CWF operations during 2018 and as a result CWF as a technical assistance model in conservation already has a solid foundation.



FCZ - Forestry Commission

CWF's first formal agreement was signed with the Forestry Commission of Zimbabwe in 2017 and is valid until 2022. This covers the attachment of Forest Guards (security personnel) to APUs either run by or collaborating with CWF, in order to provide official powers of arrest and admissibility of evidence in court. CWF hosts one Forest Guard attached to the Kennedy APU and one to the new Hideaways APU, both on a three week roster basis. Rations are

Provided for these two while attached to CWF. Continued co-operation on security matters with FCZ is working well.

ZPWMA ('Parks')

There is strong collaboration with ZPWMA and in late 2018 CWF this is in the final stages of negotiating an **MoU** to operate in the whole of the largest national park in Zimbabwe. This will be for 5 years initially but renewable thereafter, encompassing four broad areas: law enforcement (including some ranger training and deployment); animal management (broadly problem animal issues, disease, mortality and injury investigations and issues); limited infrastructural assistance (eg vital spare parts for equipment); and selected support to wildlife research. All assistance is agreed as strictly available on the basis of 'as CWF resources allow'. CWF Chairman Beks Ndlovu has approved the draft of the CWF proposal for this MoU.

| | DIRECT DONATIONS TO HWANGE NATIONAL PARK 2018 | US Dollars |
|--------------|--|-------------------|
| | Manning and Assisting Park Entrance Gates ¹ | 3680 |
| | Park Ranger Training ² | 1230 |
| | Fuel and Spare Parts Purchases ³ | 500 |
| | Communications Equipment ³ | 1200 |
| | Official Functions Sponsorship ⁴ | 420 |
| | Litter Collection Sponsorship ⁵ | 600 |
| TOTAL | USD 7630 | |

¹Manning Kennedy **entrance / exit gate** in HNP with a boom and monitoring traffic 24/7. CWF gave a small financial donation to the construction of Mtoa entrance gate which was completed and opened as a new access to HNP behind Dete township. Individual tourism operators combined to contribute the bulk of these costs.

²Steve Alexander from CWF, Gary Cantle (FoH) and a Harare-based trainer together ran a course on **weapons handling and training** for ZPWMA rangers at Sinamatella Camp, HNP. It was very successful and in future Steve and Gary will do this Parks training in the Matabeleland region. CWF has paid for ammunition for the next shooting course at Main Camp.

³Booster unit for cellphone communications, spare parts like mower blades, etc.

⁴Sponsorship for Nat Parks **annual sports / events day**: CWF sponsored floating trophies and medals for Men's

Shooting and Ladies Netball and Steve presented these prizes. CWF also sponsored some of the food and drink for the occasion.

⁵The **Bin Bag campaign** for more efficient collection of tourist rubbish from cars exiting HNP at Main camp, continues to be effective. Imperial Plastics Company in Harare are donating bin bags for 6 months. Many photographs of all aspects of CWF work in 2018 have been given to Parks for their own use. They are very appreciative of both the transparency and the visual material that their under-resourced publicity efforts can use.



Weapons training course for ZPWMA Rangers, 2018

Assisting ZPWMA to monitor traffic at non-tourist entry gates into HNP (below)



CWF sponsorship of trophies, medals and refreshments at ZPWMA annual sports day, held at Main Camp, HNP, in 2018



Donation of a cellphone signal booster to Hwange Main Camp Office: CWF Field Co-ordinator Steve Alexander is pictured with Mr Edmore Ngosi, ZPWMA Hwange Area Manager

A CWF sponsored Bin Bag campaign in HNP has allowed removal of some rubbish bins at game viewing platforms and tourist picnic sites. This reduces ZPWMA collection challenges and the menace of baboons scattering litter which causes environmental eyesores and health and injury risk to both humans and wildlife. CWF Project Manager Dr Richard Hoare is pictured here with the Tourism Manager of Main Camp, Mr. Peace Madora (seen on the right)



ZRP and NRZ

The Zimbabwe Republic Police and Zimbabwe's railway authority have been very supportive since the start of field operations and have co-operated in fighting local wildlife crime in joint operations with CWF and wildlife authorities. The police from Dete have participated in arrests of several poachers.



Agreements with local government bodies (two **District Councils**) will be formalized in the next project stage as they naturally follow those made above with the national agencies. Some **private landowners** have approached CWF in their moves away from hunting - specifically to collaborate on improving their security to attract photo-tourists to private land.



ACHIEVEMENTS ON SECURITY

Improvement of law enforcement has to be multi-disciplinary so that each activity contributes synergistically. To achieve this, **the following activities are being carried out in combination** to combat both widespread ‘low-tech’ unarmed poaching (mostly snaring) as well as armed incursions of commercial game meat and ivory poachers.

PRESENT ACTIVITIES

Anti-poaching presence on the ground. Eleven men were recruited from surrounding local communities (or those not far away) so this employment benefits multiple people in their large families. In 2018, the project showed it was possible to effectively cover spatially contiguous and temporally co-ordinated patrol areas in the Hwange peripheral zone. There were APU field patrols in some part of the project area on almost every day of the year and a wide network of intelligence on wildlife crime was developed.

The **SMART data recording and management system** has standardized the operating procedures for different APUs and after one full year can show very interesting data and key performance indicators. Local contacts have created an **intelligence scheme** based on an **informer and information reward network** that has led to arrest of poachers and identification of some dealers in wildlife products.

To supplement the above efforts, CWF and some of its members have facilitated a **surveillance flying** program using systematic observation procedures to record animal carcasses, poachers’ camps, bush fires, water points and other data relevant to law enforcement. The Harare-based organization FFW is flying over Hwange monthly.

FUTURE ACTIVITIES

The training and **deployment of a small detection (sniffer) dog unit** is now being investigated for when funds allow. More effective searches for illegal and hidden animal trophies, bush meat, firearms and poisons will add another dimension to CWF wildlife

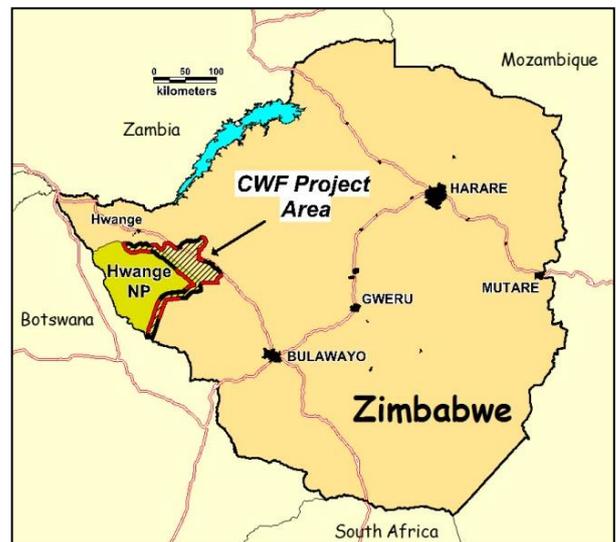
law enforcement. **Horse riding training** at Hwange Horse Safaris premises has been started, for future CWF APU horseback patrols when funding allows to cover more ground more rapidly and so add to the poaching deterrent.

To improve wildlife crime **prosecution procedures** CWF can support legal training but this will be done in conjunction with a separate NGO in the capital city that specializes in such matters. The vital role here for CWF is providing credible field data recorded to a standard required for admissible legal evidence.

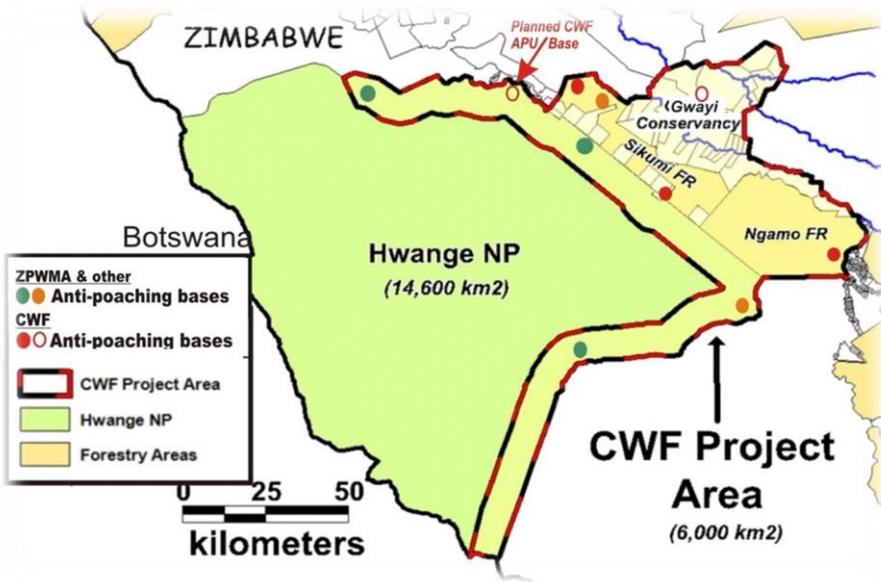
MAP OF CWF PROJECT AREA

In Map 1 HNP and surrounds in western Zimbabwe are shown (below)

The CWF initial project area is designed to safeguard wildlife and tourism based land-use on the periphery of HNP and in so doing, simultaneously reduce the



threat of illegal activity and poor land management on the core protected area of the park itself, plus contribute to improved livelihoods of communities adjacent to this buffer zone.



Areas depicted in white to the north, north-east and east of HNP are those with human settlement

Map of NINE APUs around the Hwange periphery: **THREE RED dots** outside HNP are: CWF Kennedy Siding (in collaboration with The Hide Safari Camp); CWF Sikumi (in collaboration with Hideaways Lodge) and CWF Ngamo (in collaboration with Imvelo Safari Lodges- commencing January 2019). **THREE GREEN dots** inside HNP area at Main Camp, Sinamatella and Makona stations, operated by ZPWMA (with some rangers partly trained by CWF). **ONE ORANGE dot** in the north is operated by PDC in Sikumi; **ONE ORANGE dot** in the east is operated independently by Wilderness Safaris; **OPEN RED CIRCLE dot** is defunct (Gwayi Conservancy). **A FOURTH CWF APU needs to be put in place urgently at the RED ARROW (Inyantue) – a hotspot of illegal access and activity.** A funding grant has been applied for and this site has been discussed with ZPWMA who are very supportive. Hopefully by mid-2019 this APU will be fully operational under CWF.



KENNEDY APU

The first CWF APU was set up on the Kennedy Annex concession which is leased by The Hide Safari Camp from NRZ. The building at Kennedy Siding belongs to NRZ and was initially refurbished by The Hide. There are four CWF rangers based at Kennedy and a Forest Guard is seconded on a rotational basis for three week periods.

HIDEAWAYS APU

The second CWF APU became operational with three CWF scouts and a Forest Guard permanently on duty. Housing is in tents at Hideaways Lodge property in their concession at Jwapi, Sikumi Forest Land. Regular daily patrols are recovering snares set by people from Dete in the Hideaways concession, the surrounding Sikumi Forest and on Railway Farm 41. CWF has also assisted Jenman Safaris concerning the ongoing problem of cattle grazing and watering during the late dry season on the Hideaways concession.



INFORMER AND INFORMATION REWARD

APU ground patrols are ineffective without the support of a **pro-active intelligence scheme** which relies heavily on rewarding informers. The CWF informer scheme worked with the wildlife authorities and made payments on six occasions in 2018 (three related to ivory poaching, two to illegal cyanide possession and one for a pangolin). **These cases resulted in the arrest of 12 poachers.** Informers and the collaboration of the ZRP or ZPWMA led to the arrest of several ivory poachers, the removal of cyanide-laced bait for killing elephants and the arrest of two people in illegal possession of a dead pangolin. The NGO Painted Dog Conservation (a CWF member) has its own APU (separate from CWF) which after a tip-off had notable success arresting a poacher in a CL village who was in possession of many illegal items: a lion skin, a python skin, pangolin scales, cyanide and wire snares.



Arrests were made after the informer network led authorities to a dead pangolin – a specially protected species that is now the world’s most trafficked animal

SNARES



Bush meat poaching with wire snares is the most threatening activity to wildlife in the majority of the project area. **The total of snares collected in 2018 by CWF APU patrols was 405.** Snaring is indiscriminate on all species, and has an insidious and cumulative effect over time on wildlife populations. The mortality rate in snared animals is very high and the very low recovery rate of bush meat from carcasses amounts to a senseless wastage. The only good news is this is a type of poaching activity which can be controlled over time with enough law enforcement resources, through well organized and sustained patrolling and some intelligence gathering.

A Wild Dog and a Bushbuck snare victims in the Gwayi ICA, found by a PDC patrol.

Wild Dogs are especially badly affected by snaring deaths and PDC suspect it is the greatest factor responsible for observed ‘pack failures’.

Occasionally live animals of different species are seen injured by snares and can be relocated after intense and time-consuming searching. A total of 10 live animals were darted and treated successfully for snare injuries in 2018 around Hwange (4 Wild Dog, 1 Cheetah, 1 Lion, 1 Hyaena, 1 Elephant, 1 Buffalo, 1 Waterbuck). These procedures were done by four different people specially licensed to use game capture drugs.



A radio-collared male lion with a copper wire neck snare - removed by HLR. The wire snare on the lion was removed from a male which very fortunately was radio-collared, thus preventing serious neck injury

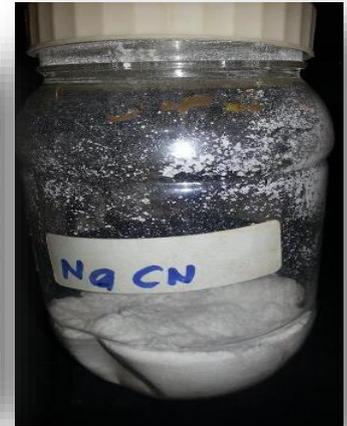


Snares are indiscriminate, affecting many species. Animals that are rescued from snares represent a small proportion of those which die an agonizing death and often are never even utilized. Overall losses can affect seriously affect whole populations, especially endangered species like Wild Dogs (left)

CYANIDE

Cyanide is a highly toxic and very cheap chemical used in mines for the extraction of gold. Cyanide **poisoning** targeting elephants is an illegal activity almost exclusive to Zimbabwe and particularly seen in the Hwange region. Such poisoning can kill many non-target species, especially endangered vultures and

mammalian scavengers (lion, hyaena, jackal) but if water sources are contaminated any animal can die rapidly. **A total of five poisoning cases were seen in 2018.** In one incident CWF rangers ambushed and arrested a gang of poachers deploying cyanide around a waterhole used by wildlife. This arrest resulted in very valuable intelligence which broke up a poisoning syndicate based in the local urban centre.



A pumpkin bait laced with cyanide (NaCN) by ivory poachers to poison elephants

ILLEGAL FIREWOOD

Illegal firewood collection in the HNP near Dete township was brought under control thanks to the collaboration of CWF with ZPWMA.

LAW ENFORCEMENT STRATEGY

But effective anti-poaching can displace wildlife crime to areas with less or little law enforcement. So CWF's law enforcement plan is to expand to cover the entire periphery of Hwange's wildlife range. Thus in the forthcoming second year of CWF operation we plan to construct, man and equip two additional APUs and provide them with strategically positioned bases. Funding for constructing and manning the first of these (Ngamo), has been secured and construction is scheduled to begin in early 2019. One of the CWF members in commercial tourism, Imvelo Safari Lodges, has donated a lot of resources towards the construction and staffing of this first unit. We need to increase the field rangers by at least five per new APU.

A combination of SMART recorded data and verbal intelligence is already telling us that the CWF project area is becoming less lawless and more unfriendly for illegal activity. Campaigns against snare setting also reduce and more importantly significantly deter, illegal incursions into protected areas, which in turn reduces disturbance on wild animals, bush fires, illegal cattle grazing and unauthorized firewood extraction. They each require a budget of around USD5000 per man per annum to employ.

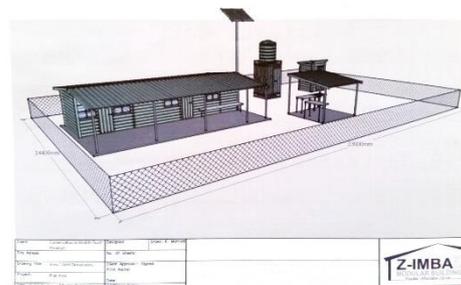


Diagram of a modular metal kit building for a new CWF APU base, funded by The Beit Trust (above)

The remaining (fourth) APU's future establishment is very strongly supported officially, especially by the national parks authority ZPWMA, as it will be established in a notorious hotspot of illegal entry into HNP and associated wildlife poaching activity (Inyantue - see map). This APU will have ZPWMA Rangers seconded to it (not Forestry Commission Guards) and operate in the park and adjoining communal land. Once this APU is functional there will then be permanent security collaboration on the ground, mandated by formal agreements with the two main wildlife authorities. This is a priority on CWF's wishlist.

Hwange is a small community and the news that law enforcement has been strengthened has begun to spread to the small urban centres from which local wildlife crime is largely organized. **However, such efforts have to be constantly sustained as any 'let-up' can result in a rapid reversal of the situation.** As more of the project area falls under the CWF standardized law enforcement approach, hopefully law enforcement results will shift from being reactive to pro-active, and so act as a far wider **deterrent to wildlife crime.**



Wire snares are set for smaller animals and cables are used for larger species

PROSECUTION OF WILDLIFE CRIME

Law enforcement efforts in wildlife crime experience disappointment when offenders are apprehended but the **judicial process** falls far short of expectation. The project had several successes in 2018 against the Cyanide menace. But in the case where CWF rangers ambushed and arrested a gang of poachers deploying cyanide around a waterhole used by wildlife, the prosecution was disappointing. While the success was that this arrest resulted in very valuable intelligence which broke up a poisoning syndicate, the prosecution process released the offenders with a very light sentence of 'community service' – on the technicality that an animal carcass was not present at the crime scene. This exact problem has also been experienced in other areas of Zimbabwe. Zimbabwe's relevant legal statutes are comprehensive but it is the judicial interpretation that is questionable. A collaborating

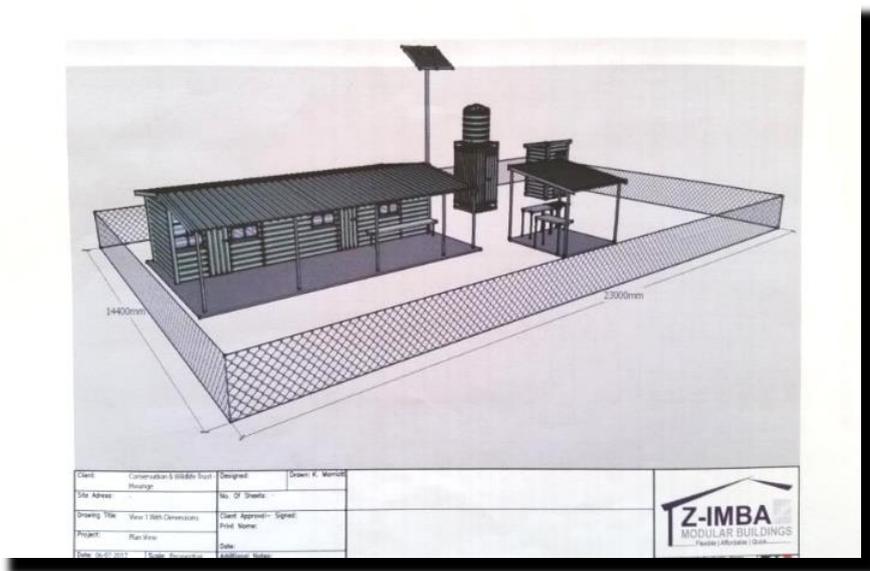
NGO that specializes in judicial support for wildlife crime cases nationally, has been consulted and is lobbying the country's relevant authorities on this matter.



Overall, **the target for reduction in numbers of wildlife crime cases** has been tentatively set at 25 - 30% year on year, for 3 years. **The target for increase in success of prosecution in wildlife crime cases** has been tentatively set at 80% by year 3 of this project



Kennedy Siding APU Base ; CWF Rangers with field kit for long patrols



New ranger picket (a modular kit building) for 6 men, sponsored by The Beit Trust

SECURITY INFORMATION DATABASE for APUs

SMART software as an information database for law enforcement used worldwide against wildlife crime (see <https://www.youtube.com/watch?v=pTJEOLmgqxc>). It has been very valuable in the first year of operation at CWF (see table below) and its use will be continued with regular refresher training. Quantitative performance indicators and their trends will be extracted from the SMART database.



SMART logo and data loggers for use on security patrols



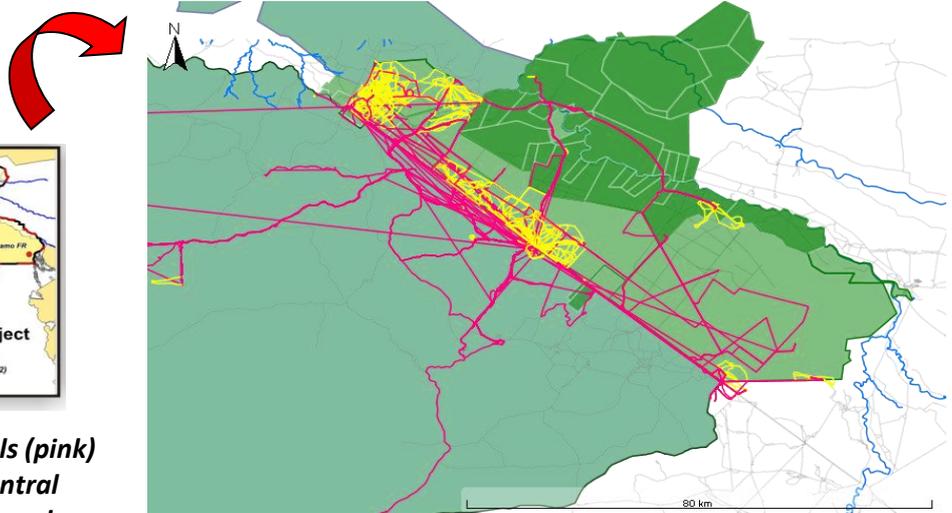
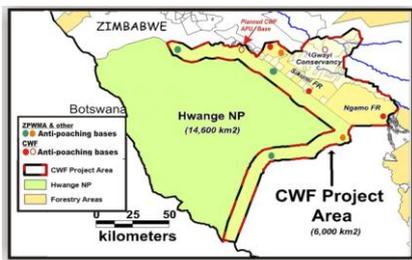
The PANTHERA sponsored SMART training team from Zambia comes to Hwange 3 - 4 times per year and engages with many different SMART users. SMART reports are produced monthly and the first annual one for 2018 in the standard format has been completed.

CWF Anti – Poaching Data Summary 1st January 2017 – 31st December 2018

| FOOT PATROLS | Number of Patrols | Distance (km) | Number of Patrol Hours |
|--------------|-------------------|---------------|------------------------|
| Total | 420 | 4577 | 3261 |

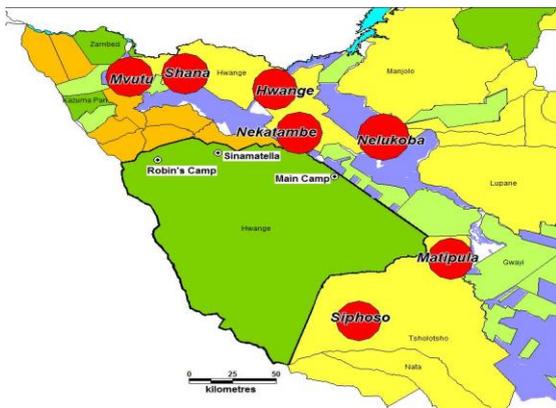
| VEHICLE PATROLS | Number of Patrols | Distance (km) | Number of Patrol Hours |
|-----------------|-------------------|---------------|------------------------|
| Total | 174 | 9214 | 924 |

| | Poacher Apprehensions | Number of Snares Removed | Cyanide Poisoning Events | Illegal Poacher Camps | Animal Carcasses | Bushmeat Confiscations (kg) | Ivory Confiscations | Other wildlife parts |
|--------------|-----------------------|--------------------------|--------------------------|-----------------------|------------------|-----------------------------|---------------------|----------------------|
| Total | 5 | 405 | 5 | 8 | 88 | 0 | 4 | 1 Pangolin |



Map of combined of Vehicle Patrols (pink) and Foot patrols (yellow) in the central project area of the Hwange peripheral zone

By far the worst snaring area was in the Gwayi Conservancy – although CWF covered only a small portion of it. The PDC APU also patrols there and has removed in excess of 1000 snares. The wildlife in Gwayi has been decimated and a new start is required from these private landowners. Other snaring hotspots were in Sikumi Forest around Dete and the Hideaways Lodge concession and around the Ivory Lodge concession. Northern Tsholotsho CL adjacent to Ngamo Forest is also a problem area.



COMMUNITY INTERESTS

The **Hwange National Park Management Plan** was updated in 2015 and officially accepted at Zimbabwe’s Ministry of Environment level in 2016. One of the four components of this 10 year plan is implementation of a co-operation plan between the park and park neighbours. CWF is getting involved in this issue in the project area.



Chieftaincies around Hwange where human-wildlife conflict cases occur. Domestic cow killed by a lioness.

Human-wildlife conflict (HWC) is an important, perennial issue around Hwange which CWF has begun to assist with. The three main conflict species are lion, spotted hyaena and elephant. Whilst **livestock killing by predators** has been much reduced in recent years, a total of 206 domestic animals were killed by predators around Hwange in 2018. Lions were responsible for 45% of these deaths overall and for 70 % of the cattle component. Hyaena were responsible for almost all of the balance.

These losses may not seem too large over a Hwange wildlife – CL boundary of around 350km long. But there is still enough of a problem to need to **decrease hostility to the park**, which some community members regard as just a source of problem animals. The most productive initial way for CWF to engage

| | 2018 TOTAL RECORDED LIVESTOCK LOSSES FROM ALL PREDATORS * | | | | |
|---------------|---|-----------|-----------|----------|------------|
| | Cattle | Goats | Donkeys | Sheep | TOTALS |
| HWANGE CL | 63 | 53 | 18 | 9 | 143 |
| TSHOLOTSHO CL | 33 | 12 | 18 | 0 | 63 |
| TOTALS | 96 | 65 | 36 | 9 | 206 |

Data courtesy of Hwange Lion Research Project

with community well-being is to become one of the leaders in efforts to mitigate problem animal activity on village land. There is plenty of local expertise to do this, especially as the two main CWF employees, Steve and Richard, have very considerable and complimentary experience in the mitigation of HWC. This initiative, which is slow and complicated, has already begun. It can be structured into

(i) emergency reaction to problem animals (often called PAC- **Problem Animal Control**), which needs much refinement into standard operating procedures. A CWF member, HLR runs a comprehensive '**Lion Guardian Program**' to protect livestock in villages surrounding HNP from wild carnivore predation and has achieved much success against 'conflict lions' and hyaenas with a variety of very innovative measures. HLR is a leader in Africa in this regard (see www.wildcru.org). CWF assists the Lion Guardians in their field work and thus can help expand this very successful initiative to more areas where it is desperately needed.

LESSONS FROM PROBLEM LIONS IN 2018

A recent and significant '**conflict lion**' event was the unexpected arrival in Hwange of a coalition of three nomad male lions of about three years old, from **Chizarira National Park** (150km distant) that had traversed a long corridor heavily populated by villages. This movement is very significant for the KAZA TFCA. On arrival in Hwange the lions continued to kill livestock around human settlement, causing political issues and controversy. Whilst management deliberations were going on between the various land authorities, local communities and researchers, the coalition began to spend more time inside HNP itself, and now appears to be settling there most of the time. There is a very good lesson here in problem lion management, in that sometimes less severe intervention and some patience may allow a conflict situation to resolve naturally.

Earlier another lesson in HWC was reinforced – which again illustrates the **dismal success of translocation** of individual 'problem lions'. A lioness with three cubs who were frequent stock raiding offenders, were live captured in 2017. In early 2018 they were translocated 150km away and released in another very isolated national park (**Kazuma**) with no surrounding villages. But she made her way north to the Zambezi River (50 Km from Kazuma) which she crossed into Zambia on two occasions to raid livestock again. On the second foray, she was shot in Zambia and her cubs were captured and held in captivity. This incident serves to illustrate to proponents of problem lion translocation that they should consider the repeated evidence of lack of success, and so like other human-wildlife conflict problems, preferably deal with them *in situ*.

and (ii) longer term mitigation measures to prevent problem animal activity effectively in the longer term.

WILDCRU's HLR is one of CWF's founding and most active members. Their **advice** is unfortunately not often heeded in major issues that erupt as a result of conflict lions, in which their expert counsel should be taken far more seriously in both the state and private sectors. The existence of CWF, which has a strong combined voice of local stakeholders and is establishing local credibility, may hopefully improve this situation.

PROBLEM ELEPHANTS

As in many parts of rural Africa, elephants, mainly bulls, are a crop raiding nuisance in villages around Hwange on a seasonal basis. The mitigation of this problem has historically focused on shorter term measures and often lethal PAC – Problem Animal Control. Elephants are often wounded by poor PAC efforts and either die later from injury or turn aggressive, creating further problems in communities. Longer term and more sustainable mitigation measures, proven elsewhere in Africa, need to be introduced to address human-elephant conflict.

A ZPWMA 'problem animal workshop' in which CWF played a major facilitating and presenting role was held with all relevant players in Hwange. In contrast to previous such workshops, and likely to some considerable extent due to the existence of a new, collaborative body like CWF, real progress was made towards a more cohesive and realistic approach to managing the three main problem wildlife species in the area: lion, hyaena and elephant. Standard operating procedures for **problem animal control** are in the process of being agreed to. These are a major improvement over *ad hoc* procedures of the past. And a second workshop to implement **long-term human wildlife conflict mitigation** is planned to take place shortly in collaboration with WILDCRU's Hwange Lion Research project. CWF and HLR will be taking the lead with involving the various authorities in conflict mitigation. CWF can fund some of this forthcoming workshop which we hope will produce a new **problem animal control strategy and binding policy** from ZPWMA and RDCs.

FACILITATION OF OTHER CONTRIBUTIONS TO CONSERVATION IN HWANGE



AERIAL SURVEILLANCE FLIGHTS TO ASSIST ZPWMA.

Aerial observation is vital to the management of large and remote wildlife systems in Africa and Hwange has no resident aircraft. An NGO Flying for Wildlife (FFW), assisted by CWF, PDC and Imvelo Safari Lodges started conducting over-flight sessions on consecutive dry season months in 2018 (August, September and October). FFW flies with a Parks ranger as official observer and provides a written report after each monthly session.

Aerial observations look for animal carcasses, poacher’s camps, fires, water points etc. and especially help locate and age elephant carcasses, some of which still have ivory (so not poached). CWF is already authorized by Parks to recover ‘pick-up ivory’ or poached ivory (above photo) – which is a good indicator of a healthy relationship and trust. Longer term plans are to acquire a resident aircraft and pilot for Hwange, as aerial observation is only really effective in law enforcement if it can be called upon and react at any time. The presence of an aircraft patrolling regularly always becomes a very significant deterrent to poaching.



Different colours are flight tracks over HNP in September 2018, covering some of the problem areas for law enforcement

INVESTIGATIONS OF ANIMAL DEATHS

Investigating causes of animal mortality is one example of a CWF work activity usefully assisting ZPWMA that has been specified in the draft MoU agreement between the two parties. Steve as a professional wildlife guide and ex-hunter and Richard as a wildlife veterinarian have combined as an effective team in HNP investigating causes of death in animal carcasses. A ZPWMA representative is always taken along to officiate.



Post-mortem examinations of fresh and old elephant carcasses use various aids: a metal detector (for Bullets) blood slides (for Anthrax) and the picrate chemical test (for Cyanide poison)



The long railway boundary of HNP and associated roads (left) facilitate CWF's security work in several ways, because poachers' incursions can be more easily detected. CWF assists the NRZ when animals get killed in collisions with trains (right)

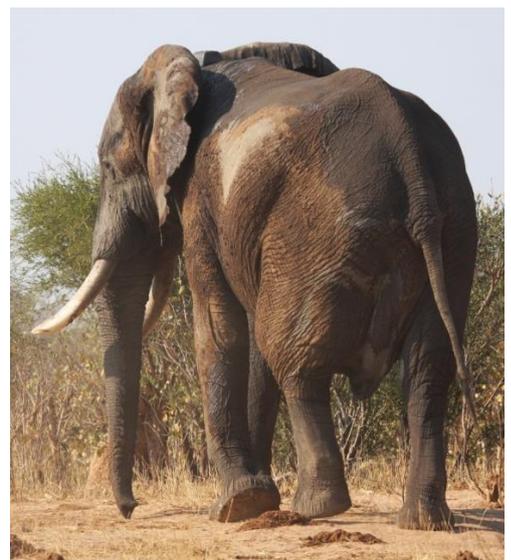
SUPPORTING WILDLIFE RESEARCH

STARTING UP NEW ELEPHANT RESEARCH

Elephant are the ‘defining species’ of the Hwange ecosystem. Due to the complex interaction of a number of past and present factors, the population has greatly expanded for decades and now **Hwange has the highest density of elephants found anywhere in Africa (>3 perKm²)**. Research on Hwange’s massive elephant population (censused at around 45 000 in 2014) has involved several studies of cow elephant groups, mainly focusing on their use of supplemented water – provided in the dry season by an extensive network of boreholes, situated in about 40% of the area of the park. Recent research has revealed that in wet seasons with plentiful natural surface water, elephant cows move long distances out

of Hwange (150Km), especially westwards into neighbouring Botswana.

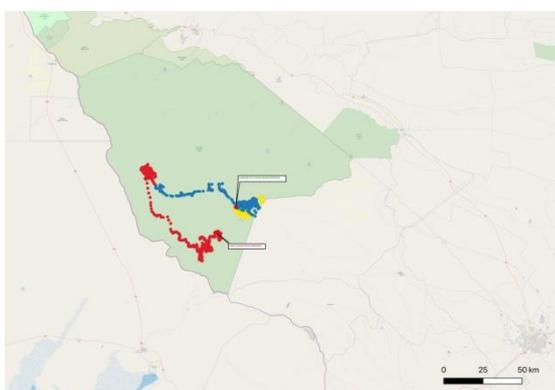
But surprisingly, relatively little is known about the bull elephants of Hwange and their seasonal movements. So CWF applied for a research permit to study Hwange’s elephant bulls in a joint project with ZPWMA. An initial number of five radio-collars was approved and over about a year we sourced the required funding from both private donors and a UK university (Liverpool John Moores University - L JMU) to start the project. In 2018 the first phase of the **‘Hwange Tuskers Project’** was completed. All five elephants fitted with GPS radio-collars were selected as exceptionally large-bodied animals for which Hwange has been renowned, and carrying heavy ivory.



Five large elephant bulls were radio-collared in Hwange in 2018 as a start to the ‘Hwange Tuskers Project’



The elephant data management system is working very well with Dr Lochran Traill at L JMU in the UK able to produce regular and varied maps of these animals' movements and habitat use. In addition, there is another aspect to this project which **links to CWF assisting law enforcement**: the very frequent satellite-derived locations have an added benefit of monitoring the security of these exceptionally valuable animals. A permit will hopefully be forthcoming from ZPWMA in 2019 for the expansion of this project.



Movements of >150km of one elephant bull collared at Jozivanini in HNP: Yellow Sept-Oct 2018 / Blue November 2018 / Red December 2018

On the eastern side of Hwange there is a **known migration route of up to 250km out of HNP** and Forestry areas which is used only by elephant bulls. These elephants use narrow corridors through Forest Lands and inhabited Communal Land and up to 200 of them spend long periods on properties primarily used for commercial cattle ranching. One of these cattle ranches has a lot of resident wildlife and even a small research facility. CWF has had dialogue with them with a view to close collaboration, which will give a big boost to research on elephant bulls in the eastern parts of Hwange.

Because the main driver of Hwange's elephant movement is rainfall, and with global climate change this is becoming more patchy and unreliable over the years, we have started working with the HNP Research Department and government's Meteorology Department to improve the coverage and standard of **rainfall recording** in HNP and surrounds.

SUPPORTING EXISTING LION RESEARCH

In the last 20 years ground-breaking scientific research on the **'edge effect' on the lion population** via quantification of **anthropogenic** ('caused by humans' i.e. unnatural) **mortality factors** has been conducted in Hwange by HLR. The national park is large (14 600km²) but HLR's long-term study has shown that only 39% of this core protected area contains lions that are not potentially subject to the **population 'sinks'** around it. Illegal activity in the form of animal snaring and trapping, poisoning, excessive problem animal control, abuse of hunting quotas and loss of prey from widespread bush meat poaching, badly affects the lion dispersal areas peripheral to the core HNP. If this unnatural mortality can be contained and thus the long-standing population sink much reduced, lions can then attain an **ecologically-driven density** across the vast majority of Hwange system.

HLR with some financial support and collaborative effort from CWF, set up a comparative **camera trap survey** in May 2018, to establish a baseline of both lion and lion prey identification and densities in contiguous areas with differing management – the exact CWF project area. These are state forests (FCZ areas) where safari hunting and some other natural resource utilization takes place versus the completely protected contiguous national park (HNP) – separated by the clear, porous boundary of a railway line. Very unfortunately some interests opposed to wildlife research caused the state forest camera grid to be removed after only 14 days. So data was only obtained from the 40 day HNP camera grid. However, combined sources of complimentary data on the lion population in Forest Areas outside the national park do suggest that anthropogenic mortality is definitely slowing down, in part we believe due to **CWF's new and efficient law enforcement activities**.

INITIATING NEW RESEARCH INTO RABIES

Rabies has been a perennial problem in domestic dogs in villages around HNP and is addressed annually by PDC that conducts dog vaccination campaigns. In late 2017 and during 2018 **'spill over' of Rabies into wildlife species** occurred, involving several carnivores:

A whole pack of endangered Wild Dogs died, five cases were diagnosed in Honey Badgers that threatened people, a Hyaena tested positive, and populations of Jackals and Bat-Eared Foxes may have suffered serious declines from the disease.

To address this threat, Richard undertook extensive preparation and discussion over some months for a PhD student to start fieldwork in Hwange in early 2019, to study the Rabies problem. CWF negotiated a wide collaboration between PDC (as the research



base), VFWT (the laboratory component in Victoria Falls) and the University of Zimbabwe – UZ in Harare (the local academic affiliation). The **PhD candidate is a qualified Veterinarian** with an academic and field programme fully funded through the University of Porto, in Portugal.



Rabies is a 'notifiable' disease subject to specified government standards of sampling and control measures. Five Honey badgers (left) were destroyed in a local outbreak at one location and tissue samples tested.

INFRASTRUCTURE AND EQUIPMENT

With a very small team of local helpers CWF's Field Co-ordinator Steve Alexander single-handedly organized construction of **a field base** almost adjacent to the first CWF APU accommodation at Kennedy siding. It was completed in May 2018. This consists of one semi-permanent accommodation tent on a concrete base with a tarpaulin roof, a small office and kitchen combined, and a basic water and solar power supply. The location has advantages of being central in the project area and relatively private for law enforcement work, but the isolation means communications are very difficult. Eventually a satellite-based **internet link** was purchased and installed so that efficient telephone, internet and email communication is now possible.

Field equipment vital for APU patrols was purchased in South Africa - largely funded by private donations from individuals in the USA. CWF field patrols can be a rapid reaction force if needed and can now undertake self-sufficient patrols for up to a week in remote areas.

A VHF radio system of hand-held and base sets was purchased and commissioned. But in Hwange's very flat terrain this suffered from limited range. Combining the individual donations of generous safari clients then allowed a first **radio repeater** to be purchased (US\$ 9300). The National Railways of Zimbabwe have collaborated with CWF by kindly allowing a radio repeater to be installed on their railway signal tower at Kennedy siding. This should give greatly increased communications coverage for the APU patrols to around a 30Km+ radius.

CWF MEETINGS

The first AGM was held in January 2018 Victoria Falls.

A membership and publicity meeting was held in July 2018, Hwange Main Camp - CWF members and 35 outside invitees attended. Presentations were given and discussions were held to inform Hwange stakeholders about our achievements to date, and to attract wider membership to CWF.

INVITED MEETINGS

CFW was invited to and participated in the following meetings:

PWMA meetings in Hwange

- Cyanide poisoning in wildlife: initial information meeting with EMA.
- Problem Animal Control and Strategy meeting of Hwange stakeholders
- Wildlife crime prosecution strategy meeting at PDC in Hwange

KAZA Regional Country meetings in Victoria Falls

KAZA meeting in Victoria Falls to create an 'Elephant Working Group' across the five KAZA countries. (Richard is elephant research co-ordinator for the Zimbabwe section of KAZA)

Habitat connectivity meeting for KAZA which was organized by WildCRU /HLR in Victoria Falls. (The lion and elephant groups will be working together to ensure overlap in connectivity for the two species in KAZA)

CFW law enforcement strategy in Hwange was presented at a KAZA Carnivore Conservation Coalition meeting in Victoria Falls.

INTERNATIONAL MEETINGS

IUCN Human-Wildlife Conflict Task Force: Richard was invited to an international meeting in Oxford, UK, of a newly-formed IUCN Taskforce - consisting of 16 renowned specialists in human wildlife conflict (HWC) from around the world. Its aim is to consolidate worldwide approaches to Human-Wildlife Conflict. There is only one other person working in Africa who was invited to initially represent the continent. This initiative has a link to the World Bank and Zimbabwe and several other regional countries are receiving some World Bank funding for HWC mitigation measures.

PUBLICITY & COMMUNICATIONS

Publicity is a joint effort between the CFW Project Manager based in Harare and the Marketing Team of Hideaways Lodge, based in Cape Town, and members.

CFW Leaflets, A4 Format. Produced in house by CFW. These were used both locally in Zimbabwe and further afield to advertise CFW and to familiarize interested parties and the authorities with the project. They were well received and popular.

CFW Posters. A2 Format. Produced in house by CFW. These CFW info posters were given to members and collaborating authorities to display at their premises to indicate their participation in CFW.

Internal News Bulletins. Written by the Manger and sent as PDF to board members at approximately two monthly intervals.

A closed Facebook Page called 'PAN GATHERINGS' is restricted to members and those associated with member organizations. CFW staff post text and photographs on all aspects of CFW activity on Pan Gatherings which are then selected and used for publicity in the public domain.

A Public Facebook Page

www.facebook.com/conservationwildlifefund

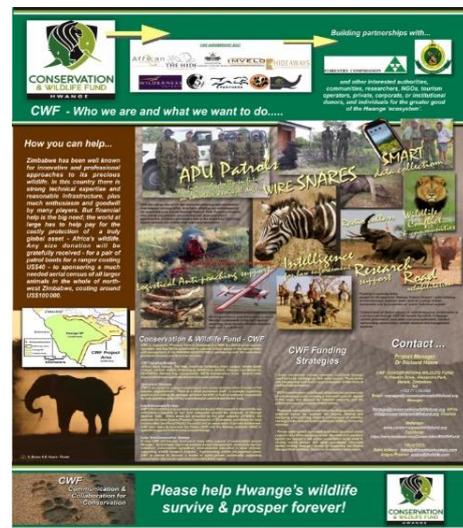
Hideaways transfers posted news content from the closed group Facebook page to the CFW public one.

Tourism Industry Newsletters

These are produced by Hideaways with content taken from the internal and public Facebook pages.

CFW Website www.conservationwildlifefund.org

This was revived in house and updated in December 2018.



CFW Poster is displayed in members' premises and the Main Camp Tourism Reception in HNP.

FINANCIAL MANAGEMENT

CWF is a registered charitable trust. CWF has a **funding strategy** consisting of raising revenue from (i) tourist bed night levies via the membership; (ii) institutional grants obtained via written proposals and (iii) some donations from individuals. We will aim for an approximate ratio of these three categories at **45% : 40% : 15%**. In 2018 the CWF total project budget was around USD280 000.

Core funding for the operation of CWF (some of the salaries for management and field staff, most administration costs and some recurrent expenditure) comes from an innovative internal system of a small fee, levied on each bed night spent by safari tourists with four of the CWF member companies engaged in photo-tourism (**African Bush Camps, The Hide, Jenman Safaris Hideaways Lodge and Amalinda Collection Ivory Lodge**). In 2017 and 2018 this levy has been US\$10 per tourist bed night.

Zimbabwe's economy has been operating on a system using both local and foreign currency. CWF recently opened a **Foreign Currency Account** and all incoming deposits in foreign currency are being credited there in US Dollars. Members' bed night levies from the last quarter of 2018 onwards are being deposited in this account in US Dollars. The members paying bed-night levies are invoiced quarterly by CWF. Because of this CWF had to register for Value Added Tax (VAT) and pay VAT on these levies. But then VAT on other purchases made by CWF is refundable.

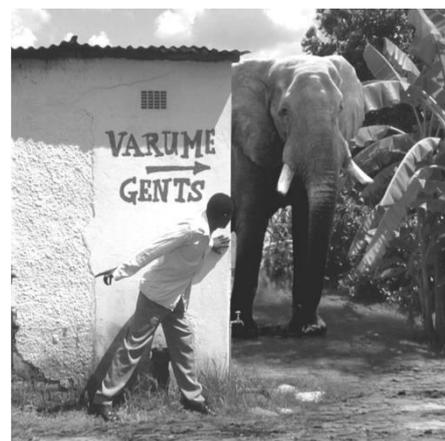
A similar funding strategy will be followed in 2019. We will try to increase the total budget to around US\$350 000 in the coming year. The membership voted to increase the bed night levy in 2019 to US\$15 per night, so this revenue stream is projected to reach US\$150 000 or about **45% of the annual costs** of the project. Interested private guests on photographic safaris with the tourism member companies have themselves separately donated quite generously in the past and the aim is for donor individuals to collectively contribute up to **15% of the annual costs** of the project. Thus 'institutional' donors offering grants to conservation in Africa will have to be the source of the **remaining 40% of the annual costs**.

A large portion of the 2019 budget increase will be an attempt to extend law enforcement coverage of the project area by expanding APUs from the present two to four. A third APU base facility is paid for and under construction from January 2019 (**Ngamo**). A fourth base facility (**Inyantue**) and all staff to be recruited for it, need funding. We have two CWF commercial members (Hideaways and Imvelo) directing funding to APUs based on their safari concessions which have substantial CWF supervision and control. They received such support from their own donor contacts and the total investment here for 2019 is around **US\$88 000**.

Other financial avenues that have been set up for donations are **ECOCASH** (a mobile phone banking application in Zimbabwe) and online platforms **PAYNOW** (in Zimbabwe and international).

We have set up partnerships with reputable charitable foundations in the following countries that can receive donations on CWF's behalf and allow the **donors to legally obtain income tax rebates** or tax related benefits:

- **USA Bushlife Conservancy** – <https://bushlifeconservancy.org>
- **UK Victoria Falls Wildlife Trust** – www.vicfallswildlifetrust.org
- **Germany** www.Rettung-bedrohter-Wildtiere.de
Lindenweg 4, 95445 Bayreuth, Germany.
- **Netherlands Stichting CCP** – **Carnivore Conservation Programme**, Blaaksedijk 244, 3271LR Mijnsheerenland, The Netherlands.



INCOME PAID TO CWF BY SOURCE, 2017 - 2019

| INCOME SOURCE | 2017 | 2018 | 2019 estimate /so far |
|----------------------------|---------------|---------------|-----------------------|
| TOURISM LEVIES | 111000 | 133000 | 153000 |
| DONOR INDIVIDUALS | 42000 | 9700 | 25000 |
| DONOR CORPORATES | 2650 | 3000 | |
| DONOR INSTITUTIONS | | 93000 | |
| TOTALS (US Dollars) | 155650 | 238700 | 178000 |

DONORS AND DONATIONS

SUMMARY of DONORS to CWF HWANGE 2017/18

| TYPE | FUNDS SUPPORTING | Information |
|--|---|--|
| INSTITUTIONAL | | |
| PANTHERA | SMART Equipment & Training One 4WD vehicle and one car | www.panthera.org |
| LRF (WCN) | Core operating expenses for law enforcement. | www.lionrecoveryfund.org |
| THE BEIT TRUST | APU building, Ngamo APU Base | www.beittrust.org.uk |
| SARF AUSTRALIA | Equipment items | www.savefoundation.org.au |
| LIVERPOOL JOHN MOORES UNIVERSITY, Dr L. Traill | Elephant collars and tracking data analysis | www.ljmu.ac.uk |
| INDIVIDUAL | | |
| Dr Wolfgang & Dr Gisela Hennig (Germany) | Core operating expenses for law enforcement. One Ranger Drone Elephant collar Additional vehicle purchase | www.Rettung-bedrohter-Wildtiere.de |
| Mrs Kathie Weisman (USA) | APU Field Kit Radio repeater unit | |
| Mr Mark & Mrs Pamela Robinson (USA) | Unrestricted donation | |
| Mr Ken & Mrs Mary Walker (USA) | Elephant collar | |
| Mr Steve and Mrs Kathy Taylor (USA / ZIM) | Two Rangers | www.askarisafari.com |
| Mrs Yvonne Povey (ZIM) | Metal Detector | www.minelabzimbabwe.com |
| Mr Scott & Mrs Brigitte Shulze (USA) | Unrestricted donation | |
| CORPORATE | | |
| BUTTERFIELD & ROBINSON (CANADA) | Elephant collar | www.butterfield.com |
| SATIB Trust (SOUTH AFRICA) | Medical insurance premiums | www.satib.co.za/satib-trust |
| SAFARI PROFESSIONALS (USA) | Ranger uniforms | www.safariprofessionals.org |
| IMPERIAL PLASTICS (ZIM) | Bin Bags for tourist rubbish | <imperial@yoafrica.com> |

STAFF COMPLEMENT

After the first year of operation CWF has 14 employees in total.

- Project Manager, Dr Richard Hoare was part-time in 2017 then assumed a full-time CWF position in April 2018.
- Field Co-ordinator, Mr Steve Alexander, was appointed to a full-time CWF position in October 2017.
- Finance Administrator, Mrs Kim Irving, is part-time in Harare.
- Project Assistant to Manager, Ms Sian Brown. Voluntary Position.
- A complement of 10 Rangers has been recruited, trained, equipped and deployed in two APUs in the first year of operation. The 11th man is the caretaker of the Kennedy base.

MEMBERSHIP OF CWF

The categories of membership so far are:

- 1 FULL MEMBERSHIP** is available to stakeholders in Hwange who contribute to CWF through either: direct financial contributions (eg bed night levies) or other regularly timed substantial donations sponsorship or administration of projects having a measurable financial value that fulfil the aims and objectives of the society.
- 2 PARTNER MEMBERSHIP** is available to stakeholders in Hwange who are active implementers of conservation-related activity but are themselves not in a position to contribute financially to CWF.
- 3 ASSOCIATE MEMBERSHIP** is available to organisations who are not active implementers of conservation activity in the Hwange area *per se*, but whose interaction with the society may be beneficial to the latter's aims and objectives.

Full member organizations have one representative on the CWF Board. A constitution has been drawn up and discussed amongst the full members and will be fully ratified by the Board in 2019

CFW FULL MEMBERSHIP 2018

(First five are photographic tourism companies; the last four are NGOs, two local and two international)



CFW PARTNERS REQUESTED IN 2019



FURTHER READING

Three examples of publications relevant to practical conservation by scientists* involved in CWF and Hwange

Mujon Baghaia, Jennifer R.B. Miller, Lisa J. Blanken, Holly T. Dublin, Kathleen H. Fitzgerald, Patience Gandiwa, Karen Laurenson, James Milanzi, Alastair Nelson, Peter Lindsey* (2018). **Models for the collaborative management of Africa's protected areas**. *Biological Conservation* 218: 73–82. Journal homepage: www.elsevier.com/locate/biocon

Arnold Tshipa*, Hugo Valls-Fox*, Hervé Fritz*, Kai Collins, Lovelater Sebele*, Peter Mundy, Simon Chamaille-Jammes* (2017). **Partial migration links local surface-water management to large-scale elephant conservation in the world's largest transfrontier conservation area (KAZA)**. *Biological Conservation* 215:46–50. Journal homepage: www.elsevier.com/locate/biocon

Loveridge, A.J.*, Hemson, G.M., Davidson, Z.*, & Macdonald, D.W. (2010). **African lions on the edge: reserve boundaries as 'attractive sinks'**. *Biology and Conservation of Wild Felids*, Oxford University Press, Oxford, pp. 283 - 304.

Management Plan

Hwange National Park General Management Plan 2015-2025. Zimbabwe Parks & Wildlife Management Authority and African Wildlife Foundation. P.O. Box CY140 Causeway, Harare. www.zimparks.org



ACKNOWLEDGEMENTS

CWF would like to thank all the following people for their many and varied contributions to the success of its first full year of operation in the field in Hwange. Apologies if there are any omissions – these are unintended.

MEMBERS REPRESENTATIVES (CEOs of organisation) Beks Ndlovu (CWF Chairman, African Bush Camps), Angus Preston (CWF Vice Chairman, The Hide), Sharon Stead (Amalinda Collection), Katja Quasdorf (Hideaways Lodges). Mark Butcher (Imvelo Safari Lodges), Peter Blinston (Painted Dog Conservation), Andrew Loveridge (Hwange Lion Research Project), Peter Lindsey (WCN Lion Recovery Fund), Paul Funston (PANTHERA), Brian Courtenay (Southern African Conservation Trust).

AUTHORITIES:

ZPWMA Ms Rose Mandisodza-Chikerema Chief Ecologist, AM Edmore Ngosi, SWO Kainos Mugande, SWONYathi, WO Makumire, Lovelater Sebele, Cheryl Mabika, Peace Madora, Mr Maphosa; Rangers Melisa, Norman, Anthony Antonio; Tourism Officers Precious, George, Takudzwa, Searchmore, Petronella.

FCZ Mr A. Marufu, Mr Piloto, Peter Mushunje, Constance Sibelo, Tendai Serima.

NGOs and PRIVATE: Lio-Junior Mathe, Jane Hunt, Lovemore Sibanda, Kristina Ketch, David Kuvawoga, Chris Foggin, Roger Parry, Jessica Dawson, Ian Stevenson, Devon Concar, Obert Manyeza, Nic Polenakis, Elissa Warrantz, Beth Brock, Esther van der Meer, Hans Dullefont, Gary Cattle, Dave Dell, Paula Dell, Lisa Hywood, Hannes Scholz, Richard Tennant, Richard Calder, Daniel Scholz, Roy Aylward, Ranga Huruba, Glen Johnson, Sarah Johnson, Davies Pfukenyi, Tapiwa Hanyire, Keith Dutlow.

COMMERCIAL: Chris Pakenham, Clive Jones, Mike Burr, Nigel Forsgate, Walter Mapanguri, Denias Kuhlengisa, Jannie Jacobs, Dale Crous, Greg Stead, Craig Logan, Sally Mucklow, George Makings, Hemal Ranchod, Sharlene du Plessis, Sharon Nel, Dennis Nel, Harry Tselentis, Stewart Mckinlay, Mike Johnson, Alex Johnson, Des Stephens, Sophie Haupt, Mark Beylis, Mike de Bruijn, Ananda De Abreu, Tom Fehrsen, Amy Goosen, Tyron Hurst, Antonia Amyot, Shaun Stanley, Albert Paradzai, Robin Forman, Nigel Newmarch, Isabel Warren-Codrington, Nick Milne, Shelley Cox.

DONORS – SPECIAL THANKS (see P.23)

PANTHERA Paul Funston, Xia Stevens

LION RECOVERY FUND (WCN) Peter Lindsey, Jean-Gaël Collomb, Jeffrey Parrish.

THE BEIT TRUST, David Long, Philippa Marett

LIVERPOOL JOHN MOORES UNIVERSITY, L. ochran Traill

BUTTERFIELD & ROBINSON (CANADA), Jonny Santilly

SATIB Trust (SOUTH AFRICA) Brian Courtenay

SAFARI PROFESSIONALS (USA), Natasha Smith

SAVE AFRICAN RHINO FUND (AUSTRALIA), Nicholas Duncan

IMPERIAL PLASTICS (ZIM), Deepak Chouhan

AMARULA via AFRICAN DISTILLERS (ZIM) Donna Marowa

MOLDON Ltd (ZIM), Karl Klein

Dr Wolfgang & Dr Gisela Hennig (Germany)

Mrs Kathie Weisman (USA)

Mr Mark & Mrs Pamela Robinson (USA)

Mr Ken & Mrs Mary Walker (USA)

Mr Steve and Mrs Kathy Taylor (USA / ZIM)

Mrs Yvonne Povey-Austin and Mr Rob Austin (ZIM)

Mr Scott & Mrs Brigitte Shulze (USA)