



2015 Annual Progress Report

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I. Executive Summary

The new Visitor Centre is now open and fully operational. This new space has provided opportunity for significant expansion of the experience offered to visitors. The new kitchen of the Cheetah Café has allowed for immense diversification of the menu and a substantial improvement in the number of patrons it can accommodate at any given time. The FNB Conference Room has allowed CCF to host events that previously would have been impractical and to provide space for educational lectures and presentations to large groups of students. We are always finding new ways to utilise this space and it will continue to provide unexpected opportunities to our operation. We are most grateful to those who joined the 'Ember Members of the Phoenix Club' to support this accomplishment.

We continued monitoring and enjoying the success of six re-wilded cheetahs: four adults and two sub-adult cubs thriving at the Erindi Private Game Reserve and one on CCF land, which gave birth to four cubs in September. Our release programme is an invaluable tool for potential re-introductions into other current and former cheetah range areas. Similarly, our research in other areas such as cheetah genetics, health, reproduction, and ecology, continues its momentum with numerous scientific papers or posters published or in the making. Much of our research work, along with our educational programmes, is largely possible thanks to the support of our volunteers and the dedication of our student interns. This year we also launched the free Carnivore Tracker app, which will allow for the gathering of data on species sighted in Namibia.

In Namibia, as in most of the cheetah range, the future of the species is in the hands of people who must share their land with this apex predator. Thus, our work places great emphasis on economic development initiatives aimed at improving the livelihoods of Namibian livestock farmers and the community in general. The CCF's Dancing Goat Creamery is constantly experimenting with new products and nearly doubled its profits from 2014. The Creamery, along with CCF's Chewbaaka Memorial Garden, Vineyard, and Apiary, encourage businesses not commonly practised in Namibia, such as goat milk products, organic vegetables/greens, wine and honey. Our flagship programme, Bushblok, once again passed its Forest Stewardship Council (FSC)™ annual inspection, and saw continued improvements to its facility.

Implementation of programmes aimed at economic development, integrated livestock and wildlife management, and habitat restoration in the Greater Waterberg Landscape (GWL) continued during the first half of 2015. This includes over 90 workshops on bush biomass harvesting, craft making, and tourism for conservancy members. A key factor for success is CCF's ability to maintain full-time staff and mentors in four GWL conservancies, imparting Future Famers of Africa courses in two villages per conservancy for a total of eight training days per month.

One of our most important programmes designed to mitigate human-wildlife conflict, CCF's Livestock Guarding Dogs (LSGD), continues to be in high demand by livestock farmers who understand the need to maintain healthy eco-systems. Our programme has also been adopted by Cheetah Conservation Botswana, Cheetah OutReach (South Africa) and, more recently, the Ruaha Carnivore Project (Tanzania). Since the programme's inception, nearly 600 dogs have been placed throughout Namibia, Tanzania and South Africa. An integral part of CCF's LSGD programme, the CCF Model Farm, serves as a real-life example of how an integrated approach to managing livestock and wildlife makes it possible for people and eco-systems to live in harmony. During this period, the number of goat and sheep herds reached a record ~400 individuals, and over 400 heads of cattle.

The illegal trafficking of cheetahs for the pet trade threatens wild populations across most of the cheetah's range. As such, we continued with our active participation in a CITES inter-sessional working group mandated with developing terms of reference for its inter-sessional work, including consideration of the organisation of a workshop to address issues and concerns related to this issue of high concern. The workshop was held in Kuwait in early November 2015, and was the first-ever international meeting dealing exclusively with cheetah trafficking with the participation of all relevant countries, NGOs and international organisations. Recommendations issued by workshop participants will be considered at the CITES Standing Committee meeting to be held in January 2016.

Effective fundraising is essential to keep our programmes alive, and my international travels are an important part of CCF's fundraising efforts. My travels during this period year covered 11 U.S. states and two cities in Ontario, Canada, and included lectures at prestigious zoos and institutions. I also travelled to Europe and the United Arab Emirates, where I had the honour to lecture at prestigious conferences including the Wildlife Conference 'Towards an EU strategic approach to wildlife conservation in Africa', the 1st European Cheetah Workshop, and the 15th Annual Sahelo-Saharan Interest Group Meeting.

My tours also serve to cultivate new partnerships, which are an important element to expand our programmes, and explore new opportunities that will allow the cheetah to prevail. During this period, I met with one of the partners of Tesla Motors, a company known for its leadership in solving environmental issues, and entered into a new marketing partnership with a new mobile technology company, Cheetah Mobile.

Saving a species like the cheetah is not much different than saving the world. By maintaining the health of keystone species, whole eco-systems can remain sustainable. It is a titanic task, and it can only be done by raising awareness, utilising solid science, and encouraging collaborations. We, humans, have the intelligence and the resources to ensure that our planet does not suffer irreparable damage. We can do this if we work together. The time is now!

A handwritten signature in black ink that reads "Laurie Marker". The signature is written in a cursive, flowing style.

Laurie Marker, DPhil.
Founder and Executive Director

II. Organisational Structure

The Cheetah Conservation Fund (CCF) is an international organisation with registered not-for-profit organisations in Namibia, the United States, Canada, the United Kingdom, Belgium, and Australia. New CCF foundations are being incorporated in Italy and China. In addition, CCF has Memoranda of Understanding with partner fundraising organisations in the Netherlands, France, and Germany.

CCF's International Research and Education Centre in Namibia is the primary base for all of CCF's global activities. In 1991 CCF became a Namibian Voluntary Trust and in 2002 was registered as a not-for-profit Namibian Section 21 Company. CCF's Namibian Board of Directors is comprised of leaders in the local community, businesses, and agricultural sectors. Additionally, there is an International Scientific Board of Advisors that assists in planning and advising on research projects. CCF's Executive Director, Dr. Laurie Marker, is assisted in the management and operations of CCF by a core professional staff aided by short-term volunteers and students who assist with daily operations and data collection.

The CCF Centre includes the farms Elandsvreugde, Osonanga, Boskop (Khayam's Kopje), Cheetah View, Bellebenno, Janhelpman, and Bynadaar, totalling 46,000 hectares. CCF's Centre is located in prime cheetah habitat and a wildlife-friendly area, with many neighbouring farmers who believe in conservation ethics. This ensures a large prey population, which is important for the cheetah population and serves to provide a model for farmers to demonstrate that they can live harmoniously with cheetahs.

CCF is an active member of the Waterberg Conservancy, which encompasses over 175,000 hectares of private farmland surrounding the Waterberg Plateau Park: a national game park dedicated to rare and endangered species. The conservancy's farmers cooperatively manage the land's wildlife for long-term sustainability that in turn provides habitat and prey base for the cheetah. CCF also sits on the Steering Committee of the Greater Waterberg Landscape, an area comprising 16,000 km², or close to 2 million hectares, around the Plateau and in Hereroland.

III. Research

During 2015, CCF continued working towards achieving its research objectives and strengthening collaborative efforts. Research continued in overall health and genetics, surveying, release of cheetah, and ecosystem research.

A. Population Dynamics

As of December 2015, the number of CCF's resident captive cheetahs is 33 (15M, 18F), compared to 34 (15M, 19M) at the end of 2014.

Throughout 2015, there were no releases, transfers, or acquisitions. One female (AJU 1203) aged 15.5 years, was euthanized in October due to chronic renal failure.

B. Examinations & Procedures

Every cheetah that is evaluated under anaesthesia by CCF is assessed for general health and fitness. The examinations follow standard protocols. Male examinations include semen collection when possible; the semen is analysed and stored in the CCF Genome Resource Bank (GRB).

In 2015, CCF performed a total of 23 examinations and procedures on 18 individual cheetahs (9M, 9F). Exams were performed on 11 captive individuals (6F, 5M) and seven released or wild individuals (4M, 3F) (Table 1).

Table 1: Summary of examinations and procedures performed by CCF on captive, captive-released, and wild cheetahs in 2015. The examination or procedure classification is indicated and includes the following: predator (wild or captive-released cheetah in field); entry (arrival of wild or captive cheetah from another facility or location to CCF); annual (routine captive cheetah health check); EEJ (electroejaculation); dental; and medical (treatment of any injury or illness, not including dentistry & oral surgery).

AJU	Sex	Date	Exam or Procedure					Details	
			Predator	Entry	Annual	EEJ	Dental		Medical
1602	M	06 Jan 15			x			x	Ophthalmic surgery
1548	M	15 Jan 15			x		x		Dental surgery
1583	M	24 Feb 15			x		x		Dental surgery
1581	M	24 Feb 15			x		x		Dental surgery
1355	F	24 Feb 15			x		x		Dental surgery
1269	M	24 Feb 15			x		x		Dental surgery
1590	F	16 Apr 15			x			x	Wound repair
1648	F	20 May 15	x						Collar placement
1649	F	20 May 15	x						Collar placement
1619	F	15 Jun 15	x						Attempted collar replacement
1619	F	28 Jun 15	x						Collar replacement
1650	M	28 Jun 15	x	x		x			CCF arrival and semen collection
1651	M	28 Jun 15	x	x		x			CCF arrival and semen collection
1650	M	6 Jul 15	x			x			Semen collection
1651	M	6 Jul 15	x			x			Semen collection
1651	M	7 Jul 15	x						Escaped from crate
1206	F	10 Jul 15			x			x	Laparoscopic surgery
1233	F	10 Jul 15			x			x	Laparoscopic surgery
1493	F	10 Jul 15			x			x	Laparoscopic surgery
1517	F	11 Jul 15			x			x	Laparoscopic surgery
1493	F	26 Jul 15					x		Dental surgery
1540	M	14 Nov 15	x						Collar replacement
1561	M	14 Nov 15	x						Collar replacement

1. Annual Physical Examinations: Captive Cheetahs

In 2015, CCF conducted annual physical examinations on 11 captive cheetahs (6F, 5M) (Table 1). Annual physical examinations were performed when a captive cheetah required a dental or health-related medical procedure. In the case of multiple anaesthetic events for the same individual cheetah, only the first event was considered the annual physical examination. All procedures were conducted under licensed veterinarians from CCF or southern Africa (Namibia, South Africa).

The annual physical examinations followed a standard protocol and included body weight measurements, dental and ocular examinations, assessments of organ systems via auscultation, morphometric

measurements, and sample collections (blood, urine, hair, faeces, ectoparasites). If needed, vaccine boosters (Fel-O-Vax®, Rabisin®) and ectoparasiticides (Frontline®) were administered.

2. Health-Related Medical Procedures: Captive Cheetahs

In 2015, CCF conducted a total of six medical examinations on six individual captive cheetahs (5F, 1M) (Table 1).

Resident male cheetah AJU 1602 (Khayjay) was anaesthetised on 6 January 2015 for examination of his left eye. For a few months prior to examination, the cheetah had exhibited excessive lachrymal discharge. Many ophthalmic ointments had been used with varying effects. While anaesthetised, the inner surface of the third eyelid revealed numerous mucous-secreting papillae consistent with chronic inflammation. The papillae were removed, a corneal ulcer was debrided, and the area was covered with a third eyelid flap. The eyelid remained shut for four weeks after which point the eye appeared fully healed.

Resident female cheetah AJU 1590 (Padme) was anaesthetised on 16 April 2015 to suture a wound on her left front leg. The wound healed well.

Resident female cheetahs AJU 1206 (Sandy), AJU 1233 (Solo), and AJU 1493 (Amani) were anaesthetised on 10 July 2015 and resident female cheetah AJU 1517 (Kiana) was anaesthetised on 11 July 2015 for laparoscopic surgeries by a visiting veterinary surgery team from the University of Pretoria Onderstepoort's Faculty of Veterinary Science. The surgeries were a follow up to laparoscopic salpingectomies (AJU 1206 on 5 July 2014, AJU 1233 on 8 July 2014) and ovariectomies (AJU 1493 and AJU 1517 on 7 July 2014) performed in 2014. AJU 1206 and AJU 1233 had both ovaries, as well as left and right uterine horn tissue sections collected. AJU 1493 and AJU 1517 had left and right uterine horn tissues sections collected.

3. Captive-Released Cheetah Examinations

In 2015, CCF released zero captive- orphaned cheetahs but conducted a total of four examinations on three formerly captive individual cheetahs originally returned to the wild prior to 2015 (2M, 1F) (Table 1).

Captive-released female cheetah AJU 1619 (Zinzi) was darted on 15 June 2015 within the CCF Reserve in an attempt to anaesthetise her in order to replace her GPS/VHF tracking collar. She was darted with two separate darts but unsuccessfully immobilised, possibly due to the fact that she was in oestrus. Capture was postponed to a later date to ensure that she did not reach advanced levels of stress. AJU 1619 was darted again on 8 June 2015. She was successfully anaesthetised, appeared to be in good health, and her collar was replaced without any complications.

Captive-released male cheetahs AJU 1540 (Chester) and AJU 1561 (Obi-Wan) were darted on 14 November 2015 within the Erindi Private Game Reserve in order to replace their VHF tracking collars. AJU 1561 was immobilised first, followed by AJU 1540 a few minutes later. Both cheetahs appeared to be in good health and both collars were replaced without any complications.

4. Wild Cheetah Examinations

In 2015, CCF conducted a total of seven wild cheetah exams on four individual cheetahs (2F, 2M) (Table 1).

Wild born female cheetahs AJU 1648 (Savanna) and AJU 1649 (Shandy) – 13 month-old cubs of released cheetah AJU 1510 (Jacomina) – were darted and anaesthetised on 20 May 2015 in order to place VHF tracking collars. A small wound was noted on the lateral aspect of the proximal left forelimb of AJU 1648. The wound was clipped and cleaned, topical antibiotics were applied on the wound, and a dose of long-acting systemic antibiotics was administered. CCF received reports from Erindi staff that the wound has healed, and she is healthy and doing well.

Wild adult male cheetahs AJU 1650 (Mike) and AJU 1651 (Lou) were captured by a farmer in the Grootfontein region. Following transportation to CCF, they were successfully anaesthetised on 28 June 2015, full entry exams were performed using the annual physical exam protocol, and semen was collected by electroejaculation. Both cheetahs were in excellent shape and were housed in the CCF quarantine area pending selection of a release site. An additional anaesthesia and semen collection were performed on both cheetahs on 6 July 2015 and a GPS/VHF tracking collar was placed on AJU 1650. Both cheetahs recovered and remained in transport crates with their release scheduled for the following day. Overnight, AJU 1651 escaped from his crate which was in CCF's secure holding pen. An additional darting was performed on 7 July 2015 and AJU 1651 was placed in a replacement crate. Both cheetahs were then transported to the site of their original capture and released back into the wild.

5. Dental Procedures on Wild and Captive Cheetahs

In 2015, CCF conducted dental exams on six cheetahs (4M, 2F) (Table 1).

Resident male cheetah AJU 1548 (N'Dunge) was anaesthetised on 15 January 2015 for dental treatment. He received root canals of all four canine teeth as well as removal of debris from a perforated palatine erosion. Additionally, a small mass was removed from his palate.

Resident male cheetahs AJU 1581 (Mischief), AJU 1583 (Phil), AJU 1269 (Merlot), and resident female cheetah AJU 1355 (Rosy) were anaesthetised for dental treatments on 24 February 2015. All had root canals and tooth extractions performed. AJU 1269 had reworkings of two previous root canals performed on 22 July 2013.

Resident female cheetah AJU 1493 (Amani) was anaesthetized on 26 July 2015 for dental treatment. She received six root canals, one of which was a reworking of a previous root canal performed on 20 February 2013. Additionally, one of her previous root canals from 20 February 2013 was refilled.

6. Cheetah Deaths, Euthanasia, and Necropsies

In 2015, CCF conducted three necropsies on cheetahs (0M, 3F).

Resident female cheetah AJU 1203 (Blondie) was euthanized on 1 October 2015 due to failing health. The necropsy was performed on 5 October 2015 and the findings were as follows: poor dentition; ulcerations along base of tongue; enlarged hepatic vasculature; right kidney was pale and swollen; left kidney was shrunken, dark, and firm; cause of death was kidney failure (acute failure in right kidney, chronic failure in left kidney). Blood work results were consistent with renal failure.

Wild juvenile female cheetahs AJU 1652 and AJU 1653 were found approximately 50 meters apart in the middle of a dirt road outside of Otjiwarongo on 18 November 2015. The necropsies were performed on 19 November 2015. The findings for AJU 1652 were as follows: significant skull fracture with exposed brain tissue; mid-shaft closed spiral humeral fracture; cause of death was vehicle strike. The findings for AJU 1653 were as follows: diaphragmatic hernia with stomach and liver displaced into thoracic cavity; ruptured stomach at level of fundus with stomach contents in thoracic cavity; cause of death was vehicle strike.

7. Non-Cheetah Carnivore Examinations and Necropsies

In 2015, CCF performed three necropsies on non-cheetah carnivores (3M, 0F): one African wild cat (FSI) and two leopards (PPA).

Wild juvenile male African wildcat FSI 009 was found dead in the CCF horse barn on 5 July 2015. The necropsy was performed on 31 July 2015 and the findings were as follows: ectoparasite infestation (fleas); no evidence of trauma or internal haemorrhage; cause of death was not determined.

Wild adult male leopard PPA 077 was found dead in a farmer's trap 10 kilometres outside Otjiwarongo on 17 November 2015. The necropsy was performed on 18 November 2015 and the findings were as follows:

peripheral vasodilation; haemorrhage throughout the kidneys, heart, lungs, brain, and urinary bladder; petechiation along underside of liver; cause of death was heat stroke.

Wild juvenile male leopard PPA 078 was found dead along the shoulder of the B2 roadway near Okahandja on 23 November 2015. The necropsy was performed on 26 November 2015 and the findings were as follows: superficial external wounds along the shoulder (2) and lower back (1); tip of tongue was bitten off and remainder of tongue was stuck between teeth; no internal lesions were discovered; cause of death was vehicle strike.

C. Health and Reproduction

1. Genome Resource Bank

CCF continues to bank sperm, serum, plasma, white and red blood cells, hair, and skin samples on all cheetahs worked up. Additionally, an increasingly extensive scat sample collection from wild cheetahs in Namibia and neighbouring countries is kept at CCF. All samples are part of CCF's Genome Resource Bank (GRB). Since 1991, blood and tissue samples have been obtained from over 900 individual cheetahs. These samples are used for over-all health and genetic purposes, with backups stored at both CCF Namibia and the Smithsonian Institution in the USA. With the creation of CCF's genetics laboratory, most samples are now held at CCF. Currently CCF holds the world's largest wild cheetah database of biological material, which also creates the need to curate all the samples and the development of database management systems.

Since 2002 CCF has been collecting, evaluating, and freezing cheetah sperm. The CCF GRB contains a total of 497 cryo-preserved sperm samples from captive and wild cheetahs in Namibia, representing 106 individual cheetahs. In 2015, three collections (two from AJU 1650 and one from AJU 1651) were added to the CCF GRB. One collection from AJU 1651 did not produce viable semen for freezing due to low quantity and quality.

D. Conservation Genetics

1. Life Technologies Conservation Genetics Laboratory

The Life Technologies Conservation Genetics Laboratory was set up in 2008/2009 by Dr. Anne Schmidt-Küntzel, CCF's Assistant Director for Animal Health and Research, thanks to the generous support of Life Technologies Inc. (today Thermo Fisher, formerly Applied Biosystems) and the Ohrstrom Foundation. Since then, the most important addition to the CCF genetics laboratory was the donation and installation of a refurbished 4-capillary genetic analyser in July 2014 by Thermo Fisher. The new instrument has greatly increased the capacity of the laboratory. In July 2015 the genetics laboratory moved into its new space located in the new Visitor Centre. This laboratory was designed with forensic laboratory standards and is larger in order to be able to host visiting scientists. The two genetic analysers and PCR machines were recalibrated by a technician from Thermo Fisher. The normal project process has been started again shortly after. Laboratory tours and talks are given to the public and groups with special interest in conservation genetics.

The laboratory's main aim is to contribute to the on-going research and conservation of cheetahs by working together with the ecology and biomedical departments in CCF's cross-disciplinary mode of operation. The Scat Detection Dog programme is part of this approach and was put into place in order to provide the necessary samples to the various genetics projects. The main genetics projects are related to cheetah population structure, census, relatedness, and assignment of individual ID to non-invasive samples such as scat. Projects related to other species are performed with outside funding and are so far limited to collaborative projects.

Since 2013, while in the United States, Dr. Schmidt-Küntzel worked closely with a database expert on an interactive electronic laboratory notebook. The notebook contains the entire scat and blood sample collection, as well as extraction information and resulting DNA for all the cheetah blood samples. .

After completing her Master's thesis, 'Identification of individual cheetahs (*Acinonyx jubatus*) represented in a sample collection, combining non-invasive genetic and camera-trapping techniques in December 2014, Lucia Mhuulu accepted a position at the CCF laboratory as Laboratory Technician and Research Assistant. Mbawemi Gabriella Mulikita, a Zambian graduate who performed a 3-month internship in 2014, returned to the laboratory as short term staff in January 2015. In June 2015 Katrin Hils joined the team as Genetics Laboratory Technician and is taking on some of the managerial aspects of the laboratory. In 2015, the laboratory welcomed four recent graduates from the University of Namibia (UNAM) as interns, Clemencia Tjazuko for six months, Saima Shipahu and Rudo Matavire for three months, and Loide Shipingana for one month. Dr. Ezekiel Fabiano, who graduated with his Ph.D. in genetics with CCF in 2013, took on a lectureship position at UNAM in January 2015 and continues to work with CCF as a collaborator, particularly with Angolan projects.

As part of South Africa's National Research Foundation's two-year bilateral agreement funding platform, the National Zoological Gardens of South Africa (NZG) and CCF have teamed up to investigate the pathology and potential genetic basis of oxalate nephrosis in cheetah. This collaborative project, co-funded by the Namibian National Commission on Research, Science and Technology, aims to investigate whether oxalate nephrosis in the cheetah is caused by mutations in the same genes as in humans and cats. In June 2015, NZG delegates Antoinette Kotze, Manager of Research and Scientific Services; Drs. Desire Dalton and Monica Mwale, Geneticists; Emily Lane, pathologist; and student Antonie Kloppers visited CCF for a 3-day symposium. The CCF and NZG research teams were joined by long-term CCF collaborator Dr. Karen Terio, a pathologist from the University of Illinois, to discuss the current status of the project, next steps, and future collaborations. As part of this collaboration, Mbawemi was able to visit the NZG genetics laboratory for two weeks in May 2015 and a South African student, Antonie Koppers, visited the CCF genetics laboratory for two weeks in June 2015.

Dr. Ezekiel Fabiano visited the laboratory with three UNAM students in October 2015. The students received training on laboratory procedures and interpretation of sequences and genotypes.

Genetics Projects

- Cheetah reference genome: CCF provided the genetic sample (AJU 981, Chewbaaka) for the reference sequence of the cheetah genome, which was published in Genome Biology 'Genomic Legacy of the African Cheetah, *Acinonyx jubatus*'. In addition, genetic variations that were identified from the whole genome sequences were verified with sanger sequencing at CCF's genetic laboratory as part of this research.
- Cheetah genotypes of known individuals (blood/tissue samples): As part of CCF's on-going research at the genetics laboratory, DNA is extracted from all individuals of which blood and tissue samples are available and their genotypes are obtained. All extracted DNA samples were assessed for quality via gel electrophoresis and extraction information was entered into the new database system. Intern Clemencia Tjazuko performed a genetic test for Zn-Finger on the samples as a sex marker. New markers were ordered and will be tested in the beginning of 2016 to extend the genotypes. Once complete, this data will be used to answer various population genetic questions.
- Population study of cheetahs on CCF property using non-invasive techniques: Individual cheetahs are assigned a genetic ID as well as a visual ID through the combination of genotyping of the DNA obtained from the scat samples and the photographs obtained from CCF's camera trap study. The data from 2008-2014 is part of Lucia Mhuulu's MSc research thesis, which was submitted in December 2014 and defended in July 2015. Many of these scat samples were collected with the help of the scat dogs Finn, Isha, and Tiger.

The scat sample collection from a coalition of two wild cheetah males ('the wild boys': Hifi, AJU 1543, and Sam, AJU 1542), which had been collected daily around the CCF Centre between July 2008 and October 2013, comprises over 950 samples and is a valuable resource for long-term monitoring of physiological parameters in two wild cheetahs. While the two wild males have died since (AJU 1542 in August 2010, AJU 1543 in October 2013), the work on the samples continues. The parasite levels were

assessed and recorded on a regular basis at the time of collection and over 180 samples have been identified genetically. The aim of the study is to identify samples for every 3-5 days throughout the entire five-year period and conduct hair analysis to determine the wild males' diet over time. Hormone work to determine stress and testosterone levels will be performed when funding is secured.

- Namibia-wide population genetic study: Samples are processed once they are collected by the CCF ecology and scat detection dog teams. Some samples are also obtained from collaborators from other conservation organisations and taxidermists. Mbawemi processed a set of 50 samples during her internship and identified the cheetahs in that sample collection. Currently she is generating an extended genotype for one sample per individual and performing diet analysis (microscopic identification of prey hair) on the identified samples.
- Verification of the accuracy of the scat detection dogs: The species of the scat samples found by the dogs is routinely verified using molecular markers.
- Illegal trade: The species content of samples from illegal trade was assessed using molecular markers specifically designed to identify carnivore species in samples of poor quality. PCR products were taken to the United States by Dr. Schmidt-Küntzel to do next-generation sequencing in a collaborator's laboratory. The obtained results will be made public when available.
- Babesia: A trial study was conducted in order to determine the percentage of affected cheetahs that are currently at CCF and compare those to the results obtained from microscopic evaluation of blood smears from other captive cheetahs. We also developed a diagnostic test to be used for further screening of the samples. The initial testing was assigned to Shalette Dingle, a visiting Cornell veterinary student in 2013; since then, a more sensitive test was also performed with promising results. Veterinary intern Natasja Lavin read the blood slides corresponding to the genetic samples in June/July 2015, so these can be included in the comparison.
- Release study: Sixty-six release and pre-release scat samples were extracted and assigned to an individual cheetah. These samples were sent to the Smithsonian Institution in the US to be analysed for faecal hormone levels.
- Carnivore species ID and diet: In 2014, visiting student intern Alicia Walsh from University of New Hampshire (USA) extracted DNA from 50 carnivore scat samples and verified the species they belong to using a mitochondrial marker. She also identified what the animals ate by using a variety of approaches including hair, bone, exoskeleton, and vegetation analysis. She published the project in the university's Inquiry journal in April 2015.

Collaborative Genetics Projects

- Rhinoceros: A pedigree for white rhinoceros (*Ceratotherium simum*), performed by visiting researcher and Master's student Abigail Guerier from Ongava Wildlife Reserve's Research Centre, was finalised and published in 2012. Abigail graduated with a Master's degree in September 2012. In the beginning of 2013 she started a genetics project on Ongava's resident population of black rhinoceros (*Diceros bicornis*) at the CCF genetics laboratory. The project is on-going and more samples are added as they are collected by the Ongava research team.
- Termites: In May 2015, a research team from the University of Florida worked with CCF to do a pilot study on termites. The initial tests were successful. More research is planned for upcoming years.
- Oxalate nephrosis: A collaboration was started in March 2012 with Dr. Karen Terio from the University of Illinois (USA) and Dr. Emily Lane from the NZG (South Africa) for a study on oxalate nephrosis. Primers for one candidate gene were designed by Dr. Schmidt-Küntzel and optimised at the CCF genetics laboratory in 2014. Diseased individuals were tested in the laboratory of the South African collaborators. In the first half of 2015 a second gene was investigated. The South African

team came to visit CCF during this period as well (see overall genetics laboratory section). To date no candidate mutation was found.

- **Amyloidosis:** In September 2013, a PhD student from the Smithsonian Institution, Ashley Franklin, came to CCF to make use of our unique sample collection of captive and wild cheetahs to determine their amyloidosis status. Ashley did the genetic work at the CCF genetics laboratory and took matching scat samples back to the United States to do hormone work and determine amyloid levels. Ashley graduated in 2014 and the study was presented at the North American Congress of Conservation Biology in July 2014. The results were published in the Journal of Heredity in 2015.
- **Gene expression:** Collaboration began in early 2011 with Dr. Eroid Naomab, head of UNAM's Department of Chemistry and Biochemistry, for a study on gene expression in the cheetah. New sets of samples were collected in 2014.
- **Geographic origin:** The collaboration with cheetah holding facilities and veterinary clinics in the UAE was initiated during a trip in June of 2013 and renewed in February of 2014. The aim is to begin developing a genetic database of cheetahs held in that area. Sperm and genetic samples were collected on males in 2014. The genetic samples are currently being analysed.
- **Carnivore ID:** Carnivore hair samples obtained from rubbing stations and hair snares in southern Namibia were analysed at the genetics laboratory to identify the species. This work was done in collaboration with the Brown Hyena Project in Lüderitz and was part of Sarah Edward's PhD (Royal Holloway, University of London). The genetic analysis was finalised in 2014, and the PhD successfully defended in October 2015.

2. Detection Dogs

In 2015, CCF Research Technician and Cheetah Keeper Eli Walker continued working with scat dog Tiger. In November 2015, Bart Balli, an intern from France, began working alongside Eli with the scat detection programme and started being trained on how to handle Tiger. With this new addition to the team, time spent in the field has increased substantially and Tiger is being worked almost daily.

In 2015, Tiger performed 45 training exercises, 75 searches (96% increase from the same period 2014), three sample checks, and four demos. Tiger also performed seven assessment searches of an experimental diamond-transect design (Figure 1). Tiger found 169 of the 170 training aids placed (99%), and the scat detection team collectively found 75 cheetah samples (316% increase from the same period 2014), and rejected 21 non-cheetah carnivore samples. During searches this period, Tiger covered a minimum of 131.3km (80% increase from the same period 2014). By the end of 2015, the scat detection team decided to redesign the diamond shaped transects into rectangle shaped transects for assessment beginning in 2016.

Figure 1: Screenshot of experimental diamond transect: blue is transect, green is path taken by dog.



E. Large Carnivore Research and Ecology

1. Cheetah Survey

CCF was asked by B2 Gold Mine to undertake a biodiversity monitoring project utilising remote camera traps in order to determine the species richness across the area. B2 Gold purchased 24 SpyPoint Remote Camera Traps for the purpose of this study. The aim was to determine the number of key carnivores on the game reserve including cheetah, leopard and brown hyaena.

On 28 March 2015 CCF's Ecology Manager, Dr. Louisa Richmond-Coggan, and ecology intern Trycolyn Pikirayi went to the B2 Gold game reserve to work with Reserve's Manager Duane Rudman, Ecology Manager Andre Rousseau, and Assistant Manager Simeon Nampala. The B2 Gold mine reserve was divided into 22 grid cells, each of 2.92 km². The number of cells was based on the total number of remote camera traps available, as there is no need to place two cameras per station when the focus is on collecting data on the presence-absence of species. Remote camera traps were placed randomly at least within 300 metres from the centre of a grid and left mounted at ca. 50 cm above the ground and left for three months. All the cameras were checked, furnished with charged batteries and empty SDs, and a short tutorial was conducted on how the cameras work (Figure 2).

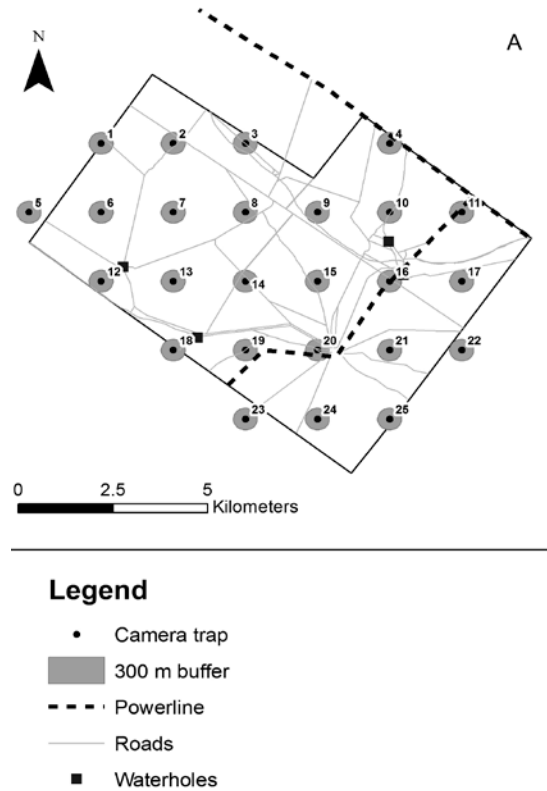


Figure 2: Study area with the camera trapping layout for biodiversity assessment for estimating relative abundance of brown hyena, leopard and cheetah.

The survey started on 28 March 2015 and was completed on 5 June 2015. The data has been analysed to determine the overall species richness, frequency and activity patterns within the reserve. The cameras were out for a total of 931 trap nights and took 31,476 photographs (Figure 3). Overall 10 carnivore species, 13 herbivore species and 7 bird species were captured. Amongst the carnivore species, the project achieved its goal of capturing all three target species (leopard, cheetah, brown hyaena). The B2 Gold mine team worked very hard checking the cameras every week, downloading the photographs and sending them over to CCF for analysis.



Figure 3: Example photo from the B2 Gold survey.

The carnivore species with the highest relative abundance (Figure 4) was jackal followed by brown hyaena, and the lowest being cheetah as they were only captured once throughout the study (Figure 3).

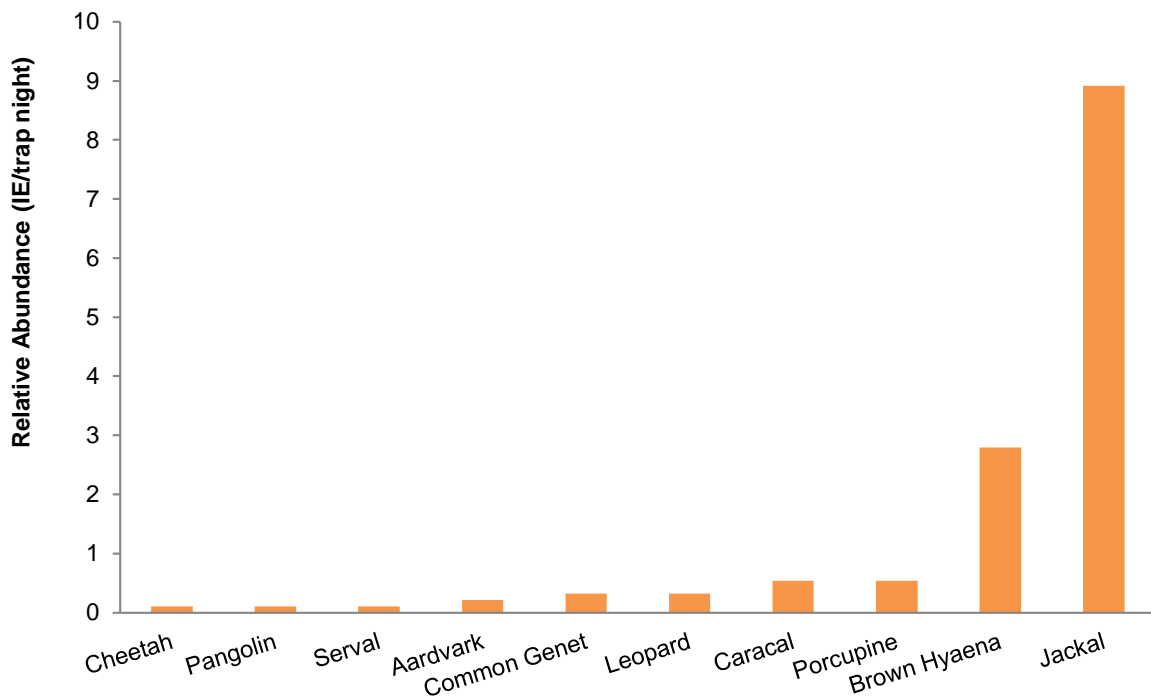


Figure 4: Shows the relative abundance based in Independent Events (IE) per 100 trap nights for all carnivore species captured between 28 March and 5 June 2015, B2 Gold Mine Game Reserve, Namibia.

As suspected, the majority of carnivore activity took place during the night, with jackal being the only species to be extensively active both day and night in the reserve (Figure 5).

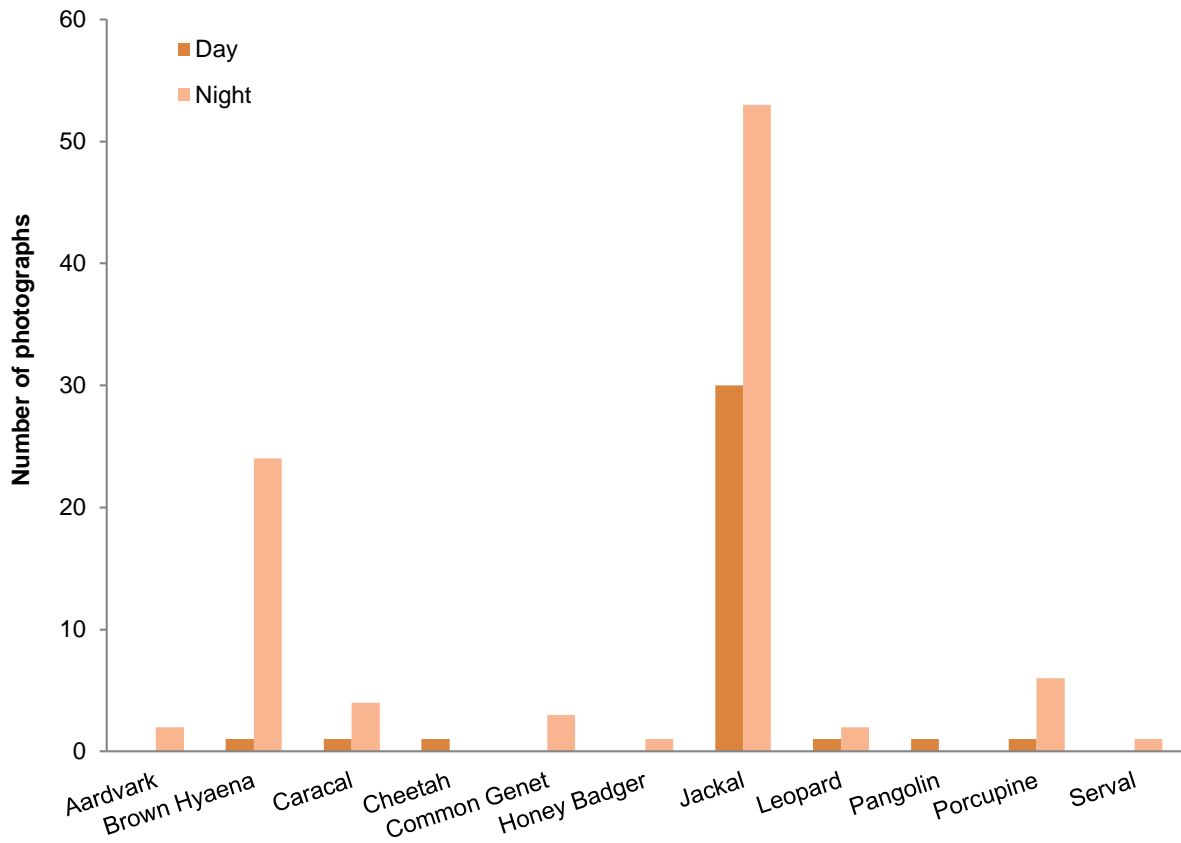


Figure 5: Shows the difference in activity between day and night for all carnivore species captured between 28 March and 5 June 2015, B2 Gold Mine Game Reserve, Namibia.

The cheetah was captured at 10am. The brown hyaena activity pattern of being active during the hours of 6pm – 6am reflects the movement patterns found in other studies across similar land-use types as a technique to avoid human activity (Figure 6).

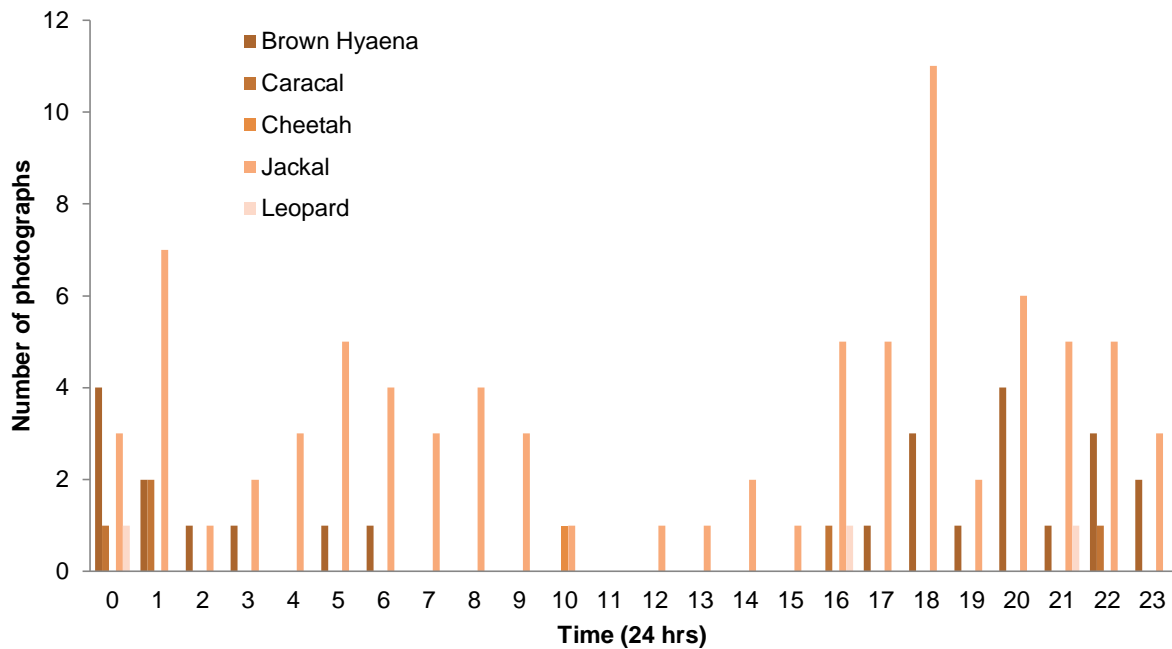


Figure 6: Shows the difference in activity patterns over a 24 hour period for the target species captured between 28 March and 5 June 2015, B2 Gold Mine Game Reserve, Namibia.

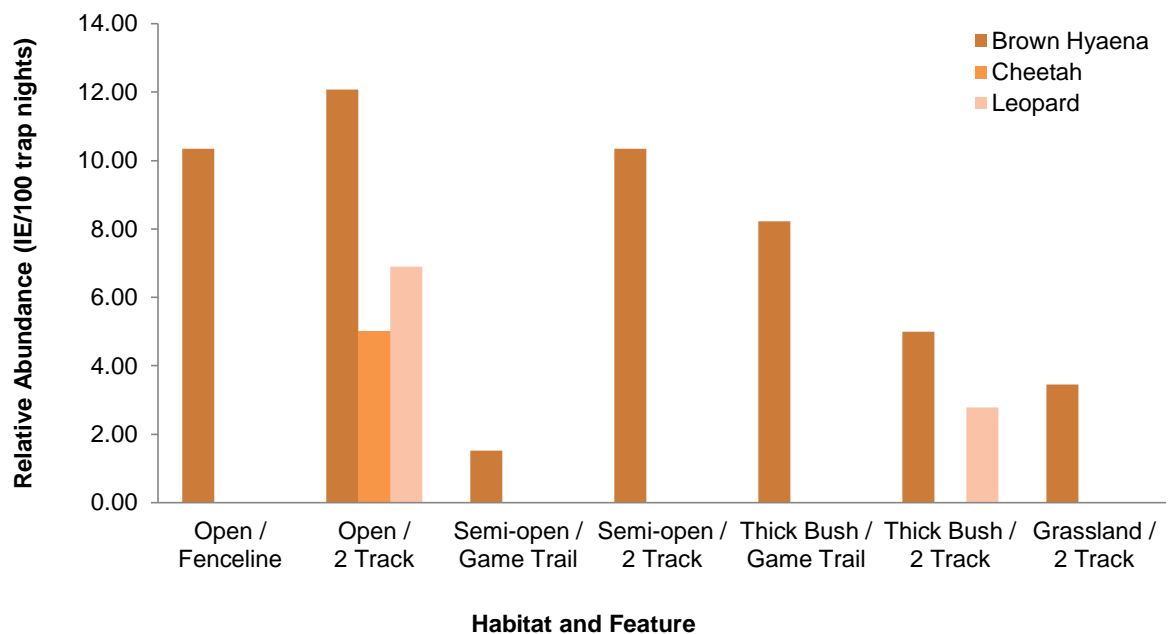


Figure 7: Shows the difference in relative abundance across both habitat type and feature for the key carnivore species captured between 28 March and 5 June 2015, B2 Gold Mine Game Reserve, Namibia.

This study has provided a baseline of information for the B2 Gold Mine and has answered the primary objective which was to determine if large carnivores such as cheetah, leopard and brown hyaena were present within the reserve. It has also provided a habitat sampling reference for future studies when targeting specific species (Figure 7). As well as the three key species, other carnivores such as serval, honey badger, caracal and pangolin were also captured, indicating that the species richness in the reserve is high. This means that the long-term protection of this area is very important as it has already been identified that outside the boundary of the reserve carnivores are persecuted due to conflict with livestock. The reserve has the potential to act as

a population source for the surrounding area and therefore maintain the local biodiversity and in turn ecosystem stability. We look forward to continue our positive relationship with B2 Gold Mine.

2. Cheetah Releases and Monitoring

While CCF has successfully reached $\geq 3,000$ Namibian farmers with its integrated livestock and predator management courses and programmes, much work remains to be done. In many areas of Namibia, farmers still continue to kill cheetahs. However, those who are aware of CCF contact us to seek help with the cheetahs, rather than kill them.

With the establishment of a new farmers' hotline, CCF is on call 24/7 when farmers call to notify about a real or perceived cheetah problem. CCF staff may assist with setting traps or retrieving cheetahs already trapped; however, this practice has greatly reduced over the past few years through education as well as government policies. Direct contact with the farmers does allow CCF staff to provide them with information about CCF's non-lethal predator management methods. Since its founding in 1990, CCF has retrieved over 800 cheetahs from farms across Namibia. Once at CCF, the veterinary team evaluates every cheetah's condition and determines whether it is healthy and old enough to survive in the wild again on its own. Consequently, over 600 cheetahs have been released back into the wild. Depending on the release location and the specific cheetahs, CCF attempts to monitor released cheetahs via radio or satellite collars.

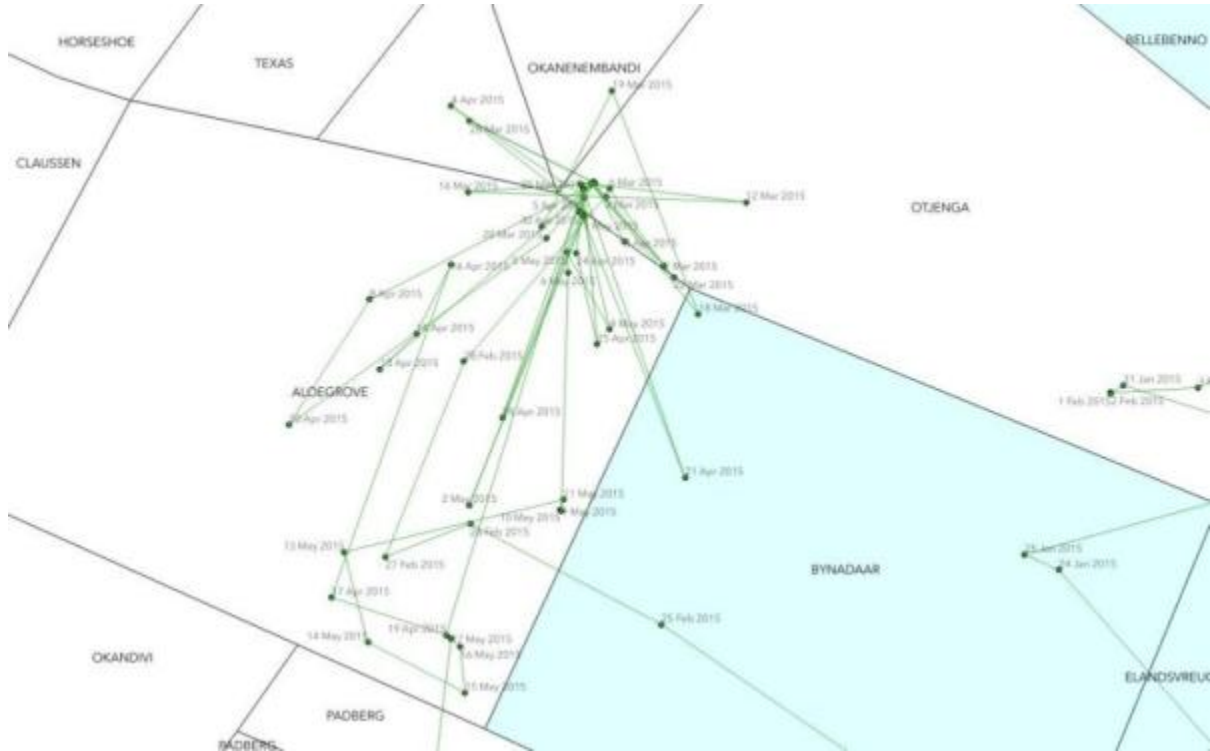
Throughout 2015, CCF continued monitoring six cheetahs: one female released in June 2014 (Zinzi, AJU 1619), a female released in December 2013 (Jacomina, AJU 1510) and later translocated to Erindi Private Game Reserve in March 2014 (for release in July 2014) with her two female offspring (Savanna, AJU 1648 and Shandy, AJU 1649), and two males (AJU 1540 and AJU 1561) released in Erindi in 2012. Additionally, on 27 June 2015, CCF retrieved two males (AJU 1650, 1651) from farm Uitsig north of Grootfontein. The farmer captured these two males in trap cages at a presumed playtree and contacted CCF to have them removed. After negotiating with the farmer, CCF collared AJU 1651 with a GPS/VHF collar and then released the two males back at the capture site.

Zinzi

Zinzi (AJU 1619) was released in the Bellebenno Game Camp on 17 June 2014 along with female Debra (AJU 1608). Zinzi made her first kill three days after release: a juvenile female steenbok. She has covered vast distances leaving a trail of kills behind her. Since her release, observed kills include steenbok, duiker, springbok, aardwolf, and warthog.

Zinzi has done incredibly well on her own, never needing support from CCF's monitoring team. In early March 2015, Zinzi's GPS data showed that she had not moved for two days. She was on farm Otjenga and therefore inaccessible to CCF staff. However, on 7 March 2015 she finally started moving again and the GPS data that followed (Figure 8) indicated that she had given birth to cubs. Her suspected nest site was only 600m from the farm Aloegrove, which was accessible to CCF staff and allowed the monitoring team to regularly check on Zinzi. Through the rest of March and April, Zinzi and her cubs seemed to be doing well and the cubs were even heard calling to Zinzi on 29 April 2015. Sometime during the first week of May 2015, Zinzi and her cubs finally left the nest site, moving south onto and through Aloegrove, and eventually into CCF's neighbouring farm Padberg. Sadly, sometime around 20 May 2015, Zinzi appeared to have lost her cubs while away from them hunting. CCF does not know the fate of the cubs but at only two months of age, it is highly improbable that they could have survived on their own. Subsequently, around the middle of June, Zinzi's GPS data and position suggested that she may have been mating in CCF's Big Field.

Figure 8: Concentrated view of Zinzi's March 2015 nest site; centre of star pattern indicates nest site.



Upon notification from SirTrack of low battery life in her collar, CCF decided to anaesthetise Zinzi and replace the collar to ensure continued monitoring of and data collection from this valuable cheetah. On 28 June 2015, CCF staff darted Zinzi and replaced her collar with a brand new SirTrack GPS/VHF hybrid collar. Under the current setting, the collar is expected to last for two entire years.

On 12 September 2015 Zinzi's GPS data (Figure 9) indicated that she had given birth again, confirming CCF's suspicions that she had been mating sometime in June 2015. Fortunately this time, Zinzi chose a nest site on CCF's farm Janhelpman. She chose a site on top of a large *kopje* where she could observe all of her surroundings and ensure the safety of her cubs while she was away hunting (Figure 10). On 21 September 2015 while Zinzi was out of the nest hunting, CCF's post-release monitoring team visited her nest site to count, sex, and weigh her cubs. CCF's veterinarian joined to give the cubs a quick health exam. The team found four healthy cheetahs cubs, two males and two females, and took identification photos of each (Figure 11).

Figure 9: Concentrated view of Zinzi's September 2015 nest site; centre of star pattern indicates nest site.

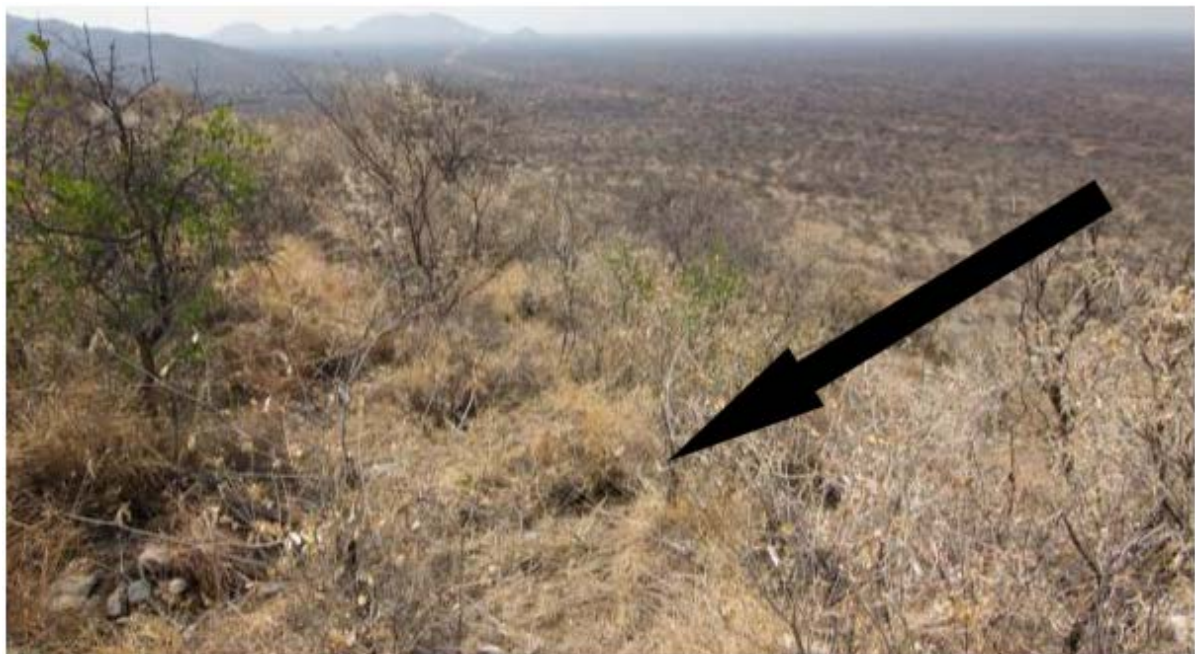
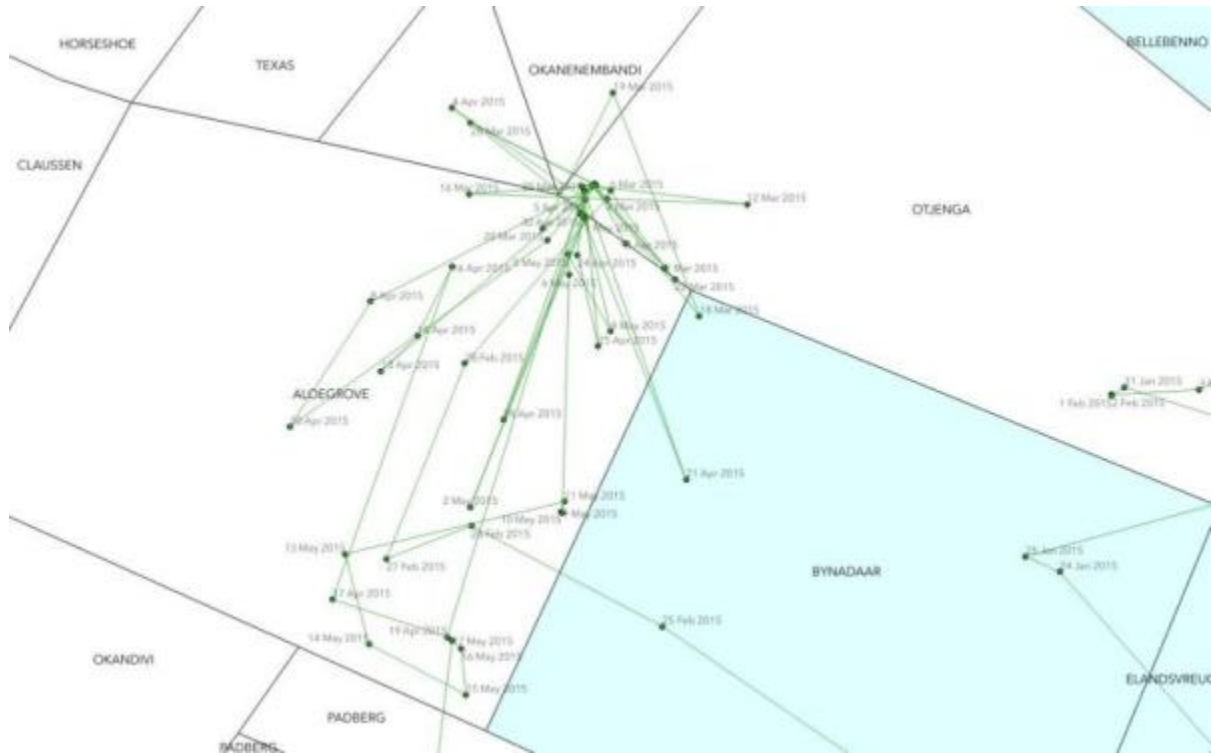


Figure 10: Zinzi's nest site on the Janhelpman kopje, black arrow indicates location of cubs.



Figure 11: Frontal identification photo of first male cub.

At the end of October 2015 Zinzi's GPS data indicated that she had left the nest with her cubs permanently and on 1 November 2015 CCF's post release monitoring team saw the four cubs for the first time outside of the nest (Figure 12).



Figure 12: Three of Zinzi's cubs seen on 1 November 2015.

As of the end of December 2015, Zinzi and all four of her cubs were doing very well. The next year will be a trying time for the cheetah family, but Zinzi has thus far proven her ability as a mother and CCF has high hopes for the four cubs. She is considered one of the most successful cheetahs released back into the wild. Although regularly tracked, she has never needed supplemental food or water and has already given birth to two litters of cubs in the wild. She has found CCF property to be suitable for her home range, as this is where she spends most of her time, but frequently visits the farms north and northwest of CCF property.

At the beginning of November, staff at Erindi notified CCF that Obi-Wan's collar had died. Plans were made and on 14 November 2015, CCF's team travelled to Erindi along with a film crew from Cheetah Mobile to dart both Chester and Obi-Wan and replace their collars. The darting and procedure went smoothly and both cheetahs made quick and full recoveries. In lieu of a normal VHF collar, a GPS/VHF collar was placed on Chester for the first time. The GPS collar will provide CCF with more fine scale data about the movements and behaviours of this coalition, to which we previously had no access (Figure 14).

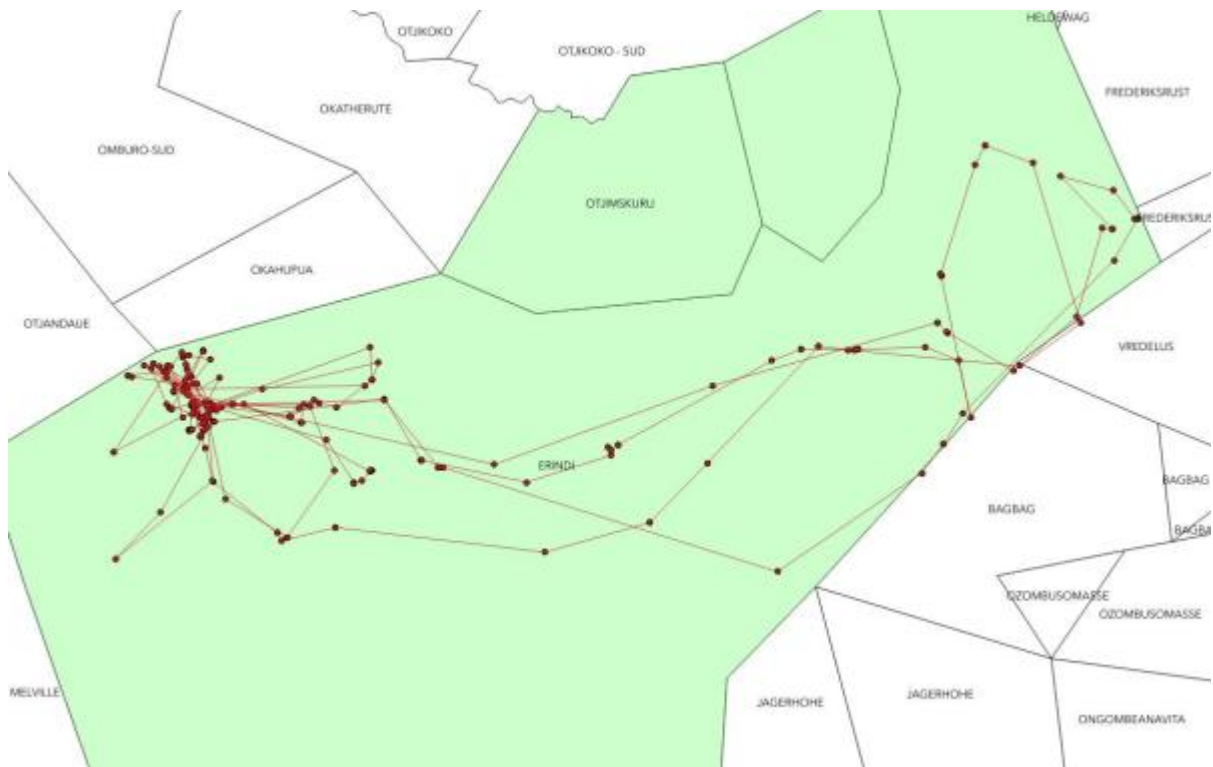


Figure 14: Data points from Chester's collar from 14 November 2015 (date of collaring) to end of 2015.

Chester and Obi-Wan occupy a very large home range that encompasses the majority of Erindi (nearly 70,000 has.), but their core home range is mostly concentrated in a large savannah-like habitat in the south western part of the reserve. The coalition has shown a preference for hunting in this open area as well. Chester remains as the dominant male in the coalition in terms of mating and hunting, despite a semi-lame hind leg.

Coalition mates Omdillo and Anakin were found dead in 2012; one shot by a farmer and the other from a possible leopard attack, respectively.

Jacomina and Cubs (2014)

Jacomina (AJU 1510)

Jacomina (AJU 1510) and her two 3-month old female cubs were released from the 1-ha holding *boma* in Erindi on 20 July 2014. Their gates were opened, and the family waited to leave until the group of observers (including a French film crew, CCF, and Erindi staff) departed. Camera traps were set up, showing the time she left the *boma*. That evening they were supplement fed with a wildebeest hind leg for sustenance. Their first morning in the game reserve, Jacomina and the cubs encountered two adult lions for the first time without a fence protecting them. Jacomina responded appropriately, luring the lions far away from her cubs.

Throughout the extensively monitored portion of her release (~100 days), the first-time mother was observed protecting her cubs from male lion coalitions, leopards, and spotted hyaenas.

Over a three and a half month period, Jacomina was supplement fed on numerous occasions with varied amounts of food (n=13) and water (n= 36) to ensure that she and the cubs had enough energy to explore their new environment as well as evade any potential threats. Despite being fed, Jacomina made her first kill only nine days after being released. She had been observed unsuccessfully hunting prior to this and sometimes the hunts were interrupted by the cubs, which would prematurely chase the prey.

Since her release date in Erindi, she has been observed killing duiker, steenbok, Damara dik dik, common impala, springbok, red hartebeest, and unknown prey. She has hunted a wide range of species and is starting to show a clear preference for springbok, especially the lambs.

The first half of 2015 has proven difficult for Jacomina. At the end of January, she became separated from her two nine-month-old cubs. Fortunately, after seven days Erindi staff found the cubs at Camp Elephant's waterhole attempting to hunt scrub hare. Jacomina was very close to this location and Erindi staff were able to lure her back to the cubs. Erindi reports that the cubs were thin, but had obviously made some successful kills during their time apart from their mother. In the months that followed, Jacomina struggled to hunt successfully and regularly needed supplemental food from Erindi. They report that most of her attempts were unsuccessful because the two cubs continued to ruin the hunts by prematurely chasing the prey. When Jacomina did successfully hunt, the cubs seemed to steal most of the food from her as well.

At the beginning of May, Erindi staff notified CCF that it seemed as if the cubs were getting ready to separate from Jacomina permanently. Therefore, CCF's team went to Erindi on 20 May 2015 to put VHF collars on them. Normally, cubs this young (13 months) would not be collared but this precaution was necessary to ensure they could be found and assisted if necessary once separated from their mother. At this time, Jacomina was also darted with a dose of antibiotics due to a bite she got when trying to hunt a jackal. The wound was becoming infected and swollen, but it healed well with antibiotics. In the few weeks after the collaring, Jacomina and the cubs were fed every other day by Erindi staff to allow her condition to improve. After this period of constant supplemental feeding, Jacomina and the cubs became much more self-sufficient and did not need as much supplemental feeding. They were regularly observed on kills by Erindi staff and tourists.

On 12 June 2015, the GPS functionality of Jacomina's collar stopped sending data due to low battery life. A few weeks later, the VHF function stopped working as well. Unfortunately, Jacomina separated from her two cubs sometime during the first few days of August 2015 before she could be re-collared and she has not been seen since. Erindi guides are constantly on the lookout for her and she will be re-collared if she turns up again.

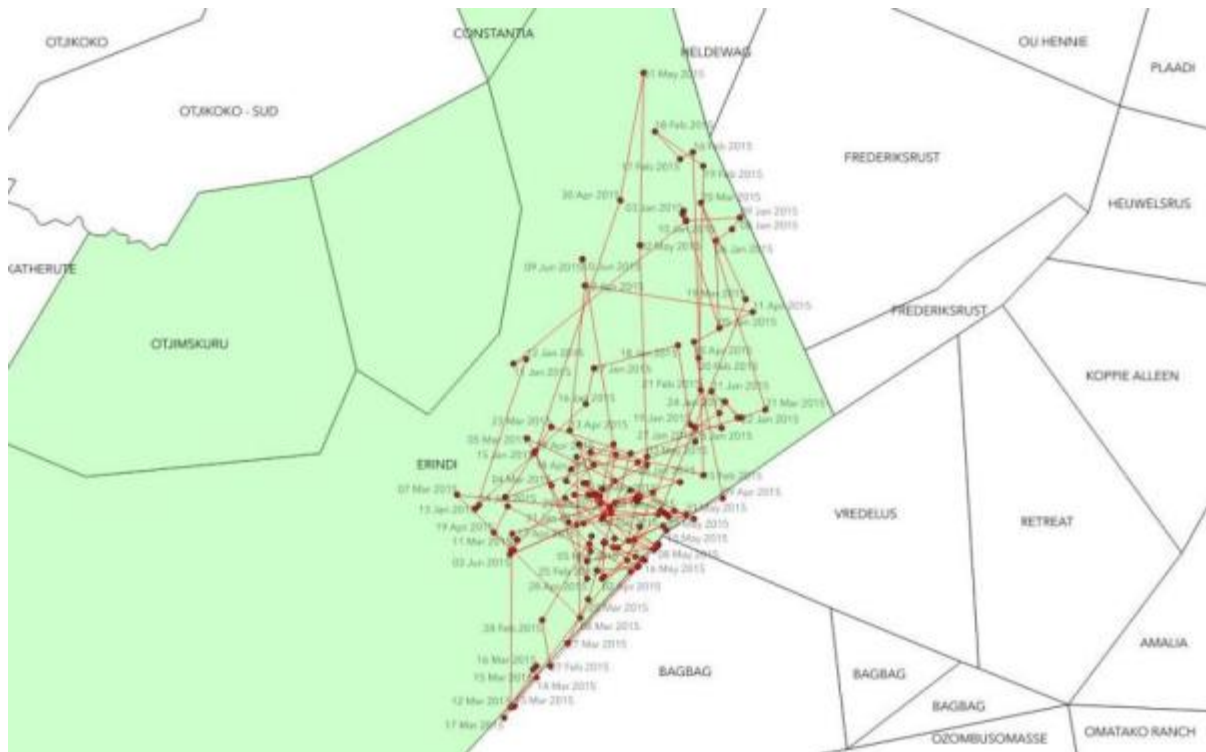


Figure 15: Data from Jacomina's GPS collar from January to 11 June 2015; data has been truncated to one point per day.

Savanna (AJU 1648) and Shandy (AJU 1649)

After separating from their mother Jacomina (AJU 1510) at just 16 months, Savanna and Shandy have remained together through the end of 2015. They are seen almost daily by Erindi staff who always report that the two females are always full and doing well. Normally, cheetahs will not leave their mothers at this age but thus far Savanna and Shandy have done well at fending for themselves in the wild; even in the presence of lions, leopards, and spotted hyaena.

As these two cheetahs are the offspring of a rewilded cheetah, they represent immense success for CCF's rehabilitation and release programme. Jacomina lived nearly seven years at CCF in captivity, but successfully reproduced in the wild and, with CCF's assistance, successfully raised two cubs to adulthood. The next year will be an exciting time for these young cheetahs and CCF hopes that they too will start breeding sometime during 2016.

4. Angola Carnivore Research

As part of CCF's long-term vision and following Dr. Marker's initial trip to Angola in 2010, CCF in collaboration with the Angolan Carnivore Project, continues to engage with the Angolan Ministry of Environment. This engagement seeks to establish a working relationship aimed at improving our knowledge regarding the status of cheetah and other carnivores there, as well as building capacity through training. To this end, the Angolan Ministry has welcomed both projects and is evaluating the relevant proposals, with the first survey conducted in December 2014 and a second in December 2015.

Angola Surveys

During the first half of the year, Dr. Fabiano continued to engage with the Ministry of Environment in Angola towards signing an MoU, conducting a complete carnivore survey at the Iona National Park and the Angolan component of the Kavango-Zambesi Transfrontier Park (Ao KAZA). Dr. Fabiano signed a MoU during the second half of 2015, valid for three years with possibility of renewal. This is a major achievement. Later in

December 2015, Dr. Fabiano and the Cheetah and Wild dog Range Wide Program (RWCP) secured funding and conducted a second survey of Iona. Data is being analysed but results remain consistent with the 2014 survey. The former is a continuity of the early survey he conducted late last year. Furthermore, Dr. Fabiano has extracted all 31 cheetah and three leopard samples collected in 2014 and will now process the 20 cheetah and eight leopard scat samples collected during this survey. These datasets (including 2010) will allow for the determination of genetic diversity and minimum abundance.

Apart from surveys, Dr. Fabiano presented his work at the Research Centre in Biodiversity and Genetic Resources, Porto, Portugal in December. It is hoped that the Superior Institute of Science and Education, Lubango, Angola will commence a 6-year programme with the Portuguese centre during the next couple of months, that will produce 16 Angolan masters and Ph.D. students. Additionally, Dr. Fabiano submitted a short communication focusing on the spatial distribution of large mammals at Iona later to the journal KOEDOE (African Protected Area Conservation and Science).

The next steps include securing funding to complete the genetic analysis and future surveys in Angola. As for Ao KAZA, Dr. Fabiano is collaborating with Panthera, which has recently signed a MoU with the Angolan Ministry of Environment and is currently conducting carnivore surveys in this area.

Overall, CCF is pleased by the Angolan Ministry of Environment taking a leading role, with CCF and other partners serving as supporters of the Ministry's activities towards the conservation and management of carnivores and other biodiversity in Angola, for the benefit of the Angolan people.

F. Ecosystem Research

As over 80% of Namibia's game inhabits farmland, assessment of the Namibian ecosystem for long-term habitat viability for the cheetah and its prey is a part of CCF's primary on-going research.

1. Weather Monitoring

We continued collecting rainfall data and daily high and low temperature readings (Figure 16 and Figure 17). Between January and December 2015, the CCF Centre received a cumulative total of 371 mm. This is somewhat lower than the 11-year mean of 490 mm from 2005-2015. The lowest yearly rainfall was recorded in 2007 at 165 mm; while the highest was in 2011 at 1101 mm. Although 2015 is a year of lower than average rainfall, the figure below demonstrates the variability in rainfall in the area. This variation does, however, influence the condition of the veld via grass quality and biomass, as well as surface water distribution (dams and water holes), thus determining stocking rates of the property.

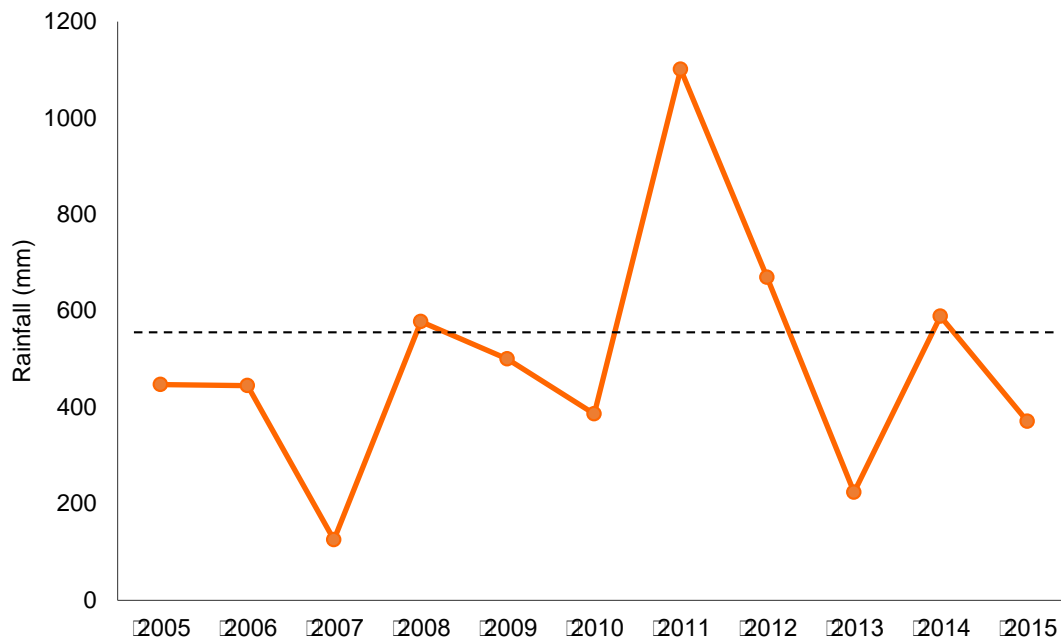


Figure 16: Annual cumulative rainfall at CCF centre from 2005 – 2015. The dashed line represents the 11-year mean.

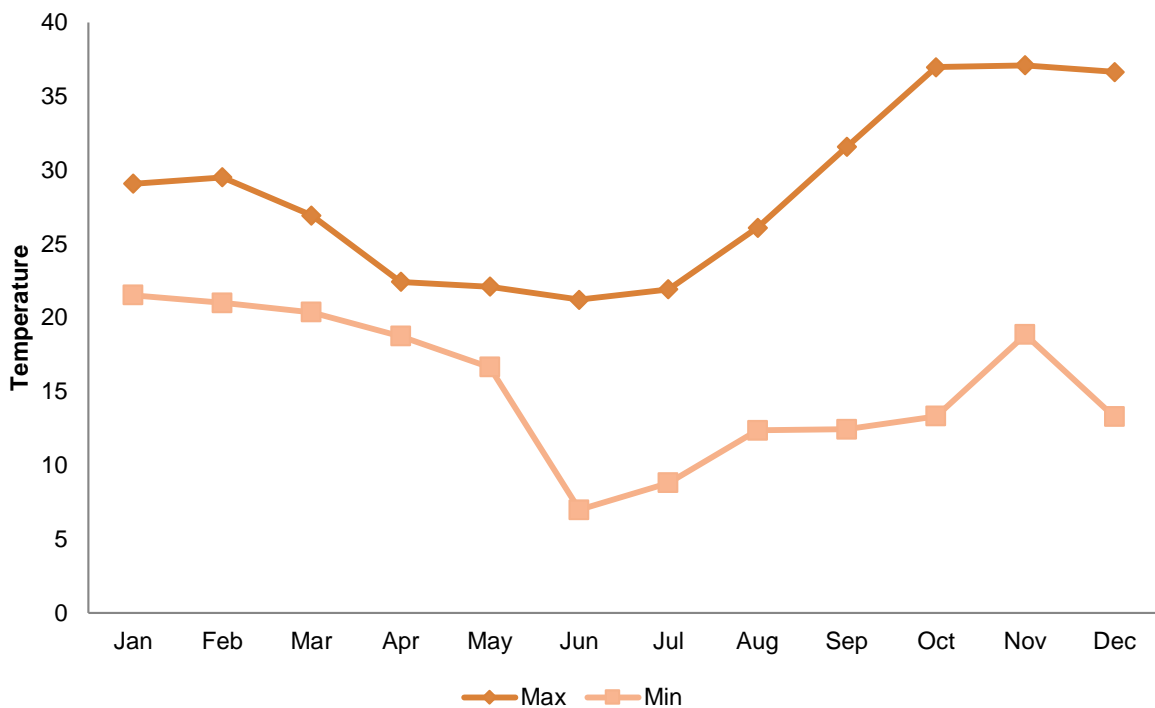


Figure 17: Monthly minimum and maximum temperatures (centigrade) at CCF Centre for 2015.

2. Game Monitoring and Prey Habitat Preferences

CCF's long-term wildlife monitoring programme continues with the assistance of volunteers and student interns. The research conducted on CCF farms is designed to understand patterns and trends of game density, movements, demographics, and habitat utilisation. The monthly monitoring involves visual road counts,

categorising vegetation types, densities, and distributions. This information is correlated with data collected on rainfall and temperature.

Big Field Game Counts

CCF's Big Field, known also as 'The Little Serengeti', is an old uncultivated field of 1,492 hectares. The field, one of the largest open, uncultivated areas in the north central farmlands, attracts a high number of free-ranging game. This area provides an ideal case study to monitor ecological successional trends. Apart from containing high prey densities for cheetahs and leopards, this area is where most of the game is, so monitoring trends and understanding the dynamics of how the game utilises the field provides important information for future management strategies and is very helpful for tourism in the long term. Consequently, the area has been the subject of monthly counts by CCF since 2004.

During this reporting period, a total of 33 replicate counts (3 routes sampled daily for 3 days every month except July) were conducted on the Big Field, resulting in a sampling effort covering 570.90 km. There are three routes on the field: Chewbaaka Road (6.34km), Midfield Road (5.38km), and Osonanga Road (4.76km). All data from these surveys were entered into the Filemaker database and preliminary results on trends were produced. Population estimates (Table 2) for the most common (Figure 18) game species during this period were compared to the same period in 2014.

Table 2: Population estimates (mean \pm lognormal confidence intervals) of common game species counted on the CCF Big Field in 2015. Estimates are given with 95% lower (N LCL) and upper (N UCL) confidence limits.

Common name	# obs. per species	CV	Population estimate		
			Mean	Lower CI	Upper CI
Steenbok	135	0.39	166	79	345
Warthog	526	0.18	461	387	644
Springbok	84	0.89	75	17	336
Red hartebeest	113	0.22	98	64	149
Oryx	465	0.14	586	447	767
Kori Bustard	337	0.49	256	103	371

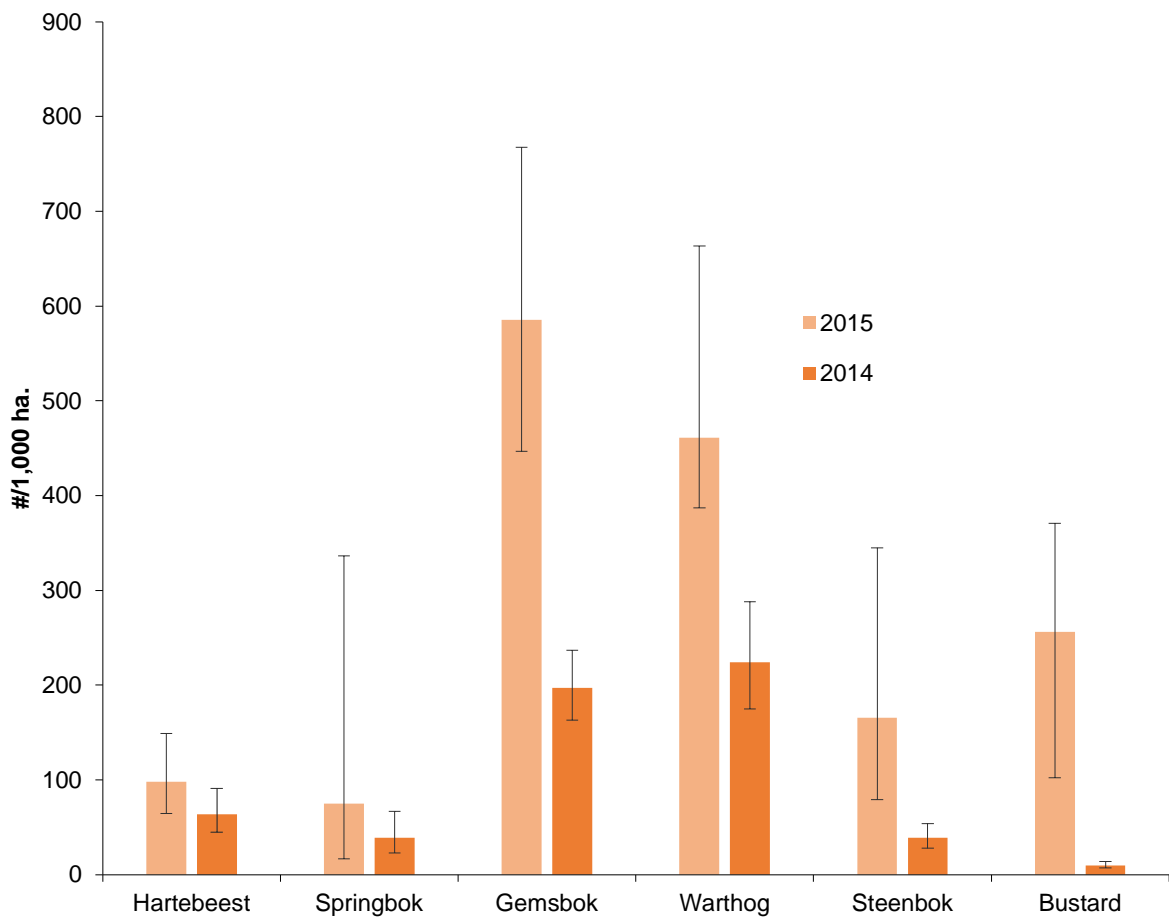


Figure 18: Distance-density estimates for common game species on Big Field (based on monthly counts in 2014 and 2015).

Overall, Big Field is holding a lot more grazing herbivores than in previous years and the veld condition will require monitoring due to intensive grazing pressure, particularly from bulk grazing species such as gemsbok. The large increases seen across most species compared to 2014 is probably due to very good rainfall in the wet season of 2014/2015 leading to a high grass biomass in 2015. Gemsbok and warthog specifically show significant increases in number (Figure 18) and are now widely dispersed over Elandsvregde farm.

Estimates for springbok are not accurate due to infrequent sightings. It is possible that they are being outcompeted by gemsbok and warthog. Species such as kudu and duiker could not be analysed due to a lack of sufficient encounters. It is recommended that different counts be used to ascertain the densities for these more cryptic species. Distance sampling is also not generally used for estimating bird abundance and densities due to a number of limiting factors. This can be seen in the substantial variation in Kori bustard numbers between the two years (Figure 3). We recommend the use of counting and estimation techniques more suitable for birds if estimates are required for bustard, francolin, korhaan etc.

Circuit Counts

Since 1996, CCF has been conducting 55-km road strip count transects on two circuits of farm Elandsvregde to investigate game distribution in relation to habitat type and trends in density.

During this reporting period, a total of 24 game counts were conducted on Circuit B, covering over 648km of farm road. Circuit A has not allowed for monitoring due to poor road conditions. See Table 3 for the most common wildlife species observed on CCF's Circuit B for the period.

Oryx were the most frequently observed, followed by warthog and red hartebeest (Figure 19).

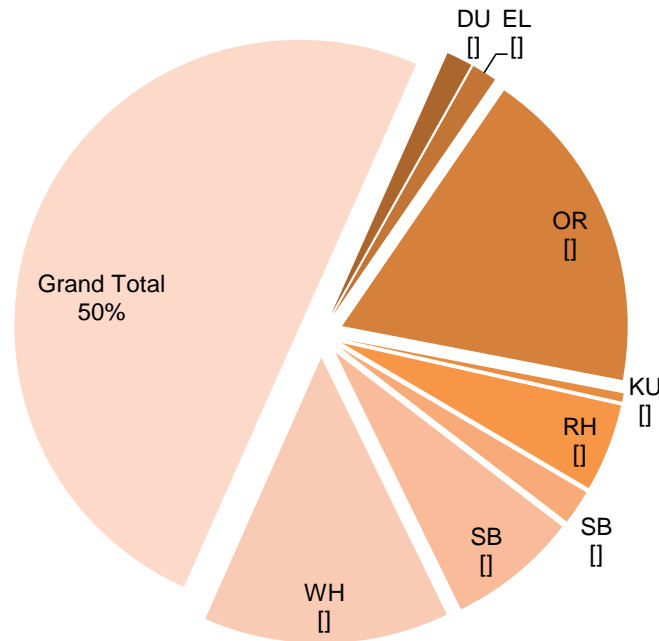


Figure 19: Common game distribution on the CCF circuit counts for 2015 (OR = oryx, WH = warthog, ST = steenbok, SB = springbok, RH = red hartebeest, EL = eland, KU = kudu, DU = duiker).

Overall, game density estimates were similar or higher in 2015 than during the same period in 2014. Most animals on the circuit counts were also frequently seen on the CCF Big Field. Circuit B counts showed a decrease in oryx and springbok (Table 3); however, this can probably be attributed to the fact that most of the oryx and springbok (and indeed most herbivores) have dispersed widely across CCF land due to above average rainfall in 2014 (Figure 16).

Hartebeest, springbok and steenbok numbers have remained relatively constant while warthog have increased substantially; another indicator of the good rains and high grazing value of the grass. Eland appear to have moved onto neighbouring land, probably due to intensive inter-specific competition with other bulk-grazing species at CCF. Kudu and duiker are infrequently seen on the Circuit counts due to their shy nature and preference for thicker habitats.

Circuit A was not driven in 2015 due to poor road conditions. It is envisaged that this Circuit will be included again in 2016. This will result in better cover and representation of habitat that should produce more accurate final estimates.

Table 3: Population estimates (per 1,000 ha.) of the most common wildlife species observed on CCF's Circuit B in 2015. Estimates are given with 95% lower (N LCL) and upper (N UCL) confidence limits.

Common Name	# obs.	Distance		
		N	N LCL	N UCL
Oryx	308	81	67	98
Red hartebeest	83	27	17	42

Springbok	33	9	5	17
Warthog	233	63	54	74
Steenbok	118	21	27	37

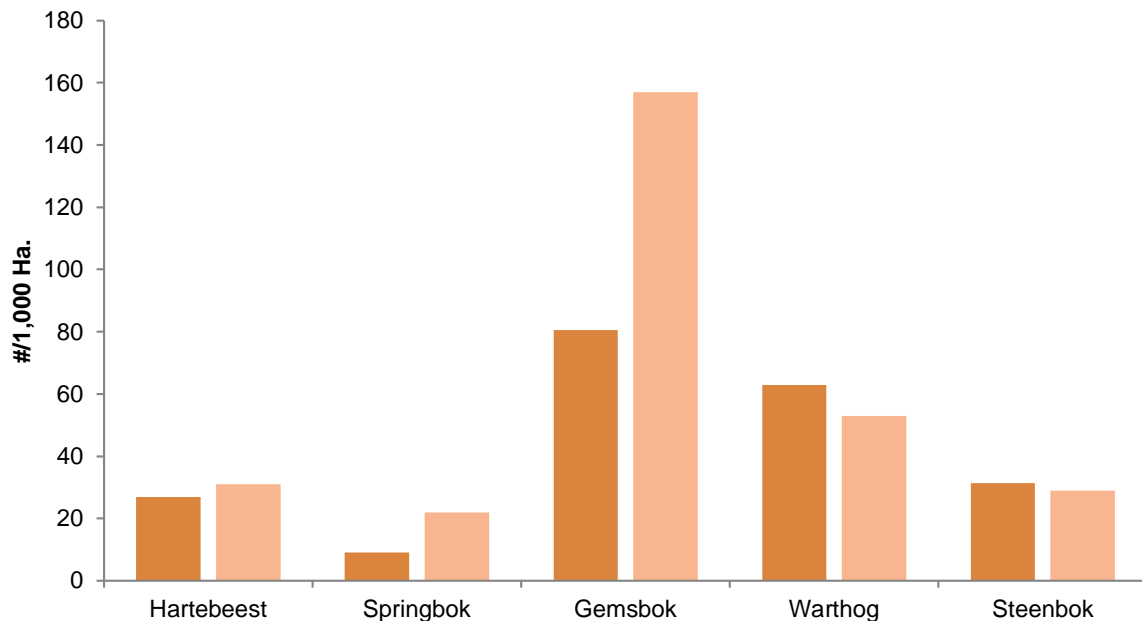


Figure 20: Abundance estimates (animals per 1,000 ha.) of common wildlife species observed on Circuit B for farm Elandsvreugde in 2014 and 2015. Estimates were derived from distance sampling.

Bellebenno 12-hour Waterhole Counts

To assist in developing a management plan for the 4,000-ha game-fenced Bellebenno camp, CCF started monthly 12-hour waterhole counts in 2008. CCF volunteers and staff members assist with these on-going counts, which involve being positioned in hides at each of Bellebenno's four waterholes and counting animals that come to the waterhole. Information such as species, age, sex, and condition are recorded on standardised sheets, as well as whether the animals utilise the waterhole or the salt lick placed at the site. These counts are designed to help us understand patterns and trends in game numbers, such as survival rates in juveniles and sub-adults and recruitment from one age class to the next. The counts take place from 6 a.m. to 6 p.m. with two observers in each hide.

From January to December 2015, waterhole counts were conducted on a bi-monthly basis at the four waterholes within the game camp (Table 4). A total of 4,692 animals were counted from 8 different species (Figure 21 depicts the six most common). The proportional abundance figure below shows that warthogs were extremely abundant amongst all animals present in the game camp, comprising 65 % of all sightings, followed by zebra (Figure 21). Very few hartebeest, steenbok and kudu were observed, possibly due to their shy nature.

Table 4: Actual numbers of animals counted and densities (animals per 1000ha) for the common game species in the Bellebenno Game Camp 2015.

Common Name	# counted	# per 1000 ha
Eland	377	94
Giraffe	97	24

Kudu	48	12
Gemsbok	317	79
Warthog	3053	763
Zebra (plains)	800	200

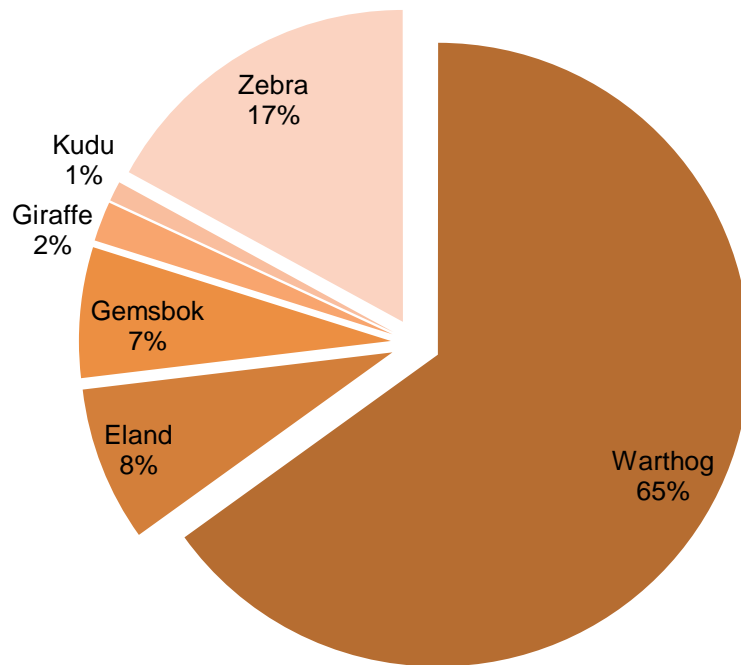


Figure 21: Proportional representation of game in the Bellebenno Game Camp in 2015 (based on counts at n=4 water points).

Higher numbers of eland were observed during the second half of the year (dry season) while gemsbok and zebra remained relatively constant through the year (Figure 22). By contrast, warthog, giraffe, kudu, and warthog observation decreased through the year (Figure 23). Being a very small game-fenced property with little opportunity for emigration/immigration, we believe that Bellebenno was overstocked. This would have led to overgrazing and either die-offs or forced dispersal by certain species.

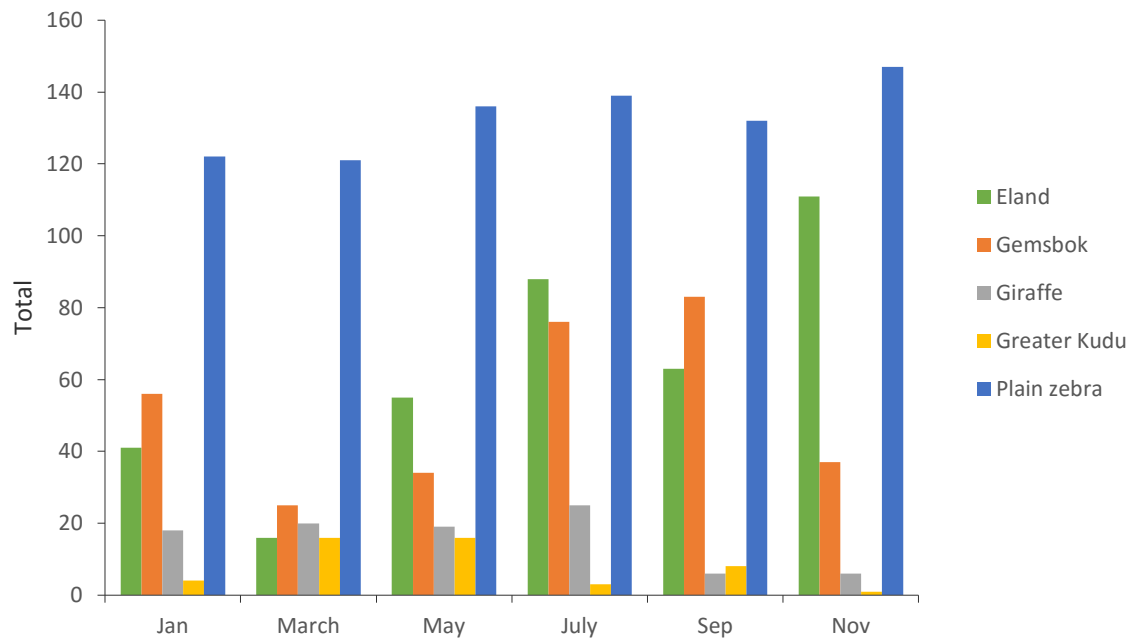


Figure 22: Total abundance of five antelope species at Bellebenno in 2015 (data displays the sum of counts for each species at n=4 water points).

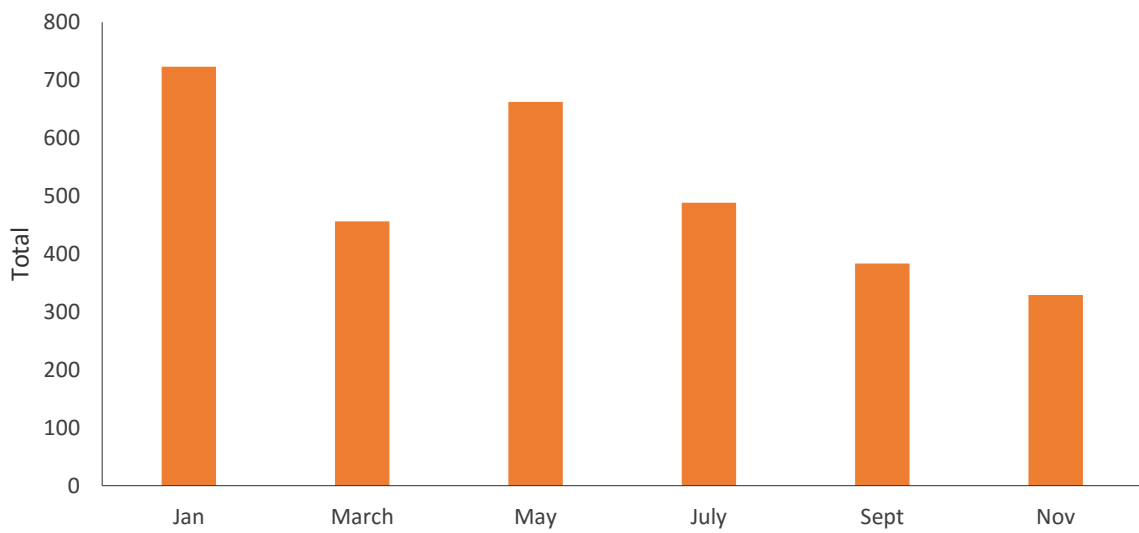


Figure 23: Total abundance of warthog at Bellebenno in 2015 (data displays the sum of counts at n=4 water points).

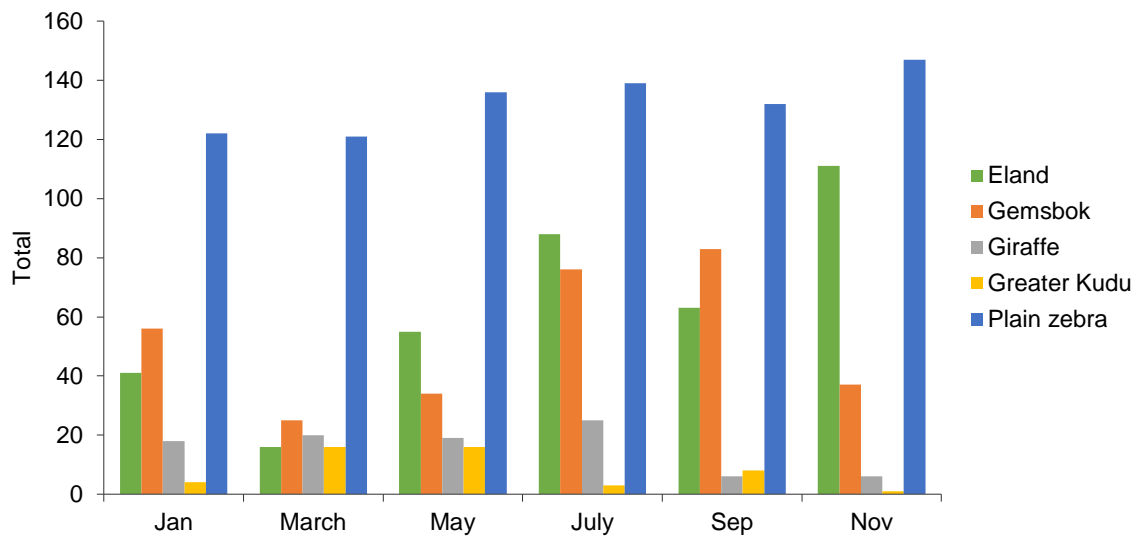


Figure 24: Comparison of abundances between 2014 and 2015 for five common species at Bellebenno (based on counts at n=4 water points).

When compared to 2014, it appears that warthog numbers have remained relatively constant, while giraffe, kudu and gemsbok have decreased (Figure 25). The browsers in particular (giraffe and kudu) have decreased substantially, raising concerns about food quantity and quality in Bellebenno. Zebra numbers however, have increased sharply from 2014 to 2015 and Bellebenno is almost certainly severely overstocked with zebra and eland. We recommend either a culling programme or a temporary dropping of fences in 2016, to facilitate movement of game (zebra in particular) from Bellebenno into Elandsvreugde. This will relieve the substantial grazing pressure on Bellebenno, at least for the time being.

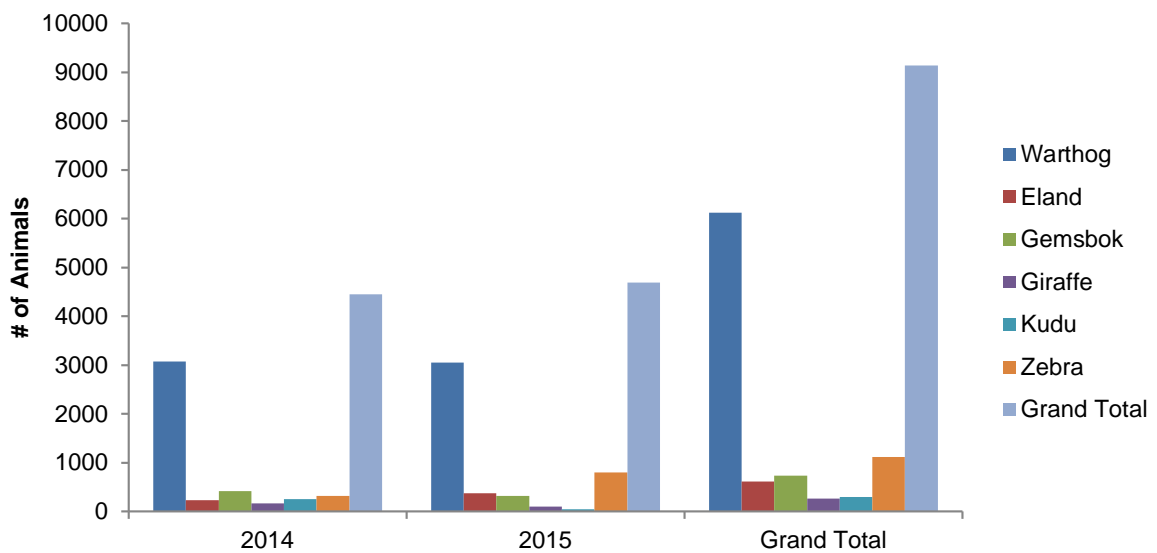


Figure 25: Comparison of abundances between 2014 and 2015 for five common species at Bellebenno (based on counts at n=4 water points).

3. Bush Encroachment and Biodiversity

Bush encroachment is an environmental problem threatening Namibia's rangeland productivity, food security, and biodiversity conservation nationwide. However, it also has potential as a renewable resource for alternative energy, especially in rural areas, and may alleviate electricity shortages projected to affect Namibia in the near future.

Research continued around CCF's Bush project in 2015. In March and April 2015, CCF hosted UNAM's Biogeography and Environmental Management Course students. The students undertook biodiversity surveys in previously thinned sites in order to determine the impacts of harvesting.

In 2014, CCF's ecology staff undertook vegetation surveys at three separate sites: Omupanda, Okanjokomukona, and Ombujovakuru in the Okakarara constituency. During this reporting period, contracts were signed with the local farmers targeting the areas surveyed and applications for harvest permits were submitted to the Ministry of Agriculture, Water and Forestry (MAWF). Harvesting will commence as soon as the permits are issued.

CCF and the University of Hamburg in Germany entered into an agreement to study the impacts of bush encroachment and bush clearing on soil and vegetation characteristics, and on the savannah water budget. This project is part of the Southern African Science Service Centre for Climate Change and Adaptive Land Management (SASSCAL). The project has three sites in Namibia and includes CCF's farms. In November 2014, data collection equipment consisting of rain gauges and soil moisture meters, as well as remote digital data transmitters were installed in previously harvested and current bush-encroached sites on CCF farms Cheetah View and Boskop.

4. CCF Rhino Reserve

CCF continues to monitor its 14,640-ha rhino reserve, where a small population of south-western black rhinos (*Diceros bicornis*) resides. The rhinos are part of the Namibian Ministry of Environment and Tourism's (MET) Black Rhino Custodian Programme.

CCF monitors the rhinos by deploying trail cameras across the reserve at key points that include waterholes, dung middens, game trails and roads (Figure 26). The natural waterholes were partially filled up after the rains

this year, with a couple having dried up completely. This leaves a handful of dams with a fair amount of water, ensuring that all the animals have access to water until the next rainy season. Cameras are regularly repositioned, as the rhinos' behaviour changes throughout the year. Individuals can be identified in photographs by a number of features, including ear notches, horn profiles, and hide scars. Waterhole monitoring and vehicle patrols are conducted regularly throughout the reserve. Additionally, we have made improvements to our reserve infrastructure by removing old cattle fences, bush clearing and road maintenance.



Figure 26: A recent photo taken by a remote camera trap of a female rhino with her two successive calves.

As part of our on-going commitment to environmental education, all volunteers and working guests have spent time with our reserve monitoring team, learning about the behaviour, feeding habits, the threats and challenges faced by the rapidly declining black rhino population.

G. Scientific Publications and Papers

1. Scientific Papers

Published Papers:

- Dobrynin P, Liu S, Tamazian K, Xiong Z, Yurchenko A, Krasheninnikova K, Kliver S, Schmidt-Küntzel A, Koepfli K-P, Johnson W, Kuderna L, García-Pérez R, de Manuel Montero M, Godinez R, Makunin A, Komissarov A, Brukhin V, Qiu W, Zhou L, Li F, Yi J, Driscoll C, Antunes A, Oleksyk T, Eizirik E, Perelman P, Roelke M, Wildt D, Diekhans M, Marques-Bonet T, Marker L, Bhak J, Wang J, Zhang G, O'Brien SJ. Genomic legacy of the African cheetah, *Acinonyx jubatus*. *Genome Biology* 2015 16:277.
- Flacke G, Schmidt-Küntzel A, Marker L. Treatment of chronic herpesviral dermatitis in a captive cheetah (*Acinonyx jubatus*) in Namibia. *Journal of Zoo and Wildlife Medicine* 2015 Sept;46(3):641-6.
- Franklin AD, Schmidt-Küntzel A, Terio KA, Marker LL, Crosier AE. Serum Amyloid A protein concentration in blood is influenced by genetic differences in the cheetah (*Acinonyx jubatus*). *Journal of Heredity* 2016 March, cover;107(2):122-133. Epub 2015 Nov 19.
- Hartman MJ, Monnet E, Kirberger RM, Schmidt-Küntzel A, Schulman ML, Stander JA, Stegmann GF, Schoeman JP. Single-incision laparoscopic sterilization of the cheetah (*Acinonyx jubatus*). *Veterinary Surgery* 2015 July 44 Supl 1:76-82.
- Marrow, J. C., Woc-Colburn, M., Hayek, L. C., Marker, L., and Murray, S. Comparison of two $\alpha 2$ -adrenergic agonists on urine contamination of semen collected by electroejaculation in

captive and semi-free ranging cheetah (*Acinonyx jubatus*). Journal of Zoo and Wildlife Diseases; 46(2):417-420.

- Potgieter, G. C., Marker, L.L., and Kerley, G. I. H., More Bark than Bite? The Role of Livestock Guarding Dogs in Predator Control on Namibian Farmlands. Fauna and Flora International. Oryx. DOI: <http://dx.doi.org/10.1017/S0030605315000113> Published online: 20 May 2015
- Schulman ML, Kirberger RM, Tordiffe ASW, Marker LL, Schmidt-Küntzel A, Hartman MJ. Ultrasonographic and laparoscopic evaluation of the reproductive tract in older captive female cheetahs (*Acinonyx jubatus*). *Theriontology* 2015 Dec;84(9):1611–9. Epub 2015 Aug 22.
- Weise, F.J., Lemeris Jr, J., Stratford, K. J., van Vuuren, R. J., Munro, S. J., Crawford, S. J. Marker, L. L., Stein, A. B. A home away from home: insights from successful leopard (*Panthera pardus*) translocations. Biodiversity Conservation, Volume 24, [Issue 7](#), pp 1755-1774. DOI 10.1007/s10531-015-0895-7. 10 March 2015.

Papers in Preparation:

- Fabiano E.C, Marker L. Assessing carnivores and prey temporal interactions in north-central Namibia.
- Fabiano E.C, Sandro B, Schmidt-Küntzel A, Marker L, Eizirik E. Inferring the historical demography of the Namibian cheetah population using Bayesian analysis of microsatellite data.
- Fabiano, E., Vermeulen, D., Van Dieren, M., Rust, N., Marker, L. Camera trap-based density estimates: suitability for estimating densities of non-individually identifiable species.
- Fabiano E. C., Marker L., Nghikembua M., A comparison of cheetah abundance and activity patterns between hunting and non-hunting commercial conservancies in north-central Namibia.
- Khwaja, H., Schmidt-Küntzel, A. and Marker, L. Analysis of ovarian activity in group-housed captive female cheetahs (*Acinonyx jubatus*) using vaginal cytology.
- Marker, L, Walker, E.H., Rodger, Y., Shrivastava, S., Nghikembua, M., Schmidt-Küntzel, A. The release of captive-raised cheetahs in Namibia: management implications and lessons learned.
- Nghikembua, M; Morre, K., Bagniewska, J.M, and Marker, L., Investigating the extent of bush encroachment within Namibia: A long-term case study of bush encroachment in the Waterberg conservancy using fixed point photography.
- Reijneker, M., Winterbach, C., Marker, L. The effect of rainfall on herbivore population estimates from water point counts.
- Rust, N., Marker, L. Farmer training courses reduce perceived livestock depredation whilst increasing reported farm profits and tolerance toward carnivores.
- Schmidt-Küntzel, A., Forsythe K., Kreijtz, S., and Marker L. Diet of cheetah on game and livestock farms in central and north-central Namibia.
- Schmidt-Küntzel, A., Stoneburg, S, Mujaj, S.A., Barley, S.J., and Marker, L. Causes of Death of Captive Cheetahs 1970 - 2010.
- Schmidt-Küntzel, A., Williams, J., Marker, L. A formula-based rearing method for cheetah cubs.

Papers in Revision

- Buyer, J. S, Schmidt-Küntzel, A., Nghikembua, M., Maul, J.E., and Marker, L. Soil microbial communities following bush removal in a Namibian savannah. (Soil).
- Fabiano E.C., Nghikembua M. T., Eizirik E, Marker L.L. Using remote camera traps for surveying and monitoring trends in abundance and density; a case study of a cheetah population in north-central Namibia. (Journal of Mammalogy)
- Fabiano E.C, Marker L, Schmidt-Küntzel A, Eizirik E. Estimating the effective population size of the Namibian cheetah *Acinonyx jubatus*: comparison of analytical approaches and assessment of the impact of vital rate variation. (Population Ecology)
- McGowan, N.E., Marks, N.J., Marker, L., Schmidt-Küntzel, A., Maule, A.G., Scantlebury, M. Determining thermoregulatory responses to exercise in cheetahs using non-invasive technology.
- Ngaturue D. Muroua, Matti T. Nghikembua, Laurie L. Marker, and Richard M. Jeo. Ungulate distribution in different habitat on commercial Farmlands in North-Central Namibia. (African Journal of Ecology).
- Nghikembua M., Harris J., Tregenza T., Marker L. Interactions between bush encroachment and large carnivore habitat selection: a case study on GPS satellite collared cheetahs in northern Namibia. (African Journal of Ecology)
- Rust N. A & Marker L. L. Conservation in working landscapes: solutions to ensuring coexistence of people and wildlife. (Science Perspectives).
- Switzer A.D., Munson L., Wilkins P., Hoffmaster A., Marker L. Free-ranging Namibian farmland cheetahs (*Acinonyx jubatus*) demonstrate immunologic naivety to anthrax (*Bacillus anthracis*). (Journal of Zoo and Wildlife Diseases).

Papers Submitted

- Terrell, K. A., Wildt, D.E., Anthony, N. M., Bavister, B.D. Leibo, S.P., Penfold, L.M., Marker, L.L. and Crosier, A.E. Glycolytic Enzyme Activity is Essential for Domestic Cat (*Felis catus*) and Cheetah (*Acinonyx jubatus*) Sperm Motility and Viability in a Sugar-Free Medium.
- Walker, E.H., Nghikembua, M., Bibles, B., and Marker, L. Preference of trees as scent-posts in free-ranging Namibian cheetahs. (Global Ecology and Conservation)

2. Books

- Marker, L., Boast, L., Schmidt-Küntzel, A. The Biology and Conservation of Cheetahs (in preparation)

IV. Conservation

Whether perceived or real, livestock loss to cheetahs is an economic and emotional issue as farmers' livelihoods depend on the economic success of their livestock and wild game industries. While many Namibian farmers are very respectful of nature and tolerate a certain level of loss, some resort to lethal predator control rather than alleviating their problems in a non-lethal manner through appropriate livestock and predator management. By addressing livestock-predator conflict through a conservation management strategy that benefits both humans and cheetahs, CCF is ensuring the long-term species' survival on Namibian farms and has raised greater awareness of better farm practices.

A. Livestock Guarding Dog Programme

1. Programme Overview

CCF's Livestock Guarding Dog Programme (LSGD) continues to be one of the most successful conservation projects to assist farmers with predator conflict in Namibia. To date, CCF has placed 457 Livestock Guarding Dogs with farmers throughout Namibia and other parts of Africa as well. As of December 2015 there were 179 (93M, 86F) dogs alive in the programme (Table 5), of which 151 (79M, 72F) are working dogs, 8 (5M, 3F) are puppies in training at CCF, and 20 (9M, 11F) are retired or housed as pets.

Table 5: LSGD – Dogs alive as of 31 December 2015.

Location	M	F	Total
Commercial	30	27	57
Commercial (CCF Working)	5	8	13
Commercial (CCF Puppies)	5	3	8
Communal	17	17	34
Emerging Commercial	12	11	23
Resettled	9	4	13
South Africa	1	1	2
Kenya	1	0	1
Tanzania	4	4	8
Total Working	84	75	159
Retired/Pet (breeding)	9	11	20
Total dogs alive:	93	86	179

In 2013, CCF began a collaboration with the Ruaha Carnivore Project (RCP) in Tanzania, which is working to mitigate human-carnivore conflict in the Ruaha area. A large part of this conflict is driven by attacks on livestock, so CCF has provided RCP with a total of 10 (5M, 5M) puppies throughout the years to protect livestock of Maasai and Barabaig farmers. The programme has been quite successful and due to this success, RCP will begin their own breeding programme in the future with one intact female CCF provided. Unfortunately, this year, one of their female dogs that was placed in 2014, Chui (SB# 578), died in August from a snakebite. As the programme is still growing, CCF hopes to send more puppies to RCP in 2016.

CCF has also donated numerous puppies over the years to Cheetah Outreach, another facility who works to save the wild cheetah in South Africa, to help form their own livestock guarding dog programme. Since the trial programme was so successful in 2005, they also began breeding and providing Anatolian shepherds to farmers after the CCF model. The programme is key in helping farmers protect their livestock and thus save more cheetahs.

Currently, there are 22 (7M, 15F) intact dogs in the programme (Table 6), of which 11 (3M, 8F) reside at CCF as working dogs (3M, 7F) or pets (1F), seven (3M, 4F) work on commercial farms, one (1F) is a pet, two (1M, 1F) are in South Africa, and one (1F) is in Tanzania. Penda (SB# 287), although retired from the breeding programme, is included in Table 7 because she is still intact. Two females were sterilised and have been removed from the breeding programme: Uschi (SB# 269) and Isha (SB# 347), who was sterilised in August due to complications with her pregnancy. Intact female Branka (SB# 298) died on 1 September 2015 from a snake bite.

Table 6: LSGD – Intact livestock guarding dogs as of 31 December 2015.

SB#	Dog Name	Born	Sex	Working/Pet	Farm Type	Country
277	Uhtaya	9/30/2004	M	Pet	N/A	South Africa
285	Amos	3/18/2005	M	Working (CCF)	Commercial	Namibia
287	Penda	7/16/2005	F	Pet (CCF)	Commercial	Namibia
324	Wagter	9/18/2007	M	Working	Commercial	Namibia
382	Hediye	3/5/2009	F	Working (CCF)	Commercial	Namibia
392	Tiny	6/29/2009	F	Working	Commercial	Namibia
423	Max	end Jan-10	M	Working	Commercial	Namibia
451	Kiri	2/10/2010	F	Working (CCF)	Commercial	Namibia
424	Aleya	7/5/2010	F	Working (CCF)	Commercial	Namibia
405	Pandora	8/5/2010	F	Pet	N/A	South Africa
431	Firat	8/31/2010	M	Working (CCF)	Commercial	Namibia
456	Kaspaas	2/1/2012	M	Working	Commercial	Namibia
458	Nahla	2/1/2012	F	Pet	N/A	Namibia
468	Kandake	8/11/2012	F	Working	Commercial	Namibia
485	Nesbit	2/17/2013	M	Working (CCF)	Commercial	Namibia
487	Lady	2/17/2013	F	Working	Commercial	Namibia
490	Taya	2/17/2013	F	Working (CCF)	Commercial	Namibia
498	!Us	4/2/2013	F	Working	Commercial	Namibia
507	Repet	4/11/2013	F	Working (CCF)	Communal	Namibia
524	Karibib	2/10/2010	F	Working (CCF)	Commercial	Namibia
535	Lady	9/10/2012	F	Working (CCF)	Commercial	Namibia
579	Busara	10/03/2014	F	Working	Communal	Tanzania

The LSGD programme is a crucial part in CCF's mission to conserve the wild cheetah and its continuing success is due to the efforts of dedicated CCF staff. Gebhardt Nikanor has worked on the programme since he joined CCF over 10 years ago. Paige Seitz arrived in December 2013 to manage the programme and CCF's Small Stock Supervisor, Tyapa Toivo, began assisting with dog trips in January 2014.

2. Breeding and Puppy Placements

Since the programme's inception, 63 litters have been born at CCF for a total of 538 (270M, 258 F, 10U) puppies. An additional group of puppies have been born at other facilities under CCF's direction. From January to December 2015, a total of 41 (23M, 18F) puppies were born to five of CCF's breeding females. From these litters, 3 (1M, 2F) puppies were stillborn, 2 (1M, 1F) were euthanized due to irresolvable medical issues, one (1M) was kept as a future ambassador. and 27 (15M, 12F) were placed on farms. Eight puppies are still at CCF and will go to their new farms in late January 2016 (Table 7).

Table 7: Puppies born and type of placement in 2015 (K = Commercial Farm; C = Communal Farm; EG = Emerging Commercial Farm; R = Re-settled Farm; P/B = Pet/Breeder; D = Dead; NP = Not Placed; IP = Intact Puppies).

Sire/Dam	431/451		431/490		431/424		431/347		431/524		Totals	
DOB:	26May'15		14Jun'15		03Aug'15		08Aug'15		11Nov'15			
Sex:	M	F	M	F	M	F	M	F	M	F	M	F
K	3	3	2	1	2	1	0	0	0	0	7	5
C	1	1	2	2	1	2	0	0	0	0	4	5
EC	1	0	0	0	0	0	0	0	0	0	1	0
R	0	0	2	0	1	2	0	0	0	0	3	2
P/B	0	0	0	0	0	0	1	0	0	0	1	0
D	1	0	0	1	0	0	1	2	0	0	2	3
NP	0	0	0	0	0	0	0	0	5	3	5	3
Total	6	4	6	4	4	5	2	2	5	3	23	18
IP	0	0	0	0	0	0	0	0	5	3	5	3

- Kiri (SB# 451), a Kangal imported from Germany by her owner and brought to CCF for breeding purposes in 2012, was bred to our Kangal male Firat (SB# 431) for the fourth time. She successfully gave birth to a litter of 10 (6M, 4F) puppies on 26 May 2015. One male puppy, SB# 594, was stillborn. The necropsy confirmed the puppy never took a breath. The body of the puppy was completely normal, but the face was very deformed and the veterinary staff is unsure of the reasons behind this. Six (3M, 3F) puppies were placed on commercial farms, one (1M) was placed on an emerging commercial farm, and two (1M, 1F) were placed on communal farms.
- Taya (SB# 490), an Anatolian born in Namibia, was bred with our Kangal male Firat (SB# 431). She gave birth to her first litter of 10 (6M, 4F) puppies on 14 June 2015. One female puppy (SB# 608) was stillborn. The necropsy indicated that the puppy never took a breath and possibly was stuck in the birthing canal. Three (2M, 1F) puppies were placed on commercial farms, two (2M) were placed on resettled farms, and four (2M, 2F) were placed on communal farms.
- Aleya (SB# 424), a Kangal imported from Germany, was bred to our Kangal male Firat (SB# 431) for the fourth time in the end of May 2015 and gave birth to 9 (4M, 5F) healthy puppies on 3 August 2015. Three (2M, 1F) puppies were placed on commercial farms, three (1M, 2F) were placed on resettled farms, and three (1M, 2F) were placed on communal farms.
- Isha (SB# 347), a Mongretolian, was bred with our male Kangal, Firat (SB# 431) in the beginning of June 2015 and gave birth to her first litter of four (2M, 2F) puppies on 8 August 2015. Unfortunately, only one male survived. This puppy will stay as Dr. Marker's pet at CCF and become an ambassador for the dog programme. For more information on this case see section Dog Health.
- Karibib (SB# 524), a Kangal imported to Germany by her owner and subsequently given to CCF as a breeding dog as the owner no longer needed her for his livestock, was bred to our Kangal male, Firat (SB# 431) for the second time. On 11 November 2015 she gave birth to 8 (5M, 3F) healthy puppies. These puppies will be placed in late January 2016.

The farmers receiving puppies participated in CCF's mandatory one-day course 'Puppy Information Day', where the farmers are trained on the correct methods of raising a livestock guarding dog. The courses cover care and training of livestock guarding dogs, as well as predator-friendly livestock management.

3. Follow-up on Prior Placements and Health Survey

Before any dog is placed on a farm in Namibia, CCF conducts a pre-approval farm visit to ensure that the farm has the facilities and capabilities to ensure the health and wellbeing of the dog, and that it can provide the right conditions for the dog to succeed as a livestock guarding dog. After a puppy is placed, CCF performs follow-up visits at three, six, nine and 12 months of age, and then yearly, to ensure the health and success of each dog. If an individual dog is being abused or mistreated, CCF will confiscate it from the farm and nurse it back to health. The dog will then be placed on a different farm if deemed able to work.

From 1 January 2015 to 31 December 2015, CCF staff visited 194 (101M, 93F) dogs; this number includes dogs counted multiple times because they have been visited numerous times throughout the year to complete their required 3-, 6-, and 1-year visits or follow-up visits. Of the 194 dogs, 34 (18M, 16F) received their one-year of age visit. The dogs were vaccinated against rabies and other canine diseases, had an overall health check, and were evaluated on their working success. All were thoroughly checked and reported to be working well. Following are some outcomes and findings from the follow-up visits:

- Ghandi (SB# 605) died on her communal farm on an unknown date from unknown causes.
- Johanna (SB# 503) died on her commercial farm on an unknown date from being shot by a neighbouring farmer. Reasons for the shooting are unknown. The owner would like a new puppy and has been added back on to the waiting list.
- Peet (SB# 224), a pet dog, died in September 2014 from old age, but CCF was informed in 2015 when the owner was called for the dog's yearly check.
- Griet (SB# 252) died of old age in September 2014, but CCF was informed in 2015 when the owner was called for the dog's yearly check.
- Kwassie (SB# 364) died as a retired working dog on her commercial farm in September 2014 from an unknown disease. The owner said she went blind and got a fever but the vet could do nothing for her and she declined quickly. CCF was informed of her death in 2015.
- Nandi (SB# 271), a pet dog, died from a snake bite in October 2014. CCF was informed of her death in 2015 when the owner was called for the dog's yearly check.
- Beauty (SB# 248) died of old age on her emerging commercial farm in December 2014; but CCF was informed of the death in April when we contacted the owner to inform them we would be visiting.
- Tanja (SB# 471) died from a snake bite on her emerging commercial farm on 20 December 2014; CCF was informed of her death in 2015.
- Repet (SB# 507) and her puppy (SB# 587) were given to a commercial farmer that was having serious predator problems on 2 January 2015. Repet was assigned to help train it and provide protection for the farmer's stock while the puppy grew. Repet was returned to CCF on 17 April 2015 and her puppy is working very well at her new farm.
- Amakali (SB# 573) died on his commercial farm on 15 January 2015 from unknown causes. The farmer found the puppy with a dead lamb next to it. They believe a predator got in to the kraal, but are not positive of the cause of death.
- Michael (SB# 496) died on his resettled farm on 18 January 2015 from a snake bite.
- Bird (SB# 523) died on her emerging commercial farm on 25 January 2015 from a snake bite.
- Cheetah (SB# 205), a retired working dog who still kept a close eye on her flock but did not travel the whole day with them, was eaten by a python on 1 February 2015. CCF was informed of her death in April when we went to visit the farmer's second livestock guarding dog. The farmer said that Cheetah did not

return from work that day and they went to check at her favourite look out spot, but only found a python that looked as though it had just eaten. They checked the same area a few days later and found the python dead and her body lying next to the snake. The farmer hopes to one day write a story about Cheetah and share it with CCF.

- SB# 584, who was not given a name, disappeared from his commercial farm on the 7 February 2015 and was presumed dead on 10 February 2015.
- Teacher (SB# 375) died on his resettled farm on 10 February 2015 from an unknown disease.
- Anna (SB# 200), a pet dog, was euthanized due to old age on 11 February 2015.
- Sheperd (SB# 418) became sick on his communal farm in late January 2015. The farmer called and asked for advice and CCF suggested taking the dog to the vet. On 11 February 2015, Sheperd was brought to CCF as the farmer did not take him to the vet and had gotten worse. He was very skinny, could not walk properly, and continuously fell over. He was extremely positive for Ehrlichiosis, a type of tick bite fever. He was put on treatment and a slight improvement was seen. Since he cannot hold himself up for long periods of time and will need to be on medication for the rest of his life, he will live at CCF and protect the dairy goats while they are out in their yard for the day.
- Dolly (SB# 449), a working dog on a communal farm, was confiscated due to poor health in 2014. Further examination at CCF's clinic revealed that she had developed tongue cancer. She exhibits no other health issues and the cancer is not very advanced so she will be returned to her farm to continue working. Before she left for her farm she got an injury from a tick and developed Ehrlichiosis. She stayed at CCF and was treated for the disease. She was finally returned to her communal farm on 25 February 2015 and was working well. However, she returned to CCF on 7 October 2015 due to her tongue cancer advancing. The area where she was placed is very hot and not suitable for her any longer; she will now work for CCF's goat herder, Armas Shanika, so CCF can monitor her closely. The farmer will receive a new puppy in the future.
- Shipena (SB# 501) died on her commercial farm in March 2015 from unknown causes.
- Cheetah (SB# 549) was stolen from his resettled farm on his way back to the kraal on 5 February 2015. The farmer informed the police, but the puppy was not found. He was presumed dead on 13 March 2015.
- Nado (SB# 446) ran away with the small stock manager who was being chased by the police on 11 February 2015. He was seen on numerous farms, but never found. He was presumed dead on 14 March 2015.
- Tiger (SB# 525) died on his communal farm on 19 March 2015 from a snake bite.
- Max (SB# 453) was given by his owner to another farmer on 2 April 2015. He is adapting well to his new farm.
- Moritz (SB# 457) died on his commercial farm on 5 April 2015 from a suspected snake bite.
- Johnny (SB# 561), previously Tjevera, was brought to CCF on 19 November 2014 after Gebhardt had visited his commercial farm and the dog had a problem with his right eye. He was diagnosed with Ehrlichiosis and received antibiotics for four weeks. He was re-homed as a working dog on a communal farm on 3 December 2014. On 20 March 2015 he was removed from the communal farm as the farmer said they had tried everything to get him to work and he was not showing any interest. On arrival to CCF he was a bit underweight but otherwise quite healthy. CCF retrained him and on 1 May 2015 placed him with a farmer who previously had one of CCF's guarding dogs and we are told he is doing well.
- Wagter (SB# 257), a retired working dog kept as a house pet, died on 1 August 2015 from old age.

- Branka (SB# 298), a pet dog to be used for future breeding for CCF's LSGD programme, died on 1 August 2015 from a snake bite.
- Shiba (SB# 473) died on her emerging commercial farm on 5 August 2015 from a snake bite.
- Timbo (SB# 311) died on his commercial farm on 8 August 2015 due to old age.
- Mandela (SB# 368), a retired working dog housed as a pet, was euthanized by her owners on 12 August 2015 as she was no longer able to walk.
- Cheetah (SB# 569) died on her communal farm on 9 September 2015 from an unknown sickness.
- Beauty (SB# 469) died on her commercial farm on 10 September 2015 from being shot by the neighbouring farmer due to suspected hunting.
- Fabiana (SB# 339) was brought in from her emerging commercial farm when she was sick because her farmer did not want to take her to the vet. CCF confiscated the dog and treated her. Unfortunately, she did not improve and CCF could not determine the cause of her issues. She continued to decrease in health and was euthanized on 14 September 2015.
- Shepherd (SB# 412), belonging to CCF's herder, Armas Shanika, died on his commercial farm on 25 September 2015. He climbed into a cattle dam but was unable to climb back out and subsequently drowned. Necropsy showed no other issues.
- Simba (SB# 592) was placed on an emerging commercial farm. He was presumed dead on 1 November 2015 after not returning to the kraal on 1 October 2015. The farmer believes he was either killed or got lost in the veld. This farmer has been put back on the waiting list.
- Joker (SB# 610) was brought from his commercial farm on 7 November 2015 to CCF as he was extremely ill. It was later determined he had parvovirus and was taken in to town for isolation at the local vet. He died on 13 November 2015. For more information on this case see section Dog Health.
- Batman (SB# 612) died on his communal farm on 13 November 2015 from getting his collar stuck on the fence and strangling himself. The farmer has asked to be put back on the waiting list.
- Benny (SB# 541) died on his emerging commercial farm on 16 November 2015 from a suspected snake bite.
- Spots (SB# 413), one of CCF's working male dogs, was given to Harry Erasmus, a commercial farmer in Dordabis who was having severe problems with predators. This farmer will receive a puppy from Karibib's litter in late January, but will continue to use Spots to help deter the predators until then. Spots will then stay at the farm for another 2-3 months to help train the puppy, after which he will return to CCF.
- Ngaihupe (SB# 601) was brought in to CCF on 9 December 2015. At his 6-month visit on his resettled farm, the membranes of his eyes were noticed to be swollen, he seemed lethargic, and he wasn't eating. Gebhardt brought him to his house on 8 December 2015 because we had no room at CCF to monitor him. On the drive from Okahandja to Otjiwarongo, he defecated and vomited in the car and seemed to be feeling a bit better. The next morning, 9 December 2015, his eyes were normal, he seemed to have more energy, and he was eating. We believed he would be okay and could return to his farm, but decided to have him check out by CCF's vet. On his way to CCF he defecated in the car again and this time a large amount of black hair was found in the faeces. Gebhardt contacted the farm workers asking if they had killed anything recently and they reported to have slaughtered a black sheep a couple days before. We believe the puppy ate the sheep skin and became blocked. The puppy defecated again at CCF's clinic and had an extremely high load of tapeworms, which could also cause him to feel lethargic. He was de-wormed and sent back to his farm. We informed the workers to no longer keep the skins where the puppy can get them and provided them with more de-wormer for the next month.

Additionally, updates were obtained on three dog deaths occurred prior to 2015 that had been unrecorded: Leeu (SB# 31), Lydia (SB# 345) and

Bella (SB# 300).

Other than routine vaccinations, CCF provides de-worming tablets, veterinary supplies for minor injuries, and topical anti-parasitic agents that are available from donations. The medical supplies ensure that the dogs' health is a priority. Dog food is offered for purchase at a discounted rate to the farmers to encourage that a correct diet is followed consistently. The dogs' working success has been correlated with good care from the owner. Many farmers are part time and thus their attention is divided between their farm and other business activities; however, this is not a problem if they have good herders who assist with livestock and dog care. It is important that the owners are in touch with the developmental phases of their dogs so that problems can be dealt with immediately as they occur, preventing bad habits from developing and the dog failing as a result. When dogs are found to be unhealthy or not doing their job, they are removed from that specific farm, evaluated, and placed on another farm if deemed pertinent or placed as pets if the dogs are no longer able to work as livestock guarding dogs due to health or behavioural problems.

4. Dog Health

All of CCF's Anatolian shepherd and Kangal dogs, as well as the scat-detection dogs, are enrolled in a preventative medicine programme. Every month, a broad-spectrum anti-parasite product for endoparasites is administered. The product utilised is rotated continually to help prevent the development of resistance. Every four weeks an ectoparasite prevention product is applied topically to prevent fleas, ticks, and mites. Each dog receives vaccinations annually against canine distemper virus, canine parvovirus, adenovirus, parainfluenza virus, and rabies virus. Each month every dog is weighed to make sure they are at a healthy body weight.

Following are some of the special cases dealt with by the CCF's veterinary team during this period:

- The rainy season this year resulted in increased issues with ticks. Many of CCF's dogs were diagnosed with Ehrlichiosis, a type of tick bite fever. This strain is an intercellular parasite that attacks the white blood cells of the dog and can cause an extreme number of symptoms, including lethargy, loss of appetite, decrease in weight, etc. A blood smear or an Erlichia snap test can confirm if the dog is infected. If positive, the dog is put on a course of Doxycycline for 3-4 weeks. To help control the tick problem, we began using Bravecto and it has worked very well. Ticks are rarely found on the dogs and if found, they are usually dead.
- As mentioned above, Sheperd (SB# 418) became sick on his communal farm around the end of January 2015 and was eventually found positive for Ehrlichiosis. He was put on different doses of Prednisolone in an effort to reduce inflammation, but only slight improvement was seen. When the tick bite fever is very severe, it can take up to a year for the dog to heal, and since his nervous system has been affected, he may never recover. He will permanently live at CCF and will receive Prednisolone for the rest of his life.
- Around the beginning of February 2015 it was noticed that Penda (SB# 287) was drinking a lot of water, seemed lethargic, was urinating large amounts often, had started to develop cataracts, and was losing weight despite being fed a large amount. These can all be signs of diabetes, so she was brought in to the clinic and a urine sample was taken. Her glucose level was at 300, which is very high. Subsequently a blood sample was sent in to Pathcare and tested positive for diabetes. She was taken in to the Otjiwarongo veterinarian to determine the amount of insulin she would need to regulate her diabetes and was kept there for a few days before she returned to CCF. She was also started on diabetic dog food. Within a few days her personality and energy were back and she was slowly gaining weight. She is in great condition now and is back to normal.

In the end of July/beginning of August, Penda came into heat. She began decreasing in weight, becoming lethargic, drinking excess water, and urinating in the house. CCF's veterinarian believes that due to increased levels of oestrogen from her heat cycle, her glucose levels increased causing her diabetes to become unstable again. The amount of insulin she received was increased numerous times, but her body

would still not regulate her glucose levels and she continued to lose weight and energy. After a few weeks of her body continuing to do this, she was tested for Ehrlichiosis to see if that disease could be hindering her recovery and she was positive. She was put on a 3-week treatment of Doxycycline. After her treatment began, her body started accepting the insulin and her glucose levels began to regulate themselves. However, her glucose levels then began to go below the average glucose range and when given her insulin after meals, she would become hypoglycaemic (blood sugar levels that are too low). To prevent this, she no longer received insulin unless her glucose levels rose above 13mmol/l. The clinic is not quite sure what occurred with her diabetes. She has now gained back her weight and energy and has not received insulin in over two months. She still remains on diabetic dog food and her glucose levels are at a fairly normal range, still slightly under the average range. Staff plans to spay her in 2016 so her levels will not fluctuate each time she comes into heat.

- Uschi (SB# 269) was sterilised on 2 March 2015. She has now reached an age where she will be retired from the breeding programme. The surgery went smoothly and she is healthy.
- Luka (SB# 576) was brought in to the clinic on 20 April 2015 with injuries from a suspected warthog attack. She had a broken femur and some puncture wounds on the right side of her body. She was sedated to stitch up the wounds and scheduled for leg surgery the next day at the Windhoek veterinary clinic. She had permanent pins put in her broken leg and returned to CCF a few days later with the recommendation of bed rest for three weeks. She was doing great until early May, when her appetite and energy decreased and she began to refuse food. On the morning of 6 May 2015, she was found very cold and lethargic and had defecated and urinated on herself. She had a very faint heartbeat and was put on oxygen. She was also given adrenaline and CPR, but her body had already stopped working and she passed away. No necropsy was done, but it is believed there was more internal trauma than previously determined.
- On 8 August 2015, Isha (SB# 347) went in to labour. When she began delivering the first puppy, she appeared to be having difficulty and therefore was assisted with the birth by Dr. Marker. The puppy (SB# 621) was manually removed from the birthing canal, but was stillborn. The necropsy suggested that she died from obstructed blood supply during whelping, possibly from being stuck in the birthing canal. After this puppy, Isha was having difficulty delivering the second puppy and was taken in to Elvira's Vet Clinic in Otjiwarongo for an emergency caesarean section, after which she was sterilized. Three puppies were extracted, the first two (SB# 618 and SB# 619) appeared healthy and the third (SB# 620) had an extreme deformation and was euthanized within a few minutes of being born as her heart was still encased in the pericardial sac and beating outside of her chest. The necropsy showed no other abnormalities.

The two surviving puppies (SB# 618 and SB# 619) were given Dopram to help them start breathing. SB# 619 had to be given Dopram twice and swung to remove fluids from his lungs. It was noticed that he had a severely kinked tail, an abnormally aligned spine, and his oral fissure (skin around his mouth) was misaligned. Some of these issues made it difficult for him to suckle and despite bottle and tube feeding his weight continued to drop. He also began having issues with his breathing and was running a fever. He was administered medication and oxygen, but seeing no recovery the decision was made to euthanize him on 15 August 2015. It is believed that he aspirated on his milk, but the necropsy also showed he had a very thin diaphragm which could cause issues with his breathing. The only surviving puppy, SB# 618, is healthy and growing fast. He will stay at CCF as a pet to Dr. Marker, and will become an ambassador for the dog programme.

- On 7 November 2015, Joker (SB# 610) was brought to CCF by Gebhardt because he was very ill. Gebhardt had gone to the farm for the puppy's 3-month visit and was told that after being taken to the state vet's office for his vaccinations on 30 October 2015, the puppy stopped eating and barely was drinking. When the puppy arrived at CCF's clinic, he had a high temperature, was lethargic, severely dehydrated, had a low heart rate, and very slow breathing. He immediately had ice packs positioned around him, was drenched in ice water, and had a fan placed on him. He was also administered fluids. After his temperature lowered, an x-ray was taken of his abdomen, which showed distended intestines with fluid and gas build up. His glucose level was also checked and was low at only at 3.6 mmol/l, so he was given honey through a syringe to increase his blood sugar. The puppy remained lethargic for the rest of the day, but later was walking around, during which time he vomited. With all of these signs, it was determined he

had a possible case of parvovirus and was isolated in the adjoining room of the clinic, the scat lab. He was given medication to ease his nausea and was monitored every two hours throughout the night. From the 8 November until the 10 November, he slowly seemed to gain more strength. He continued to be syringe fed and his vitals improved. On 10 November, a faecal sample was collected and it tested positive for parvovirus. Due to the arrival of new puppies the next day, it was critical for him to be isolated and was sent to Elvira's Vet Clinic in Otjiwarongo on 11 November 2015 to be treated until his virus subsided. He continued to show a bit of improvement, by eating and drinking, but was found dead on the morning of 13 November. The necropsy showed an intussusception of the small intestine (telescoping of one piece of intestine into another), which leads to death and can be a common occurrence with parvovirus. CCF's clinic and scat lab were disinfected to prevent the spread of the virus. Since CCF is uncertain as to how the puppy acquired the virus, the farmer will only be allowed to receive an adult re-homed dog as the parvovirus can live in the environment for years and puppies are much more susceptible to disease as their immune system is still weak.

In 2015 three of CCF's breeding females did not get pregnant:

- Hediye (SB# 382) was bred in the beginning of August with our male Firat (SB# 431), no copulatory tie was observed, but it was assumed that she bred due to the males being very persistent. As she was showing no signs of pregnancy, she was X-rayed in September and found to have no puppies. She still has not come in to another heat cycle for 2015 so CCF has not tried to breed her again.
- Lady (SB# 535) was bred in early April to our male Nesbit (SB# 485), and locking was seen numerous times. As she was not showing signs of pregnancy, she was X-rayed in mid-June and no puppies were seen. She came into another heat cycle in early September and was to be bred with our male Amos (SB# 285), but no breeding occurred.
- Repet (SB# 507) was bred with Amos (SB# 285) in mid-October and tying was observed numerous times. Repet began to increase in size and have her teats enlarged, but when she was ultra-sounded and X-rayed in early December no puppies were visible. No abnormal behaviour or discharge was seen during the pregnancy. It is believed she underwent a pseudo pregnancy, but it is inconclusive if she was ever actually pregnant.

A theriogenologist, Dr. Gradil, from Tufts University in Boston, Massachusetts came to visit CCF in December and discussed these issues with the clinic. It was decided that sperm would be collected from two of the males, Amos (SB# 285) and Nesbit (SB# 485), to test for viability. Firat (SB# 431), a male that produced numerous litters throughout 2015, was not scheduled for collection. A female in the end of her heat cycle was used to arouse the male dogs to make collection easier, but no sperm was collected. We will continue to try and collect sperm in the next few months. CCF will continue to try and breed all of these females as they are healthy and will continue to look into this issue and try some of the recommendations from Dr. Gradil for our breeding programme.

5. Squamous Cell Carcinoma (SCC) Research

The tongue biopsy samples from various dogs affected with SCC were sent to pathologist Dr. Karen Terio's laboratory at University of Illinois (USA) at the end of 2013. We are awaiting final analysis to determine the efficacy of the chemotherapy in reversing the microscopic progression of the tongue cancer.

B. CCF Model Farm

CCF's farm provides the opportunity to practice and experiment with optimal methods of livestock and non-lethal farm management practices, especially acting as a showcase model of success. CCF's cattle, goat, and sheep herds continue to increase and selected herds have been used during various Farmer Training programmes. Table 8 provides an overview of CCF's livestock.

Table 8: CCF cattle and livestock from January to December 2015.

	Stock Start	Born	Purchased	Sold	Died	Slaughtered/ CCF use	Stolen	Stock End
Cattle	457	160	0	176	5	2	0	434
Boer Goats	83	82	0	18	8	0	0	139
Damara Sheep	83	63	0	14	4	0	0	128
Dairy Goats	86	61	0	10	8	0	0	129
Donkeys	16	4	66	0	0	57	0	29
Horses	42	2	10	0	0	14	0	40

CCF's Farms Manager, Johan Britz; Large Stock Assistant Manager, Bessie Simon; Small Stock Manager, Tyapa Toivo; Small Stock Herder, Armas Shanika; and the animal health team carry out proper management to maintain the general health and welfare of the animals.

During this period, CCF farm staff continued to work on fence repairs and basic farm maintenance. Work also continues on firebreaks, road maintenance, as well as weed control and eradication of alien species.

1. Cattle

CCF cattle are managed in a 100% predator-friendly environment. A cow-calf system is in place and weaners are sold before one year of age based on market conditions. Factors such as severe bush encroachment continue to be a challenge. A below average rain season (250mm) was experienced for the first semester of 2015. The new rainy season at the end of 2014 had a very slow start and continued to be poor with only some good rains at the end of the season in March 2015. The new 2015/16 raining season also started poorly, with the first rainfall of note only happening in December 2015.

Normal management is done in coordination with nature, therefore mating seasons differ yearly but generally it is from January to the end of April. This period can be extended since CCF only owns four bulls instead of the usual 12 to 15 bulls. However, when necessary, CCF utilises six to eight bulls that are on loan. Pregnancy determination is normally done in July or August. Dehorning and castration are done as needed during the calving season.

By 31 December 2015, CCF had 434 cattle compared to 457 at the end 2014. Total cattle production for 2015 included 160 calves born (82M, 78F) and 176 sold (89M/weaners, 87F). CCF also rents grazing land to two farmers for their cattle (approximately 500 head total), thus providing an extra income.

Vaccination Programme

CCF firmly believes in farming with animals adapted to the Namibian climate with a strong natural resistance to most diseases. As such, unnecessary vaccinations are avoided to minimise costs and reduce stress on the animals. Compulsory brucellosis vaccinations are administered and other vaccinations are done purely as needed. Periodical internal and external parasite control is also in place.

Other

Since cattle falls under the Fanmeat scheme of Namibia, CCF must ensure compliance with the European Union (EU) and the Fanmeat scheme. Fanmeat stands for Farm Assured Namibian Meat, which is a standard for meat production, specifically for cattle, that involves the traceability, animal health and welfare, record keeping, and animal movement in Namibia. The CCF cattle recordkeeping and data have passed inspection

every year, and our cattle operation is mentioned by the Directorate of Veterinary Services as an excellent standard when it comes to the fulfilment of these requirements.

CCF cattle also participated in both weaning auctions during July 2015 and August 2015 in Otjiwarongo. Both auctions had more than 2,000 head of cattle on auction. During these auctions CCF's male weaners received one third place while the female weaners received a second and third place on the different auctions. Although our main aim is not to compete in these auctions, it serves good purpose to measure ourselves from time to time with the rest of the farming community.

2. Small Stock

Goats and sheep are an essential part of CCF's LSGD programme as the puppies must be raised amongst the goats and sheep in order for them to form a close bond with the livestock. As part of CCF's Model Farm, dogs and small stock are used during farmer-training programmes as a method to raise livestock around predators without using lethal methods to prevent predation.

In addition to the 12 Anatolian shepherd and Kangal dogs mentioned in the previous section, as of December 2015 the kraal contains 129 (8M, 82F, 39 wethers) dairy goats, 139 (2M, 109F, 28 wethers) Boer goats, and 127 (1M, 96F, 30 wethers) Damara sheep.

CCF staff continued to work on increasing the amount of shade and rain protection for the dairy goats. The buck's pen has been updated and now has better shelter and fixed fencing. A new shelter for the Boer goats and Damara sheep has also been completed, as are new pens for CCF's Livestock Guarding Dogs.

Boer Goats

CCF's Boer goats are managed for meat production and castrated males and old or inferior does are sold at the auction. Between January and December 2015, 18 goats (2F, 16M) were sold, none were purchased, and eight died (1M, 4F, 3 wethers) (Table 9). The two females were sold due to health issues that would not resolve. Of the goats that died, one breeding male (SB# 284) died due to a high load of internal parasites. The wethers had reached slaughter weight and were sold.

Table 9: Boer goat deaths from 1 January 2015 to 30 December 2015.

Studbook #	Sex	Date of Death	Cause of Death
SB# 284	Male	17-Jan-15	Internal parasites
SB# 349	Wether	19-Jul-15	Stillborn
SB# 350	Female	19-Jul-15	Stillborn
SB# 419	Female	26-Aug-15	Premature Birth
SB# 371	Female	14-Sep-15	Unknown
SB# 402	Wether	5-Oct-15	Unknown
SB# 353	Wether	11-Oct-15	Unknown
SB# 424	Female	4-Nov-15	Broken Hip

CCF's strategy is to keep improving on the quality of its Boer herd by bringing in quality bucks and continuing to improve the selection of animals for breeding. This will provide more income from the sales of these goats, as some can be sold as breeding animals versus only meat.

Damara Sheep

The Damara sheep herd stood at 127 (1M, 96F, 30 wethers) at the end of this reporting period, up from 83 at the end of 2014.

From August 2014 to the end of October 2014, 61 sheep were mated and finished lambing by March 2015. From January to June 2015 a total of 50 ewes gave birth, with a conception rate of 84%. In total 50 (22M, 28F) lambs were born, including one stillborn male lamb. Ten more ewes were mated in March 2015 and finished during August 2015, giving birth to 12 (5M, 7F) with a conception rate of 100%. Two of these ewes, SB# 252 and SB# 230 both gave birth to twins. No deaths were experienced during the August lambing season (Table 10).

In addition to the stillborn lamb, three sheep died during this period. Of these, one ewe (SB# 260) died from a neck injury sustained at night. The cause of the injury is unknown. Two ewes (SB# 36 and SB# 41) were culled due to old age.

Fourteen wethers were sold during this period.

Table 10: Damara sheep births from January 2014 to December 2014 (cM = castrated male, iM = intact male).

Studbook #	Sex	DOB	Dam	Sire	Dead/Alive
266	F	01-Jan-15	184	217	Alive
267	F	03-Jan-15	49	217	Alive
268	cM	03-Jan-15	74	217	Alive
269	M	04-Jan-15	70	217	Stillborn
270	F	05-Jan-15	204	217	Alive
271	F	06-Jan-15	79	217	Alive
272	cM	06-Jan-15	207	217	Alive
273	F	06-Jan-15	66	217	Alive
274	F	07-Jan-15	173	217	Alive
275	F	08-Jan-15	212	217	Alive
276	cM	09-Jan-15	179	217	Alive
277	F	11-Jan-15	103	217	Alive
278	cM	11-Jan-15	68	217	Alive
279	cM	12-Jan-15	71	217	Alive
280	cM	12-Jan-15	71	217	Alive
281	F	12-Jan-15	76	217	Alive
282	F	12-Jan-15	194	217	Alive
283	cM	14-Jan-15	54	217	Alive
284	cM	14-Jan-15	64	217	Alive
285	cM	14-Jan-15	214	217	Alive
286	F	14-Jan-15	193	217	Alive
287	F	14-Jan-15	181	217	Alive
288	cM	15-Jan-15	185	217	Alive
289	F	15-Jan-15	7	217	Alive
290	cM	17-Jan-15	186	217	Alive
291	F	17-Jan-15	204	217	Alive
292	F	17-Jan-15	72	217	Alive
298	F	17-Jan-15	186	217	Alive
293	cM	18-Jan-15	80	217	Alive
294	cM	18-Jan-15	182	217	Alive

295	F	19-Jan-15	209	217	Alive
296	cM	19-Jan-15	220	217	Alive
297	cM	19-Jan-15	81	217	Alive
299	F	20-Jan-15	67	217	Alive
300	cM	25-Jan-15	197	217	Alive
301	cM	30-Jan-15	65	217	Alive
302	F	03-Feb-15	192	217	Alive
303	cM	04-Feb-15	196	217	Alive
304	F	06-Feb-15	174	217	Alive
305	F	09-Feb-15	206	217	Alive
306	F	10-Feb-15	77	217	Alive
307	F	19-Feb-15	235	217	Alive
308	F	20-Feb-15	244	217	Alive
309	F	05-Mar-15	236	263	Alive
310	cM	07-Mar-15	241	263	Alive
311	cM	09-Mar-15	41	263	Alive
312	F	21-Mar-15	262	263	Alive
314	F	23-Mar-15	246	263	Alive
315	cM	24-Mar-15	231	263	Alive
316	F	25-Mar-15	243	263	Alive
317	cM	04-Aug-15	256	263	Alive
318	cM	6-Aug-15	252	263	Alive
319	F	6-Aug-15	252	263	Alive
320	F	6-Aug-15	245	263	Alive
321	F	7-Aug-15	258	263	Alive
322	cM	8-Aug-15	248	263	Alive
323	cM	9-Aug-15	230	263	Alive
324	F	9-Aug-15	230	263	Alive
325	F	12-Aug-15	229	263	Alive
326	F	14-Aug-15	249	263	Alive
327	F	15-Aug-15	257	263	Alive
328	cM	16-Aug-15	225	263	Alive

Dairy Goats

The dairy goat herd increased by 43, from 86 animals on 31 December 2014 to 129 (8M, 82F, 39 wethers) on 31 December 2015.

The dairy goat does are managed in such a way that when half of them are being bred, the other half are lactating to keep a continuous production of milk. During this period, 31 females were bred from March to June 2015 and gave birth to 58 kids between July and Dec 2015. Additionally, hormonal sponges were placed into seven goats in December 2014 to try to bring them into heat. Of these, three came into heat and bred. Two of them (SB# 65, SB# 121) gave birth to three kids in May 2015, while one aborted.

Table 11 below shows the breeding and kidding times for 33 of CCF's 57 dairy does from January to December 2015.

Table 11: Dairy goat breeding and kidding times from January to Dec 2015.

Goat	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Anne-Sophie			Bred					Kid				
Pinotage			Bred					Kid				
Ruby2			Bred					Kid				
Himba			Bred				Kid					
Chenin Blanc			Bred					Kid				
Brenna			Bred					Kid				
Kate Middleton			Bred					Kid				
Yarrow			Bred					Kid				
Daffodil			Bred				Aborted					
Margaret			Bred					Kid				
Indira			Bred					Kid				
Jasmin			Bred					Kid				
Tina2			Bred					Kid				
Ruacana			Bred					Kid				
Feigie			Bred					Kid				
Lil-Red			Bred					Kid				
Caroline			Bred					Kid				
Caitlin			Bred					Kid				
Poppy			Bred					Kid				
Whinnie				Bred				Kid				
Princess												
Saba				Bred				Kid				
Regina				Bred				Kid				
Arial White				Bred				Kid				
Prim Rose				Bred					Kid			
Salt				Bred					Kid			
Josephine				Bred					Kid			
Kunene						Bred				Kid		
Chardonnay						Bred				Kid		
Zinfandel						Bred					Kid	
Noir						Bred					Kid	
Katrina							Bred					Kid
Dolly Parton						Kid						
Hannah						Kid						

A total of 61 kids (1M, 27CM, 33F) were born during this period. Two of these kids (1CM, 1F) were stillborns. Table 12 shows the breakdown of the dairy goat kids that were born during this period with the parents, studbook numbers, and sex of the kids.

Table 12: Dairy goat births in 2015 (cM = castrated male).

Sire SB	Dam SB	Birth Date	Sex	SBN	Alive/Stillborn/ Died
35	121	21-May-15	cM	194	Alive
35	121	21-May-15	F	195	Alive
38	65	26-May-15	M	196	Alive
110	117	28-Jul-15	F	197	Alive
110	117	28-Jul-15	F	198	Alive
98	46	30-Jul-15	cM	199	Stillborn
98	46	30-Jul-15	F	200	Stillborn
35	40	6-Aug-15	cM	201	Alive
35	40	6-Aug-15	F	202	Alive
35	40	6-Aug-15	F	203	Alive
35	144	6-Aug-15	F	204	Alive
35	144	6-Aug-15	F	205	Alive
98	49	6-Aug-15	F	206	Alive
98	49	6-Aug-15	F	207	Alive
110	137	8-Aug-15	F	208	Alive
110	137	8-Aug-15	F	209	Alive
110	130	8-Aug-15	F	210	Alive
110	77	8-Aug-15	cM	211	Alive
110	77	8-Aug-15	cM	212	Alive
98	124	8-Aug-15	cM	213	Alive
98	124	8-Aug-15	F	214	Alive
110	128	8-Aug-15	F	215	Alive
110	132	8-Aug-15	cM	216	Alive
110	131	10-Aug-15	cM	217	Alive
110	108	11-Aug-15	cM	218	Alive
110	108	11-Aug-15	F	219	Alive
98	44	11-Aug-15	cM	220	Alive
98	44	11-Aug-15	F	221	Alive
35	100	12-Aug-15	cM	222	Alive
35	100	12-Aug-15	F	223	Alive
UNK	182	14-Aug-15	cM	224	Alive
98	75	15-Aug-15	cM	225	Alive
98	75	15-Aug-15	F	226	Alive
98	103	17-Aug-15	cM	227	Alive
98	103	17-Aug-15	cM	228	Alive
98	45	24-Aug-15	cM	229	Alive
98	45	24-Aug-15	F	230	Alive
98	72	29-Aug-15	cM	231	Alive
98	72	29-Aug-15	F	232	Alive
66	107	29-Aug-15	cM	233	Alive

66	107	29-Aug-15	F	234	Alive
66	99	31-Aug-15	cM	235	Alive
66	99	31-Aug-15	cM	236	Alive
66	109	31-Aug-15	F	237	Alive
66	109	31-Aug-15	F	238	Alive
110	138	1-Sep-15	cM	239	Alive
35	115	18-Sep-15	cM	240	Alive
35	115	18-Sep-15	F	241	Alive
35	42	23-Sep-15	cM	242	Alive
35	42	23-Sep-15	F	243	Alive
35	42	23-Sep-15	F	244	Alive
66	143	28-Oct-15	F	245	Alive
66	143	28-Oct-15	F	246	Alive
98	53	29-Oct-15	cM	247	Alive
98	53	29-Oct-15	cM	248	Alive
98	52	3-Nov-15	cM	249	Alive
98	52	3-Nov-15	F	250	Alive
98	50	11-Nov-15	cM	251	Dead
98	50	11-Nov-15	F	252	Alive
66	142	25-Dec-15	F	253	Alive
66	142	25-Dec-15	F	254	Alive

In addition to two stillborn kids (SB# 199 and 200), six dairy goats died during this period. Three adult female goats (SB# 40, 69, 128) and one wether (SB# 178) died of diarrhoea in November 2015. Two male kids (SB# 192 and 251) died of unclear causes. SB# 192's necropsy showed broken ribs and punctured lungs. SB# 251 was found dead one morning of unknown causes.

A total of 10 dairy goats were sold during 2015.

Milk Production

There are several major factors that play a role in the amount of milk given by a specific goat. These factors include: the breed, age of the animal, lactation stage, amount and type of feed, temperature, milking frequency, availability and duration of free ranging, animal health condition, and the type of management practice. Each goat is milked twice a day, although the number of goats milked each month depends on their lactation stage.

From January to December 2015, a total of 40 goats were milked. Between 23 and 34 goats were milked every day throughout 2015 for a total production of 17,140.2kg of milk. The total net production amounted to 15,280.4kg after filtering and processing waste were removed (roughly 1,858.8kg or 10.8%). Of this milk, 4,752.7kg were used to raise goat kids and 10,528.7kg were supplied to the creamery (Table 13).

Table 13: Goats milked, amount produced, and how much allocated to kids and creamery in 2015 (kilograms).

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Goats milked	28	28	27	24	26	23	17	30	34	30	31	32
Total Produced	1,817.1	1,404.8	1,366.6	1,043.3	984.6	862.9	782.2	1,164.2	1,829.3	2,041.7	2,166.8	1,676.7
Processing Waste	471.0	136.1	63.4	84.2	68.5	75.3	89.3	86.1	58.5	45.0	574.6	106.8

Used to Raise Kids	556.0	339.0	166.4	0.0	25.5	98.6	95.2	378.0	938.4	1,152.6	621.0	382.0
To Creamery	790.1	929.7	1,136.8	959.1	890.6	689.0	597.7	700.1	832.4	844.1	971.2	1,187.9

The amount of milk each individual goat produces is monitored on a daily, weekly, and monthly basis. This allows us to determine when they are producing the most milk and then compare the amounts produced to the feed they are given. Table 14 shows amounts of milk production per goat per month and the total milk production per month. Figure 27 displays the number of goats milked each month and the total milk production per month.

Table 14: Milk production per goat per month for 2015 (kilograms).

Goat	SB#	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Opal	47	133.4	86.4	90.1	78.9	81.7	75.1	74.5	74.7	78.2	90.5	74.6	83.0
Anne-Sophie	40	29.6	18.1	1.8	-	-	-	-	52.5	63.6	37.4	-	-
Chardonnay	93	93.1	86.9	93.9	68.5	67.3	54.4	55.4	14.2	-	-	-	40.9
Daffodil	46	-	-	-	-	-	-	-	-	-	-	-	-
Diana	59	66.9	54.7	53.4	40.4	33.9	26.3	14.7	11.8	11.9	-	-	-
Garnet	91	75.4	53.8	58.1	50.4	56.0	50.4	52.6	49.0	52.4	61.4	47.2	55.3
Indira	49	-	-	-	-	-	-	-	61.5	95.6	95.2	74.2	70.2
Jasmin	44	46.7	43.4	43.1	37.1	29.5	3.4	-	40.6	98.5	103.6	61.8	76.4
Josephine	42	67.1	45.6	44.4	27.8	4.8	-	-	-	-	86.9	124.1	48.6
Kimberly	56	98.9	62.9	67.0	50.4	52.5	37.9	37.1	33.6	27.7	37.2	31.5	37.0
Noir	50	101.8	88.5	98.1	77.6	72.8	56.9	64.3	59.2	13.5	-	37.7	90.7
Safire	48	102.5	89.0	88.4	67.7	58.7	49.4	49.4	48.1	48.9	67.8	59.4	85.0
Tina	28	76.4	61.9	64.7	50.1	36.4	21.8	21.6	22.0	18.5	17.7	-	-
Yarrow	45	49.2	38.7	18.5	-	-	-	-	24.5	95.0	103.4	150.0	69.8
Zinfandel	52	71.4	57.5	59.7	50.6	50.9	38.2	35.7	4.0	-	-	-	77.6
Rosie	64	82.4	55.2	58.1	46.3	44.1	32.7	32.8	26.9	20.2	29.1	30.7	39.8
Margaret	72	30.0	25.2	18.6	-	-	-	-	-	82.8	87.2	123.8	25.3
Lily	69	59.9	43.1	51.7	47.0	44.9	51.0	52.2	52.6	52.2	49.7	-	-
Kate Middleton	77	35.9	33.9	38.2	33.2	16.7	-	-	53.6	87.1	88.0	70.1	69.3
Gretel	67	97.9	72.2	79.1	68.5	70.3	62.6	58.3	55.8	59.7	54.4	58.5	50.1
Edelweiss	74	54.1	39.0	44.4	35.5	36.5	32.4	32.7	39.9	41.9	42.8	36.5	26.5
Dolly Parton	65	54.1	48.8	-	-	6.1	96.3	104.1	86.4	70.5	73.8	61.6	60.4
Regina	99	43.2	30.4	30.6	16.7	16.0	8.9	8.0	-	44.2	53.8	83.8	37.8
Arial white	103	40.3	28.2	27.7	15.4	15.9	6.1	-	-	57.2	62.9	84.7	39.8
Mirabai	105	41.9	34.9	32.8	20.5	20.0	15.0	-	-	-	-	-	-
Pinotage	75	63.6	46.3	43.2	33.4	20.5	-	-	31.6	93.0	93.4	130.3	74.7
Ruby2	108	43.6	34.5	33.8	28.6	23.6	1.3	-	31.0	53.8	47.5	39.6	32.1
Whinnie	109	53.8	43.0	40.8	32.6	37.1	15.7	-	-	54.0	67.6	123.6	65.4
Princess Saba	107	54.8	44.7	45.1	27.7	32.4	21.3	-	-	64.2	70.2	125.0	58.8
Salt	115	49.2	38.0	41.3	38.4	41.1	34.0	13.7	-	11.6	72.4	99.9	48.7
Chenin Blanc	100	-	-	-	-	-	-	-	15.0	48.6	54.0	38.2	43.4
Caitlin	132	-	-	-	-	-	-	-	35.4	46.2	40.9	39.3	28.1
Carolin	131	-	-	-	-	-	-	-	25.3	39.5	38.3	29.9	28.2
Prime Rose	138	-	-	-	-	-	-	-	-	30.7	45.0	101.4	42.7
Poppy	137	-	-	-	-	-	-	-	30.9	44.4	39.4	37.6	38.3

Lil-Red	130	-	-	-	-	-	-	-	31.5	44.4	48.2	38.8	33.8
Tina2	124	-	-	-	-	-	-	-	42.5	55.2	54.7	55.3	57.8
Feigie	128	-	-	-	-	-	-	-	35.4	43.3	41.5	64.1	1.3
Ruacana	144	-	-	-	-	-	-	-	18.9	29.8	31.8	-	-
Hannah	121	-	-	-	-	14.9	71.8	75.1	55.8	51.0	54.0	33.6	39.9
Total		1817.1	1404.8	1366.6	1043.3	984.6	862.9	782.2	1164.2	1829.3	2041.7	2166.8	1676.7

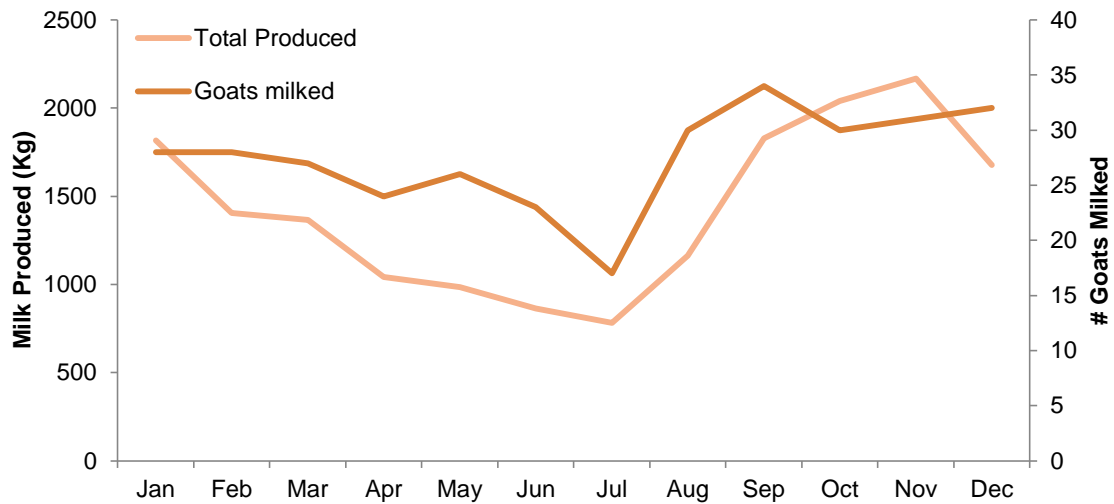


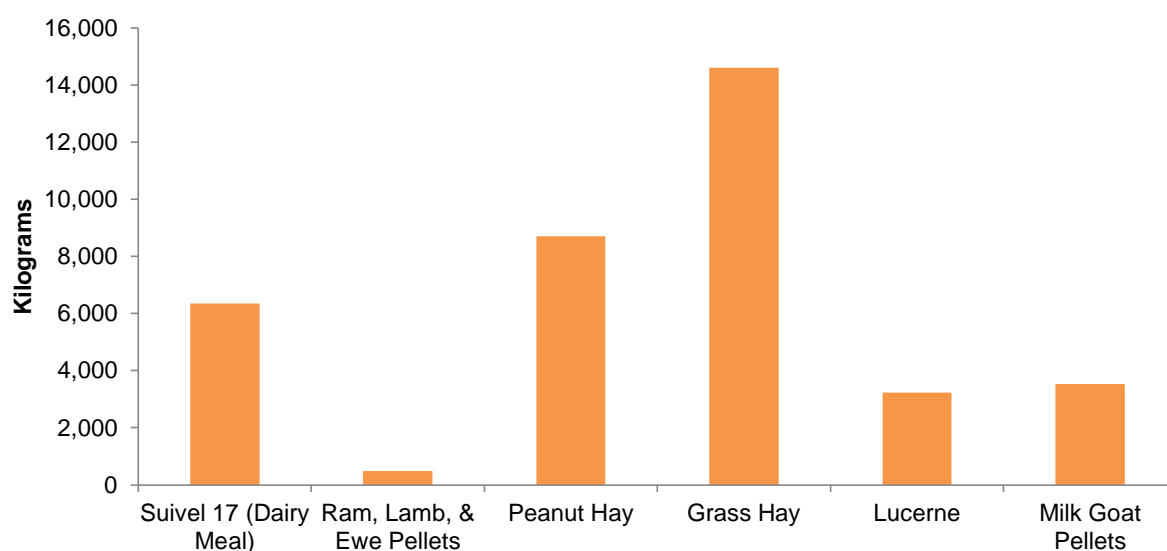
Figure 27: Number of goats milked each month and monthly milk production in 2014.

Feed provided to CCF Small Stock

To ensure the health of all our goats and sheep we constantly monitor their food requirements and intake. We currently use seven feed products to provide the correct variety of nutrients for our animals. They include: peanut hay; Alfalfa hay, Suivel 17; ram, lamb, and ewe pellets; milk goat pellets, and grass hay. Figure 28 shows the amount used of each for this reporting period. Due to the drought experienced in 2014, there was a shortage of peanut hay on the market. The use of this product was slowly reduced and was eventually replaced by lucerne towards the end of June 2015. More peanut hay was brought in during September and lasted for the rest of 2015.

All lactating dairy goats receive peanut hay, Suivel 17, and milk goat pellets. The lactating dairy goats also go out each day to graze behind the *kraal*. The dairy and Boer bucks, as well as the Damara ram, receive the ram, lamb, and ewe pellets. Even though the Boer goats and Damara sheep receive most of their nutrients from going out each day into the bush, when pregnant does or ewes give birth they receive other feed products while they stay in and care for their young. All animals that do not go out to graze and the lactating dairy goats receive grass hay twice a day.

Figure 28: Amount and type of small stock feeds used from January to June 2015.



Vaccinations and De-worming

All of CCF's small stock is treated for internal and external parasites on a quarterly basis in January, April, July, and October of each year. The product used for internal parasite treatment rotates between the following four products: Fenbendazole, Ivermectin, Albendazole, and Doramectin. The product used at each treatment is determined by which product was used previously; products are rotated between drug classes in order to help prevent development of resistance among the parasites, which can happen when the same product is used repeatedly. Both before and after each quarterly parasite treatment, a herd-wide Faecal Egg Count (FEC) is performed to determine the internal parasite burden in the animals. This is done by collecting representative faecal samples from various areas in the *kraal*. The pre- and post-treatment testing helps ensure that the treatments reduce the parasite burden in the animals, which helps to ensure efficacy of the products used. For external parasite (tick, fly, and lice) prevention Paracide (Pfizer Animal Health) and Ultra-Boss Pour-On (Schering-Plough Animal Health) are rotated at each quarterly treatment. Vaccines are applied as follows. In addition, this year CCF vaccinated all small stock against Anthrax.

- Glanvac 3 – for the control of caseouslymphadenitis (*Corynebacterium pseudotuberculosis*) and prevention of enterotoxemia, pulpy kidney disease (*Clostridium perfringens* Type D), and tetanus (*Clostridium tetani*).
 - Adult female animals are vaccinated one month before giving birth (parturition)
 - Adult male animals are vaccinated once annually.
 - Newborns are vaccinated at three and four months of age and then annually thereafter.
- Pasteurella – for the control of Pasteurella haemolytica respiratory infection ('shipping fever').
 - All adult animals are vaccinated annually.
 - Newborns are vaccinated at three and four months of age and then annually thereafter.
- Brucellosis – for the control of *Brucella ovis* and *Brucella melitensis*, a bacterial infection of the reproductive tract.

- This vaccine is given only once and provides life-long immunity; all young animals are vaccinated at four months of age.
- Enzootic Abortion – for the control of Chlamydia abortus, an organism that causes early and late term abortions.
 - All female animals are vaccinated one month before breeding on an annual basis.
 - Rabies – for the prevention of rabies virus which causes fatal encephalitis.
 - All adult animals are vaccinated yearly.
 - All newborns are vaccinated at nine months of age and then annually thereafter.

3. Hay Production

Between January and December 2015, CCF produced 350 bales of hay. This number is well below average and is due to the poor rainfall received during this period.

4. Wild Game Hunted on CCF Property

As part of CCF Model Farm’s sustainable wildlife management practices, CCF hunts several wild game species for consumptive purposes, including oryx, kudu, red hartebeest, and warthog. Figure 29 below displays the amount of wild game removed for consumptive use for this reporting period.

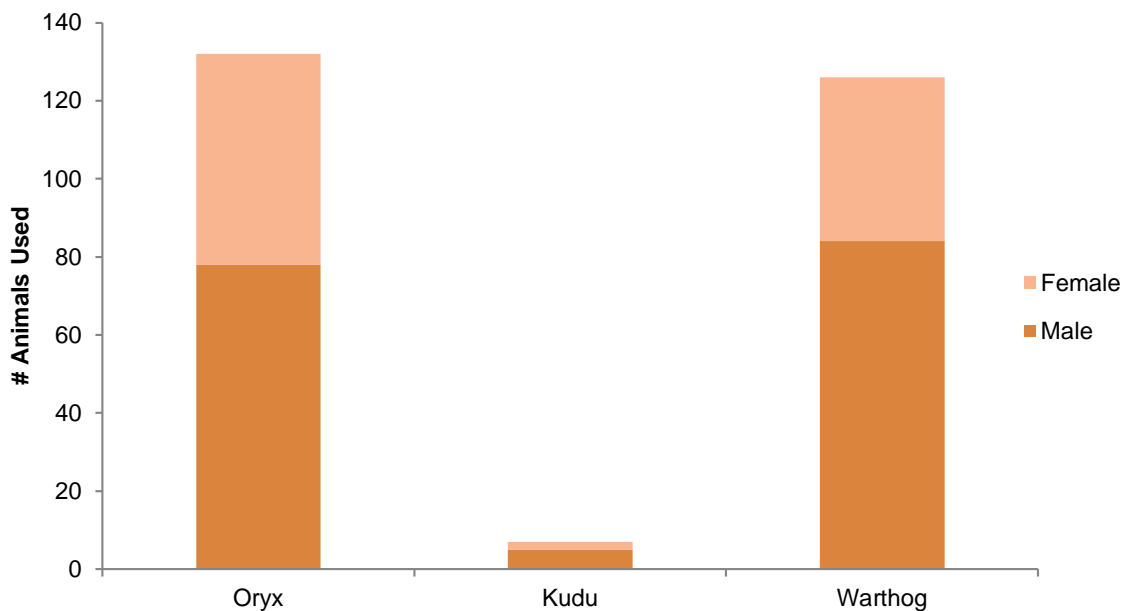


Figure 29: Amount of game used by sex and species in 2015.

C. Sustainable Economic Programmes Supporting Local Communities

If the world’s fastest cat is to survive in the wild, humans must coexist with it. The following progress has been made on CCF’s activities that seek to assure the economic well being of people living within the cheetah’s range and provide resources to support CCF’s long-term activity.

1. Certified Wildlife Friendly

CCF is a co-founder of The Wildlife Friendly Enterprise Network (WFEN), which is a 'global community dedicated to the development and marketing of products that conserve threatened wildlife while contributing to the economic vitality of rural communities'. The WFEN provides the 'Certified Wildlife Friendly' trademark (Figure 30) that distinguishes enterprises that meet the highest standards of being wildlife friendly. CCF's Bushblok and Dancing Goat Creamery are both Certified Wildlife Friendly.



Figure 30: Certified Wildlife Friendly logo.

2. Bushblok

Operations

Production for 2015 amounted to 303.05 tonnes, while sales were 268 tonnes. Table 15 shows the monthly block production during this reporting period.

Table 15: Monthly block production January to December 2015.

Month	Amount (tonnes)
January	12.70
February	29.86
March	10.10
April	19.38
May	22.52
June	43.47
July	40.52
August	40.52
September	45.26
October	25.42
November	13.3
December	0
Total	303.05

General Information

The Forest Stewardship Council (FSC)[™] annual inspection was held and passed in April 2015.

With support from the Fund for Local Cooperation from the embassy of Finland several improvements were made to the Bushblok factory equipment.

Dr. Bruce Brewer, CCF's General Manager, remained active in groups involved with bush encroachment in Namibia. These included the National Rangeland and Bush Encroachment Forum, which is convened by the Ministry of Agriculture, Water and Forestry, and the GIZ/MAWF De-bushing project, which is supported by the German Development Authority. There was much activity of the GIZ group as a joint marketing company is under consideration.

On behalf of CCF Bush, Ron Marks visited the Ukraine factory of equipment under consideration for the EU-supported Bushblok carbonisation project.

3. Cheetah Country Initiatives

Dancing Goat Creamery

Background

CCF began producing fresh goat cheese in August 2009 using the milk from six CCF dairy goats, which came from the award-winning dairy farm Fairview in South Africa. The herd has grown slowly over the past few years, as it takes approximately one and a half years to get a goat kid into production. At the end of 2015, there are 82 female Saanen and British Alpine dairy goats at CCF with up to 34 being milked daily for a daily average of 26.96 kilograms per day. Milk yield from the goats has steadily increased since the inception of the dairy goat programme.

The programme aims to facilitate training and skill development around the production of dairy goat products, thus enabling livelihood diversification and supplemental income to both CCF and community members.

In early April 2013, CCF opened the Dancing Goat Creamery, where high-quality artisanal fresh goat cheeses, as well as a variety of goat milk ice creams, fudge, and soaps are produced daily by CCF's Creamery Manager Hanlie Visser and head cheese maker Sherien Garoes. Sherien, having worked at CCF for over 10 years, has been making CCF's cheeses for five years. Hanlie has a degree in Hospitality and Catering from Boland College in Stellenbosch. With the opening of the new creamery, CCF also launched a new label for their cheeses.

The Dancing Goat Creamery is an essential part of CCF's Model Farm, which alongside its celebrated Livestock Guarding Dog Programme, allows CCF to demonstrate how cheetahs and livestock can live together and how local farmers can be successful using non-lethal predator management strategies to protect their livestock and thus their livelihoods.

As with the CCF International Research and Education Centre, the CCF Model Farm and Dancing Goat Creamery are open to the public daily and local farmers are encouraged to visit.

Production

A significantly higher milk production during this period allowed the CCF's Dancing Goat Creamery to be supplied with 10,528.7kg of milk from CCF's Model Farm between January and December 2015, compared to 6,338.92kg in 2014. Table 16 shows amounts of milk allocated to each of the Creamery products.

Table 16: Milk allocation per product in 2015.

Product	Milk Used (kg)
Feta	4,656.66

Chevre	3,398.68
Ricotta	1,045.56
Mozzarella	243.16
Fudge	760.12
Icecream	181.09
Yogurt	13.29
Soap	230.15
Total	10,528.71

Of this milk 76.5% was used to produce 998.83kg of the Creamery's original cheeses, feta and chèvre.

Table 17 shows the amounts of these varieties produced each month. In addition, the Creamery produced a total of 96.44 kg of fudge, 214.14kg of ice cream, 6.65kg of yogurt, 155.02kg of ricotta, 28.66kg mozzarella and 90.6kg of soap, for a total of 1,590.35kg of goat milk products.

Table 17: Feta and chèvre monthly production (Kg) in 2015.

Month	Feta	Chèvre	Total
January	29.92	35.86	65.78
February	36.79	32.36	69.15
March	73.33	31.81	105.14
April	53.84	35.1	88.94
May	54.88	29.46	84.33
June	48.87	18.37	67.24
July	36.8	22.99	59.79
August	38.91	26.3	65.21
September	51.34	32.63	83.97
October	54.95	32.04	86.99
November	67.69	39.23	106.92
December	71.71	43.66	115.37
Total	619.03	379.81	998.83

Expenses

Creamery expenses such as cheese cultures, packaging, labelling, herbs, labour, gas, and electricity are estimated at N\$19,876.22 for this period, averaging N\$12.50 per kilogram of product. Total milk costs amounted to N\$56,230.14 at an average of N\$35.36 kilogram of product. The average amount of milk to produce a kilogram of cheese is 7.93kg, whereas fudge requires 7.88kg, ice cream 0.85kg and soap 2.54kg.

Table 18 shows the breakdown of costs for the various Creamery products and the total cost per kilogram of product.

Table 18: Production costs (N\$) of creamery products. January to December 2015 (excluding soap).

Product	Production (kg)	Milk/kg	Total Milk Used (kg)	Total Milk Cost	Total Other Cost	Total Production Cost	Total cost per kg
Feta	619.03	7.52	4,656.66	\$25,425.36	\$8,987.35	\$34,412.72	\$55.59
Chèvre	379.81	8.95	3,398.68	\$18,556.79	\$6,559.45	\$25,116.25	\$66.13

Ricotta	155.02	6.74	1,045.56	\$5,708.76	\$2,017.93	\$7,726.69	\$49.84
Mozzarella	28.66	8.48	243.16	\$1,327.65	\$469.30	\$1,796.95	\$62.70
Fudge	96.44	7.88	760.12	\$4,150.26	\$1,467.03	\$5,617.29	\$58.25
Ice cream	214.14	0.85	181.09	\$988.75	\$349.50	\$1,338.26	\$6.25
Yogurt	6.65	2.00	13.29	\$72.56	\$25.65	\$98.21	\$14.77
Total	1,590.35	-	10,528.71	\$56,230.14	\$19,876.22	\$76,106.36	\$50.75

Sales

Total revenue from creamery products in 2015 grew by 46.3% to N\$181,803.87 compared to N\$124,234.81 in 2014. This resulted in a total profit of N\$106,353.20, representing a 34.1% increase compared to N\$79,295.08 in 2014.

Creamery product sales totalled 1,548.08kg, of which 74.38kg were distributed as promotional samples and gifts at events such as agricultural shows, farmer's markets, and tourism fairs and 18.82kg of product were left in inventory (Table 19).

Table 19: Sales of creamery products in 2015.

Product	Kg	Cost/kg	Total Cost	Revenue	Profit
Feta	192.70	\$55.59	\$10,712.45	\$23,124.00	\$12,411.55
Chèvre	91.82	\$66.13	\$6,071.91	\$11,018.40	\$4,946.49
Ricotta	31.50	\$49.84	\$1,570.06	\$3,780.00	\$2,209.94
Fudge (100 g bags)	22.10	\$58.25	\$1,287.25	\$3,315.00	\$2,027.75
Ice cream (110 g tubs)	9.00	\$6.25	\$56.24	\$1,980.00	\$1,923.76
Stores and Lodges	347.12		\$19,697.91	\$43,217.40	\$23,519.49
Fudge (Gift Shop)	52.40	\$58.25	\$3,052.30	\$5,620.00	\$2,567.70
Soap (Gift Shop)	48.00	\$12.76	\$612.48	\$2,000.00	\$1,387.52
Cheese (Giftshop)	30.90	\$58.57	\$1,809.81	\$4,170.00	\$2,360.19
Ice cream (Gift Shop)	69.43	\$6.25	\$433.94	\$13,648.00	\$13,214.06
CCF Gift Shop	200.73		\$5,908.53	\$25,438.00	\$19,529.47
Ice cream (CCF Babson)	48.00	\$6.25	\$300.00	\$10,560.00	\$10,260.00
Soap (Babson)	35.20	\$12.76	\$449.15	\$8,800.00	\$8,350.85
Cheese (CCF Babson)	116.75	\$58.57	\$6,838.05	\$14,010.00	\$7,171.95
Fudge (Babson)	12.40	\$58.25	\$722.30	\$1,860.00	\$1,137.70
CCF Babson	212.35		\$8,309.50	\$35,230.00	\$26,920.50
Ice cream (Café)	65.00	\$6.25	\$406.25	\$14,300.00	\$13,893.75
Cheese (Café)	433.50	\$58.57	\$25,390.10	\$52,020.00	\$26,629.91
CCF Cafe	498.50		\$25,796.35	\$66,320.00	\$40,523.66
Cheese (Hotspot)	196.00	\$58.57	\$11,479.72	\$11,479.72	\$-
Ice cream (Hotspot)	19.00	\$6.25	\$118.75	\$118.75	\$-

CCF Hotspot	215.00		\$11,598.47	\$11,598.47	\$-
CCF Total	1,126.58		\$51,612.85	\$138,586.47	\$86,973.63
Cheese samples	61.98	\$58.57	\$3,630.17	\$0.00	\$(3,630.17)
ice cream samples	3.00	\$6.25	\$18.75	\$0.00	\$(18.75)
Fudge samples	9.40	\$58.25	\$547.55	\$0.00	\$(547.55)
Total Samples	74.38		\$4,196.47	\$0.00	\$(4,196.47)
Total	1,548.08	\$0.00	\$75,507.23	\$181,803.87	\$106,296.65
Inventory (Fudge)	0.14				
Inventory (Ice cream)	0.71				
Inverntory (Soap)	7.40				
Inventory (cheese)	10.57				

Cheese deliveries were made to approximately 25 different customers, nine of which order on a regular basis. CCF's main customers include Maerua Super Spar, Desert Hill, Fruit and Veg, Theo Spar, and the Frans Indongo Lodge.

The Dancing Goat Creamery also creates a secondary industry for CCF with increased revenues for its eco-tourism business by offering its products for sale to visitors at the Cheetah Gift Shop at retail price. As shown on the above table, during this period the Creamery supplied the Gift Shop with 200.73kg of product (cheese, fudge, soap, and ice cream).

The Creamery also supplies product to the CCF kitchens at Babson House, Cheetah Café, and the Hot Spot. During this period, the CCF kitchens were supplied with 925.85kg of ice cream, fudge, cheese, and soap.

At the end of this period, the remaining inventory in CCF's freezers was only 10.57kg of cheese, 0.14kg fudge, 7.40kg Soap and 0.71kg of ice cream, as every product made at the Creamery is regularly sold.

Client Development

CCF will continue to place special emphasis on customer satisfaction and quality assurance in an effort to continue its growing sales trend. In addition, CCF will intensify marketing and sales of its new cheese types while continuing to develop new products. As demand continues to grow, it will be necessary to continue increasing milk production.

CCF continued to participate in the Otjiwarongo Farmers Market, which strives to create an outlet for fresh and local food, and a place where the community can connect. The market takes place every first Friday of the month. The CCF booth offers its homemade artisan goat milk cheese, goat milk fudge, soap, fresh bread, pastries (filled with different goat milk cheese fillings), muffins, Bushblok, and crafts made by local farm workers. However, as the market is still in the development stages and with low attendance, CCF does not participate every month. CCF's Heike Stackmann serves on the Market's committee, and on CCF's behalf has recommended moving the market day to Saturday morning as a strategy to increase attendance.

The Chewbaaka Memorial Garden

CCF's Chewbaaka Memorial Garden continues to produce fresh vegetables for consumption by more than 40 CCF staff and volunteers, as well as visitors to the Cheetah Café and Babson House guests. Namibia imports approximately 80% of its fruits and vegetables, mostly from South Africa, transporting it across long distances and increasing use of fossil fuels and carbon emissions that contribute to climate change. By localising food production, CCF is not only reducing the environmental and social impacts of transporting food, but is also providing fresher, tastier, and more nutritious meals while saving money.

To counteract the heavy clay-sand soil, CCF uses aged manure from its farm animals and a by-product from its Bushblok production: wood dust. These materials are mixed into parent soil to improve fertility and organic matter content. CCF is also creating compost from food scraps, which is an essential ingredient for any organic garden. CCF staff, volunteers, and CCF gardener, Petrus Johannes, have been trained in proper composting techniques. CCF is consistently harvesting a variety of salads and vegetables including beans, beetroot, carrots, daikon radishes, peas, squash, lettuces, turnips, parsnips, rutabagas, cilantro, chard, endive, mustard, rocket, spinach, radishes, and okra.

Since its inception, the garden's harvest has continued to grow. By having diverse plantings in a small space, the garden remains chemical-free because it invites beneficial insects to do the work of managing unwanted insects. Sunflowers and other flowers attract pollinators. The vegetables are therefore healthier for the environment, the growers, and the consumers. Seeds were provided courtesy of Baker Creek Heirloom Seeds, an American company based in Missouri that distributes from California. We now have 60 varieties of heirloom vegetable seeds.

The garden is named 'Chewbaaka Memorial Garden' and was dedicated on 3 April 2013, which marked the second year of Chewbaaka's passing. The garden is one more step in CCF's sustainability programme, which includes an extensive recycling programme and composting. The Chewbaaka Memorial Garden and Sustainable Practices are an integral part of CCF's farmer training programmes as yet another way to promote alternative livelihoods and economic growth in Namibia.

The Apiary

CCF has yet to harvest any honey from the apiary, but the original hive is doing well with three supers (hive extensions) added. In addition, a wild swarm moved into one of the vacant hive boxes and is now being cultivated by CCF.

Having bees at CCF is beneficial for many different reasons. Honey harvesting and sales will add to CCF's diverse income and food sustainability. In addition, bees will pollinate the crops at CCF's organic garden and increase food production. CCF intends to build up the apiary to teach more aspects of sustainability to visitors and local farmers, and to produce honey for food and added income. Along with CCF's Model Farm, the apiary will help to demonstrate predator-friendly farming techniques, as honeybees are part of an integrated farming system that diversifies income and adds value to the landscape.

The Vineyard

In 2015, CCF harvested 220kg of grapes which were sent to the winery for processing. In September 2015, CCF planted another 120 Columbard sticks, 50 Merlot sticks, 50 Shiraz sticks, and 50 Pinotage sticks. The new irrigation system has substantially improved the water use efficiency of the vineyard and has provided for much healthier grapes.

Another harvest will take place in early 2016, and it is expected to be larger than the 2015 harvest.

D. Eco-Tourism

Tourism is one of Namibia's fastest growing industries, with a large number of developments emerging in the Otjiwarongo area over the past couple of years. CCF's eco-tourism potential continues to grow, as it has become one of the region's leading travel and tourism destinations, thus boosting the local businesses of Otjiwarongo.

1. Visitors to CCF

In 2015, CCF hosted 7,288 tourists and 1,465 students/learners/teachers for a total of 8,753 visitors, which represents a 1.8% increase from 8,596 in 2014. In terms of income, 2015 saw a 13.16% increase at N\$3,455,876.70, compared with N\$3,054,035.00 in 2014.

In addition to school groups and film crews mentioned under separate sections, CCF hosted many friends, supporters, and collaborators in the period January-December 2015; many of them on return visits. Return visitors included Swedish veterinarian Sven Odman and Nancy Boynton from the US, who returned to volunteer at CCF for the 11th time. Carolyn Farquhar, Chair of CCF Canada, came to CCF for a month, and Dr. Jane Galton, Co-Chair of CCF UK, visited for two weeks.

We were honoured to host Jacqueline Bassa-Mazzoni, the French Ambassador to Namibia, at Babson House for two days, as well as many long-time friends and supporters. These included Alan and LaVerne Silverman, Cindy Campell with her husband Rick and son Jacob, Maureen Liebenberg, and the Henderson family, who came to visit their adopted cheetah. We also hosted a group of the "Adventure Women" for a day trip.

CCF is also utilised as a field-study area by scientists around the world. During this period we welcomed David Millican, of Virginia Polytechnic Institute and State University, who spent two weeks at CCF assessing the area for the suitability for a bird study. In April, Marleen De Blecourt, from the University of Hamburg, returned to CCF to continue her soil study. In May, Jay Johnson spent several days at CCF to continue his studies into cheetah movement and how it can be applied to athletics training. Mark Stanback from the Davidson College (USA) and PhD student David Millican from the Virginia Tech (USA) are conducting a study on the ecology of cavity nesting in Namibian Birds. Mark Stanback from Davidson College in North Carolina (USA) is conducting an avian study about interspecific nest site competition in Namibian cavity nesters. Mark arrived at CCF in December 2015 for three weeks. His colleague David Millican will stay at CCF until June 2016.

2. Visitor Analysis

As tourists are increasingly becoming seasoned international travellers, they become more discerning and choose those destinations that can provide a more memorable experience and good value for their money. Therefore, CCF strives to ensure that the product offered to the tourism sector is sufficiently attractive.

2015 saw an overall drop of 2.24% in visitor numbers to CCF; however, this was primarily due to the period January-June, which saw visitor numbers down 18.5% following the Ebola crisis. Tourism visitors totalled 7,288 in 2015 compared to 7,353 in 2014 (Figure 31).

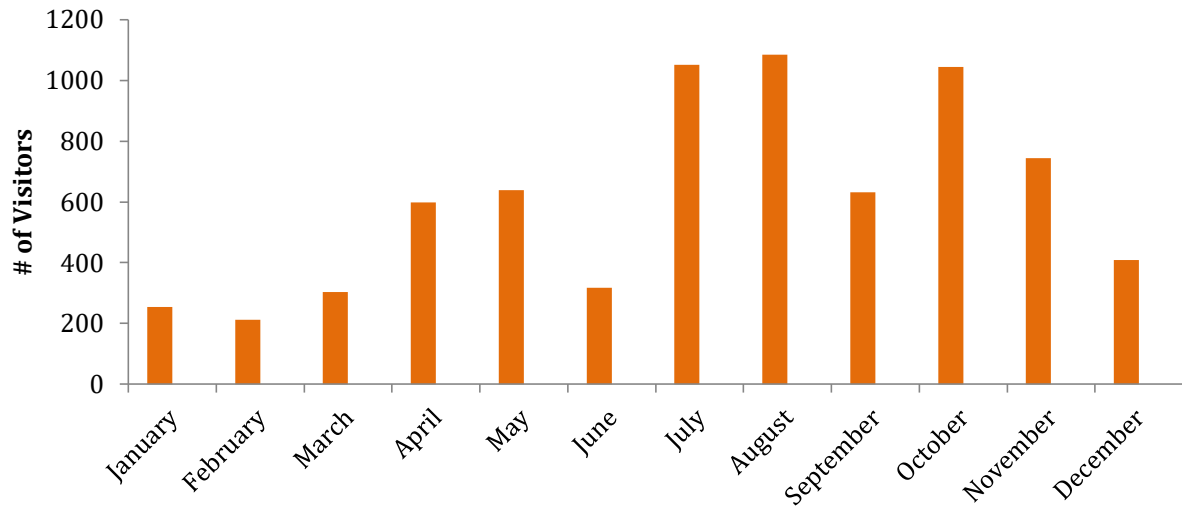
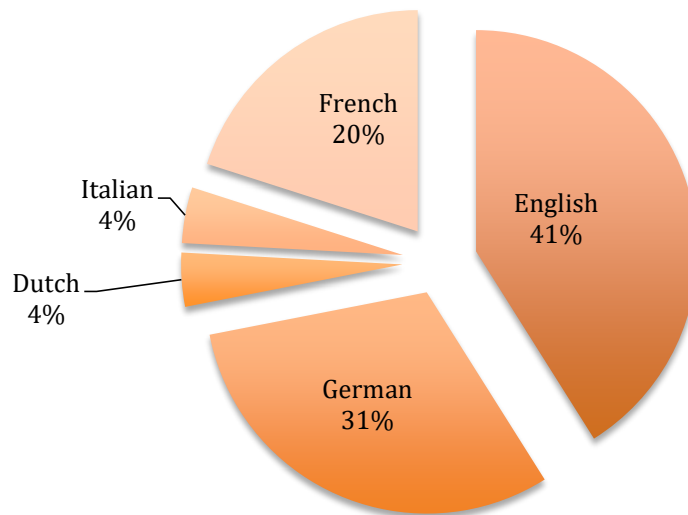


Figure 31: Number of visitors (not including students) to CCF per month from January to December 2015.

The predominant language spoken by visitors during this period was English (41%), followed by German (31%), and French (20%) (Figure 32). In terms of nationalities, the majority of visitors were from Germany, followed by France and Namibia (Figure 33).

Figure 32: Languages spoken by visitors January to December 2015.



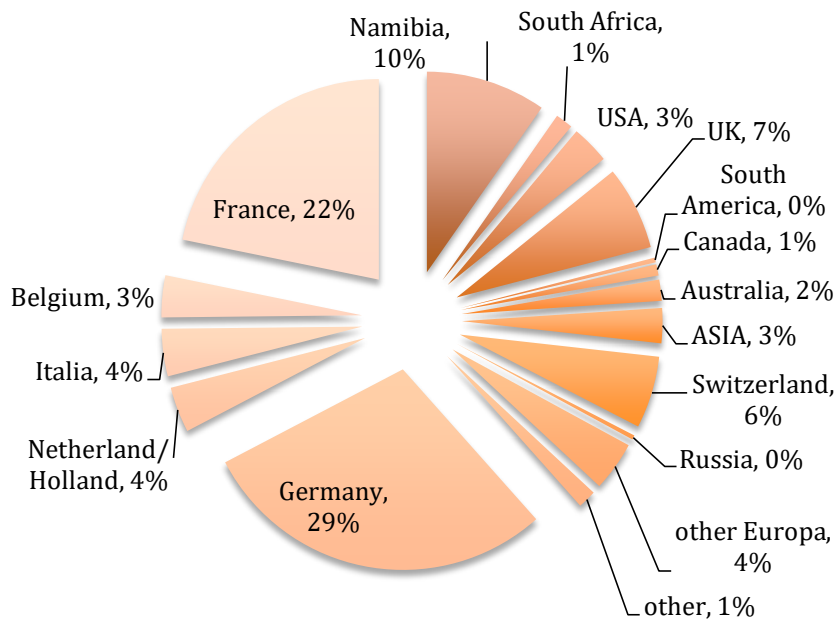


Figure 33: Percentage of visitors per country from January to December 2015.

The majority of visitors continue to be walk-ins, representing 56% of all sources (Figure 34) with 4,081 in 2015. The number of visitors booked by CCF's reservation agent, Exclusive Reservations, decreased from 2,310 in 2014 to 2,032 in 2015, representing a 12% decline against other sources.

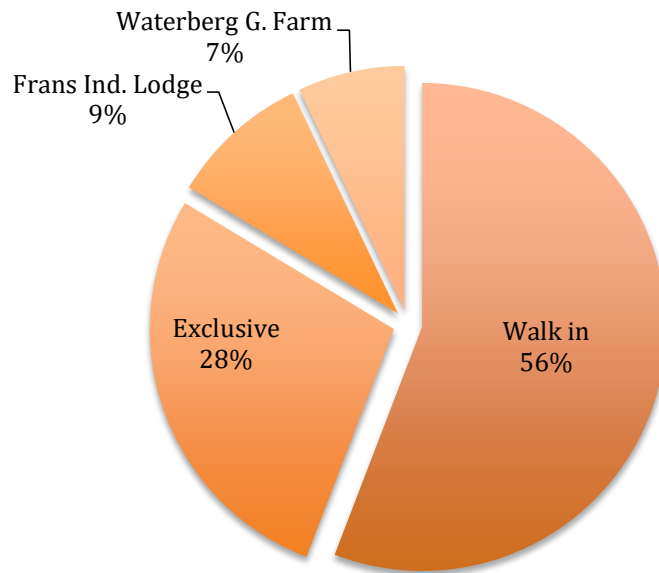


Figure 34: Sources of visitors to CCF from January to June 2015.

In terms of income, there has been a 13.16% increase during this period, at N\$3,455,877, compared with N\$3,054,034.00 during the same period in 2014 (Figure 35).

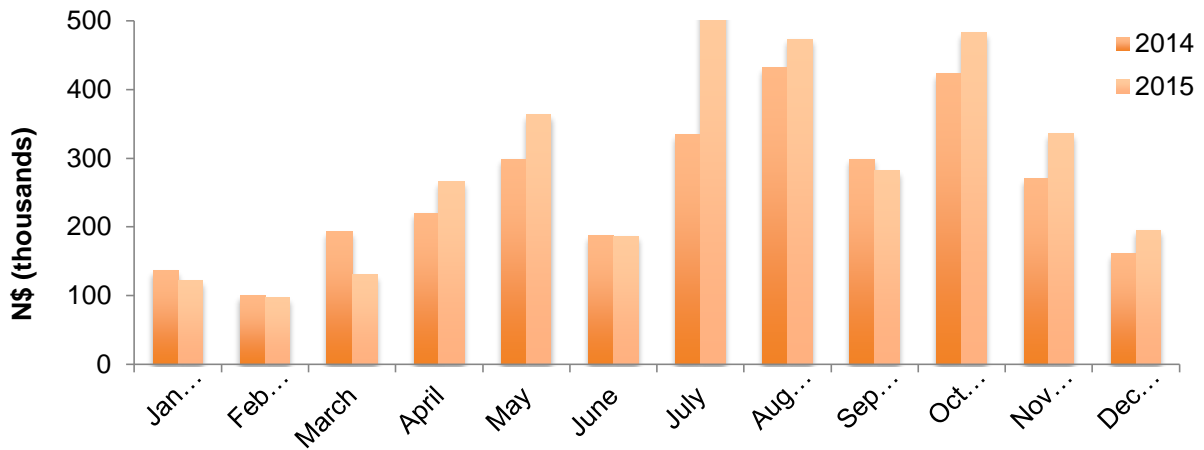


Figure 35: Tourism income (N\$) from January to December 2014 versus 2015.

Table 20 provides the monthly breakdown of income per activity and number of visitors, showing that the month with the highest average of expenditure per visitor was June at N\$587.87 and the lowest month was March with N\$427.45 per visitor. The average amount spent by visitors at CCF shows a 15.9% increase in 2015 with N\$474.00 compared to N\$409.00 in 2014. Cheetah Drives (Elands) represented the highest income source during 2015, at 34.36 % of the total income of N\$3,455,877.00. Gift Shop revenue shows a 33.9% increase with N\$822,288.00 in 2015 compared to N\$614,095.00 in 2014. A comparison of income per activity is shown on Figure 36.

Table 20: Monthly income per eco-tourism activity from January to December 2015 (Namibian dollars)

Activity	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	%
Elands	25,828.00	41,172.00	50,489.00	78,908.00	61,692.00	50,772.00	194,921.00	219,867.00	124,667.00	163,972.00	107,968.00	63,782.00	1,184,038.00	34.3%
Gift Shop	39,322.00	23,082.00	30,826.00	60,686.00	72,613.00	52,995.00	137,817.00	98,867.00	57,594.00	110,953.00	73,648.00	63,885.00	822,288.00	23.8%
Ed. Centre	21,063.00	18,288.00	27,972.00	47,691.00	147,722.00	22,446.00	63,459.00	62,082.00	36,648.00	92,997.00	67,599.00	35,532.00	643,499.00	18.6%
Run	15,232.00	2,608.00	8,432.00	32,856.00	39,660.00	21,376.00	54,284.00	44,432.00	29,152.00	55,024.00	32,728.00	8,848.00	344,632.00	10.0%
Accom.	490.00	-	1,015.00	6,050.00	-	16,000.00	26,497.00	9,755.00	1,610.00	5,300.00	20,440.00	-	87,157.00	2.5%
Café	4,459.00	3,276.00	4,685.00	12,539.00	12,493.00	10,292.00	17,635.00	22,519.00	13,396.00	26,434.00	23,481.00	15,863.00	167,072.00	4.8%
Serengeti	-	-	-	232.00	-	-	-	-	500.00	-	-	250.00	982.00	0.0%
Behind the Scenes	-	-	-	6,563.00	2,550.00	2,700.00	2,250.00	3,900.00	9,975.00	13,030.00	1,500.00	1,500.00	43,968.00	1.3%
Donations	1,000.00	1,600.00	-	5,400.00	-	400.00	2,020.00	1,000.00	1,500.00	0.55	3,000.00	-	15,921.00	0.5%
Services	4,840.00	6,475.00	5,604.00	6,117.00	6,543.00	8,019.00	8,588.00	5,912.00	6,035.00	7,115.00	5,450.00	5,175.00	75,873.00	2.2%
Chees	755.00	565.00	923.00	1,045.00	1,515.00	1,355.00	725.00	850.00	710.00	380.00	120.00	500.00	9,443.00	0.3%
Exclusive	8,080.00	-	-	8,080.00	18,180.00	-	14,544.00	4,040.00	-	8,080.00	-	-	61,004.00	1.8%
Total	121,069.00	97,066.00	129,946.00	266,167.00	362,968.00	186,355.00	522,740.00	473,224.00	281,787.00	483,286.00	335,934.00	195,335.00	3,455,877.00	100.0%
Visitors	254.00	212.00	304.00	599.00	638.00	317.00	1,052.00	1,085.00	631.00	1,044.00	744.00	408.00	7,288.00	0
Avg Exp/ Visitor	476.65	457.86	427.45	444.35	568.92	587.87	496.90	436.15	446.57	462.92	451.52	478.76	474.19	0

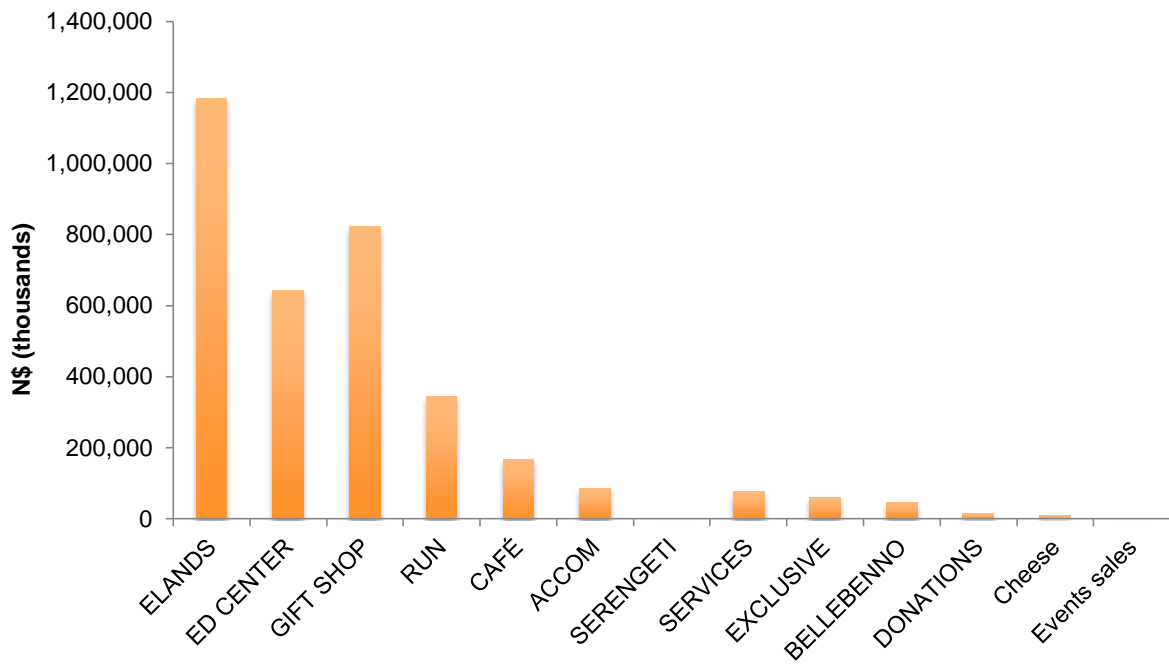


Figure 36: Income per activity 2015.

The total number of guests staying at CCF's luxury accommodation, the Babson Guest House, totalled 60 during 2015, representing a 20% decrease when compared to 72 guests in 2014. In terms of revenue, Babson House has generated N\$296,400 (Figure 37). However, income and number of visitors do not correlate as payment arrangements vary (advanced vs. on site vs. payment through lodges, booking agents, or other CCF entities).

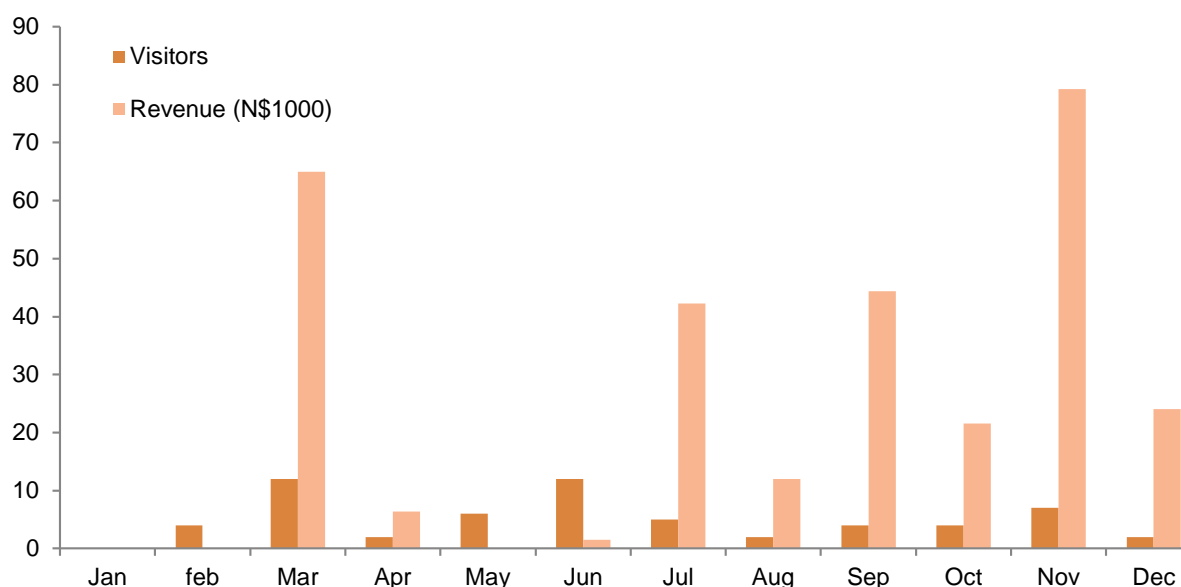


Figure 37: Babson House income (N\$ x 1000) and number of guests from January to June 2015.

3. Food Expenses

The number of people eating at CCF differs every day in accordance with the numbers of guests, working guests, volunteers, and interns arriving and leaving.

Table 21 presents the number of lunches and dinners that were cooked each month at CCF’s community dining room, the Hot Spot, totalling 30,082 meals for an average of 82 meals per day.

Table 21: Number of meals served at CCF’s Hot Spot from January to December 2015.

Meal	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Lunch	1303	984	1020	1055	1454	1367	1495	1472	1485	1399	1025	1005
Dinner	1296	983	1026	1059	1449	1326	1494	1473	1479	1385	1033	1015
Total	2599	1967	2046	2114	2903	2693	2989	2945	2964	2784	2058	2020
Average/day	84	70	66	70	94	90	96	95	99	90	69	65

Over half of the meals (50.50%) served at the Hot Spot were for CCF staff members. Volunteers and interns represented 36.54%, while Working Guests (WG), Babson Guests (BG), and other guests represented 12.96% (Figure 38).

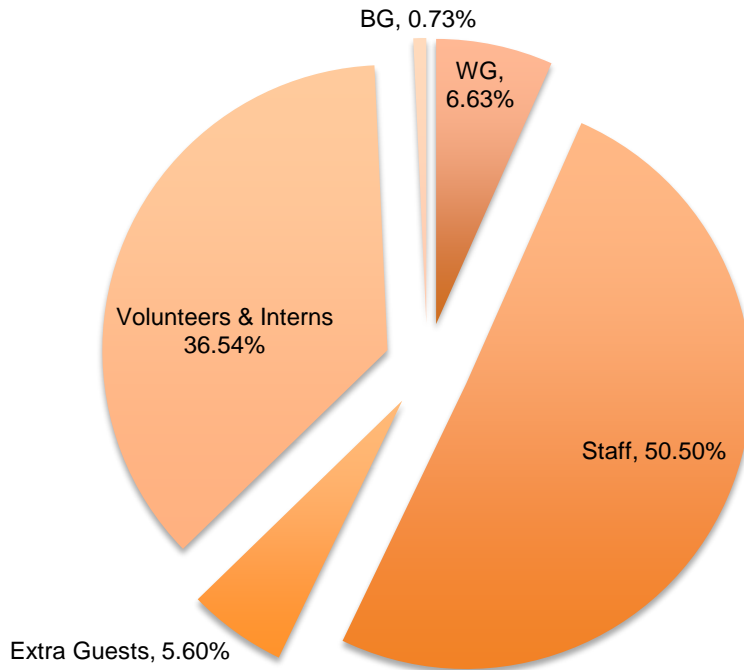


Figure 38: Overall categories of people served at the Hot Spot in 2015.

4. Marketing

For the third consecutive year, CCF received a Certificate of Excellence from TripAdvisor in June. This award is given to tourism businesses that consistently receive high ratings from TripAdvisor members. Only the top 10% of businesses worldwide on TripAdvisor receive this award.

CCF's marketing agent, Exclusive Reservations, continues to support our eco-tourism efforts both with bookings and its objective of transforming the CCF brand to make it distinctive and different.

Exclusive participated in the 17th Annual Namibia Tourism Expo. At the expo, held from 10 to 13 June 2015, the Exclusive stand displayed CCF images and promotional materials. CCF staff was present on the first night (devoted to tour operators) to promote CCF activities, the Babson House and the Dancing Goat Creamery. Exclusive also participated in other expos based in South Africa, including Africa's largest travel show, INDABA.

CCF's marketing agent also organised an educational visit with some of the Namibian tour operators on 14 March 2015 to promote CCF and to familiarise the tour operators with CCF's work as an education and research centre. Exclusive Reservations also promotes CCF by regularly visiting other tour operators in Windhoek and organising meetings for the companies based in Swakopmund.

On the 9 June, CCF staff attended the 'Network Namibia' event in Windhoek. The event provided an opportunity to meet international booking agents from China, USA, South Africa, Angola and the United Arab Emirates to explain the work CCF does to save the cheetah in the wild and to discuss the activities and accommodation we offer.

In 2015 CCF produced several magazine articles including an 8-page editorial published in Air Namibia's inflight and online magazine "Flamingo." The magazine was placed aboard all their flights over the course June 2015. CCF also provided content for the 46th edition of "Explore South Africa" magazine for their

Namibia supplement. The 46th edition was distributed across South Africa and coincided with the ITB trade show in Berlin where it was also given exposure.

Attractions that encourage tourism operators to market CCF as a destination continue to be evaluated, as is the information and materials supplied to visitors on departure in order to encourage them to become engaged and share their experience with their closer and wider networks once they have returned to their homes. We are actively promoting our social media websites (Facebook, Twitter, Blogger, YouTube, TripAdvisor, and LinkedIn) to all guests visiting CCF.

5. Visitor Attractions

Since the opening of CCF's Dancing Goat Creamery early in 2013, menu items at the Cheetah Café include the very popular CCF Goat Cheese Platter and baked Feta, as well as fresh muffins, scones, quiches, a cake of the day, and goat milk ice cream, which is a favourite on hot days. Set menus and buffets are offered to larger groups. Fudge produced at the Creamery is also offered for sale at the Gift Shop.

After a lightning fire on 16 October 2013 destroyed the CCF Visitor Centre, which housed the Cheetah Café, we continued to operate at the tourism office in the Cheetah Museum building. This required several adaptations, including the introduction of booked lighter meals and cake and coffee. In May 2015, the Cheetah Café re-opened in the new Visitor Centre building with the support of Pupkewitz Catering. Supporting local businesses have helped CCF to refurbish the new Cheetah Café. Additionally, a new and improved menu was designed.

Sales at the Cheetah Café were 9.2% lower in 2015 at N\$166,972 (Table 22) compared to N\$183,890.00 in 2014. Efforts continue in order to increase the number of booked lunches and expanding the booked lunch menu.

Table 22: Cheetah Café sales from January to December 2015 (N\$).

Month	Pre-Booked	A la Carte	Total
January	\$0	\$4,459	\$4,459
February	\$34	\$3,242	\$3,276
March	\$0	\$4,585	\$4,585
April	\$5,220	\$7,319	\$12,539
May	\$7,093	\$5,400	\$12,493
June	\$8,462	\$1,830	\$10,292
July	\$1,690	\$15,945	\$17,635
August	\$4,160	\$18,359	\$22,519
September	\$0	\$13,396	\$13,396
October	\$4,680	\$21,754	\$26,434
November	\$9,880	\$13,601	\$23,481
December	\$2,340	\$13,523	\$15,863
Total Sales	\$43,559	\$123,413	\$166,972

E. Association and Conservancy Relationships

1. Large Carnivore Management Association (LCMAN)

CCF is a founding member of LCMAN and continues its work as a stakeholder of this group of NGOs, researchers, farmers, and governmental departments. LCMAN helps guide the conservation and management of large carnivores in the country and facilitates communication among the stakeholders to ensure a coordinated approach. This association further functions as a resource for the Namibian Ministry of Environment and Tourism (MET) to provide expert advice and guidance during policy making procedures.

There was a meeting held in Windhoek on 5 March 2015. The minutes of the Annual General Meeting (AGM) held on 6 November 2014 were reviewed and accepted. CCF was represented by Dr Marker (LCMAN Chair), Dr Richmond-Coggan, Dr Marker's Personal Assistant, Teresia Robitschko, and CCF Master's student Matthew Lindenberg.

The main topics discussed included LCMAN's sustainability, i.e., increasing membership fees, alternative funding sources and a better marketing strategy. Different member organisations also provided updates on their projects. The issue of wild dog persecution by local farmers in the Okamatapati conservancy was raised and the AfriCat foundation has been working closely with the affected community on mitigation measures.

An announcement for a Human Wildlife Conflict conference to be held in Kenya in January 2016 was made by the chairperson, and LCMAN could link with this event. Another event, The African Wildlife Consultancy Forum, which is to take place in South Africa in 2016, was also announced at this meeting.

On 1 September 2015, the LCMAN AGM was held in Windhoek. Topics discussed were mainly focused around feedback from the Cheetah and Wild dog Regional Strategy Meeting that took place on 9-13 August 2015 in South Africa, as well as feedback on the EIS (Environmental Information Service) and Red List Workshop. LCMAN's 2016 objectives were discussed with an aim to include other stakeholders from the tourism and university sectors as LCMAN members.

Carnivore Tracker App

On August 30, in association with LCMAN, CCF launched a new application for mobile devices that enables members of the scientific community, farmers, tourists and local residents to identify and report sightings of carnivore species in Namibia. The distribution data gathered with this app, known as *Carnivore Tracker*, will help provide data on Namibia's wild ranging carnivores and will assist the government in national wildlife conservation strategies.

Dr. Richmond-Coggan worked with software developer and CCF volunteer Steven Lambright to develop the app. This app enables just about anyone with a mobile telephone to become a scientific research assistant, which greatly expands the size of our survey areas and also helps in speeding up data collection and analysis.

The type of information collected through Carnivore Tracker includes identification of the species sighted, number of individuals and the GPS location, even if outside network and Wi-Fi coverage areas. Each carnivore species has a photographic icon for easy identification and a brief description of its ecology and status. Now Namibian residents can report what they see on a regular basis, and tourists on holiday just passing through can report animals they encounter during their travels.

Carnivore Tracker can also be used by farmers to help reduce the number of farm animals lost to predators, particularly during calving season.

Carnivore Tracker can be downloaded free of charge and is available for both Apple and Android devices. Every three months, users will receive an update on carnivores that have been recorded across Namibia, which will include a map so users can identify how their sightings have contributed. The data is received and

reviewed at CCF and users are given a report back on a quarterly basis. The data will also be uploaded into the online EIS mammal atlas.

2. Conservancy Association of Namibia (CANAM)

Dr. Laurie Marker served as Chairperson of CANAM for six years and continues to support CANAM's efforts throughout Namibia; however, CANAM has not been very active since 2011. This year CANAM held their AGM on the 16 April. CCF's Ecology Manager, Dr Louisa Richmond-Coggan, attended and presented information about the Waterberg Conservancy and the GWL. Since the AGM there has been no further activity in 2015 with CANAM. CCF asked CANAM to assist with distribution of the Carnivore Tracker App.

3. Waterberg Conservancy

The Waterberg Conservancy, of which CCF is a founding member, held its AGM on 28 May 2015, with the attendance of Dr. Brewer, Dr. Marker and Dr Richmond-Coggan. Members unanimously re-elected Mr. Harry Schneider-Waterberg as chairman and Mrs. Sonja Schneider-Waterberg as secretariat/treasurer. Since the AGM there has been no further activity in 2015 with the Waterberg Conservancy.

4. Greater Waterberg Landscape (GWL)

CCF's International Field Research and Education Centre neighbours the Waterberg National Park and is within the GWL, an area encompassing 1.77 million hectares, including the Eastern Communal lands in the Okakarara constituency. CCF is a founding member of the GWL and serves on the steering committee. In 2012, the GWL received support from NAMPLACE, a 5-year project under the Ministry of Environment and Tourism (MET) funded by the Global Environmental Facility (GEF) and through the United Nations Development Program (UNDP). The GWL is one of five landscapes in Namibia being developed through the 5-year development grant. NAMPLACE is responsible for selecting and implementing developmental projects that will benefit the community, satisfy the needs of the people, and assist in the progression of the region.

CCF was selected by the NAMPLACE steering committee to implement a needs assessment survey for the project encompassing several conservancies and commercial farms within the GWL. The survey was conducted in November 2012, after which CCF analysed the data and presented the results to the GWL leadership in January 2013. As a member of the GWL with ecological and research expertise, CCF is playing a key role in the implementation of the various recommendations and action plans resulting from the survey, including habitat restoration, reintroduction of wildlife into the target area, training of integrated wildlife and livestock management, and alternative livelihoods training in tourism and crafts development skills. When fully operational, these communities will be empowered to manage and develop their livestock and wildlife resources, restore their land to productive use, and promote tourism. During this reporting period, CCF attended three GWL meetings.

Between 5 November 2014 and 25 November 2015 CCF conducted over 94 workshops (82 farmer training, 12 handicrafts) across the four communal conservancies. CCF also held Waterberg Naturalist Training Camps for members of the GWL who were interested in becoming eco-guides in February and May (see Future Farmers of Africa and Greater Waterberg Landscape sections, under Education).

5. Namibia Professional Hunting Association (NAPHA)

CCF once again was invited by Kai-Uwe Denker, the President of NAPHA, to their AGM held on 24-25 November, 2015. CCF continues to be a supportive member of NAPHA's goals and stance on ethical hunting across Namibia. We were encouraged by NAPHA's stance on sustainable utilisation of wildlife in conjunction with the conservation of large landscapes across the country. CCF continues to ask for support from NAPHA by requesting information about presence and absence of cheetah and leopard throughout the farmlands. We also ask for location of sightings, and whether the animals are killed as problem animals or trophies, as we

wish to substantially increase the amount of information we receive on where the problems occur and the numbers being removed.

CCF asked NAPHA to assist with distribution of the Carnivore Tracker App. CCF also requested that NAPHA’s CEO, Dietlinde Mueller, communicate with hunters across Namibia to help us collect genetic samples from hunted cheetahs, in particular, as well as other predators.

F. Global Management Planning/Policy Involvement

CCF assists in international programme development and adapts model programmes developed in Namibia for use in other countries, distributing its materials and information throughout Africa and the rest of the world.

1. International Cheetah Studbook (ISB)

Dr. Laurie Marker is the International Cheetah Studbook Keeper (ISB). The ISB has the purpose of registering all cheetahs in the world held in both zoological and private facilities, and providing information about existing animals by publishing the studbook contents, thus creating the preconditions for selecting breeding animals. The Studbook includes all recorded and wild-caught and captive-born individuals since the late 1800s and after, as well as founders with live offspring since 1980. Each registered animal has a studbook number. Bi-annual questionnaires are sent to all facilities holding cheetah and information is checked through support of the International Species Inventory System (ISIS) and personal communications.

The 2015 studbook is currently in preparation. The 2014 studbook was completed in December 2015. From 1 January 2014 to 31 December 2014, 253 (100.120.33) new animals were registered, representing births and newly imported wild-caught animals during this period, as well as animals that had been brought into the captive population prior to 1 January 2014 but had not been reported until after the publication of the 2013 Studbook. Captive-born cubs from known breeding facilities totalled 212 (80.104.28), born in 61 litters in 34 facilities in 12 countries. These births represent a 21.8% increase in productivity from 2013, when 174 cubs were born. The captive cheetah population on 31 December 2014 was 1775 (913.849.13) animals in 270 known facilities in 46 countries.

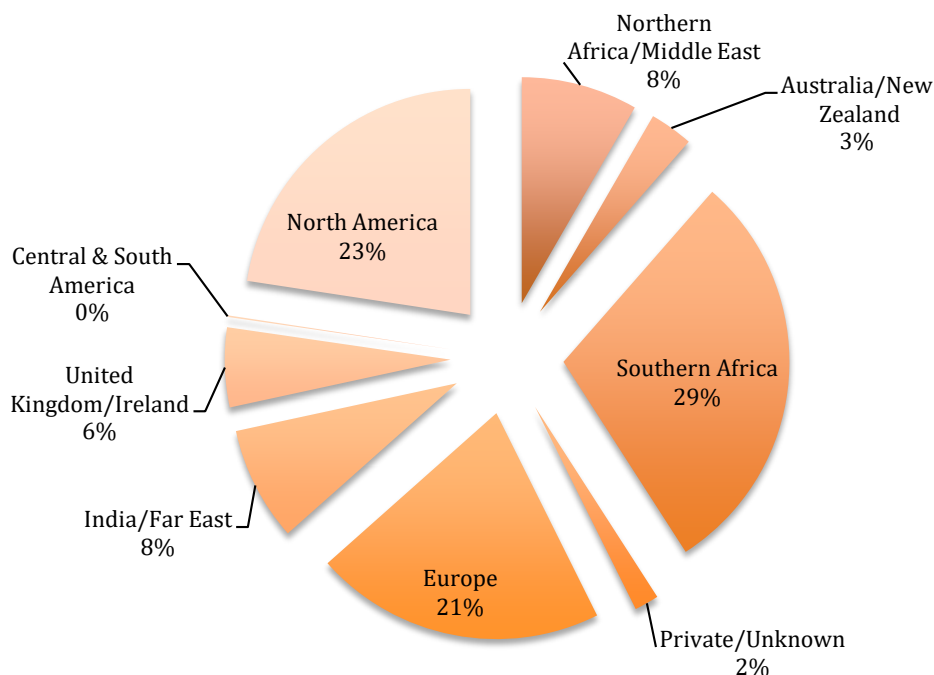


Figure 1: 2014 Captive Cheetah Population by Region, 1775 (913.849.13) Cheetahs.

2. International Meetings

Course 'Recent Advances in Conservation Genetics', January 2015

Dr. Schmidt-Küntzel was an invited speaker and lecturer *at the course 'Recent Advances in Conservation Genetics' and ConGen 2015*, held in Puerto Rico in January 2015. The course was supported by the American Genetics Association. The title of her presentation was *'The Cheetah (Acinonyx jubatus): Cheetah conservation and the status of cheetah genetics'* and her lecture was titled *'Microsatellites & the use of non-invasive samples in conservation genetics'*.

Wildlife Conference 'Towards an EU strategic approach to wildlife conservation in Africa': February 2015

In mid February 2015, Dr. Marker, Teresia Robitschko, and Birgit Braun, Executive Director of CCF's German partner organisation Aktionsgemeinschaft Artenschutz (AGA) e.V., attended the wildlife conference 'Towards an EU strategic approach to wildlife conservation in Africa' on 9 - 10 February in Brussels. Dr. Marker gave a presentation called *'A strategy for cheetah conservation'* to the attending conservationists and conservation organisations from throughout Africa, as well as EU delegates.

Saving wildlife together: Conflict, co-existence and conservation 7th Annual Symposium: February 2015

The Bristol Zoological Society in the UK hosted the 7th Annual Symposium "Saving Wildlife Together: Conflict, Co-Existence and Conservation" on 11 February. The symposium focused on ways to identify and understand the interface between the needs of people and conservation of species and habitats. Lecturers by renowned conservationists included Dr. Marker's lecture titled *"A future for cheetahs: How biofuels and goat cheese can save wildlife and lead to sustainable development in Namibia."*

1st European Cheetah Workshop: February/March 2015

The first European Cheetah Workshop was held at the Safaripark Beekse Bergen in the Netherlands on the 2–3 March 2015. The workshop was a co-operative effort between Dr. Laurie Marker; Dr. Jaques Kaandorp, veterinarian at the Safaripark Beekse Bergen; Christine Kaandorp-Huber, veterinarian at the GAIA Zoo; Lars Versteeg, EEP Coordinator of the Southern African Cheetah; Dr. Anne Schmidt-Küntzel, CCF's Assistant Director for Animal Health and Research; Teresia Robitschko, Dr. Marker's Personal Assistant; and Birgit Braun, Executive Director of the German partner organisation Aktionsgemeinschaft Artenschutz (AGA) e.V. There were 50 participants from 25 institutions from numerous countries including Holland, Sweden, Denmark, UK, Italy, France, Germany, Austria, Poland, and Belgium. The workshop included presentations by Dr. Marker and Dr. Schmidt-Küntzel, and covered topics such as cheetah husbandry, nutrition, breeding, genetics, population management and diseases.

International Bioenergy Conference: April 2015

In April, Dr. Brewer attended the International Bioenergy Conference in Minneapolis, Minnesota USA.

15th Annual Sahelo-Saharan Interest Group Meeting: April-May 2015

In late April through early May 2015, Dr. Marker and Teresia Robitschko travelled to the UAE to attend the 15th Annual Sahelo-Saharan Interest Group Meeting in Abu Dhabi. Dr. Marker gave a talk about the illegal pet trade of cheetahs in the UAE during the meeting, which was attended by conservationists from all over the world with an interest in the Sahelo-Sahara region.

Annual AZA Conference, September 2015

In mid-September 2015, Dr. Marker, CCF USA's Director of Operations and Finance Beth Fellenstein, and Teresia Robitschko attended the annual AZA Conference in Salt Lake City held on 17-21 September 2015. Dr. Marker gave a presentation about the cheetah SSP, Felid TAG and attended and presented in the session Cheetah Conservation Before SAFE: Building from a solid Base.

ZACC Conference, October 2015

Dr. Marker and Teresia Robitschko attended the ZACC Conference in Denver on 15-16 October 2015. Dr. Marker's presentation was titled "25 years of cheetah conservation".

CITES Illegal Cheetah Trafficking Workshop - Kuwait, November 2015

As a member of the CITES inter-sessional group on Illegal Cheetah Trafficking, CCF participated in a workshop hosted by the State of Kuwait in early November. CCF, represented by Patricia Tricorache, and the International Fund for Animal Welfare, presented a joint overview of challenges and recommendations pertaining to the illegal trade in cheetahs and cheetah products, from the NGO perspective. See Illegal Wildlife Trafficking section.

3. Illegal Wildlife Trafficking

CCF first became actively involved with issues involving the illegal taking of live animals in November 2005, when it arranged for the confiscation of two extremely unhealthy cheetah cubs being held in ropes outside a restaurant in Ethiopia. Since then, CCF's Strategic Communications Consultant, Patricia Tricorache, has been monitoring illegal cheetah trafficking and organising confiscations through the proper authorities whenever possible. Even though the intrinsic nature of illegal wildlife trafficking makes it difficult to collect full or reliable information, CCF has knowledge of over 1,000 cheetahs involved in illegal wildlife trade cases gathered between direct reports and media articles. Although geographically widespread, most of the cases compiled by CCF involve the Arabian Peninsula and the Horn of Africa (HoA), where CCF has a broader network.

During 2015, CCF compiled 24 cases of illegal cheetah trafficking involving at least 154 cheetahs (Figure 39), including one from unknown origin, plus an undetermined number of cheetah claws confiscated in Singapore in May. Twenty-five of the 154 cheetahs were confirmed dead, while the fate of 108 is unknown. Of the latter, 76 were reported as being offered for sale in the Arabian Peninsula, 11 were reported as being offered for sale in Somaliland, and 21 were under investigation in Somalia. Any information CCF is able to obtain regarding cubs offered for sale is forwarded to relevant authorities. Unfortunately in this year's cases, no confiscations resulted from the above cases.

Successful confiscations recorded by CCF during this period included the undetermined number of cheetah claws in Singapore, four skins in East Africa, one skull in the United Kingdom, and a cub found roaming the streets in Qatar.

In addition to the Qatar cub, the 21 cheetahs believed to be alive as of 31 December include four rescued cubs in Africa [undisclosed location], three pets in Saudi Arabia (two reported to CCF by their owner as being sick and one found at a mosque in Buraidah), and two cubs and three adults in the UAE (2 pets, 3 at a facility).

Eight sub-adults are housed at a farm in southern Somalia and CCF was able to obtain approval from the Somali authorities to transfer them to the Born Free Foundation (BFF) in Ethiopia. However, the owner changed his mind due to safety concerns once the cheetahs were handed over. Finally, in April, CCF organised the transfer of three cheetahs recovered in Somaliland in November 2014 to BFF in Ethiopia.

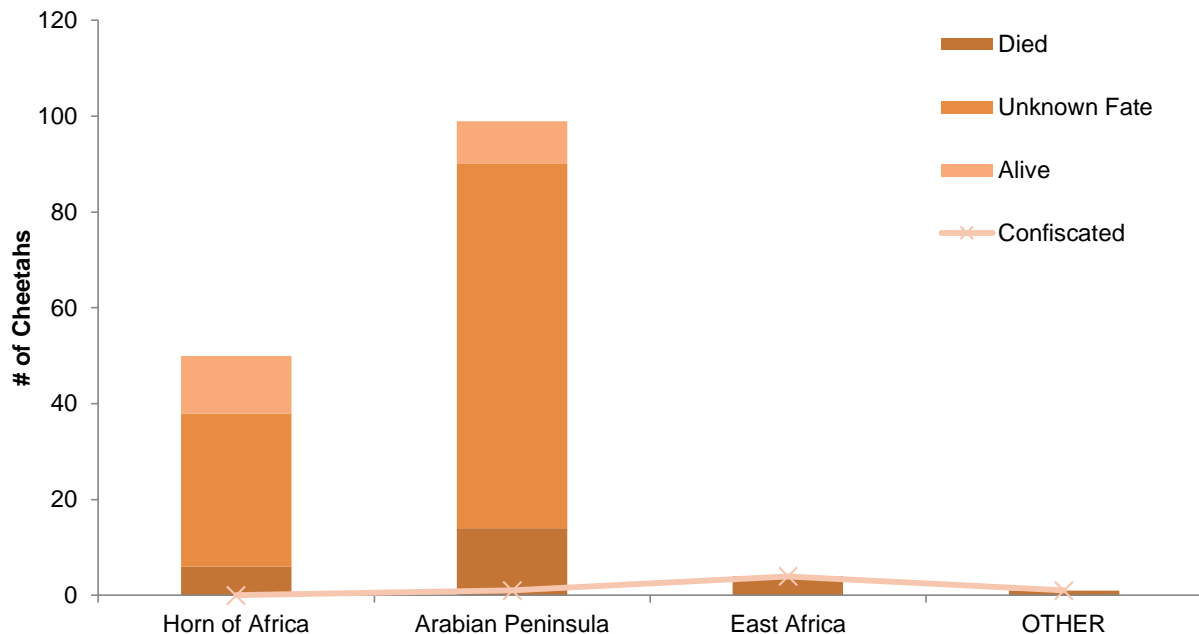


Figure 39: Summary of illegal cheetah trafficking by geographic region from January to December 2015. Not included under Other is an unknown number of cheetah claws confiscated in Singapore.

The HoA region continues to be of major concern due to political and economic factors that make enforcement more difficult, as well as its proximity to the Arabian Peninsula, where demand for exotic pets continues to be high. With few exceptions in past years, attempts by CCF and its network to confiscate cheetahs continue to be unsuccessful as more and more officials are requesting some compensation for confiscating illegal wildlife or simply return/sell the animals back to the smugglers. The Somaliland Minister of Environment and Rural Development, the Hon. Shukri Haji Ismail, had expressed to CCF and BFF the need for law enforcement personnel training, and the establishment of a long-term facility for confiscated animals in her country, but has changed her position. To this effect, CCF has assessed the viability of a private facility planned by another of CCF's contacts in Somaliland; however, safety, staffing and the ability to obtain provisions are of concern.

Our ability to work in Somaliland has been affected by the departure of our main contact, which makes communications and reports more difficult to obtain. However, we hope that our contact will return to Somaliland in 2016.

In September, CCF carried out a month-long research of cheetahs offered for sale on social media and submitted a list of nearly 150 names to CITES, INTERPOL and authorities in relevant countries. Our research is now ongoing with information continuously shared with relevant authorities. When appropriate and without hindering official investigations, CCF has alerted NGOs working on other endangered species also found on the ads, e.g. chimpanzees, orangutans, gibbons and clouded leopards.

CCF is always seeking opportunities to broaden its ability to compile data and continues to expand its network. A potential new tool for intelligence gathering is wildleaks.org, a web site capable of receiving completely anonymous illegal wildlife trafficking cases and transforming them into actionable items. In July, wildleaks.org agreed to collaborate with CCF by sharing information on reports involving cheetahs. Wildleaks' partners include Panthera, Conservation International, and the Environmental Investigation Agency.

The CCF team continues to make every effort to collect genetic samples from cheetahs in the UAE and HoA for a database that might allow us to identify their geographic origin. The samples are brought and stored in Namibia under the proper CITES permits.

Public Policy

Following a resolution at the CITES 16th Conference of the Parties held in Bangkok in March 2013, the CITES Secretariat commissioned an independent study of 'both the legal and illegal trade in wild cheetahs, and to assess the impact of this trade on the species' conservation in the wild'. The study, which included data provided by CCF, was completed in early 2014 and presented at the CITES 27th Animal Committee Meeting (AC27) and subsequently reviewed during the 67th Standing Committee (SC67) Meeting, both held in 2014. At SC67, an Intersessional Working Group on Illegal Trade in Cheetahs was formed and subsequently joined by CCF, represented by Patricia Tricorache.

The group was tasked with the design of a questionnaire to CITES Parties requesting information on national legislation and enforcement. A total of [33 questionnaires](#) were received and analysed by the Group. The Group was also tasked with the organisation of a workshop with relevant CITES parties and NGOs. The workshop was held on 3-5 November, hosted by the State of Kuwait, and was attended by 13 Parties and 10 NGOs. Patricia Tricorache, representing CCF, joined workshop sponsor, the International Fund for Animal Welfare, to present drivers of illegal cheetah trafficking and recommendations on behalf of the attending NGOs. [Recommendations](#) resulting from this workshop, which include demand reduction programmes, increased enforcement and communications, and disposal procedures, were submitted to CITES on 12 November for consideration at the SC66 meeting to be held in Geneva in mid January.

During her visit to the Middle East, Patricia had an opportunity to re-connect with some of CCF's friends in Dubai, and meet new people in Kuwait who are active in the fight against illegal wildlife trafficking.

Patricia also represented CCF in the CITES Intersessional Working Group on Captive Bred and Ranched Specimens formed during AC27. The Group was tasked with looking into the causes and effects of mis-coding Appendix I and II species traded as captive-born or ranched, but which could potentially be wild caught. This presented CCF with a valuable opportunity to contribute with suggestions to address any potential loopholes regarding cheetahs traded as captive bred under Appendix II. A document with the Group's [recommendations](#) was presented at the AC28 in Tel Aviv in August, at which point a new working group was formed with new members present at the meeting.

Elsewhere, CCF continues to be approached by and collaborating with various international conservation and enforcement NGOs researching illegal wildlife trafficking, and pro-actively approaches government agencies, groups and individuals dedicated to collecting information and training enforcement agencies to fight the trade. Efforts such as these enable CCF to create synergies that may result in successful actions, and to raise awareness to the urgency of addressing the illegal trade of live species.

In the US, Dr. Laurie Marker and staff have been active in networking with various government institutions, and monitoring several important issues and government policies that affect the cheetah. Following are some of the events on illegal wildlife trafficking attended by CCF USA.

- On 28 January, staff attended the U.S. Congressional budget allocation meeting for FY2016 held by the Multinational Species Coalition Fund and asked that the budget for combating wildlife trafficking programmes be expanded to include funding to address the illegal trade in cheetahs. Currently, their programmes only address species that are trafficked for ivory, bones or pelts and do not encompass live animals and the pet trade. CCF is aware that work needs to be done in Washington, D.C. to educate other NGOs and government officials that the illegal pet trade is a threat to cheetah survival and should be included in the request for MSCF budget allocations.
- On 19 March, Dr. Marker and CCF USA staff attended the ICCF Gala in Washington, D.C. honouring His Royal Highness, the Prince of Wales. Prince Charles is an outspoken proponent driving the

discussion of wildlife trafficking and the need to combat it on the international stage. His remarks at the Gala centred on the importance of conservation and the need to come together as citizens of the world community to act. CCF is seeking inroads to work more closely with the Royal Family and their conservation organisations in the UK, including the Tusk Trust.

- On 4 June, staff attended a briefing in Washington, D.C. on efforts to protect wildlife and conserve natural resources in war-torn South Sudan and key conservation security concerns across Central Africa, sponsored by Wildlife Conservation Society (WCS). The discussion centred on how HR 2494, the Global Anti-Poaching Act, will professionalise wildlife law enforcement efforts and how S.27, the Wildlife Trafficking Enforcement Act, will enhance authorities' ability to prosecute wildlife traffickers in the US.

By attending these programmes, CCF staff is in a position to share current information on challenges, obstacles and programmes that might impact recommendations.

Outreach

In April-May 2015, Dr. Marker travelled to the UAE and met with various veterinarians and individuals with cheetahs under their care. The formation of a CCF UAE chapter was discussed, and posters with recommendations on cheetah care and information on the effects of the illegal cheetah trade are being distributed to veterinary clinics, in order to encourage pet cheetah owners to administer proper care or turn them over to registered facilities.

On the media front, there were three media inquiries: TT News Service (Sweden), Le Monde (France) and Wall Street Journal (WSJ) – Middle East Bureau. The article by TT, *Brutal Cheetah Smuggling*, was published in late December in various syndicated Scandinavian outlets, including Störst – Metro (Sweden) and Hufvudstadsbladet (Finland). WSJ was unable to obtain visas for Yemen and decided not to pursue the story. Similarly, terrorist events in Paris deterred Le Monde from continuing its research for their article.

Social media is a tool commonly utilised by wildlife dealers, and their images of animals being offered receive many compliments and "likes" by thousands of people. In an effort to raise awareness about the threat that illegal cheetah trafficking represents to the survival of the species on social media, and resulting from CCF's most popular post on its Facebook page during this period –which was relevant to illegal wildlife trafficking, we did a soft launch of a new Facebook page titled, "So you want a pet cheetah?" on 30 December. The page's main objectives are providing information on the trade, and actions being taken, hoping to turn public opinion against ownership of cheetah pets, and in particular, to reach those who might own or plan to buy a cheetah. The page also invites people to contact CCF privately with any reports of illegal cheetah trafficking.

Within two days of its soft launch, the page had achieved 183 "likes" and engaged 247 people (Figure 40), achieving a total reach of 2,689 through four posts (Figure 41).

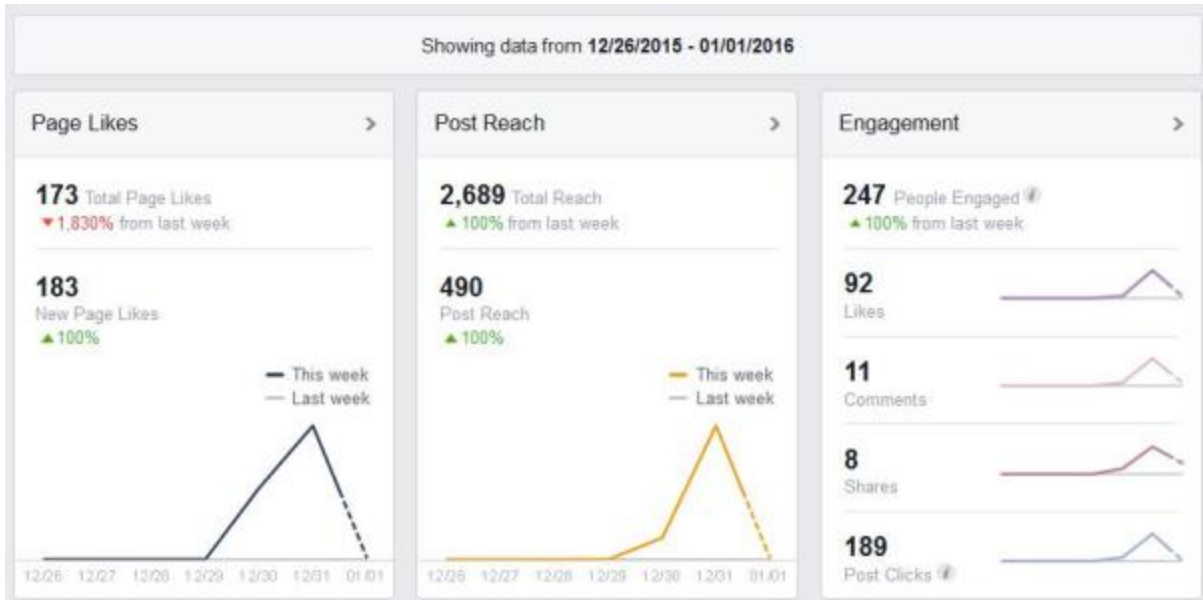


Figure 40. Data relevant to CCF's Facebook page, "So you want a pet cheetah?" (Likes, reach and engagement). Dec 30-31, 2015.

Published	Post	Type	Targeting	Reach	Engagement	Promote
12/31/2015 2:22 pm	Illegal wildlife trafficking is not just about one species, and it is a	Video	Global	205	33 9	Boost Post
12/31/2015 10:08 am	Can you see them? These three cubs were born in September an	Image	Global	173	1 6	Boost Post
12/30/2015 11:30 pm	These cheetah cubs were for sale on the Internet. About 300 cub	Image	Global	319	11 15	Boost Post
12/30/2015 3:41 pm	Welcome to our new page, dedicated to educating and raising aw	Image	Global	336	2 7	Boost Post

Figure 41. Reach and engagement of CCF's FB page, "So you want a pet cheetah?" Dec 30-31, 2015.

V. Education

Public education and the development of an active grassroots constituency are integral components of CCF's overall cheetah conservation programme. CCF educates farmers, students, educators, public-policy makers, and the public in general on the value of sustainable practices in conservation, as well as on the importance and value of predators for a healthy ecosystem. Public education and the development of national pride in the cheetah are both critical to its survival.

CCF continues to host school groups of all ages at Camp Lightfoot and visit schools as part of its outreach programme. CCF also continues to provide in-house training to Namibian students and to host national and international students and interns.

CCF is a member of the Museum Association of Namibia (MAN), an umbrella organisation that represents all the museums in Namibia. It provides training workshops for individual museums and museum development workshops for regions that currently do not have any museums. In May 2015, educator Ignatius Davids attended the MAN's AGM held in Swakopmund. The meeting provided an opportunity to discuss MAN's 3-year plan and grant projections. MAN's 2015 Regional Museum Development Grant was awarded to CCF for a total of N\$80,000 to support educational supplies for all of CCF's education programmes in Namibia. The 2014 Regional Museums Development Grant, which took effect in January 2015, was used to replace burned educational materials lost in the 2013 Visitor Centre fire and to develop and buy new education supplies for our new building.

This year, CCF's on-site educator Ignatius Davids was awarded the Conservation Hero Award by the Disney Worldwide Conservation Fund (DWCF) for his excellent work as an environmental educator. With this award, Ignatius was given an award certificate and medal, along with a cash prize of US\$1,000. To celebrate CCF threw Ignatius a Disney Halloween themed party that was attended by all of CCF's staff, interns, and family. The DWCF also awarded US\$500 to CCF for our strides in environmental education in Namibia.

A. Future Conservationists of Africa

In 2015 the CCF Education team reached over 12,000 Namibian children and youth through school outreach and centre-based programmes.

1. School Outreach

School outreach ran from February through September this year with the entire education team taking turns visiting a total of 56 schools.

In total, 11,183 children, compared to 8,000 the previous year, learned about cheetah behaviour, ecology, and how people can help conserve the cheetah during 45-minute presentations by the CCF staff.

- In February and March 2015, the CCF team conducted outreach at 32 schools in the Otjizondjupa and Khomas Regions (Otjiwarongo, Okakarara, Grootfontein, Coblentz, and Windhoek), reaching 6,693 learners in grades 5 to 12.
- In April, May, and June 2015, the education team travelled to the Hardap, Ohangwena, Oshikoto, Khomas and Otjozondjupa regions (Rehoboth, Oshakati, Ondangwa, Windhoek, Okakarara, and Okahandja) to impart conservation education programmes at 15 schools, involving 2,334 learners in grades pre-primary to 12.
- In July and September 2015, the education team travelled to the Omaheke, Hardap, and Otjozondjupa regions (Gobabis, Mariental, Aranos, and Otjiwarongo), reaching nine schools, involving 2,156 learners in grades 5-12.

2. Centre-based Programmes: Primary to High School

Organised education programmes at CCF involved 33 Namibian groups (986 children and youth, accompanied by 139 teachers, parents, or volunteers) (Table 23). Of these, 12 groups (305 children and youth with 51 teachers, parents, or volunteers) participated in overnight programmes at CCF's Camp Lightfoot or Cheetah View. Activities depend on the length of stay and the group focus, and may include cheetah runs, museum tour, guarding dog and goat kraal talks, predator kill identification exercises, 'preyground' activities, ecological talks, and game drives.

Occasionally, day groups cannot be hosted overnight due to group sizes (sometimes over 50 or 60 children), kids' ages, or overlapping dates. In 2015, day programmes involved 20 groups (681 children and youths with 87 teachers, parents, or volunteers).

Table 23: Namibian schools hosted by CCF from January to December 2015.

Namibian Overnight School Groups					
Date In	Date Out	School	Learners	Adults	Total
23 Jan 15	25 Jan 15	Fredrich Awaseb Secondary School	13	4	17
06 Mar 15	08 Mar 15	Tutaleni Primary School	29	5	34
26 Jun 15	28 Jun 15	Gammams Primary School	30	4	34
14 Aug 15	16 Aug 15	Swakopmund Primary School	30	5	35
16 Aug 15	18 Aug 15	Karasburg Primary School	30	4	34
18 Aug 15	20 Aug 15	Omatoko Primary School	28	7	35
04 Sep 15	06 Sep 15	K.W Van Marees Secondary School	30	3	33
11 Sep 15	13 Sep 15	K.W Van Marees Secondary School	30	3	33
09 Oct 15	11 Oct 15	Delta Secondary School	4	1	5
16 Oct 15	18 Oct 15	Constantia Private School	30	6	36
23 Oct 15	25 Oct 15	Heritage Week Winners	31	3	34
06 Nov 15	08 Nov 15	DHPS- German School- Windhoek	20	6	26
Total Namibian Overnight School Groups:			305	51	356

Namibian Day Visit School Groups				
Date	School	Learners	Adults	Total
26 Apr 15	Motsomi Primary School	54	5	59
11 May 15	Wilderness Safaris Eco-Guides	10	2	12
13 May 15	Elim Junior Secondary School	20	3	23
21 May 15	Youth Environmental Summit	12	4	16
04 Jun 15	Otjikoto Senior Secondary School	24	2	26
08 Jun 15	Steps for Children Preschool	18	4	22
10 Jun 15	Windhoek School for Visually Impaired	14	2	16
13 Aug 15	German Private School of Omaruru	30	5	35
14 Aug 15	Mandume Primary School	47	5	52
22 Aug 15	Waterberg Primary School	38	2	40

28 Aug 15	Osile Primary School	48	5	53
03 Sep 15	Usakos Secondary School	22	2	24
04 Sep 15	Waldfrieden Primary School	60	5	65
14 Sep 15	Mokganeedi Thlabanell High School	65	5	70
04 Oct 15	Okakarara Primary School	64	6	70
09 Oct 15	Donatus Primary School	40	7	47
22 Oct 15	Nomtsoub Primary School	19	5	24
05 Nov 15	Joseph SA Junior Secondary School	49	5	54
07 Nov 15	Okamatapati Combined School	34	6	40
13 Nov 15	Peri Naua Preschool	13	7	20
Total Day Visit:		681	87	768
Total Namibian School Groups:		986	139	1,124

One of the day visit groups was the Youth Environmental Summit (YES), which was held in May 2015 to celebrate the International Day for Biological Diversity. YES is a weeklong intensive scientific investigation run by Gobabeb Desert Research Center and was hosted this year at the Waterberg Plateau National Park. Eleventh-grade students from all over Namibia applied for 30 sponsored positions to partake in this year's YES under the theme 'biodiversity for sustainable development'. The students were divided into three different fields of study; bush encroachment, rangeland management, and eco-tourism. The students from the bush encroachment group came to CCF for a day of data collection on one of CCF's farms. At CCF the students took data from transects in an area where CCF had thinned the bush three years ago for our Bushblok programme, and compared it to an area that was fully encroached by bush. Students identified grasses, trees, shrubs, animal spoor and scat in each transect. On the last day of the summit, students presented their results to their peers, scientists, and environmental educators at the Waterberg Plateau National Park. The bush encroachment group's data showed different flora and fauna in a bush-thinned area *versus* an encroached area. CCF education staff also participated and offered support on the final day of the summit, as students presented their scientific study results. CCF also set up an exhibit table at the YES Summit event at the Waterberg Plateau National Park (see C. Community Outreach).

In October 2015 CCF hosted the 2nd place winners of MAN's 9th School Clubs and Museum Exhibition (SCAMX) competition. Four female students and one teacher from Delta Secondary School in Windhoek were welcomed to CCF for a free educational weekend program as their prize. Ignatius, our on-site programmes educator, toured the group around the centre and had them participate in daily activities such as assisting with centre feeding of our cheetahs, going on a game drive, and joining staff for meals.

Also in October 2015, the education department was awarded a small grant of N\$10,000 for National Heritage Week from MAN. With the funds, CCF invited four local primary schools from Otjiwarongo to participate in a heritage week competition. All four schools (Orwetoveni, Spes Bona, Donatus, and Karundu) were given a small grant of N\$1,000 for supplies and were asked to prepare a presentation about a Namibian culture of their choice with relation to our environmental culture. Each school presented to their peers during Heritage Week and at the end of National Heritage Week, CCF's education department held an event in Otjiwarongo's town centre, where school groups performed for the community and competed for the prize of a free educational weekend program at CCF. All of the schools did an amazing job and drew quite a crowd in Otjiwarongo. The education team picked two winning schools, Orwetoveni and Spes Bona. Subsequently, 31 learners and 3 teachers came for an educational weekend at CCF that included transport to and from CCF, all meals, and a movie night.

3. Higher Education and In-Service Training

In February, Education Manager Stephanie Bradley and Ignatius Davids hosted a teacher-training workshop for 10 teachers from six different schools in Otjiwarongo. The workshop aimed to help local Otjiwarongo

teachers start environmental clubs at their schools. The three-hour workshop covered environmental club start-up questions, concerns, and resources, as well as walking participants through CCF's Teacher's Resource Guide.

In May, Stephanie Bradley co-hosted Wilderness Safaris' Intro to Guiding Course at the CCF Centre for a day. The course was set up much like CCF's Naturalist Training Camps, taking place over five days. The Wilderness Safaris group stopped by CCF on their first day of the course for classroom lectures on taxonomy and human-wildlife conflict (HWC). CCF was able to form a relationship with Wilderness Safaris and their well-established, nationally-recognised training courses. CCF's education department hopes to partner with Wilderness Safaris for future courses as well as get guidance on the national training certification process for CCF to host more training courses at our centre.

CCF is committed to empowering Namibians to take over the conservation and protection of their wildlife. Toward this goal, for many years CCF has fostered Namibian college students' interest in wildlife conservation. CCF offers in-service training programmes for students from the Namibia University of Science and Technology (NUST - formerly Polytechnic of Namibia) and the University of Namibia (UNAM). The students conduct research projects, with the goal of completing a research paper at the conclusion of their internships. Several former interns have gone on to work at conservation organisations or with the Ministry of the Environment.

In 2015 CCF continued to foster nine Namibian student interns who carried over from 2014 and an additional 17 interns as follows:

- Five interns served in the CCF Tourism Department. Three interns from The Lingua International Training College (ITCL): Ester Shipanga, Ndahafa Angula and Lovis Mokahwa spent between one and six months with CCF's Tourism and Education staff. One intern from NUST: Ndapewa Johannes will spend six months with CCF's Tourism staff. One intern from Marco Polo Educational Training Center, Tertu Kashupi, spent one month with Café, Hotspot, and Creamery staff. ITCL intern Ester Shipanga returned for another internship for two months at the end of the year.
- Four genetics interns from UNAM, Clemencia Tjazuko, Shipahu Saima, Loide Shipingana and Rudo Matavire, spent between one and six months in our genetics lab during the first half of 2015. Clemencia worked on several projects including: optimisation of Oxalate nephrosis primers, verification of blood samples sex, and using Zn-finger primer. Saima Shipahu helped on a project for sequencing cheetah male reproduction genes. Loide conducted lab work for the oxalate nephrosis project. Rudo focused on the Wild Boy Project, analysing microsatellite data to identify the individual cheetahs Sam and HiFi.
- One Nature Resource Management student from NUST, Jason Shityeni, spent six months with us conducting a project to determine the utilisation by key bird species in relation to fixed nest boxes and natural cavities across the CCF reserve.
- Two secondary school interns from Otjiwarongo, Rolinda and Emilia, spent two weeks with the CCF education team.
- One economics intern from NUST, Fillipus Jeremia, spent one month with CCF determining the projected cost analysis for Herero Community Hand Made Crafts and as a general intern.
- Two food science interns from UNAM: Lolita Almeida and Beverly Aebes arrived at the end of 2015 to spend one and a half months with the Creamery and Café.
- Two environmental science interns from UNAM: Regina Ndumba and Frieda Namupala arrived at the end of 2015 to spend one and a half months as general interns.

In addition to the in-service training students, CCF welcomes groups from Namibia's higher-education institutions to participate in programmes aimed at enriching their skills in various study areas. During 2015, CCF hosted five groups from UNAM and one from the Interlingua Training College. A total of 74 Namibian

university students and 15 teachers participated in various aspects of CCF's work in the areas of Wildlife Management, Environmental Management, and Tourism (Table 24).

Table 24: Namibian higher-education groups visiting CCF from January to July 2015

Namibian Overnight Higher Education Groups					
Date In	Date Out	School	Learners	Adults	Total
28 Mar 15	31 Mar 15	UNAM	7	4	11
29 Mar 15	02 Apr 15	UNAM	13	4	17
27 Jul 15	29 Jul 15	UNAM	3	1	4
26 Aug 15	28 Aug 15	UNAM North	22	2	24
Total Namibian Overnight School Groups:			45	11	56

Namibian Day Visit Higher Education Groups				
Date	School	Learners	Adults	Total
10 Apr 15	UNAM	11	3	14
5 Oct 15	Lingua International Training College	18	1	19
Total Day Visit:		29	4	33
Total Namibian School Groups:		74	15	89

B. Future Farmers of Africa

CCF continued its involvement in a project contributing to the alleviation of poverty in the eastern communal areas of Namibia known as the Greater Waterberg Landscape (GWL). The eastern communal area consists of four communal conservancies (Ozonahi, Otjituu, Africa Wild Dog and Okamatapati) that form the natural dividers/areas of project activity. These communal conservancies are heavily reliant on subsistence livestock, and the area is devoid of wild game species, which leads to substantial human-carnivore conflict as there is no natural prey base to support the resident carnivore population (cheetah, wild dog, and leopard).

CCF's integrated wildlife and livestock management programme through farmers' training addresses these issues by enhancing livelihoods through improved land management and a heightened culture of ecological protection. Two villages were chosen per conservancy through a consultative process with the relevant stakeholders of each conservancy. Key members of the local communities, such as the conservancy committee chairman, were contracted by the project to distribute the training schedule throughout their communities and through radio programmes, and to actively encourage participation by their conservancy members, men and women, in order to build capacity for both genders.

Two farmer training workshops took place every week in villages across each conservancy, for a total of eight days per month. CCF staff, along with a Local Mentor, taught livestock, wildlife and rangeland management, as well as business planning (Figure 42).



Figure 42: Group gathering during one of the workshops.

The information was disseminated in a workshop format: a combination of presentations, theory and practical demonstrations. Supplementary training materials, translated into the Herero language, were designed to complement the information imparted on a weekly basis at the workshops. This ensured that the attendees had long-term reference materials to use after the training.

A total of 82 integrated livestock and rangeland management training workshops were conducted during the year, averaging 22 participants per workshop, of which 26% of them had not attended a farmer training workshop before. As a result, we were able to reach a new audience and re-connect with prior participants. Of the 1,783 participants, 1,260 were males and 523 were females. All participants were taught topics including ecology, conservation, economics, animal health and human hygiene.

Participants who attended five workshops or more received a certificate indicating their achievement. In total, 130 certificates were given out across the four conservancies as attendance throughout the 82 workshops was consistently high. This is a reflection on the value and need that the communities placed on these workshops, which is evidenced by some of their responses as to why their knowledge increased. One participant stated, 'I had no access to training workshops.' After the workshops the general feeling was that, 'My knowledge has increased from these workshops, we want more.'

Using questionnaires, the year-long project started in late 2014 was evaluated to determine whether the training workshops had led to any behavioural or attitudinal changes in participants. A total of 90 questionnaires were completed from across the four conservancies. Participants from both the focal villages and surrounding areas were asked to determine if the lessons learnt had spread further than just the original villages. The participants indicated that they had all gained knowledge in multiple areas, while also recognising areas in which they could increase their income and alleviate poverty within the community, which was the overall objective of the project.

The majority of participants said that they now see the need to vaccinate, feed, and provide supplements, treatments and salt licks to their livestock. In addition they said they will now put this knowledge into practice as they realised that it will lead to healthier and fatter livestock, which in turn will yield a higher price per kilo at the auctions. Additionally, they will practice good record keeping and financial planning as they now see the direct link between this and their potential income increase now and in the future.

Overall the survey provided valuable insights into the behaviour and attitude changes before and after the workshops. Integrating economics, ecology, conservation, animal health, feeding, treatments and other relevant topics meant that each participants gained knowledge across a number of fields. All these fields are considered by CCF as being critically important in order for the communities to develop their livelihoods and businesses whilst living and working alongside wildlife, including carnivores. After attending the workshops one participant stated that he had 'Gained knowledge on how to treat livestock well and keep them healthy,' and other stated that 'In addition to livestock management I learned about financial management, birthing and teething problems with livestock.'

The majority of participants labelled themselves as low in knowledge at the start. Of the questioned participants a vast majority felt that their knowledge on carnivore ecology had increased from information given out during the workshop, stating that they had moved to either a medium or high level across the different topics covered. Of all the participants nearly half felt that cheetahs and wild dogs could bring economic value to the area if they were viewed as a tourist attraction and could bring in alternative revenue into the community. It was determined that nearly all of the participants surveyed had experienced livestock loss in the last 12 months; however, it is important to note that this losses ranged from disease to birthing problems and poisonous plants, and not just due to predation. In fact, it was determined that on average participants lose more livestock per year to poisonous plants than predation by carnivores. Over the last six months fewer than 300 animals were lost to predation, and the majority were predated by jackals. Wild dogs, cheetah, leopard and brown hyaena were all found to be responsible for a very small proportion of loss. Even after these losses, nearly all of the participants stated that they had not killed a carnivore in retaliation for livestock losses, although wild dogs were listed as a species that had been killed which as they are listed as 'Critically Endangered' on the IUCN Red List is a concern. If the participants can use the knowledge gained and reduce, or even stop fatalities in these areas, they could reduce their losses by 64%, which would directly have an impact on their income.

Overall, this project was a success as it built upon and enhanced our past knowledge base, while highlighting several key issues of livestock health and HWC that has led to CCF to develop new projects in these two areas for 2016.

CCF also conducted a farm survey amongst 13 government research stations to determine the level of HWC, management interventions and the type of predators responsible for livestock losses. In May 2015, the managers of these farms were hosted at CCF's International Field Research and Education Centre.

On 20 November 2015, CCF hosted a HWC workshop for members of the Tsiseb communal conservancy. The Tsiseb committee were suffering livestock losses and contacted CCF after seeing cheetahs during their annual game counts. The workshop was well received by all (Figure 43).



Figure 43: Tsiseb conservancy committee members at CCF for HWC workshop.

CCF was then invited as a new stakeholder to attend the Tsiseb Conservancy Tourism Development Planning Meeting on 30 November 2015. Dr Richmond-Coggan, and Studbook Assistant and Cheetah Keeper, Kate Vanelli, participated and ensured that carnivores were included in the meeting and perceived as a tourism asset now and into the future.

C. Community Outreach

The majority of CCF's community efforts during most of 2015, funded with the European Union (EU) Civil Society grant that supports education and training for the GWL, revolved around programmes in the Hereroland area.

1. Trade Shows / Agricultural Shows

In May, CCF staff set up a booth in the cheese and wine tent of the Outjo Game Festival (Figure 44). Staff set up a table to allow the public to enjoy samples of all of our goat cheeses: ricotta, chèvre, feta, and mozzarella. We also sampled and sold café-baked breads, marmalade, fudge, and goat-milk soap.

Many people were impressed with the goat-milk products and enquired about selling CCF's Dancing Goat Creamery products in their cafés and restaurants.



Figure 44: CCF booth at Outjo Game Festival.

Also in May, CCF education and ecology staff set up an exhibit at the Youth Environmental Summit (YES) that took place this year at the Waterberg Plateau National Park (Figure 45). CCF staff gave out information about CCF's programmes and integrated wildlife-livestock management to secondary school students and environmental educators who attended the weekend event.



Figure 45: CCF booth at the Youth Environmental Summit (YES).

For the September Namibian trade show season, CCF set up booths at the Otjiwarongo, Outjo, Grootfontein, and Windhoek agricultural shows. At all of the shows CCF promoted visiting our International Field Research and Education Centre in Otjiwarongo, educational programming for children and adults, as well as our goat-milk creamery and Greater Waterberg Artisans' handmade crafts. Free educational information, games for kids, and free samples of our goat cheese and fudge were offered at all the booths.

The Grootfontein show ran from 16 to 18 September 2015 and got busier as the week progressed. Wednesday and Thursday were the main days for the various horse competitions and livestock shows, attended predominantly by farmers and their families, which provided an excellent opportunity to talk to them about HWC issues. On Friday the schools closed at 11am, with many school children attending the show and showing interest in the kill ID model and the educational cheetah games (Figure 46).



Figure 46: School children being shown how to undertake Kill ID.

Dr. Richmond-Coggan spent some time at the livestock show area each day, introducing herself to the local farmers, discussing conflict issues and giving out cards which advertised the Farmer Helpline and Carnivore Tracker. Responses were mixed with there still being an obvious suspicion of CCF and our work but in general people were at least willing to enter in to dialogue.

She was also interviewed live for the show on Channel 7 radio (Figure 47), which aired across Namibia, allowing her to advertise CCF's Farmer Helpline and the Carnivore Tracker App, along with providing some basic conflict-mitigation advice.



Figure 47: Dr. Louisa Richmond-Coggan being interviewed live on Channel 7.

For various logistical reasons the CCF booth was in a building which the organisers were using as part of the show for the first time this year. In essence, it was a food market and our cheeses and fudge sold out. Added to gift items, our sales totalled N\$2,528 during the show.

2. Greater Waterberg Landscape (GWL) Programming

From 16 to 20 February, CCF hosted ten Herero adults from the Omaheke region for CCF's Naturalist Training Camp. The adults ranged in age from 19 to 49 and were interested in diversifying their livelihoods. In addition to learning about eco-tourism and naturalist guiding, participants learned about game guarding, anti-poaching efforts, integrated livestock and wildlife management techniques, as well as how to make bread and ricotta goat cheese. Participants came for the training free of charge but helped with service projects around CCF. Service projects included cleaning up our savannah nature trail, Camp Lightfoot, and research housing at Cheetah View.

On 4-8 May CCF hosted its 3rd Naturalist Training for the GWL (1st and 2nd camps held in 2014). Nine participants from all four of the GWL communal conservancies shared in lessons and hands-on practice on the Waterberg Plateau's flora, fauna, history and conservation. The training also covered topics such as environmental education, trail etiquette, game counting, tourism, and anti-poaching. Participants also learned more about the everyday happenings at the CCF's centre, from our cheetahs, guarding dogs, livestock, to our conservation management techniques.



Figure 48: Naturalist Training Camp participants at CCF cheetah run.

3. Handicraft Project

In June CCF began working with The Peace Collection (handicraft consultant) to engage community members in each of the GWL's four communal conservancies, with the purpose of creating handicrafts that could be sold to tourists and abroad to provide income to the local communities, while benefitting CCF's conservation efforts.

Two to three workshops each were held in Okamatapati, Okakarara, Okandjatu and Otjituuo from July thru October. Over this period there were a total of 103 participants, with an average age of 33. Forty percent were men and 60 percent were women. The workshop taught the community members skills for making leather bracelets, leather necklaces, beaded bracelets, and leather key chains. Makalani nut jewellery was also experimented with.

These workshops also served to establish community contacts and set the ground work for moving into larger scale production in 2016. Between October and December CCF began marketing and reaching out to potential buyers and distributors to evaluate potential sales of the resulting products in 2016.



Figure 49: Communal Conservancy members at workshop.

D. Other Collaboration with Educational Institutions

The CCF Centre hosted 15 international groups (208 students and 44 teachers/accompanying persons) from international schools and universities participating in educational programmes, including lectures on HWC, cheetah runs, and tours of CCF's Centre. Twelve of these groups (184 students and 25 teachers) stayed at Camp Lightfoot, while the other three groups (24 students and 19 teachers) participated in day programmes (Table 25).

Ten of the groups this year were return visitors: Pacific Lutheran University, University of Arizona, Earth Expeditions, National Geographic, Global Education Benchmark Group, Mesa College, Rhodes College, Princeton University, Dartmouth College, and University of Nebraska.

Table 25: International groups attending educational programmes at CCF January to December 2015.

International Overnight School Groups					
Date In	Date Out	School	Learners	Adults	Total
19 May 15	20 May 15	University of Nebraska - USA	11	1	12
30 May 15	31 May 15	Rhodes College - USA	8	2	10
18 Jun 15	22 Jun 15	Global Education Benchmark Group -USA	23	6	29
29 Jun 15	30 Jun 15	Princeton University – USA	17	1	18
29 Jun 15	04 Jul 15	Mesa Community College – USA	14	1	15
3 Jul 15	12 Jul 15	Earth Expeditions Group 1 -USA	20	2	22
15 Jul 15	24 Jul 15	Earth Expeditions Group 2 -USA	20	2	22

18 Jul 15	19 Jul 15	Venture Force Group 1- UK	16	1	17
31 Jul 15	1 Aug 15	Venture Force Group 2- UK	14	1	15
3 Aug 15	6 Aug 15	Nat Geo Student Expeditions- USA	13	3	16
2 Oct 15	5 Oct 15	The Traveling School- USA	14	3	17
22 Oct 15	23 Oct 15	Dartmouth College- USA	14	2	16
Total International Overnight School Groups:			184	25	209
Day Visit International School Groups					
Date	School	Learners	Adults	Total	
15 Jan 15	Pacific Lutheran University - USA	10	2	12	
01 Feb 15	Pacific Lutheran University – USA	10	12	22	
29 May 15	University of Arizona – USA	4	5	9	
Total International Day Visit School Groups:			24	19	43
Total International Groups:			208	44	252

E. Volunteers and Interns

Volunteers are the backbone of CCF and vital in daily operations. During 2015, CCF hosted 52 international volunteers and interns. Among these were 31 working guests/volunteers from the USA, Switzerland, South Africa, the UK, Canada, and Australia. Ten of these were returning working guests (third, fourth, and tenth time *alumni*); two were volunteering after graduating high school; one was visiting during a gap year; one was a visiting vet; one was a vet technician; one was a visiting geneticist with her intern; four were zookeepers, a retired educator, a retired accountant, a resident artist, a neonatal nurse, and a continuing education student.

In addition to 26 Namibian student interns, CCF welcomed 21 international student interns from the USA, France, South Africa, and the UK training in veterinary medicine, farm management, genetics, history and biology, ecology and evolution, conservation biology, zoology, animal science, wildlife management, biotechnology, ecology, captive wildlife care and education, biophysics, GIS, bioengineering, fisheries and wildlife sciences, earth systems, wildlife biology, organismal biology, dog handling, international studies and environment, molecular biology and genetics, forest resources and wildlife management, business marketing, biomedical engineering/biology, and sociology/ethology.

6. Structural Activities

A. Namibian Facility Developments

1. Existing Structural Projects and New Projects

2015 saw some crucial infrastructure enhancements at CCF listed below.

- The installation of a WiMAX relay station transmitting internet to the revived Cheetah View Education Complex (previously no internet and very little cell coverage was possible).
- The installation of a solar array, battery banks, and an inverter unit at Cheetah View providing reliable full-time power to the education facility and student accommodation blocks.
- Security fencing around the Cheetah View campus area; an important safety feature securing against wildlife encroachment including leopards and baboons.
- Renovation of a zinc dam at Janhelpman to prevent water loss.
- Building of a bathroom (shower, sink, and toilet) in each of the four existing *rondvals*, including two solar water geysers providing shared hot water to the four units. In addition, the area was re-landscaped, and new and existing structures were decorated, both inside and outside.
- Complete zinc roof cover of the dormitory building, which had extensive leakage problems (six dormitories, the common room, and laundry station)
- Construction of a 'superintendent's dwelling, including *en-suite* toilet and shower and solar power, at Lightfoot Education Camp. This provides standalone accommodation for a permanent member of staff being present as security for both property and visiting students.
- The building of a new goat and sheep pen to house the flock and herd securely overnight. This includes a large sheltered area and 14 mobile birthing/rearing pens.
- The installation of two new 5,000-litre water tanks and filling station for the 'P-Quad' water tanker vehicle, incorporating a new water supply line for buck/dog pens and cheetah camp.
- Extensive remodelling and grading of the aircraft runway providing better drainage to meet legal requirements.
- The continued water reclamation system has been extended from the new Visitor Centre, running to the Hotspot and beyond to the dam. This will capture tens-of-thousands of previously-lost rain water.
- Site for the relocation of the Bushblok factory has been given vehicle access and was cleared and graded. Concrete slab was poured in December 2015 in preparation for 11 ton kiln arrival.
- The Visitor Centre was completed. The Gift Shop, catering kitchen, Cheetah Café deck and FNB Conference Room were opened. Staff moved into the new office space. The genetics lab was completed and moved from the Babson House basement. A battery system was installed for 24-hour operation.
- The Hot Spot septic tank was expanded.
- A new metal tile (thatch themed) roof was installed on the Senior Staff House.

- The Senior Staff House interior concrete work was patched and the walls painted.
- A new roof on the clinic/office building began (only substructure). Construction has paused until the roofing tiles are delivered.
- A wifi transmitter was installed on the Babson House roof to beam signal to the Hot Spot. A relay was installed at the Hotspot to boost signal for staff housing.
- Renovation of North Staff housing took place. House numbers 1, 2, 3, 4, and 7 were renovated (paint, waterproofing, door/window repair, shower repair, masonry repair, etc.).
- Two new duplex houses and a laundry structure foundation and slabs were built.
- Guest House complex construction commenced. The foundations are almost completed and trench for electric and water was dug.
- Laid out and dug main trench for new electric servicing to the future North Staff Housing Kiosk.
- New roofs (Senior Staff, Clinic and Dormitory) with metal purlins/batons were ground for lighting.
- Entry road was graded.
- Exercise to find water commenced in December 2015. Boreholes may be drilled in 2016.
- Demolition in preparation for the renovation on the future residence for CCF's Assistant Director Anne Schmidt-Küntzel began at the end of December 2015.

2. Automotives

Vehicles and tyre repair continue to be an expensive and time-consuming problem at CCF. During this period, CCF repurposed an old Land Rover as a new Safari Car. On-going maintenance on all working vehicles still takes place. Table 26 lists CCF's vehicles and their condition at the end of 2015.

Table 26: CCF's vehicle fleet and each vehicle's status by the end of 2015

Vehicle	Status
Nissan4x4(3307)	Running
Nissan4x4(4349)	Running
Old Toyota4x4(dogs)	Running
Toyota4x4(feeding)	Running
Quantum Old(2131)	Running
Quantum New(3878)	Running
Mahindra	Running
Land Rover, goats	Running
Land Rover, game view	Running
Toyota, old game view	Running
Green safari cruiser	Running
GWM, game view	Running
Old land cruiser	Running
Condor	Running
Cheetah bus	Broken

Toyota 4x4 Farm	Running
New Nissan white N5947OT	Running
Pajero Bruce N1198OT	Running
Toyota Laurie	Running
Big trekker	Running
Small trekker	Running
Gater	Broken
Camo bakkie	Running
Bynadaar trekker	Running

B. Staffing

1. CCF Namibia Staff

- Laurie Marker, DPhil – Founder and Executive Director
- Brian Badger - Operations Manager
- Stephanie Bradley – Education Manager
- Bruce Brewer, PhD - General Manager
- Johan Britz – Farms and Bushblok Manager
- Tanya Britz - CCF Bush Accountant
- Ignatius Davids – Education and Tourism Officer
- Andrew DiSalvo, DVM – Research Veterinarian
- Karin Falk – CCF Accountant
- Josephine Gabriel – Tourism Assistant
- Mike Gardiner - Hospitality and Food Services Assistant Supervisor
- Katrin Hils – Genetics Laboratory Manager
- Kristophine Keendjele – Tourism Assistant
- Chavoux Luyt - Ecology Ph.D. Student
- Lucia Mhuulu – Genetics Technician
- Gabriella Mulikita – Genetics Technician
- Matti Nghikembua – Forest Steward & Chief Ecologist
- Gebhardt Nikanor – Education and Tourism Officer
- Matt Renninger – Community Development & Facilities Officer
- Louisa Richmond-Coggan, PhD – Ecology Manager
- Tess Robitschko – Personal Assistant to the Director
- Anne Schmidt-Küntzel, DVM, PhD - Research Geneticist & Asst. Director for Animal Health and Research
- Paige Seitz – Livestock Guarding Dog Manager
- Tryves Shivolo – Tourism Assistant

- Meriam Shuudi – Tourism Assistant
- Titus Shuuya – Ecology & Forest Steward Assistant
- Bessie Simon – Assistant Farm Manager
- Max Simon – Mechanic
- Richard Siririka – Community Development Assistant
- Heike Stackmann - Volunteer Co-ordinator and Public Relations Officer
- Tyapa Toivo – Small Stock Supervisor
- Kate Vannelli – Studbook Assistant & Cheetah Keeper
- Hanlie Visser – Hospitality and Food Services Supervisor
- Paul Visser – Assistant Farms Manager
- Eli Walker – Research Technician & Cheetah Keeper
- Grace Warner – Veterinary Nurse

At the closing of this period, CCF Namibia also employs four cooks, 40 farmhands and domestic workers, and 24 Bushblok project workers.

2. CCF USA Staff

- Caitlyn Beck - Constituent Relationship Manager
- Beth Fellenstein - Director of Operations and Finance
- Paula Martin – Executive and Development Assistant
- Angelina Mertens – Donor Relations Coordinator
- Heather Ravenscroft - Chapter Coordinator
- Dan Winter –Chief Development Officer

VII. Organisational Activities

A. Fundraising

1. Namibia

Namibian Governance

CCF Namibia, a section 21 registered not-for-profit, held a board meeting on 17 March 2015. CCF Namibia underwent its annual financial audit on 13-15 April 2015 by the Namibian auditing firm of Grant Thornton and Neuhaus.

In July CCF Namibia hosted a combined Boards meeting with representatives from CCFUSA and CCFUK.

Namibian Grants

The European Union (EU) Civil Society grant that supports education and training for the Greater Waterberg Landscape (GWL) supported the purchase of a new *bakkie* (pick-up truck). The grant program concluded successfully at year-end.

TIKA, the foreign aid agency of the government of Turkey, donated a similar bakkie, as did CCFUK (through a bequest that also supports LSGD work), and the Ludwick Foundation (USA).

The FNB Foundation turned over the first N\$400,000 of a 3-year N\$1.1 million grant for education support. The first year included monies for the completion of a meeting room in the Visitor Centre complex.

The Pupkewitz Foundation donated over N\$80,000 worth of kitchen equipment to the Visitors Centre.

CCF received an N\$80,000 Museum Development Grant from the Museums Association of Namibia for outfitting of the Visitors Centre.

During 2015 CCFUSA contributed a little over N\$12.5 million; CCFUK contributed N\$1.2 million (some of which was used to purchase a bakkie); CCF Canada contributed N\$0.6 million; our German partner AGA, donated N\$0.6 million; SPOTS, the Netherlands group, N\$0.2 million; and Boras Djurpark Sweden gave N\$75,000. Smaller amounts were received from our French and Italian partners.

2. International

CCF USA

Board Governance

During this period, the USA Board of Directors and Trustees had three meetings via teleconference: 28 January, 21 August and 18 December 2015. One meeting was held at the Cosmos Club on 22-23 October. Twelve resolutions were passed during these meetings:

1. Resolution #1053 – Bylaws
2. Resolution #1054 - 2014 Retirement Plan Contribution
3. Resolution #1055 – Approval of 2015 Budget
4. Resolution #1056 – Approval of Restricted Funds

5. Resolution #1057 – Approval of Restricted Funds
6. Resolution #1058 – Merrill Lynch Advisory Services
7. Resolution #1059 – Approval of Restricted Funds
8. Resolution #1060 – Re-organize and Define Committees
9. Resolution #1061 – Charter for the Executive Committee
10. Resolution #1062 – Charter for the Salary and Benefits Committee
11. Resolution #1063 – Charter for the Audit Committee
12. Resolution #1064 – Charter for the Governance Committee

At the meeting on 21 August, Dr. Stephen O'Brien resigned as Chairman of the Board of Directors and Woodrow Garmon was voted in as Chairman of the Board. CCF underwent its annual audit in March with the field portion conducted on site in the Alexandria, Virginia offices on 17 to 18 March 2015. The audit was conducted by Michaud, Accavallo, Woodbridge & Cusano, LLC (MAWC).

Operations

The CCF US office has moved to a new location: 200 Daingerfield Rd. Suite 200, Alexandria, VA 22314. The new office allows room for collaborative work and space for interns to work. Situated two blocks from the King Street Metro, we are able to attract more college interns.

CCF staff and volunteers continue to use Basecamp to manage projects and ongoing operations projects. Basecamp allows for centralised communications to working groups and eliminates the need to rely on email.

All cheetah.org email addresses are hosted by Google. The staff is now using Google drive to store and share documents. Staff meetings are now hosted on Google Hangout, and we are looking forward to starting some Google Hangout Lunch Discussions with volunteers in the near future.

For 2015, CCF began using software from Bidding for Good to manage online ticket sales, silent auctions, and online auctions. Bidding for Good is more visible and recognizable online than the previously used Tofino software. When Bidding for Good is not being used, credit card transactions at events have been processed using Square card readers.

In terms of personnel changes, CCF USA Major Gifts Officer, Lloyd Tanner resigned in March. In June a new part time Donor Relations Associate, Angelina Mertens, was hired for the Northern California Bay area. In August, Dan Winter came on part time and in December became the full time Chief Development Officer, based in Chicago.

Campaigns

The CCF's Annual Fund Campaign includes four direct mail appeals: the Spring Appeal, the Chewbaaka Memorial Challenge, the Fall Appeal, and the Year-End Challenge. Each direct mail appeal includes several mailing components to targeted audiences during the time period of the appeal and supported with e-mail solicitations. In addition to these major campaigns, several smaller, independent e-blast efforts are incorporated throughout the year, as well as two printed newsletters, two electronic newsletters, and two electronic 'Notes from the Field'.

Major Appeals

- Spring Appeal: An initial mailing to 10,968 USA subscribers was sent on 20 April 2015. The campaign raised US\$34,882.05. In support of the direct mail components of the appeal, email solicitations were sent to 13,863 USA recipients. The electronic component raised US\$4,695.02, for a total of US\$39,577.07.
- Chewbaaka Challenge: Challengers donated US\$229,754.50 towards the Chewbaaka Challenge. An initial mailing to 11,551 US subscribers was sent on 1 July 2015 raising US\$89,546.36. On 12 August 2015, a second mailing was sent to 807 donors who had not yet donated to the Challenge, but had

donated to the challenge in 2013 or 2014. The second mailing raised US\$21,340.62. In support of the direct mail components of the email, a total of 213,249 emails were sent between 1 July and 12 September 2015. Some of the blasts focused on cheetah sponsorships; funds received towards sponsorships during this time period were matched. The electronic component generated US\$92,190.28. Table 27 lists the email appeals and their descriptions. In total, the campaign raised \$432,831.76.

Table 27: Emails solicitations sent for the 'Chewbaaka Memorial Challenge' appeal.

Description	Distribution	Date	Coverage
CMC	13,372	1-Jul-15	USA
Chewbaaka	13,425	1-Jul-15	USA
CMC France	547	18-Jul-15	FR
CMC International	2,704	21-Jul-15	AU, NZ, UK, CA, IT
CMC 3 – Dogs	13,324	21-Jul-15	USA
CMC Memorial Garden	13,159	1-Aug-15	USA
CMC Graphic Only	13,124	6-Aug-15	USA
CMC 6	12,996	8-Aug-15	USA
CMC 7	13,031	13-Aug-15	USA
CMC 8 – FFA	13,031	13-Aug-15	USA
Eric's Story	12,996	18-Aug-15	USA
CMC - Germany	813	19-Aug-15	DE
CMC Forward to a Friend	318	24-Aug-15	USA, Already Gave
CMC Picture	12,916	27-Aug-15	USA
International 2	2,401	29 Aug 15	AU, NZ, UK, CA, IT, GE
We're Desperate	12,843	29 Aug 15	USA
Name This Dog	13,170	30 Aug 15	USA
Last Chance	13,143	31 Aug 15	USA
Thank You	13,113	3 Sept 15	USA

- Fall Appeal: An initial mailing directed at the USA was sent to 9,998 US subscribers on 1 October 2015, raising US\$30,052.71. The electronic component generated US\$12,715. This campaign raised a total of \$42,767.71
- Year End Challenge: Challengers donated US\$251,919.57 towards the Year End Challenge. An initial mailing to 12,121 US subscribers was sent on 1 December 2015 raising US\$119,717.30. On 17 December 2015 a second mailing was sent to 1,320 donors who donated to the Year End Challenge in 2013 and 2014 and had not yet donated to the challenge. This mailing raised US\$44,015. In support of the direct mail components an e-mail appeal directed at 33 countries was sent to 20,645 recipients Table 28. A total of 228,015 emails were sent between 27 November 2015 and 1 January 2015. The blasts focused on the winter holidays and CCF programmes and the electronic component generated US\$136,681.51. The campaign raised a total of US\$552,333.38.

Table 28: Emails solicitations sent for the 'Year End' appeal.

Description	Distribution	Date	Coverage
YE International	21,871	20-Nov-15	World
Thanksgiving	14,013	26-Nov-15	USA
BlackFriday	14,013	27-Nov-15	USA
Cyber Monday	14,017	30-Nov-15	USA

Giving Tuesday	13,946	1-Dec-15	USA
YE LSGD	13,951	12-Dec-15	USA
YE International 2	8,010	16-Dec-15	World
YE 2 US	13,907	16-Dec-15	USA
Happy Holidays Africa	1,557	16-Dec-15	Africa
YE Progress	13,653	22-Dec-15	USA
YE LSGD	13,614	24-Dec-15	USA
YE Last Minute Sponsor	13,506	25-Dec-15	USA
Happy Holidays	36,320	25-Dec-15	World
YE Education	13,438	28-Dec-15	USA
YE Almost There	13,369	29-Dec-15	USA
YE Cubs	13,289	30-Dec-15	USA
YE Last Chance	12,902	31-Dec-15	USA
Happy New Year	36,026	1-Jan-16	World

Other Appeals

- Valentine's Day: An e-mail appeal directed at the USA was sent to 15,356 recipients (Table 29). A total of 43,154 emails were sent between 2 and 14 February 2015. The campaign was also featured on the CCF Facebook page. The blasts focused on cheetah sponsorships above US\$250, which received a purring cheetah, and generated 13 new sponsorships and US\$4,264.07.

Table 29: Emails solicitations sent for the 'February: Give a Purring Cheetah' appeal.

Description	Distribution	Date	Coverage
Sponsor a Cheetah – Purring Cheetah	13,890	2 Feb 15	USA
Send a Purring Cheetah Reminder	13,908	9 Feb 15	USA
Happy Valentines	15,356	14 Feb 15	USA and Africa

- Lapsed Donor Appeal: A mailing to 408 USA partners was sent on 19 February 2015. The campaign received 18 donations totaling US\$1,495.
- Mother's Day: An e-mail campaign focusing on Mother's Day was sent on 7 and 10 May 2015 and consisted of two e-blasts to USA subscribers. The e-mail campaign focused on cheetah sponsorships and netted US\$1,482.50.
- Father's Day: An e-mail appeal about Father's Day was sent on 19 and 21 June 2015 and consisted of two e-blasts to USA subscribers, focusing on cheetah sponsorships and netting US\$665.67.
- Commemorative Medallion: An e-mail campaign focusing on selling silver and bronze commemorative medallions began on 15 June 2015. E-blasts were sent to 14,074 USA subscribers. Two reminders were sent on 20 June 2015 and another one is scheduled for 7 July 2015. The appeal has received 40 responses and US\$7,810.
- Annual Donation Mailing: CCF continues to send annual donation reminder postcards. In the first quarter of 2015, postcards were sent to 493 constituents that lapsed or who were about to lapse. In April, it was decided that reminder postcards would be suspended.

- Recurring Donor Thank You Mailing: On 3 September 2015 a mailing went out to 93 recurring donors, thanking them for their recurring gifts.

Table 30: Number of donors giving in each stage in 2013 versus 2014 versus 2015.

Donation Amount (US\$)	Number of Donors 2013 Year End	Number of Donors 2014 Year End	Number of Donors 2015 Year End
\$1 - \$49	727	1,022*	766
\$50 - \$99	610	786	702
\$100 - \$249	823	1,021	959
\$250 - \$499	243	390	397
\$500 - \$999	170	231	258
\$1,000 - \$2,499	125	161	185
\$2,500 - \$4,999	38	47	54
\$5,000 - \$9,999	39	28	40
\$10,000 - \$19,999	18	24	26
\$20,000 - \$49,999	17	16	14
\$50,000 - \$74,999	3	2	4
\$75,000 - \$99,999	1	0	1
\$100,00 and Above	0	2	1

*After comparing numbers between 2013, 2014 and 2015, it was determined that the 250 fluctuation was due to book sales in 2014.

Cheetah Sponsorships

Total revenue from cheetah sponsorships in the USA for 2015 year-end was US\$48,586.71. In 2015, 282 partners sponsored cheetahs. Bi-annual updates on 34 of CCF's resident cheetahs were sent out in early July and December 2015. Many of our appeals and Facebook posts promote cheetah sponsorships. June was Adopt-a-Cat month, which featured one e-blast, sent 4 June 2015 to 8,174 people.

Newsletters

'Cheetah Strides' Newsletter

Issue no. 9 of CCF's newsletter 'Cheetah Strides' was mailed on 18 March 2015 to 14,184 people in the USA. In addition, 373 newsletters were mailed to new subscribers. The mailed piece generated US\$19,489.56. An e-version of the newsletter (USA and International) was sent out in on 16 April 2015 to 20,753 e-mails worldwide.

Issue no. 10 of CCF's newsletter was mailed on 14 September 2015 to 14,828 people in the US. In addition, approximately 50 newsletters were mailed to new subscribers, and many of the extras ordered were given out during the Fall Tour, generating US\$20,067.10.

Dr. Laurie Marker's 'Notes from the Field'

Alternatively with 'Cheetah Strides', CCF sent out one 'Notes from the Field' e-letter in the spring to 27,393 emails worldwide on 23 June 2015. In the winter, 27,958 emails were sent worldwide on 4 December 2015.

Promotional Campaigns

- T-shirt Campaign: An e-mail campaign directed to both USA and international partners was sent to a total of 19,522 people. The campaign featured CCF's 25th Anniversary T-shirt and involved four e-blasts. A total of five emails were sent to 71,896 recipients between 2 and 25 February 2015. The campaign earned a total of US\$9,516.41. T-shirts were sold again in November, raising US\$663.04. In all, 443 t-shirts were sold.
- African Critters Summer Reading: In an effort to distribute the African Critter books stored at the office, CCF sponsored an opportunity to support the student, classroom, or school of a person's choice. Donations above US\$250 would be able to send 25 books to a school of their choosing. One email was sent on 24 April to 13,495 partners in the US, and resulted in three donations directly motivated by this offer. Books were sent to five schools.

Humans for Cheetahs

Supplementing Dr. Marker's visits to the US, regional chapters have been encouraged to support Humans for Cheetahs events. These are events that support CCF in communities. In 2015 these events have been supported with targeted e-blasts and have also been posted to Facebook.

Table 31: Humans for Cheetahs Chapter Activity.

Description	Chapter	Distribution	Date	Coverage
Play it Fast for Cheetahs	N. CA	13,325	5 February 2015	US
Play it Fast for Cheetahs	N. CA	2,467	27 February 2015	Northern California
Walkway Marathon	NY	13,538	3 March 2015	US
Walkway Marathon Correction	NY	13,547	3 March 2015	US
Play it Fast for Cheetahs	N. CA	2,477	5 March 2015	Northern California
Walkway Marathon	NY	13,325	31 March 2015	US
Walkway Marathon – Sponsor a Runner	NY	13,319	14 April 2015	US
Whale Watching	N. CA	1,207	30 April 2015	Northern California – Bay Area
Whale Watching	N. CA	1,241	12 May 2015	Northern California – Bay Area
Whale Watching	N. CA	1,239	15 May 2015	Northern California – Bay Area
Humans for Cheetahs Race	Washington	521	2 June 2015	Washington
Join the Marathon Team	Oregon and Washington	1461	28 July 2015	Oregon and Washington
Hero 5k	Washington	515	11 Sept 2015	Washington

Informational/Targeted E-Blasts

Eight targeted e-blasts were sent out to invite partners to events with Dr. Marker during her European Tour. Twenty-one targeted e-blasts were sent to invite partners to events associated with Dr. Marker's USA Spring and Fall Tour. The schedule of e-blasts is listed in Table 32. Table 33 lists 10 e-blasts sent out for miscellaneous informational topics.

Table 32: E-Blasts associated with US tours in 2015.

Description	Distribution	Date	Coverage
UK Invitation	921	3-Feb-15	UK
Italy Invitation	412	5-Feb-15	Italy
Belgium Invitation	135	5-Feb-15	Belgium

Germany Invitation	796	21-Feb-15	Germany
French Invitation	424	24-Feb-15	France
French Invitation	434	25-Feb-15	France
Netherland Invitation	282	26-Feb-15	Netherlands
French Invitation	432	27-Feb-15	France
Spring Tour Invitation	13,534	18-Feb-15	US
Spring Tour Invitation – Correction	13,601	18-Feb-15	US
Indianapolis Zoo	1,487	4-Mar-15	Illinois, Indiana, Kentucky, Ohio
City Island	987	5-Mar-15	New York, New Jersey, Rhode Island, Connecticut
Oklahoma City	457	9-Mar-15	Oklahoma and Texas
Spring Tour Invitation	13,525	10-Mar-15	US
Spring Tour Invitation – Correction	13,519	10-Mar-15	US
Santa Barbara	1,262	27-Mar-15	Southern California
Palm Springs	1,263	30-Mar-15	Southern California
Happy Hollow	1,184	1-Apr-15	Southern California
California Tour	2,422	2-Apr-15	California
Dawson	2,420	3-Apr-15	Northern California
Sherman Oaks	1,256	6-Apr-15	Southern California
Palm Springs Reminder	1,253	7-Apr-15	Southern California
Dawson Reminder	1,185	8-Apr-15	Northern California
Cal Academy	1,183	9-Apr-15	Northern California
EU Tour Thank You	387	9-Apr-15	EU
Santa Barbara Reminder	1,256	13-Apr-15	Southern California
New York 2 Invitation	93	17-Apr-15	Select NY Partners
Sherman Oaks Reminder	1,265	21-Apr-15	Southern California
New York 2 Reminder	94	22-Apr-15	Select NY Partners
US Spring Tour Thank you	13,543	29-May-15	US
Fall Tour Save the Date	13,346	17-Jul-15	US
Auction Items	13,332	29-Jul-15	US
Winery	1,193	11-Aug-15	NorCal
DC Gala	946	21-Aug-15	DC, Virginia, Maryland
BCBP	1,457	21-Aug-15	Oregon, Washington
Winery Reminder	1,443	4-Sep-15	California
DC Gala Reminder	940	4-Sep-15	DC, Virginia, Maryland
BCBP Reminder	1,183	4-Sep-15	Oregon
Fall Tour Save the Date	13,090	8-Sep-15	US
BCBP Reminder	1447	1-Oct-15	Oregon, Washington
DC Gala Reminder	2,109	2-Oct-15	DC, Virginia, Maryland
AZA TY	693	6-Oct-15	AZA Attendees
Santa Cruz Veterans	202	8-Oct-15	Northern California
Online Auction	12,467	9-Oct-15	US

Cheetah Seminar	955	9-Oct-15	DC, Virginia, Maryland
Santa Cruz Veterans Reminder	201	12-Oct-15	Northern California
Explorers Club	968	13-Oct-15	New York City
DC Gala	971	14-Oct-15	DC, Virginia, Maryland
Explorers Club	960	16-Oct-15	New York City
DC Gala	972	17-Oct-15	DC, Virginia, Maryland
DC Gala	971	20-Oct-15	DC, Virginia, Maryland
Online Auction	12,448	20-Oct-15	US

Table 33: E-Blasts associated miscellaneous informational material.

Description	Distribution	Date	Coverage
Happy Near Year	12,951	1 January 2015	US
Google Hangout – EU	4,242	15 January 2015	EU and Oceania
Volunteer Appreciation	536	15 April 2015	Volunteers
WCN Expo	1,052	6 May 2015	Iowa, Indiana, Illinois
SCBI Invite	975	13 May 2015	Washington, DC, Virginia, Maryland
Annual Report	730	20 May 2015	Scientific Board and Zoos
Suzi Eszterhas Event	2,568	21 May 2015	California
DC Open House	972	27 May 2015	Washington, DC, Virginia, Maryland
DC Open House Reminder	971	4 June 2015	Washington, DC, Virginia, Maryland
Angie – Welcome	13,531	18 June 2015	US
UAE Exhibit	289	20 Oct 2015	UAE

Management of Constituent Information

CCF continues to track more information on each partner record in our donor database system, Bernard. All email blasts, mailing campaigns, and phone calling campaigns are tracked through Bernard. Each individual record shows the communications sent and the responses received from that partner.

Bernard's one giving page to track donations given to multiple appeals and segments was used for one memorial fundraiser, ten birthday parties, one wedding, and one zoo fundraiser. The parties raised US\$5,590 and generated 54 new donors.

Beginning with the 2015 Fall Tour, events with significant online auctions were hosted through Bidding for Good. Although this requires uploading information into the Bernard database, the software allows event guests to have a better customer experience and for capacity expansion to raise funds at events and online. Six events in 2015 used Bidding for Good to sell tickets or participate in the online auction. Through Bidding for Good we raised US\$56,092.

Grants

Table 34 lists the awards and grants received or in progress between January and December 2015.

Table 34: Grants or awards received or in progress during 2015

Recipient	Grantor	Notes	Value	Date
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CCF USA	Empowers Africa	LSGD	US\$5,000	21 May 15
CCF USA	Columbus Zoo	Rebuild	US\$25,000	5 May 15
CCF USA	The Ohrstrom Foundation	GWL	US\$40,000	12 May 15
CCF USA	Pittsburgh Zoo and Aquarium	LSGD	US\$3,000	17 Jun 15
CCF USA	The Bay and Paul Foundation	FFA	US\$15,000	6 Oct 14
Pending Grants or Awards (submitted)				
Recipient	Grantor	Notes	Value	Date
CCF UK	EOCA	Bushblok	€30,000	-
CCF USA	AZA			-
CCF USA	WWF			-
CCF USA	Dreyfus Foundation			-
CCF USA	Sea World Busch Gardens	Scat Dogs		-
CCF USA	Sea World Busch Gardens	GWL		-
CCF USA	Levinson Foundations			-
CCF USA	Fresno Chaffee Zoo			-
CCF USA	Abraham Foundation		-	-
CCF USA	Terra Viva			-
CCF USA	Conservation Food and Health			-
CCF USA	Indianapolis Prize	Award	-	-
CCF USA	Ludwick Family Foundation		US\$30,000	-
CCF USA	People's Trust for Endangered Species			-
CCF USA	Mohamed bin Zayed Species Conservation Fund			-
CCF USA	Prince Bernhard Foundation			-
CCF USA	Walt Disney Foundation			-

International Tours and Events

Dr. Marker's tours during this year included six European countries in February-March, eight states in the U.S in the spring, as well as 11 U.S. states and Canada in the fall. Her tours focused on the celebration of CCF's 25th Anniversary and served to re-introduce her first popular book about her cheetah work, *A Future for Cheetahs*, featuring exclusive and exceptional photographs by Suzi Eszterhas. Below is a summary of fundraisers, lectures, conferences, zoo visits, awards, and special events supported by the CCF USA and international Chapters and international fundraising partners.

Fund Raisers 2015

- On 8 February 2015, Dr. Marker was hosted by CCF Belgium for a meet-and-greet dinner in Brussels.
- In mid-February 2015, CCF's Italian liaison hosted meet-and-greet dinners for Dr. Marker in Rome, Milan, and Verona.
- CCF's fundraising partner, Aktionsgemeinschaft Artenschutz (AGA) e.V., hosted Dr. Marker for a meet-and-greet dinner on 28 February 2015 in Munich.

- CCF's French fundraising partner, AMIFELINS, hosted a meet-and-greet dinner for Dr. Marker in Paris in late February.
- A meet-and-greet dinner hosted by CCF's fundraising partner in Holland, the SPOTS Foundation, was held on 1 March 2015 in Hilvarenbeek.
- CCF USA Trustee Paola Bari and the New York Chapter hosted a small fundraiser in City Island, New York at Sea Shore restaurant on 22 March 2015. This was the kick-off event for the spring tour and involved 25 guests with ticket priced at US\$75. Dr. Marker held a book signing and sold Namibian crafts. Total income raised was US\$1,803.
- On 27 March 2015, CCF USA Trustee Vicki Gourley and the Oklahoma Chapter hosted a special 'Meetah Cheetah' event in downtown Oklahoma City. It was a sold out event with tickets ranging from US\$125 to US\$1,000 for VIPs. Over 110 guests enjoyed a silent and live auction event. Total event income was US\$45,300.
- CCF USA Trustee Emanuel J. Friedman and Simone Friedman of EJP Philanthropies hosted an event in conjunction with the Houston Zoo on 29 March 2015. New cheetah friends Nick and Katie Johnson hosted the event at their home in Houston with over 120 guests from the Texas area including former CCF Chair Annie Graham and her husband, Bob Graham. The event in celebration of CCF's 25th Anniversary served to raise awareness and raised over US\$28,104 in donations.
- Dr. Marker had a brief stopover in Denver, where she was hosted by her cousin Deon Smith and neighbours Cathy and Alan Curtis for a potluck fundraiser. The event offered Dr. Marker an opportunity to reconnect with cheetah friends, including CCF USA's former director Nick Nicholson and Trustee Vance Martin of The WILD Foundation. The gathering garnered over US\$8,500 in donations and book and merchandise sales.
- The Dawson Cole Fine Art gallery hosted Dr. Marker for a special fundraiser with an ambassador cheetah on 11 April 2015 in Carmel, CA. The ambassador cheetah Themba, owned by Rob and Barb Dically of Wild Cat Education and Conservation, helped to support this 25th Anniversary event with renowned artist Richard MacDonald and his daughter Michele Jayson. The event raised over US\$3,640.
- On 15 April 2015, CCF USA Trustee Patricia Klitgaard hosted a fundraising luncheon at the Presidio Golf Club with the support of cheetah friend Dee Norris. This is was a special gathering of San Francisco high-end donors and board members to celebrate CCF's 25th Anniversary tour. The luncheon received donations totalling over US\$8,000.
- New cheetah friends Jeannie and Bruce Nordstrom hosted a private cultivation party at their home in Rancho Santa Fe on 18 April 2015. CCF USA Director Eric Berman flew in from Seattle. Over 38 new friends joined Dr. Marker and supported CCF through her book signing of *A Future for Cheetahs*. A total of US\$3,900 was raised.
- Roswitha Smale hosted an event at her new home in Palm Springs in honour of CCF's 25th Anniversary. CCF USA Trustee Marisa Katnic and CCF SO CA Chapter helped to support the 19 April 2015 event, which hosted over 100 guests and the cheetah ambassador Masika from Wild Wonders. Tickets priced at \$125, along with merchandise and silent auction items, raised US\$13,000.
- Dr. Marker returned to Los Angeles area for the 4th Annual 'Meetah Cheetah' event in Sherman Oaks, hosted by CCF USA Trustees Alan Feldstein and Elizabeth Marquart at the home of Rory Posin. The cheetah showcase and VIP event included ambassador Masika of Wild Wonders. The event was two-tiered with regular tickets at US\$125 and VIP tickets for US\$225. The VIP tickets were sold out and over 100 guests attended the event, which overall raised just under US\$20,000.
- On 17 May 2015, CCF cheetah friend and boat captain Nancy Black hosted a Whale Watching fundraiser on her Sea Wolf II boat in Monterey with over 70 guests and crew. Renowned

photographer Suzi Eszterhas discussed her special cheetah photos from CCF featured in Dr. Marker's new book, *A Future for Cheetahs*. Past CCF Research Technician Burton J. Gaiseb was on hand to talk about CCF and the special cheetah programmes to protect the endangered species. The cruise lasted from 9:00am to 2:00pm with tickets sold for US\$49, raising almost US\$10,000 for CCF.

- On 13 September 2015, the start of Dr. Marker's fall tour, a special winery event was held at Savannah Chanelle Winery with the support of the NO CA Chapter. The event highlighted the 25th Anniversary of CCF with an ambassador cheetah and a VIP wine tasting and silent auction. Tickets sold for US\$125 and the event raised US\$14,735.
- In Seattle, a special evening was hosted by CCF USA Director Eric Berman at the Purple Café with 24 guests supporting a Dutch dinner and fundraiser for CCF. This successful event marked Dr. Marker's return to the area since the fall of 2014. The gathering generated over US\$18,000 in donations.
- Dr. Marker flew to St. Louis, Missouri to meet up with CCF USA Trustee Paul Zeminzski and co- host Katherine Snowden for a fundraiser at The Log Cabin in Ladue, Missouri on 28 September 2015. The dinner tickets were US\$250 per couple with over 65 guests, raising about US\$9,500.
- CCF Canada hosted Dr. Marker in Toronto and London, Ontario. Various lectures and fundraisers took place with the support of CCF Canada's Chair Carolyn Farquhar and Marie-Claude Erin. See details in the International Chapter section of the annual report.
- The annual Big Cat Big Party took place at the Oregon Zoo on 4 October 2015 with the major support from the Oregon Chapter volunteers and the special CCF Dinner Committee. The event had both live and silent auctions with an ambassador cheetah from Wildlife Safari. The tickets for the dinner, lecture and auctions sold for US\$150 with approximately 200 guests in attendance. The event raised over US\$54,000.
- On 8 October 2015, Dr. Marker was hosted by Safari West in Santa Rosa, California for the annual dinner and lecture: *Speed and Elegance, Saving the Wild Cheetah*. There was a silent auction early in afternoon followed by appetizers and dinner at 6PM. Tickets sold for US\$65 and the event raised US\$8,219.
- On 18 October 2015, a special cheetah event with the Columbus Zoo was held in Poughkeepsie, New York at the home of Theodora and Roy Budnik in honour of Dr. Marker receiving the Eleanor Roosevelt Val-Kill award presented to her at the Eleanor Roosevelt estate earlier that day. Tickets sold for US\$100 with a silent auction and ambassador cheetah BiBi attending to support the event. CCF USA Trustee Paola Bari and husband Jeffrey Aman co-hosted the event. The event raised US\$7,920 including US\$2,400 from the sale of unique cheetah Ostrich eggs.
- CCF USA Trustee Christine Osekoski hosted a private fundraiser for Dr. Marker with the ELEVEN CHARITY group in New York City on 19 October 2015 at Gander Restaurant with Iron Chef Jesse Schender. The dinner included a special book signing by Dr. Marker and collected over US\$10,000.
- The Explorers Club in New York held a special dinner and VIP Cheetah event on 20 October 2015 in honour of CCF's 25th Anniversary with a talk on cheetah conservation by Dr. Marker. Richard Weise of Born to Explore introduced Dr. Marker to a full house. The dinner tickets sold for US\$65 and the VIP tickets sold for US\$250. The Leo Zoological Conservation Center tried to participate in the VIP event with their ambassador cheetah Adaeze but at the last minute had to cancel due to permitting issues.
- The annual DC Gala and VIP cheetah fundraiser was held at the offices of Foley & Lardner LLP with the support of the DC Chapter and CCF USA staff on 22 October 2015 in Washington, DC. Tickets sold for US\$125 for regular admission including dinner and silent auction, while the VIP tickets sold for US\$250 per person with a photo opportunity with the Columbus Zoo ambassador cheetah Zemba. The evening had the additional support from EJP Capital associates as well as supporters from the DC, Virginia, and Maryland areas. The event collected US\$61,943 in sales and donations.

Lectures and Conferences 2015

- Dr. Marker launched her European lecture series with a lecture at Wild CRU – Oxford: *Biology, Ecology and Conservation of the Cheetah*, in Tubney, England on 12 February 2015.
- On 13 February 2015, Paradise Wildlife Park in Hertfordshire, England hosted Dr. Marker for a return visit, with a lecture titled: *25 Years of Cheetah Conservation – Changing the World to Save the Cheetah*.
- On 17 February 2015, Dr. Marker presented her lecture titled *25 Years of Cheetah Conservation – Changing the World to Save the Cheetah*, at the World Association of Zoos and Aquariums (WAZA) and the IUCN Global Species Programme office in Gland, Switzerland.
- In mid-February 2015, Dr. Marker travelled to Italy with her lecture titled *What if We Lost the Cheetah? Threats and Solutions for Predators in Africa and the World* at the museums of natural history in Milan and Verona, and the Museo Civico di Zoologia in Rome.
- During her visit in Germany in late February 2015, Dr. Marker was hosted for a lecture at the Frankfurt Zoo (Zoo-gesellschaftshaus Frankfurt).
- Dr. Marker's European lecture series concluded in France with her lecture titled *Working for a Sustainable Future for the Cheetah* at the zoos Parc de Thoiry (Thoiry) and Parc des Felines (Ormeaux).
- Dr. Marker began her US spring lecture tour at the Indianapolis Zoo on 26 March 2015 with a Brown Bag lecture and book signing at the Dolphin Gallery hosted by Karen Burns, Executive Vice President of External Relations and Indianapolis Prize at the Zoo. Over 110 guests attended the lecture *Changing the World to Save the Cheetah*. The event, which included a book signing and sale of Namibian crafts, raising just under US\$3,000.
- Dr. Marker also gave a lecture to Girls in Science at the Indianapolis Zoo after her Brown Bag talk, to girls ages 9 to 14. The programme included a talk with Dr. Marker, a short programme on cheetahs as well as a visit to see the zoo's cheetahs and keepers.
- In Oklahoma City, Dr. Marker gave a talk on 27 March 2015 with the Columbus Zoo cheetah and CCF USA Trustee Suzi Rapp for a youth programme called 'Kids Meetah Cheetah' at the Esperanza House, hosted by Carol and Gary Sanders. At noon, Dr. Marker had lunch and a talk at the Oklahoma Zoo.
- Dr. Marker visited the Happy Hollow Zoo and gave a talk celebrating 25 years of cheetah conservation in the newly-built zoo garden on 2 April 2015. Supporter Vanessa Rogier and Zoo Director Valerie Riegel hosted the cocktail party for cheetah and zoo friends from the San Jose area, including a City Council. Major donors created a special match for the evening raising US\$3,000.
- On 3 April 2015, Dr. Marker travelled to the University of California, Davis' Gladys Valley Hall to lecture to CCF friends and veterinary students from the class of 2014-16. Dr. Marker discussed cheetah conservation over the past 25 years. A tea reception in her honour was held after the talk with university's professors and students. The Vice Chancellor for Research at UC Davis, Dr. Harris Lewin, was also in attendance and met privately with Dr. Marker.
- Dr. Marker had a brief stopover at Safari West to have dinner with CCF USA Trustees Nancy Lang and Walt Bodley, and also spoke to visitors at Safari West about CCF. This visit garnered US\$4,000.
- The California Academy of Sciences at the Golden Gate Park in San Francisco hosted Dr. Marker for a lecture in partnership with the Wildlife Conservation Network on 15 April 2015 to a sold-out audience of over 150 guests. The lecture 'The Life of Cheetahs' highlighted Dr. Marker's 25 years of work in the field at CCF Namibia. Crafts and book sales totalled close to US\$1,000.

- In Santa Barbara, Dr. Marker lectured at the Santa Barbara Zoo for cheetah friends from the area. Tickets sold for US\$20 to a sold-out crowd.
- The Living Desert hosted Dr. Marker a second time for a lecture and book signing on 20 April 2015. CCF raised over US\$1,400 in donations from this brief talk co-hosted by the CCF SO CA Chapter.
- The San Diego Zoo Park hosted Dr. Marker for a brief talk on 21 April 2015 to zoo staff and raised over US\$650.
- Dr. Marker attended the Association of Zoos and Aquariums (AZA) conference hosted at the Utah Hogle Zoo in Salt Lake City on 17-20 September 2015. She gave a special talk during the session Cheetah Conservation Before SAFE (Saving Animals From Extinction) titled: International Cheetah Day and the Importance of Partner Zoos in Raising Public Awareness in Endangered Species Conservation. CCF USA participated in the conference with a booth selling Namibian crafts and merchandise and raising US\$1,976.
- On 2 October 2015, Dr. Marker flew to Bozeman, Montana to receive the prestigious Edward O. Wilson Biodiversity Technology Pioneer Award for her seminal contributions to the biodiversity of life through conservation, preservation and sustainable human development. Dr Marker and four other honourees spent the weekend at Montana State University and later travelled to Yellowstone National Park for a private tour with Mr. E.O. Wilson and other invited guests.
- California Polytech hosted Dr. Marker for a university lecture celebrating 25 years of cheetah conservation work on 7 October 2015 in San Luis Obispo, California. Over 100 students and faculty attended the evening lecture. In addition, CCF stakeholder Bert Forbes was in attendance to support the lecture with his wife Candice, as well as Bill Plummer, professor at Cal. Polytech.
- The Fall 2016 Wildlife Conservation Network (WCN) Expo was held at the Mission Bay Conference Center in San Francisco on 10 October 2015. The Expo was sold out and included many cheetah supporters. Dr. Marker signed copies of her book, while CCF USA manned a booth with the support of CCF USA staff and Trustees, having raised US\$3,586 in book sales, merchandise and donations.
- Dr. Marker gave a special lecture titled Conservation in Action! Dogs Saving Cheetahs in Namibia at the Santa Cruz Veteran's Building on 13 October 2015. The lecture, which covered CCF's Livestock Guarding Programme, was enhanced by the presence of a Kangal dog. Tickets were US\$20 and generated US\$1,216.
- University of California - Santa Cruz hosted Dr. Marker for a lecture with the Ecology and Evolutionary Biology Department on at its Campus on 14 October 2015. The lecture was titled, '25 Years of Conservation- Biology and Ecology Leading to Conservation'.
- The 2015 Zoos and Aquariums Committing to Conservation (ZACC) conference was hosted by the Denver Zoo. Dr. Marker was a speaker during the session 'Keeping the Hope,' with her lecture titled 'A Future of Cheetahs: How biofuels and goat cheese can save wildlife and lead to sustainable development in Namibia'. A CCF booth was supported by the CCF Denver Chapter and volunteers in the area, selling Namibian crafts and CCF merchandise to raise US\$1,305 for the endangered cheetah.
- On 18 October 2015, Dr. Marker travelled to the former estate of Eleanor Roosevelt in Hyde Park, New York to receive the Eleanor Roosevelt Val-Kill Medal for her 25 years of cheetah conservation. Dr. Bruce Brewer, CCF General Manager introduced Dr. Marker, who gave a thank you speech to the award sponsors and honoured medallists. To the surprise of 270 guests in attendance, the Columbus Zoo supported the event by introducing a cheetah ambassador during the ceremony. . CCF USA Trustee Paola Bari was in attendance with her husband Jeff Aman, and CCF Executive Assistant, Paula Martin.

- In celebration of 25 years of cheetah conservation, Dr. Marker hosted a cheetah seminar with eight of her international cheetah colleagues and respected scientists at the Smithsonian National Zoo on 21 October 2015. The seminar was entitled, *Biology Conservation of Cheetahs*, and included lectures by Dr. Stephen O'Brien, former CCF Board Chairman, and Dr Bruce Brewer.
- The CCF USA Annual Board Meeting was held on 22-23 October 2015 in the Powell Room at the Cosmos Club in Washington, DC. CCF had 35 invited members and guests attending the meeting. Dr. Stephen O'Brien stepped down after 10 years as CCF Chair and passed the baton to Woodrow Garmon from Houston, Texas. In celebration of the 25 Anniversary of CCF, all board members and guests received a complimentary bronze medallion of Dr. Marker which was kindly reproduced by CCF USA Director Richard Kopcho.

Special Gatherings, Luncheons & Dinners 2015

- The ICCF U.S. Congressional International Conservation Gala was held on 19 March 2015 in Washington, DC. Dr. Laurie Marker and CCF staff attended the event, which honoured H.E. Prince Charles for his accomplishments as a leader in conservation.
- Dr. Marker attended the Explorers Club Annual Dinner on 21 March 2015 with the Club's Vice President for Flay and Honours, Constance Difede. The event, held at the American Museum of Natural History in New York City, gave Dr. Marker the opportunity to meet with her conservation partners and cheetah supporters.
- A special luncheon to thank CCF special stakeholders for their continued support was held at Gabriel's Restaurant in New York City. Among the attendees, were CCF USA Trustee Paola Bari and major supporter Dorothy J. McIlvaine.
- Dr. Marker attended the 'Inspiring Taste of Italy' wine tasting with CCF USA Board, Trustees, and staff members on 23 March 2015 to kick off CCF's 25th Anniversary tour. The event was hosted by Total Wine & More in McLean, Virginia.
- A special high tea at the Four Seasons Hotel was hosted by CCF USA Trustee Rohini Talalla for Dr. Marker on 24 March 2015.
- Dr. Marker attended a reception for U.S Global Chiefs of Mission in Sub-Saharan Africa hosted by the Corporate Council on Africa and the Business Council for International Understanding. The event, held in Washington, DC on 25 March 2015, provided Dr. Marker with an opportunity to interface with guests, including US ambassadors and chiefs of mission stationed in sub-Saharan African nations.
- CCF USA Director Polly Hix and Tony Fair hosted a special dinner for Dr. Marker at Harry and Izzy's Restaurant with Indy Zoo friends and cheetah supporters to celebrate the 25th Anniversary spring tour.
- CCF USA former Board Chair Annie Graham and husband Robert hosted a special dinner for Dr. Marker in Houston on 29 March 2015 in celebration of CCF's 25th Anniversary.
- After a lecture at UC Davis, Dr. Marker was hosted at a dinner in Sacramento with various cheetah friends and donors and CCF USA Trustee Carol Van Bruggen.
- Dr. Marker had dinner at Safari West with CCF USA Trustees Nancy Lang and Walt Bodley to celebrate the beginning of her spring 25th Anniversary tour. Dr. Marker spoke to guests about CCF's work on behalf of the endangered cheetah.
- CCF cheetah friends Steve and Robyn Stong hosted Dr. Marker for a dinner at their home with supporters Nancy Nenow and David Dolan as she travelled her way to Los Angeles and the Palm Desert area.

- CCF USA Director Sara Nichols hosted an Earth Day dinner for Dr. Marker with her special friends and associates in Los Angeles to hear about the mission and vision of CCF.
- Dr. Bruce Brewer and Dr. Marker attended the Tyler Awards ceremony on 24 April 2015 in Los Angeles. As a former Laureate, Dr. Marker had an opportunity to meet the new awardees and re-connect with former conservation colleagues.
- CCF cheetah friend from the Explorers Club Ann Passer hosted a special evening with Dr. Marker, Dr. Bruce Brewer, and the CCF NY Chapter with a special guest, an Anatolian shepherd dog, for the last night of the 2015 spring tour. Many NY Chapter members and donors from the area were in attendance.
- CCF supporters Nancy Nenow and David Dolan hosted a welcome dinner for Dr. Marker at their home during her visit to San Diego on 21 September 2015 with fellow cheetah friends from the area.
- Jordan Sack from Jordan Couture co-hosted a luncheon with the Charter One Hundred group at the La Jolla Country Club on 22 September 2015. Dr. Marker introduced cheetah conservation to a full house and spoke about 25 years of cheetah survival.
- Chris Liebenberg of Piper & Heath Travel hosted a private *braai* at his home in San Diego for Dr. Marker, family and cheetah friends in celebration of her visit to the area.
- CCF USA Director Sara Nichols hosted a fundraising dinner in Los Angeles for Dr. Marker with cheetah friends and supporters on 23 September 2015. The gathering raised US\$1,800 in donations.
- Dr. Marker had a special book signing of her book, *A Future for Cheetahs*, at the Ferry Building location of the Book Passage bookstore in San Francisco.
- CCF supporter Rosemary Baker hosted a private dinner party for cheetah friends at The Battery Club in San Francisco on 11 October 2015.
- A special dinner was held on 17 October 2015 in honour of the 2015 Eleanor Roosevelt Val-Kill Award medallists at the Astor Court, Rhinebeck, NY. Dr. Marker attended the dinner with Dr. Bruce Brewer and CCF USA Trustee Paola Bari and her husband Jeffrey Aman.

CCF USA Chapter Support 2015

- For the sixth consecutive year, CCF SO CA Chapter set up a booth on 18 April 2015 in celebration of Earth Day at the San Diego's Balboa Park EarthFair. This event represents every type of environmental organisation, governmental programme and commercial enterprise, with goods services, and causes that address the environment and quality of life. In addition to raising donations, CCF sold cheetah items and crafts from Namibia and memorabilia. This annual event provides CCF with an opportunity to share its work at a venue that draws over 60,000 participants.
- On 20 June 2015, CCF SO CA was an exhibitor at the Old House Fair 2015, where 'history comes alive'. The event, held in conjunction with the centennial celebration of the 1915 Panama-California Exposition in San Diego, offered CCF an opportunity to share the mission and vision of the organisation with the numerous Fair attendees.
- The CCF NY Chapter, hosted by USA Trustee Paola Bari and Chapter members, set up a booth to present CCF's programmes and activities, including the Walkway Marathon, at the Millbrook Rotary Club on 12 June 2015. There were 5,000 people in attendance and 19 runners supporting the event from CCF alone. CCF had great exposure and sold Namibian crafts and t-shirts, having raised over US\$3,600 with the help of Crowdrise.

- The CCF NO CA Chapter hosted a Cheetah Potluck at Goggle in Mountain View, California on 23 August 2015. Chapter members and volunteers came together to plan events for Dr. Marker's fall tour. About 20 people joined the gathering with cheetah items sold.
- The CCF NO CA Chapter had a special 'Shots for Spots' fundraising event at Paul and Eddies bar in Cupertino, California on 24 October 2015. A live band in cheetah gear was there with a CCF video and photos to enhance the atmosphere of the event. A silent auction was held with raffle tickets and CCF merchandise raising US\$8,500.
- On International Cheetah Day, CCF NO CA Chapter hosted another 'Shots for Spots' event to raise awareness of the endangered cheetah in Santa Cruz, California. More than 50 guests attended the event, which raised over US\$2,000.
- The CCF NY Chapter hosted nearly 150 people for a community event in Poughkeepsie called A Sense of Africa to raise awareness of the mission of CCF and the endangered cheetah. An Anatolian shepherd dog provided by Ann Collins was there to support the Livestock Guarding Dog programme. The event, held on 24 October 2015, raised almost US\$1,000.

B. International Affiliates

1. Cheetah Conservation Fund Canada

The past three years

It has been three years since a new board in Canada has been established to renew Canada's efforts to support CCF. The nine-member Canadian board has transferred C\$35K, C\$76K, and C\$58K over the period 2013-2015 to CCF Namibia. In addition to strengthening our donor base across Canada, CCF Canada is building partnerships with wildlife zoos/sanctuaries, and with schools and young kids across the country, as well as pursuing opportunities with Canadian universities to support student interns at CCF. The Canadian team has secured continued funding from two family foundations that are committed to supporting key programmes at CCF, and will be continuing these efforts in 2016.

CCF Canada began the year with its AGM inviting donors from across Canada to join for an online meeting, at which Dr. Marker and Dr. Brewer provided updates and fielded a range of questions.

Partnerships

CCF Canada's collaboration with the Toronto Zoo has led the cheetah keepers at the zoo to proactively include CCF as part of their Cheetah Awareness week in July. This is a fine opportunity to present CCF's programmes and raise visibility of the Canadian charity. Close to C\$3,000 were raised during the summer.

The partnership with ECHOage (the online party provider) led to another 17 children's parties choosing CCF Canada as their gift designation. These children are becoming great ambassadors, for cheetah and the work being done by CCF to protect them in the wild. These children are an additional springboard for a growing schedule of school presentations across the country.

Expanding understanding of CCF's work

In May of 2015, CCF Canada's Chair, Carolyn Farquhar, took a personal one-month trip to CCF Namibia to see first-hand the conservation, research, animal husbandry and tourism efforts at CCF's Centre. As well, Carolyn had the opportunity to meet the CCF Namibia staff and Board.

Dr. Marker welcomed back to Canada

In early October, Dr. Marker visited Canada for two days, during which she was a guest speaker at a Global Sustainability and CSR (Corporate Social Responsibility) conference for Canadian managers and experts in the mining industry. Her presentation was entitled 'Why conservation NGOs should be integrated in CSR programmes?' Three of the Canadian mining firms involved in Namibia were present, and represented a great opportunity to further dialogue.

Dr. Marker also gave two public lectures, in London and Toronto, where over 150 attendees had the opportunity to gain an in-depth understanding of the work that CCF does and its accomplishments over the last 25 years. She also met with nearly 80 middle-school children studying sustainability and a dozen young cheetah enthusiasts who have been raising money for CCF through their birthday parties. During Dr. Marker's visit, Toronto's major daily, as well as local press, featured stories in connection with these events.

Social media - expanding CCF's base in Canada

CCF Canada's social media outreach, primarily through Facebook and Twitter, is building recognition in the country, and helping to provide timely updates about CCF's work, efforts in Canada, and key cheetah issues related to conservation science and policy. The material generated by CCF USA and Namibia is essential for this effort. In December, CCF Canada worked closely with CCF USA and other CCF affiliates around the world to support International Cheetah Day, including a Twitter storm on 4 December 2015, which helped CCF Canada to reach 1000 followers.

2. Cheetah Conservation Fund Australia (CCFA)

During 2015, the CCFA consolidated its ties with Zoos South Australia, the governing body of Monarto Open Range Zoo. The Zoo houses the highest population of cheetahs in Australia and has been successfully breeding them for more than a decade.

Membership increased, but not significantly. Funds were also raised through Monarto events, calendar sales and other donations. The CCFA committee is aware that sponsorship would be an important element for growth, but it cannot pursue this without having Deductible Gift Recipient status, i.e. legislative approval for donations of \$2 or more to be tax deductible. This is particularly difficult to obtain in Australia under the current government.

A member, who is a Director of The China Tiger Revival Australia environmental organisation (CTRA), currently winding down, suggested in July that the organisations merge, so that CCFA could take over CTRA's already approved DGR status. All legal steps were taken to register the organisation with a new name, but the final hurdle, a signing-off by the Minister for the Environment, has been pending since early October, caught in red tape.

Newsletters' have proved popular, with the latest announcing Dr Laurie Marker's first Australian tour, in March 2016. Much of the latter part of 2015 has seen a flurry of activity among committee, members and friends of the CCFA to organise this momentous event. Dr Marker is expected to make quite an impression in Australia, and thus significantly raise Australians' awareness of the plight of the wild cheetah.

3. Cheetah Conservation Fund Italy

CCF Italy held an Italian tour of Dr. Marker in Milan, Verona and Rome on 18, 19 and 20 February respectively.

Dr. Marker lectured at the museums of natural history in Milan and Verona, and the Zoological Museum in Rome. She also gave presentations at the Bioparco zoo in Rome, where attendees had an opportunity to visit the African wild dog exhibit with specialists and the Zoo director. In Verona, Parco Natura Viva's Director Cesare Avesni welcomed Dr. Marker for a presentation to all Park's staff, followed by a reception. In addition, fundraising dinners in typical Italian restaurants were held in the three cities.

There was ample media coverage of Dr. Marker's visit, including an interview with Licia Colò, a well-known TV journalist and hostess of the TV2000 show, *Il Mondo Insieme* (The World United). The 10-minute segment aired on 1 March 2015, and included video filmed at CCF in Namibia. Other interviews included Radio Tre (Swiss National Radio), and various local papers in Milan, Rome and Switzerland.

On October 30, CCF Italy hosted a fundraising conference about CCF in Albignasego (Padova). The event was introduced by Elisabetta von Hoenning and Rossella Clai. Rossella appeared on local TV for an interview about CCF's work.

On 22 December the new association Cheetah Conservation Fund Italia Onlus was registered as an Italian a charity, and has begun to register new members.

4. AMIFELINS

2015 has been quite an eventful year for AMIFELINS in France, with many opportunities to spread the word about CCF and cheetah conservation. An overview of events and activities is below.

- 26 February 2015: Dr. Marker spoke at a conference held by the National Veterinary School of Maisons-Alfort (ENVA), with more than 60 students and several lecturers in attendance. Dr. Marker presented the documentary 'Extinction – The Cheetah' and discussed CCF objectives and conservation programmes. The presentation was followed by discussions with students, genetics laboratory staff, and more specific discussions with Dr. Alain Fontbonne, a Lecturer in Maisons-Alfort and Vice-Chair of the Conservation and Reproduction of Endangered Wild Animal Species (CRESAM) in France. This French NGO of scientists and veterinary surgeons is dedicated to assisted reproduction of endangered species --mainly large felids in Africa and Asia, conducts artificial inseminations on wild females, and curates a sperm bank. Dr. Norin Chai of the National Museum of Natural History and Veterinary Surgeon of the Zoo of Jardin des Plantes in Paris, also participated in these discussions.
- 27 February 2015: Dr. Marker met with the management team and veterinarians at Parc de Thoiry (Thoiry Animal Park), as well as with veterinary students from ONIRIS Nantes Atlantic College of Veterinary Medicine, Food Science and Engineering and from ENVA in Maisons-Alfort.
- 28 February 2015: A public conference was held by Dr. Marker at the Parc des Felins, with more than 80 persons attending. The event raised €2,000 for CCF.
- 21 March to 12 April 2015: Amifelins hosted a booth at the Exhibition about The Big Cats in La Flèche (Sarthe – 72), organised in cooperation with 'Fous de Nature' association. AMIFELINS had four panels showing CCF objectives and programmes of actions to save the cheetah. Printed copies of French translations of CCF's website were available for the visitors. Danielle Beck, a renowned wildlife painter, displayed eight of her paintings about big cats. Her support was much appreciated. More than 600 visitors attended during this exhibition and many new contacts were established.
- 19 September 2015: The AGM of AMIFELINS was held. Mr. Patrice AUBRY, Co-Founder and Chair from 2009 till 2011, was elected and has accepted to join the Board again.
- 10 to 13 November 2015: At the invitation of the School of Philanthropy (Paris), Catherine EBBS-PERIN gave presentations about the work of AMIFELINS and CCF during workshops with 14 pupils, 8 to 11 years old at various Parisian schools. The partnership between the School of Philanthropy and all the schools in Paris aims to inform and motivate the younger generation about all the voluntary work of associations in the great causes of the world, namely humanitarian and those related to protection of Environment and Wildlife. Thus, AMIFELINS is now invited, whenever children choose to work with Big Cats and are determined to take actions to help spread the word about the threats they face. The children prepared information panels and drawings about cheetahs in their schools, having decorated and worn cheetah masks on International Cheetah Day, 4 December. They also wrote a play which was shown in their school at the end of this workshop and made a video which

was posted both on AMIFELINS web site and on the CCF YouTube channel. These children, particularly in the Etienne Dolet School, proved to be very enthusiastic about cheetahs.

Additionally, given a growing interest in the issue of illegal cheetah trafficking, AMIFELINS invited Patricia Tricorache to give an informal presentation to some of its members while in transit through Paris in August.

5. Cheetah Conservation Fund UK

Background

The CCF UK Board was reconstituted at the end of 2014 with little activity previously for a number of years. The 2015 annual plan focused on building awareness of CCF in the UK as well as raising funds, as summarised below:

- Raise £50,000 through:
 - Events (£15K)
 - Individual giving/sponsorships (£5K)
 - Corporate sponsorships/donations (£20K)
 - Grants (£10K)
- Build CCF community in the UK and raise awareness of CCF UK
- Build CCF UK Board and Fundraising Committee

Events

Kickstart Event (January)

CCF UK hosted a networking kickstart event in late January with the objective of identifying people with the required skills and interest in helping build the charity. Over 35 people attended, and Jonathan Scott (CCF UK Patron of BBC Big Cat Diaries fame) and Dr. Jane Galton (CCF UK Board Member) gave presentations. From this event, we began building the database of supporters as well as developing the CCF UK Fundraising Committee.

Laurie's UK Visit (February)

Laurie gave talks at various zoos and safari parks and a presentation at a conservation conference in Bristol. She also met some CCF UK supporters. There was insufficient lead time for CCF UK to host any events and in the future, the Marketing Team will work with CCF Namibia to plan productive trips.

London Marathon (April)

A CCF UK Marketing Team member (Dr Amelia Zakiewicz, ex CCF veterinarian) completed the marathon, raising over £1,500.

CCF UK Marketing Team meeting (April)

The Fundraising Committee changed its name to the CCF UK Marketing Team to reflect the broader remit. The team had their first meeting in April, comprised of 12 talented volunteers (most working full time) with a variety of skills including PR, marketing, institutional fundraising, international development, corporate, environmental science and climate change, media (radio and filmmaking) and events management. This team is proving to be extremely helpful in helping build CCF in the UK. Further meetings were held in July and

September and the team has now grown to 15, bringing in additional expertise in social media, website design, database systems and veterinary partnerships.

Wild Place Project and Wildscreen Event (May)

The Wild Place project in Bristol (Bristol Zoo) launched their cheetah enclosure with the arrival of three male cheetahs. Jane Galton, Sue Champion and Maggie de Pree of CCF UK attended this event with the goal of building a partnership with this zoo in 2016. The team also attended the evening launch of a Wildscreen photo exhibition in Bristol and has developed a very useful partnership with this organisation (educational materials and wildlife photographs).

Photo exhibition (October)

This 2-week photo exhibition was held at Patrick Mavros, a very prestigious space and shop in Chelsea (www.patrickmavros.com). CCF UK partnered with Wildscreen, Patrick Mavros and Strutt & Parker (high-end estate agents) who covered most of the costs. The event was curated by Sophie Stafford (former BBC Wildlife Magazine editor) and showcased some of the world's best-known wildlife photographers who donated their cheetah photos for sale.

The exhibition culminated in two evening events. The first night was attended by over 70 people, which included CCF UK supporters and photographers. The second night was hosted by the TV presenter and comedian, Griff Rhys Jones, with over 150 people attending, including well known wildlife conservationists and film makers, high net worth individuals, and the press. A small auction of themed prizes (wildlife safari, new range Swarovski binoculars and tickets to Namibian Rugby World Cup game, with signed rugby ball by the Namibian team) was held with an auctioneer from Christie's introducing this part of the evening. Over £20,000 was raised, about 40 new HNW individuals were added to CCF UK's database, and the event was written up in two London society magazines.

British Vets and Nursing Association Conference BVNA (October)

The Director of BritVets Services (BVS), Scott Ashcroft (new member of CCF UK Marketing Team) chose CCF UK as one of their official partners for the event and included it on their stand at the 2-day BVNA conference. Dr Amelia Zakiewicz represented CCF UK, and a formal partnership was formed with BVS, who will promote all CCF UK's future events as well as organise fundraising events.

International Cheetah Day

CCF UK designed and led the global Twitter Storm. This comprised developing the Tweet Sheet and liaising with CCF US, Namibia and other CCF Charities to plan the day. Following the Twitter Storm, CCF US reported an increase in FB likes, Twitter and Instagram followers and hits to the global website, as did CCF UK (see below). CCF UK Trustee Maggie de Pree conducted a session in a local school to prototype an approach for future work with schools. It was a learning experience, which will serve to build efforts to work with schools and zoos.

Other Fundraising Streams

- *Individual giving*: Grown to over £3000 per year
- *Corporate partnerships*: More work is required to understand the CCF Brand and global policy regarding corporate partnerships and sponsorship, ensuring that our brand is only associated with companies whose values align with CCF's and who are committed to helping achieve impact. CCF UK will pursue corporate partnerships when a clear strategy and guidelines have been developed.
- *Grants*: There was insufficient time in 2015 to develop this avenue.

Build CCF Community in the UK and raise awareness of CCF UK

- Created CCF UK Facebook page, and Twitter and Instagram accounts;
- Increased likes for FB page, tripling from a very low base;
- Increased CCF UK Twitter followers by 10%;
- Built database of active interested CCF supporters and raised awareness of CCF UK through events and social media
- Developed Cheetah Chooseday, a weekly tweet of cheetah photo.

Build CCF UK Board

Three new members (Jane Galton, Maggie de Pree and John Playle, Treasurer) joined the CCF UK Board in November 2014, so 2015 started with 4 members. Alison Ravano, the longest standing member (over 10 years) stood down at the end of 2015. The remaining Board members made the decision to build the Board slowly, ensuring that it comprises the requisite skills to help build the charity and achieve its objectives. Peter Jarman, MD of a successful UK property company and visitor to CCF Namibia, joined the board in June, bringing valuable corporate expertise.

Finances

Accounts for CCF UK had not been filed with the Charity Commission and HMRC (UK tax department) for over three years, placing the organisation in serious danger of losing its charitable status. CCF UK's new Treasurer compiled the required accounts and submitted these within the required time limits.

2015 accounts are not finalised but the estimated total raised was £75,000:

- Events (London Marathon and Photo Exhibition: £22,000 pre-costs)
- Grants: £10,000
- Legacy: £40,000 (livestock guarding dog programme and vehicle)
- Individual giving: £3,000 (estimated)

NB: The grants and legacy donations were non solicited.

6. Aktionsgemeinschaft Artenschutz (AGA) e.V.

In February 2015, AGA's Director, Birgit Braun, participated with Dr. Marker in the meeting 'Towards an EU strategic approach to wildlife conservation in Africa' organised in Brussels by the Directorate General for International Cooperation and Development of the European Commission. This meeting was followed by a joint meeting with the CITES Secretariat on 16 February in Geneva, Switzerland, regarding the illegal trade in cheetahs.

From 22-23 February 2015, Dr. Marker visited in Germany for a fundraising dinner in Munich and a presentation at the Frankfurt Zoological Garden.

In March 2015, Birgit participated in the 1st European Cheetah Workshop at Beekse Bergen, Netherlands, which was organised by CCF and the Safaripark Beekse Bergen.

In May 2015, Birgit was invited to give a presentation about cheetah conservation at Wilhelma Zoo and Botanical Garden (Stuttgart) as part of their 'wild week-end' programme.

In July 2015, AGA successfully conducted a fundraising challenge to match a €5,000 donation from the Konrad Mayer & Peter Scheufler Foundation.

Also in July 2015, AGA published a German version of CCF's Teacher's Resource Guide, *Cheetahs: A Predator's Role in the Ecosystem*. AGA received funding for the production of a CD, which has now been sent to over 100 schools in the federal state Baden-Württemberg.

In August 2015, the German version of the Teacher's guide was awarded as a contribution to the UN Decade on Biodiversity.

Also in August, AGA was able to facilitate the visit of a professional dog trainer from the UK to Namibia in support of CCF's scat detection dog programme.

At the end of August 2015, Birgit was invited to a regional TV show to talk about AGA's work with wildlife detector dogs and mentioned CCF's scat detection dog programme.

AGA was able to provide funding for 25 camera traps for cheetah conservation on the occasion of CCF's 25th anniversary. In addition, 18 camera traps were funded to monitor the rhinos at CCF. AGA was also able to send to CCF several items like binoculars, SD cards and mobile phones, which it had received as in-kind donations (mostly used items). Using the donated mobile phones, CCF was able to set up a Carnivore Help Hotline, a 24/7 line where farmers can report and/or discuss issues with cheetahs and other predators.

A 5-page article about cheetahs and CCF was published in a very popular animal magazine, as well as a 2-page article in a popular kids' magazine. AGA also manned several information booths throughout the year, presenting information about its projects, including CCF's work.

B. PR, Marketing, and Media

1. Social Media

CCF has had great success in building its social media platforms. CCF has expanded @CCFCheetah across Facebook, Twitter and most recently Instagram in 2015. CCF also maintains a LinkedIn company page, YouTube channel, and Pinterest. In late December, CCF soft-launched its new page, "So you want a pet cheetah?" which aims at raising awareness about the threats that the illegal pet trade poses on wild cheetah populations (see Illegal Wildlife Trafficking section). Links to social media sites below:

- <https://www.facebook.com/CCFcheetah/>
- <https://twitter.com/CCFCheetah>
- <https://www.instagram.com/ccfcheetah/>
- <https://www.youtube.com/ccfcheetah/>
- <https://www.pinterest.com/ccfcheetah/>
- <https://www.linkedin.com/company/cheetah-conservation-fund>
- <https://www.facebook.com/CCFKeepCheetahsWild>

Facebook

At the beginning of 2015, the CCFCheetah Facebook page had 107,632 followers; by the end of the year, the number rose to 192,841. This represents an increase of 85,209 followers in one year; the largest yearly increase in followers for this page.

The top three countries represented among our Facebook followers are the United States (53,365), India (18,943), and United Kingdom (12,784). These three countries have the highest number of Facebook supporters per country. Namibia (1,644) continues to increase in Facebook supporters at a steady pace.

Most users of CCF Facebook are active online from 12:00 - 2:00pm (EST) with the highest point of activity reached at 1:00pm.

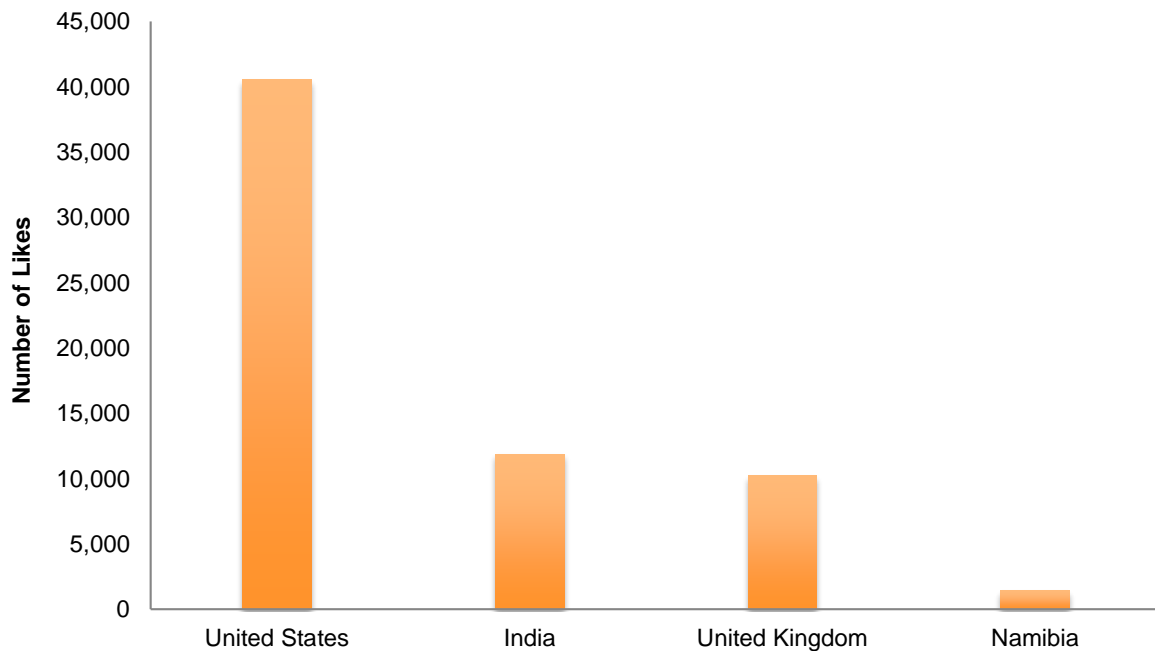


Figure 50: Number of Facebook users who like CCF by country.

Facebook Post Reach Analysis

Impressions are the number of times a post from a Facebook Page is displayed, whether the post is clicked or not. People may see multiple impressions of the same post. For example, someone might see a Page update in News Feed once, and then a second time if their friend shares it.

Highest ranking in impressions was a photo of cheetah Romeo on 31 January 2015, with 138,048 impressions, 6,969 post clicks, and 12,275 likes, comments, and shares.

Lowest ranking was the Brookfield Zoo booth announcement by WCN on 7 May 2015 with 1,826 impressions, 67 post clicks, and 90 likes, comments, and shares (neither post used @ to tag or a # (hashtag) trending topic to increase visibility. Ex: @Brookfield Zoo, @WCN or #volunteer #Brookfield; low reach is likely attributed to relatively small geographic relevance as well).

Tagging and Trending Topics

Tagging and participating in trending topics allows CCF to share messages within relevant and timely topics where social media users are already sharing. We can increase CCF's visibility via sharing and tagging using @ to tag people or groups and # for trending topics within posts.

- A post on 22 June 2015 added @Modern Veterinary Clinic to automatically link to the Emirati Clinic's Facebook page for the post about illegal pet trade and Dr. Marker's trip to United Arab Emirates (UAE), which reached 85,000 in total audience; 53,152 of which were 'non-fans'.
- A post on 10 May 2015 added #firstfriend and #HappyMothersDay to automatically participate in two trending Twitter feeds for Mother's Day and reached 52,600 in total audience; 25,296 of which were 'non-fans'.

Paid Advertising

Paid advertising on Facebook has been used with limited success to promote single events for Dr. Marker's tours. This year three posts, two events and one donation ask during the Year-End campaign were promoted. The donation ask proved to be very successful in both generating donations and gaining new followers.

17* - 20 March: Cocktail party New York, budget \$30.

PAID impressions - 3,916 Facebook users as measured by ad placement in user homepage feeds.
UNPAID (organic) impressions - 21,582 Facebook users as measured by appearance in homepage feeds through other means (non-paid promotion - regular update, likes, shares, etc.).

464 actions (post or page likes, clicks, or shares) - resulted from this PAID post.

- **9* - 11 April: Dawson Cole Carmel California, budget \$12.**

PAID impressions - 2,385 Facebook users as measured by ad placement in user homepage feeds.
UNPAID (organic) impressions - 26,207 Facebook users as measured by appearance in homepage feeds through other means (non-paid promotion - regular update, likes, shares - etc.).

115 actions (post or page likes, clicks, or shares) - resulted from this PAID post.

- **21* - 31 December: Call to action for Year-End campaign, budget \$50.**

PAID impressions - 16,832 Facebook users as measured by ad placement in user homepage feeds.
UNPAID (organic) impressions - 8,252 Facebook users as measured by appearance in homepage feeds through other means (non-paid promotion - regular update, likes, shares - etc.).

1,510 actions (post or page likes, clicks or shares) - resulted from this PAID post.

*date of original post

Chewbaaka's Cheetah Friends Facebook Fan Page

In June 2014, CCF launched its new purring cheetah sales initiative called Chewbaaka's Cheetah Friends. This initiative was developed by CCF's Southern California chapter leadership and co-managed by CCF staff. Updates are posted to the page showing the CCF purring cheetah and his travels. This aims to promote the purchase of purring cheetahs for participation. Facebook users can like the fan page and share photos of their CCF purring cheetahs. By December 2015, Chewbaaka's Cheetah Friends had 764 followers up from 273 at the beginning of 2015.

CCF Staff has enlisted the assistance of interns to help take photos of purring cheetahs across the US.

- A post 19 June 2015 added #AdoptACat to automatically participate in the trending Twitter feed for Adopt-A-Cat Month and reached 3,168 total audience and 249 likes, comments and shares, including two sponsorship link clicks. This is the most viewers of any post to date for the fan page; previously the highest viewed post reached 207 total audience, 20 likes, comments and shares and was linked to @Eat'nPark, a restaurant chain.

LinkedIn

LinkedIn is a social network focusing on professional development. CCF has two LinkedIn pages that are monitored by CCF staff: Dr. Laurie Marker's personal LinkedIn account and the Cheetah Conservation Fund account.

Laurie Marker - LinkedIn

Dr. Marker's personal LinkedIn account has limited analysis capabilities as it is a free account. Analytical tools require purchasing a monthly or yearly business or premium plan. As of 31 December 2015, Dr. Marker has over 500 connections (members that are in her network).

Her personal account has 'Skills' listed to which LinkedIn connections have the ability to 'endorse' Dr. Marker as having those skills. She has received 3926 endorsements for the following 'Top Skills': Conservation Issues, Wildlife, Wildlife Management, Biodiversity, Environmental Education, Wildlife Conservation, Natural Resource Management, Ecology, Environmental Policy, and Endangered Species, Ecosystem Services, Grant Writing, Environmental Awareness, Zoology, Fundraising, Animal Behaviour, Wildlife Biology, Conservation Biology, Non-profits, Sustainable Development, Environmental Science, Capacity Building, Grants, Animal Husbandry, Community Outreach, Nonprofits, Sustainability, Veterinary, Animal Welfare, Wildlife Rehabilitation, Volunteer Management, Science, NGOs, Wildlife Photography, Climate Change Adaptation, Agriculture, Program Development, Field Work, Marine Biology, Natural Resources, Community Development, Environmental Impact, Forestry, Climate Change, Fisheries, Programme Evaluation, and Data Collection.

Dr. Marker is following 12 LinkedIn members known as 'influencers' and she endorses 12 companies including Cheetah Conservation Fund.

Dr. Marker is a member of 35 discussion groups. These discussion groups could be useful in pursuing professional opportunities and enrichment.

Cheetah Conservation Fund - LinkedIn

Cheetah Conservation Fund's LinkedIn account has Analytics enabled. CCF staff monitors the Analytics for this account. As of 31 December 2015, CCF has 761 followers. LinkedIn for business is the social media used primarily for professional development. People link up socially or with companies they would like to be employed by to increase their chances of getting employment or advancing within their current jobs. The following is information regarding number of followers as compared to number of employees of other conservation organizations.

- Nature Conservancy: 61,684 followers (1k – 5k employees)
- Wildlife Conservation Society: 21,968 followers (1k - 5k employees)
- World Wildlife Fund: 40,784 followers (200 - 500 employees)
- National Wildlife Federation: 14,198 followers (200 - 500 employees)
- Panthera: 1,528 followers (51 - 200 employees)
- Cheetah Conservation Fund: 918 followers (51 - 200 employees)

LinkedIn Analytics provides a breakdown of the total following of other conservation-focused organisations compared to number of employees (Figure 51).

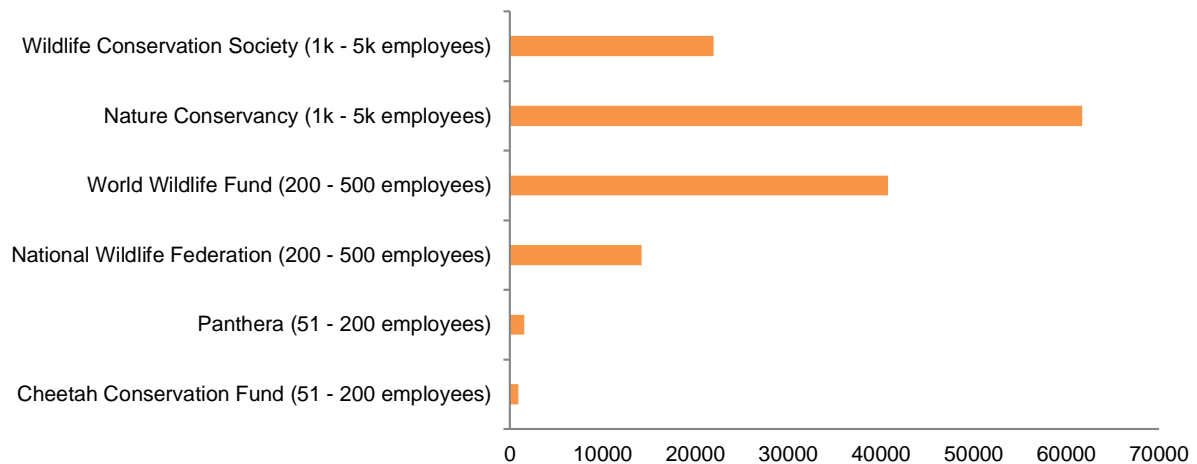


Figure 51: Visual comparison of other organisations' followers vs. CCF.

'Impressions' occur when updates are shown to LinkedIn members. During this reporting period, the highest rate of impressions on an individual CCF LinkedIn post was 1,587 on 24 January 2015, for Dr. Marker's European Tour announcement. This post got eight clicks and seven interactions (likes, shares, and comments). During the same time period the lowest rate of impressions on an individual post was 202 for the Oxford University Announcement, however this was a targeted post meant to zero in on only the relevant audience of potential attendees.

Twitter

CCFCheetah is CCF's Twitter feed. The daily content is automatically pulled from Facebook by an application that links the accounts.

This year during International Cheetah Day – 4 December, CCF UK spearheaded a Twitter Storm. This was an attempt to gain mainstream media attention using #IntlCheetahDay and #SaveTheCheetah and asking CCF followers to post from a tweet sheet. CCF UK volunteers composed the tweet sheet with a linking feature to allow twitter users to simply press the word "tweet" to instantly make a tweet. This allowed the tweets to be posted quickly and gave people ready-made material.

Before the Twitter Storm on 4 December, CCFCheetah had 12,939 followers. After the Twitter Storm and during the rest of December CCF gained 183 followers. On 4 December CCF Twitter had 32,465 impressions and was the highest for the year due to the increased traffic and activity of CCF followers.

CCF staff shares relevant content as re-tweets from selected individuals and groups of the 1,426 organisations followed by CCFCheetah. On average during this reporting period, CCFCheetah received 2,705 link clicks, averaging seven link clicks per day, 886 re-tweets, averaging two re-tweets per day, and 314,752 impressions averaging 862 impressions per day. CCFCheetah is subscribed to three lists (curated groups of Twitter users): 'Animals' by @NonprofitOrgs, 'wildlife' by Dr. Paula Kahumbu, and 'projects' by GlobalGiving.

Instagram

CCF staff enlisted the help of a dedicated volunteer to reboot and revitalise its Instagram page in the weeks leading up to International Cheetah Day. The Instagram page address @CCFCheetah was saved to be consistent with its other social media pages. From reactivation in November to 31 December CCF Instagram has gained 1,927 followers and 13,116 likes on its content.

Pinterest

CCF staff reserved user name ccfcheetah for use on Pinterest. There are seven pins and three boards as placeholder content. The page currently has 8 followers and will be developed further in the coming year.

Huffington Post Blog

On 2 May 2012, Dr. Laurie Marker published her first post as a blogger on *The Huffington Post*. Huffington Post is now considered one of the more influential Internet-based news sources, and content posted to Huffington Post often exposes CCF to new audiences. Unlike the CCF website blog, which is about CCF's programme news and staff/intern stories, the Huffington Post blog is intended to be a voice for Dr. Marker herself and functions much in the same way as an op-ed page. Successful Huffington Post pieces should be timely with events of the day and have an appeal to general audiences who are not familiar with CCF.

As of the end of 31 December 2015 Dr. Laurie Marker has posted two Huffington Post blogs:

- How to celebrate Earth Day: published on 22 April 2015
- CCF participates in first-ever international workshop on illegal cheetah trafficking: published on 19 November 2015

Cheetah.org Blog

The CCF blog is hosted on our website. Posts on the blog are also shared to Facebook and Twitter. The purpose of the CCF blog is to present longer format stories from our facility in Namibia that allow us to share with our audience the recent happenings at CCF.

From January to December, CCF staff and guest bloggers have made several posts on the blog, covering a variety of topics, including two post-release updates on cheetah Zinzi, education updates on the Greater Waterberg Landscape programmes and Heritage Week celebrations at CCF headquarters, volunteer updates and stories, and a post about a visit from Griff Rhys Jones when he was filming *Slow Train through Africa*.

Google Analytics for cheetah.org

CCF staff utilises Google Analytics to monitor user engagement. Google Analytics is a feature that inserts code into select web pages to gather user information.

Between 1 January and 31 December 2015, CCF's website cheetah.org received 695,765 page views and 347,905 sessions. During this period 264,234 of the sessions represent new users. Sessions are measured by observing the amount of time a user with a unique IP address spends on a web site during a specified period of time. The average session duration for site users was 2 minutes and 27 seconds.

Site Traffic - Acquisition

Google Analytics also measures how users arrive to cheetah.org. The top use for this section is to compare traffic from search, referrals, email, and marketing campaigns.

225,414 sessions were acquired via organic search with specific search terms (see Site Traffic section below).

62,707 sessions were acquired directly when users entered the web address www.cheetah.org.

32,221 sessions were acquired through referring sites as follows: The highest at 21.62% from the website www.kidrex.org, 6.05% from the website www.kidzsearch.com, 2.05% from the website <http://www.wildnet.org>, 1.69% from the website www.animalfactguide.com, 1.55% from the Cheetah Mobile

web blog www.blog.cmcm.com/en/, and the remaining from www.gepardenwelt.de, www.search.tb.ask.com, www.asci.uvm.edu, www.defenders.org, www.google.fr at less than 1.5%.

27,475 sessions were acquired via social media with referring social media sites being as follows: The highest at 68.84% from Facebook, reddit at 23.43%, Twitter at 3.09%, TripAdvisor at 1.03%, and the remaining from weebly, tinyURL, LinkedIn, Pinterest, Blogger, Disqus, and Quora at less than 1%.

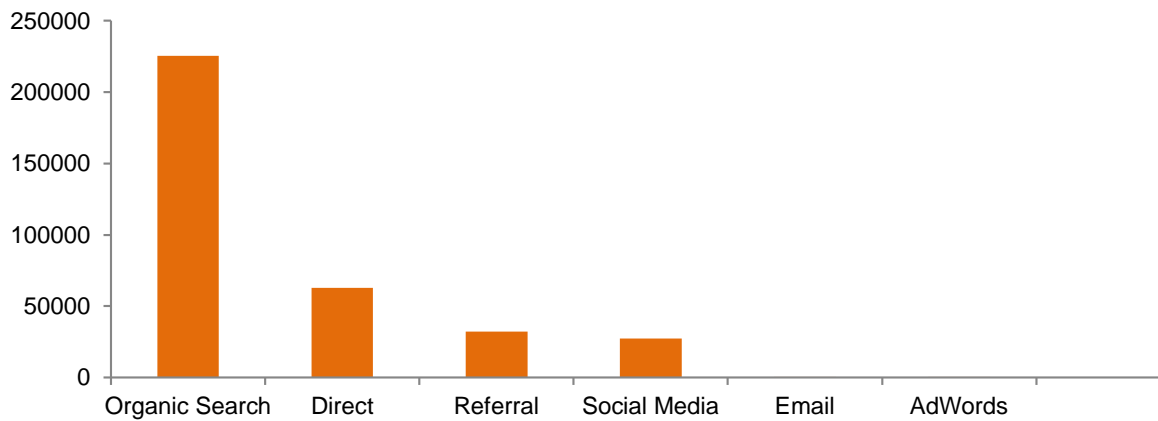


Figure 52: Visual comparison of website session sources from January to December 2015.

Site Traffic - Acquisition - AdWords

A Google AdWords subscription was donated to CCF by Google for Non-profits. This allows CCF staff to create ads that feature CCF as the top listing in Google searches. CCF's website cheetah.org received 31 sessions since AdWords was implemented of which 25 were new users.

Site Traffic - Landing Page

Traffic is also measured by tracking the landing page (the page through which the user enters the site) and how long users stay on the site monitoring where they go within the site. The landing page to which most users arrive is cheetah.org/about-the-cheetah/for-kids/ generating 23.76% of traffic entering into cheetah.org. The subsequent most arrived-on landing pages are as follows: cheetah.org at 18.44%, cheetah.org/2015/01/dr-laurie-markers-european-tour-celebrating-ccfs-25th-anniversary/ at 6%, cheetah.org/you-can-help/internship/ at 3.59%, cheetah.org/about-us/staff/namibian-job-openings/ at 3.41%,

The drop-off rate after any initial landing page is 263,000 out of 343,000 sessions. 80,000 sessions continued through the navigation to a second interaction with 27,000 sessions 'dropping off' after this navigation. 54,000 sessions continued navigating through to a third interaction with 21,000 dropping off after this navigation. After the initial drop-off rate from any landing page the number of users 'dropping off' decreases in percentage as they progress through the website. 2,800 sessions lasted through twelve pages of navigation.

Within each segment of page navigation, a significant portion of the traffic is directed toward the Donate, Volunteer, and Cheetah Fact pages. In the first navigation segment, the visitation is almost equally divided between /you-can-help/ variations to include Visit, Donate, and /what-we-do

Site traffic - Sessions by Country

Google Analytics provides data for sessions based on country. The United States has the highest number of sessions during this period at 210,841, representing 60% of total site visitation. The UK is second with 24,357 sessions, then

Australia 15,390, Canada at 15,214, Germany 7,876, India 6,423, Namibia 6,179, South Africa 6,035, France 5,766, and Italy 4,689 (

Figure 53).

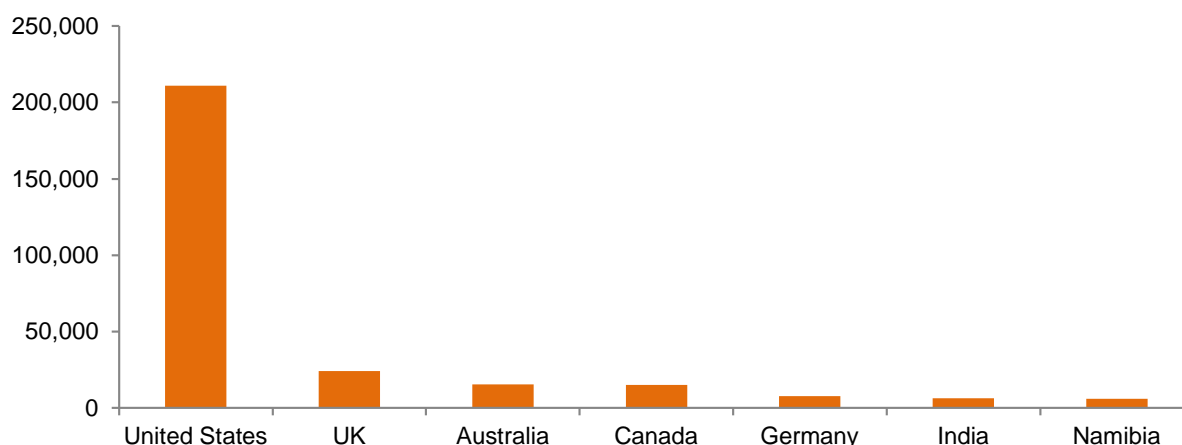


Figure 53: Number of sessions by country.

CCF staff monitors the general email inquiries received through its website. These inquiries are handled in a team fashion utilising relevant staff to address them. Inquiries are usually handled within 24 hours. During this period, approximately 600 direct web-based inquiries were handled. These are emails sent by donors and/or supporters and include school projects, hunting or cheetah-health related issues, visiting CCF or volunteering, media inquiries, and issues with donations, among others.

2. Media

CCF issued 21 press releases from January to December 2015 (Table 35).

Table 35: Press releases issued January-December 2015.

Description	Distribution	Date	Coverage
New Study Examines How Environmental Factors Impact Use of Swing Gates	N/A	6 January 15	PRWeb
Windhoek Ophthalmologist Helps Save Young Cheetah's Eye	N/A	23 January 15	PRWeb
UK Tour Invite	51	10 February 15	UK
Spring Tour	641	17 March 15	USA
25 th Cheetah Summit	868	17 March 15	All Media
25 th Cheetah Summit	85	18 March 15	Namibia
Cheetah Conservation Fund Opens New Visitor Centre	N/A	14 March 15	PRWeb
Conservationist Dr. Laurie Marker Returns Home to Monterey Bay to Speak at Dawson Cole Fine Art Gallery	N/A	6 April 15	PRWeb
Meet Conservationist Dr. Laurie Marker and a Cheetah at Two Local Events This Week	N/A	14 April 15	PRWeb

Cheetah Mobile	784	15 July 15	International
Indianapolis Raceway	773	24 July 15	International
USA Today	770	28 August 15	International
Tracker App	764	3 September 15	International
DC Seminar	47	14 October 15	DMV
Car Donation	77	12 November 15	UAE
Car Donation	77	16 November 15	Namibia
Car Donation	77	16 November 15	Namibia
Truck	823	19 November 15	International
ICD Media	823	24 November 15	International
ICD	823	3 December 15	International
Genome	823	10 December 15	International

CCF now subscribes to a press service called PRWeb to help target our releases to a more appropriate audience. Twice a month CCF staff can send press releases to a wider yet more targeted audience. CCF's media lists have been reorganised into new sub-segments to allow a more targeted approach to press contacts that will result in better opportunities to reach out to local and niche media outlets.

3. International Cheetah Day (ICD)

CCF celebrates its official International Cheetah Day on 4 December every year. The focus of the day is to promote awareness for cheetahs and increase involvement with zoos, schools, and conservation partners. CCF's partnership with Association of Zoos and Aquariums (AZA) and its Saving Animals From Extinction (SAFE) programme that identified the cheetah as one of the first promoted endangered species has helped to enlist the support of zoos to celebrate this day. Below are the zoos that registered participation with the AZA for International Cheetah Day 2015.

US: ABQ BioPark Zoo, BREC's Baton Rouge Zoo, Brevard Zoo, Busch Gardens Tampa, Central Florida Zoo & Botanical Gardens, Cincinnati Zoo and Botanical Garden, Columbus Zoo and Aquarium, David Traylor Zoo of Emporia, Disney's Animal Kingdom, El Paso Zoo, Houston Zoo, Indianapolis Zoo, Little Rock Zoo, Parc Safari, Phoenix Zoo, Rolling Hills Zoo, Saint Louis Zoo, Scovill Zoo, Texas State Aquarium, The Oklahoma City Zoo and Botanical Garden, and The Wilds.

Others: Pardisan Park (Iran), Port Lympne Reserve (UK), Sóstó Zoo - Nyíregyházi Állatpark (Hungary).

CCF's website www.internationalcheetahday.org implemented an events listing tool in 2015 for organisations and individuals to promote their ICD events. CCF received a total of 12 events listed using this new tool in its debut year from zoos, schools and individuals.

CCF staff monitors International Cheetah Day news using Google Alerts. Below are the media listings from the event in 2015.

Table 36: ICD 2015 media listings.

Date	Title	Type of Coverage	Name of Outlet	Audience	Author (If Given)	Link (If Applicable)
25-Nov-15	The 4 th of December is International Cheetah Day	Blog – Press release	Africa Geographic	Web		http://africageographic.com/blog/4th-december-international-cheetah-day/
25-Nov-15	Cheetah Conservation Fund Asks You to	Article - Press Release	Benzinga	web		http://www.benzinga.com/pressreleases/15/11/p6001631/cheetah-conservation-fund-asks-you-to-celebrate-international-cheetah-d

	Celebrate International Cheetah Day December 4, 2015						
30-Nov-15	Photos of the Week: Cheetahs	Article	National Wildlife Federation	web	NWF Staff	http://www.nwf.org/news-and-magazines/national-wildlife/photozone/archives/2015/photo-of-the-week-11-30-2015.aspx	
30-Nov-15	The History of the Cheetah	Article	Cape Cheetah Rehabilitation Center	web	CapeCheetah	http://www.capecheetah.org/news/history-of-cheetah/	
2-Dec-15	Celebrate International Cheetah Day with us on Dec. 4!	Event Announcement	Busch Gardens Website	web	Anna Gentry	http://www.buschgardenstampblog.com/celebrate-international-cheetah-day-us-dec-4	
3-Dec-15	International Cheetah Day	Event Announcement	Jennifer Pittman – News, Innovation, Stories of a Community	web	Jennifer Pittman	https://jenniferpittman.wordpress.com/2015/12/03/international-cheetah-day/	
3-Dec-15	Join AZA-Accredited Zoos and Cheetah Conservation Fund in Celebrating International Cheetah Day, December 4, 2015	Press Release	Association of Zoos and Aquariums Website	web		https://www.aza.org/PressRoom/detail.aspx?id=40662	
4-Dec-15	International Cheetah Day – Extinction by 2030?	Article	The Great Projects	web	Connor Whelan	https://www.thegreatprojects.com/blog/international-cheetah-day-extinct-by-2030	
4-Dec-15	Int'l Cheetah Day	Blog	Wildlife Photography Mosse Peterson	web	Moose Peterson	http://www.moosepeterson.com/blog/2015/12/04/intl-cheetah-day/	
4-Dec-15	International Cheetah Day	Photo gallery	Art Wolfe – Explore, Create, Inspire	web	Art Wolfe	http://artwolfe.com/2015/12/04/international-cheetah-day/	
4-Dec-15	Athletic Annabelle: ABQ BioPark's cheetah acts as local spokes-cat for the world's fastest land animal	Article	City of Albuquerque	web		http://www.cabq.gov/culturalservices/biopark/zoo/exhibits/africa/cheetahs	
4-Dec-15	5 Fast Cheetah Facts for International Cheetah Day	Article	Planet Experts	web		http://www.planetexperts.com/5-fast-cheetah-facts-for-international-cheetah-day/	
4-Dec-15	Zoos Victoria Grant Announcement on International Cheetah Day	Article - grant announcement	Zoos Victoria	web		http://www.zoo.org.au/news/zoos-victoria-grant-announcement-on-international-cheetah-day	

4-Dec-15	International Cheetah Day	Event announcement	Alibi	web		http://alibi.com/events/170197/International-Cheetah-Day.html
4-Dec-15	Cheetah Conservation Fund Offers 10 Ways to Celebrate International Cheetah Day Dec. 4	Article - Press Release	Benzinga	web		http://www.benzinga.com/pressreleases/15/12/p6023267/cheetah-conservation-fund-offers-10-ways-to-celebrate-international-che
4-Dec-15	Wolves and cheetahs face similar challenges	Article - Videos	Endangered Wolf Center	web		http://www.endangeredwolfcenter.org/blog/similar-challenges-faces-wolves-cheetahs-2/
4-Dec-15	International Cheetah Day	Photography Forum	Fred Miranda	web		http://www.fredmiranda.com/forum/topic/1401310
4-Dec-15	International Cheetah Day	Article	Farmer's Weekly	web	Staff Reporter	http://www.farmersweekly.co.za/news.aspx?id=82030&h=International-Cheetah-Day
4-Dec-15	From Church Street to the Cheetahs: DHPS Grade 9 visits Cheetah Conservation Fund	Blog	Deutsche Höhere Privatschule Windhoek	web		http://www.dhps-windhoek.de/lang-en/component/content/article/1-nachrichten/735-von-der-church-street-zu-den-cheetahs-besuch-beim-cheetah-conservation-fund
4-Dec-15	International Cheetah Day	Contest	The Tiniest Tiger	web	Joanne McGonagle	http://conservationclub.com/2015/12/the-cheetah-handbag-giveaway/
4-Dec-15	International Cheetah Day	Cheetah photo gallery	Jennifer Sawicky Photography	web	Jennifer Sawicky	http://jennifersawicky.com/2015/12/04/2015-12-04-international-cheetah-day/
6-Dec-15	International Cheetah Day	Photos	Iran Front Page	web		http://iranfrontpage.com/iran-photos/2015/12/international-cheetah-day-photos/
7-Dec-15	Iran may be able to save endangered Asiatic cheetah after all	Article	Trend News Agency	web	Baku Azerbaijan	http://en.trend.az/iran/society/2466199.html
7-Dec-15	Iran Marks International Cheetah Day in Pardisan Park	Article	Tehran Times	web	Maryann Qarehgozlou	http://www.tehrantimes.com/index_View.asp?code=251376
9-Dec-15	Paradisan Park is host to two Asiatic cheetahs	Article	Tehran Times	web	Maryam Qarehgozlou	http://www.tehrantimes.com/index_View.asp?code=251418
9-Jan-15	International Cheetah Day	Photo of the Day Contest	EarthShots	web	Iris Braun	http://www.hshots.org/2016/01/international-cheetah-day-by-iris-braun/

4. Genomic legacy of the African cheetah, Collaborative Research Paper

CCF participated in a study researching cheetah genetics and gene flow by comparing the genetics of current cheetah populations to former CCF cheetah ambassador Chewbaaka. Below are the articles published based on the research, and do not necessarily mention CCF.

Table 37: Genome legacy media listings

Date	Country	Outlet/Publication	Headline	URL (if applicable)
08-Dec-2015	Australia	Science Media Exchange - Scimex	Cheetahs ran all the way from North America	https://www.scimex.org/newsfeed/cheetahs-ran-all-the-way-from-north-america
11-Dec-2015	Belgium	The Archaeology News Network	Namibian cheetah migrated from North America	
15-Dec-2015	Brazil	Brazil Business Today - EIN News	Inside the cheetah's costly migration from North America 100,000 years ago	http://brazilbusiness.einnews.com/article/301893275/live
14-Dec-2015	Canada	Digital Journal	Cheetah's costly migration from North America 100,000 years ago	http://www.digitaljournal.com/science/cheetah-s-costly-migration-from-north-america-100-000-years-ago/article/452100
11-Dec-2015	Canada	IFL	Chewbaaka's Cheetah Ancestors Migrated From North America	http://www.iflscience.com/plants-and-animals/chewbaakas-cheetah-ancestors-migrated-far-far-away
09-Dec-2015	Canada	e! Science News	Cheetahs migrated from North America	http://esciencenews.com/sources/science.daily/2015/12/09/cheetahs-migrated.north.america
16-Dec-2015	Cyprus	Philenews.com	Κι όμως, ο αφρικανικός γατόπαρδος εμφανίστηκε στην Αμερική	http://www.philenews.com/el-gr/eidiseis-peirivallon/51/290474/ki-omos-o-afrikanikos-gatopardos-emfanistike-stin-ameriki
15-Dec-2015	France	Le Monde.fr	Chewbaaka, guépard modèle	http://www.lemonde.fr/sciences/article/2015/12/15/chewbaaka-guepard-modele_4832359_1650684.html
11-Dec-2015	Germany	spiegel.de	1000 Jahre Inzucht: Das verarmte Genom der Geparden	http://www.spiegel.de/wissenschaft/natur/geparden-sind-seit-100-000-jahren-inzuechtig-a-1066644.html
14-Dec-2015	Greece	Εφημερίδα ΕΛΕΥΘΕΡΙΑ Λάρισας	Ο αφρικανικός γατόπαρδος εμφανίστηκε στην Αμερική	http://www.eleftheria.gr/
13-Dec-2015	India	The Asian Age	Cheetahs left N America 100K years ago	http://www.asianage.com/news/cheetahs-left-n-america-100k-years-ago-852

13-Dec-2015	India	The Economic Times	Cheetahs Migrated From North America 100,000 years ago – The Economic Times	http://economictimes.indiatimes.com/magazines/panache/cheetahs-migrated-from-north-america-100000-years-ago/articleshow/50159822.cms
13-Dec-2015	India	Daily News & Analysis	Cheetahs migrated from North America to Africa 100,000 years ago, reveals new study	http://www.dnaindia.com/world/report-cheetahs-migrated-from-north-america-to-africa-100000-years-ago-reveals-new-study-2155184
13-Dec-2015	India	Business Standard	Cheetahs migrated from North America 100,000 years ago	http://www.business-standard.com/article/pti-stories/cheetahs-migrated-from-north-america-100-000-years-ago-115121300221_1.html
09-Dec-2015	India	Webindia123.com	Cheetahs migrated to Africa and Asia from North America	http://news.webindia123.com/news/Articles/India/20151209/2743794.html
09-Dec-2015	India	United News Of India	Cheetahs migrated to Africa and Asia from North America	http://www.uniindia.com/cheetahs-migrated-to-africa-and-asia-from-north-america/science-technology/news/300229.html
11-Dec-2015	Japan	Technobahn	Genetics of the African Cheetah Continues to Surprise And Excite Researchers	http://w2.technobahn.com/articles/2015121018130027.html
09-Dec-2015	Japan	Technobahn	Chewbaaka Migrated from North America	http://w2.technobahn.com/articles/2015120911050001.html
09-Dec-2015	New Zealand	The New Zealand Herald	Cheetah a late arrival in Africa	http://www.nzherald.co.nz/animals-pets/news/article.cfm?c_id=500834&objectid=11559568
09-Dec-2015	New Zealand	3 News	Cheetahs made a run for it from North America	http://www.newshub.co.nz/environmentsci/cheetahs-made-a-run-for-it-from-north-america-2015120910#axzz3zJzKuCP2
14-Dec-2015	Poland	Gazeta Wyborcza	Gepard to uchodźca z Ameryki Północnej	
12-Dec-2015	Portugal	zap.aeiou.pt	O animal mais veloz do mundo vive em África mas veio da América do Norte	http://zap.aeiou.pt/o-animal-mais-veloz-mundo-vive-em-africa-mas-veio-da-america-norte-93166
09-Dec-2015	Russia	vesti.ru	Геном гепардов показал, что они 100 тысяч лет назад мигрировали в	http://www.vesti.ru/doc.html?id=2697195

14-Dec-2015	Slovenia	Zurnal24.si	Velika selitev gepardov	http://www.zurnal24.si/velika-selitev-gepardov-clanek-261619
09-Dec-2015	United Kingdom	The Guardian	Cheetahs migrated from North America to Africa 100,000 years ago	http://www.theguardian.com/us-news/2015/dec/09/cheetahs-migrated-north-america-to-africa
09-Dec-2015	United Kingdom	Thisismoney.co.uk	Cheetahs are from NORTH AMERICA: Iconic African hunter actually migrated to the continent during the last Ice Age	http://www.thisismoney.co.uk/sciencetech/article-3351426/Cheetahs-NORTH-AMERICA-Iconic-African-hunter-actually-migrated-continent-Ice-Age.html
09-Dec-2015	United Kingdom	Mail On Sunday	Cheetahs are from NORTH AMERICA: Iconic African hunter actually migrated to the continent during the last Ice Age	http://www.mailonsunday.co.uk/sciencetech/article-3351426/Cheetahs-NORTH-AMERICA-Iconic-African-hunter-actually-migrated-continent-Ice-Age.html
09-Dec-2015	United Kingdom	Daily Mail Online	Cheetahs are from NORTH AMERICA: Iconic African hunter actually migrated to the continent during the last Ice Age	http://www.dailymail.co.uk/sciencetech/article-3351426/Cheetahs-NORTH-AMERICA-Iconic-African-hunter-actually-migrated-continent-Ice-Age.html
12-Dec-2015	United States	Lisa Barr - Examiner.com	Cheetahs found to have originated in North America	http://www.examiner.com/article/cheetahs-found-to-have-originated-north-america
11-Dec-2015	United States	DailyNews724	Cheetah genome shows a cat with nine lives	http://www.dailynews724.com/science/cheetah-genome-shows-a-cat-with-nine-lives-h622060.html
11-Dec-2015	United States	Fox News	Cheetah genome shows a cat with nine lives	http://www.foxnews.com/science/2015/12/11/cheetah-genome-shows-cat-with-nine-lives.html
11-Dec-2015	United States	A Breaking News	Cheetah genome shows a cat with nine lives	http://www.abreakingnews.com/science/cheetah-genome-shows-a-cat-with-nine-lives-h582299.html
11-Dec-2015	United States	LocalNews7.com	Cheetah genome shows a cat with nine lives	http://www.localnews7.com/science/cheetah-genome-shows-a-cat-with-nine-lives-h298562.html
11-Dec-2015	United States	ScienceNewline	Genetics of the African Cheetah Continues to Surprise And Excite Researchers	http://www.scienceline.com/news/2015121018130027.html

10-Dec-2015	United States	Nature World	Cheetahs Left North America During Last Ice Age Say Researchers	http://www.natureworldnews.com/articles/18677/20151210/cheetahs-left-north-america-during-last-ice-age-researchers.htm
10-Dec-2015	United States	Health Medicine Network	Genetics of the African cheetah continues to surprise and excite researchers	http://healthmedicinet.com/i/genetics-of-the-african-cheetah-continues-to-surprise-and-excite-researchers/
10-Dec-2015	United States	Phys.org	Genetics of the African cheetah continues to surprise and excite researchers	http://phys.org/news/2015-12-genetics-african-cheetah.html
10-Dec-2015	United States	Science Codex	Genetics of the African cheetah continues to surprise and excite researchers	http://www.sciencecodex.com/genetics_of_the_african_cheetah_continues_to_surprise_and_excite_researchers-171564
10-Dec-2016	United States	EurekAlert!	Genetics of the African cheetah continues to surprise and excite researchers	http://www.eurekalert.org/pub_releases/2015-12/nsu-got121015.php
09-Dec-2016	United States	Science World Report	Chewbaaka the Cheetah Reveals His Species Migrated from America to Africa	http://www.scienceworldreport.com/articles/34347/20151209/chewbaaka-cheetah-reveals-species-migrated-america-africa.htm
09-Dec-2015	United States	Colorado Newsday	Cheetahs migrated from NORTH AMERICA to Africa during Ice Age	http://www.coloradonewsday.com/trending/2896-cheetahs-migrated-from-north-america-to-africa-during-ice-age.html
09-Dec-2015	United States	Science 2.0	Chewbaaka Migrated From North America	http://www.science20.com/news_articles/chewbaaka_migrated_from_north_america-161499
09-Dec-2015	United States	Laboratory Equipment	Cheetahs Migrated from North America, Study Shows	http://www.laboratoryequipment.com/news/2015/12/cheetahs-migrated-north-america-study-shows
09-Dec-2015	United States	ScienceNewline	Chewbaaka Migrated from North America	http://www.sciencenewline.com/news/2015120911050001.html
09-Dec-2015	United States	Before It's News	Chewbaaka Migrated from North America	http://beforeitsnews.com/science-and-technology/2015/12/chewbaaka-migrated-from-north-america-2799692.html

09-Dec-2015	United States	weSRCH.com	Chewbaaka moved from North America 100,000 years ago	http://medical.wesrch.com/articles-details/articles-paper-ME162XQ5SMJAB-chewbaaka-moved-from-north-america-100-000-years-ago
09-Dec-2015	United States	World News Report - EIN	Chewbaaka migrated from North America	http://world.einnews.com/article__detail/region/southern-africa/300915680-chewbaaka-migrated-from-north-america?vcode=Klhy
09-Dec-2015	United States	Georgia Newsday	Cheetahs migrated from NORTH AMERICA to Africa during Ice Age	http://www.georgianewsday.com/news/regional/374017-cheetahs-migrated-from-north-america-to-africa-during-ice-age.html
09-Dec-2015	United States	Science Codex	Chewbaaka migrated from North America	http://www.sciencecodex.com/chewbaaka_migrated_from_north_america-171415
09-Dec-2015	United States	EurekAlert!	Chewbaaka migrated from North America	http://www.eurekalert.org/pub_releases/2015-12/bc-cmf120415.php
09-Dec-2015	United States	Phys.org	Chewbaaka migrated from North America	http://phys.org/news/2015-12-chewbaaka-migrated-north-america.html
08-Dec-2015	United States	Science Daily	Cheetahs migrated from North America	http://www.sciencedaily.com/releases/2015/12/151208204222.htm

5. Appendix - Media Monitoring

CCF staff monitors media primarily through Google's free News Alerts service, using specific query terms relevant to CCF's activity. Media reports are received through CCF's contacts, staff, and volunteers. Table 38 below documents all the media coverage of CCF from January to December 2015.

Table 38: CCF media coverage from January to December 2015.

Date	Title	Type of coverage	Name of outlet	Audience	Author (if given)	Link (if applicable)
6-Jan-15	New Study Examines How Environmental Factors Impact Use of Swing Gates	Article	Macro Insider	web		
16-Jan-15	How Cat Flaps for Warthogs Can Help Save the Cheetah	Article	Techly	web	Niki Rust	http://www.techly.com.au/2015/01/16/cat-flaps-warthogs-can-help-save-cheetah/
23-Jan-15	Ophthalmologist Performs Surgery to Help Save Young Cheetah's Eye at Cheetah Conservation Fund	Press Release	Press Release Rocket	web		http://www.pressreleaserocket.net/ophthalmologist-performs-surgery-to-help-save-young-cheetahs-eye-at-cheetah-

1/23/2015 pdf received from Winter 2015 publication	Dogs Saving Cheetahs	Article	Coastal Canine	print	Nancy Black	conservation- fund/48835/ https://www.dropbox.com/sh/e7kg1csrdrixn5/ABnGsFNAc9pBhAnLUQjLTDSa?dl=0
26-Jan-15	Ophthalmologist Performs Surgery to Help Save Young Cheetah's Eye at Cheetah Conservation Fund	Article	phys.org	web	Susan Yannetti	http://phys.org/news/2015-01-ophthalmologist-surgery-young-cheetah-eye.html
26-Jan-15	NCTE Orbis Pictus Award for Outstanding Nonfiction for Children	Website Announcement	National Council of Teachers of English	web		http://www.ncte.org/awards/orbispictus
29-Jan-15	Windhoek eye-doctor saves cheetah's eye	Article	The Namibian	web		http://www.namibian.com.na/index.php?archive_id=132980&page_type=archive_story_detail&page=1
30-Jan-15	Eye doctor saves cat's eye	Article	Namibia Economist	web		http://www.economist.com.na/2011-12-07-11-05-31/environment/6972-eye-doctor-saves-cat-s-eye
1/30/2015	Cheetah reintroduction hits roadblock for want of funds	Article	First Post - F.INDIA	web		http://www.firstpost.com/india/cheetah-reintroduction-hits-roadblock-want-funds-2071531.html
30-Jan-15	Cheetah reintroduction hits roadblock for want of funds	Article	The Economic Times - India Times	web		http://articles.economictimes.indiatimes.com/2015-01-30/news/58625500_1_cheetah-project-nauradehi-wildlife-sanctuary-kuno-palpur-wildlife-sanctuary
3-Feb-15	Big Cats Q&A With Super Skier Anna Fenninger	Article	National Geographic	web	Andrew Howley	http://voices.nationalgeographic.com/2015/02/03/big-cats-qa-with-super-skier-anna-fenninger/
3-Feb-15	Cheetah 1	Podcast (part 1 of 3 parts)	Animal House	web		http://www4.rsi.ch/podcast/player/player.cfm?quantity=12&can=ReteTre/Animal_house&tit=Animal%20House
4-Feb-15	Olympian Anna Fenninger Joins Nat Geo's Big Cats Initiative	Article	The Global Dispatch	web		http://www.theglobaldispatch.com/olympian-anna-fenninger-joins-nat-geos-big-cats-initiative-51039/
6-Feb-15	2015 Notable Children's Books	Website Announcement	Association for Library Service to Children	web		http://www.ala.org/alsc/awardsgrants/notalists/n cb
11-Feb-15	In focus: A Future For Cheetahs by Dr. Laurie Marker and Suzi Eszterhas	Article	Wildlife Extra	e- newsletter		http://www.wildlifeextra.com/go/world/Cheetah-gallery.html#cr
15-Feb-15	Shelley Lozano Interview - Dr. Laurie Marker	Podcast	The Wildlife 80's Show - 103.9 VOICE FM	web	Shelley Lozano	http://www.podcasts.canstream.co.uk/voicefmradio/pod/voicefmradio_15-02-15_7-14_1424008802.mp3

19-Feb-15	La "donna che sussurra ai ghepardi" al Parco Natura Viva	Video	Parco Natura Viva	web	Raphaël DA CRUZ	https://www.youtube.com/watch?v=hA-yFk54n08
23-Feb-15	Introducing the Arkive Conservation Heroes Series	Blog post	Wildscreen Arkive	web		http://blog.arkive.org/2015/02/introducing-the-arkive-conservation-heroes-series/
26-Feb-15	To keep big cats out, use a cat door	Article	mongabay.com	web	Michael Buelna	http://news.mongabay.com/2015/0226-buelna-warthog-flap-catdoor.html
26-Feb-15	Arkive's Conservation Heroes: Dr. Laurie Marker, Founder of Cheetah Conservation Fund	Blog post	Wildscreen Arkive - Arkive Blog	web		http://blog.arkive.org/2015/02/arkives-conservation-heroes-dr-laurie-marker-founder-of-cheetah-conservation-fund/
1-Mar-15	Laurie Marker, spécialiste mondiale des guépards en conférence au Parc des Félines	Article - photo gallery	Journal la Marne	web	Pascal Pioppi	http://www.journallamarne.fr/2015/02/28/laurie-marker-specialiste-mondiale-des-guepards-en-conference-au-parc-des-felins/
2-Mar-15	Reportage: Sauvegarde des Guepards, Le Combat de sa vie	Video	Velines Premiere	web	Sophie Jaubert & Cédric Chasseur	http://www.yvelines1.com/les-plus-societe/reportage-sauvegarde-guepards-combat-vie/
5-Mar-15	La signora dei ghepardi	Video	Corriere del Ticino	web		http://www.cdt.ch/la-fattoria-degli-animali/news/126337/la-signora-dei-ghepardi.html
9-Mar-15	Cheetah 2	Podcast (part 2 of 3 parts)	Animal House	web		http://www4.rsi.ch/podcast/player/player.cfm?quanti=12&can=ReteTre/Animal_house&tit=Animal%20House
10-Mar-15	Das Waisenhaus fer Wild Tiere - Video: Folge 94	Video	Das Erst	web		http://www.daserste.de/information/zoogeschichten/waisenhaus/videos/folge-94-112.html
10-Mar-15	Das Waisenhaus fer Wild Tiere - Video: Folge 94 Abenteuer Afrika	Video	Das Erst	web		http://www.daserste.de/information/zoogeschichten/waisenhaus/folgen/folge-94-108.html
10-Mar-15	Episode 28: "Animal Conservation" - Video Edition	Video - Google Hangout	Read Science! Conversations about Science Communications and Communicating Science	web		http://scientificity.net/rs/read-science-episode-28-animal-conservation-edition-video/
10-Mar-15	Episode 28: "Animal Conservation" - Audio Edition	Audio - Google Hangout	Read Science! Conversations about Science Communications and Communicating Science	web		http://scientificity.net/rs/read-science-episode-28-animal-conservation-edition-audio/
16-Mar-15	Around Town: Meet Misi next week	Article - event announcement	The Journal Record	web	Joan Gilmore	http://journalrecord.com/2015/03/16/around-town-meet-misi-next-week-opinion/
20-Mar-15	Cheetah Conservation Fund celebrates 25 years	Article - event announcement	The Namibian	web		http://www.namibian.com.na/index.php?archive_id=134922&page_type=archive_story_detail&page=1

20-Mar-15	Namibia: Cheetah Conservation Fund Celebrates 25 Years	Article - event announcement	allAfrica	web		http://allafrica.com/stories/201503201087.html
29-Mar-15	Cheetah conservationists make home in Warren County	Article	Dayton Daily News	print	Lawrence Budd	http://cheetah.org/site/wp-content/uploads/2015/03/HILKER-STORY-Cheetah-conservationists-make-home-in-Warren-County-_www.mydaytondailynews.com_.pdf
1-Apr-15	Cheetah Conservation Fund gets wild at event with Houston Zoo	Article - event review photo slideshow	Chron.com - Society Diaries	web	Maribel Molina	http://blog.chron.com/societydiaries/2015/04/cheetah-conservation-fund-gets-wild-at-event-with-houston-zoo/#31814101=4
8-Apr-15	Art openings and events, April 9-15:Richard MacDonald exhibit, cheetah fundraiser	Article - event announcement	Monterey Herald	web		http://www.montereyherald.com/arts-and-entertainment/20150408/art-openings-and-events-april-9-15-richard-macdonald-exhibit-cheetah-fundraiser
16-Apr-15	Cheetahs at Church Street	Blog post	Deutsche Hohere Privatschule Windhoek	web		http://www.dhps-windhoek.de/lang-en/component/content/article/652-cheetahs-at-church-street
28-Apr-15	Cheetah Cub Meets Puppy BFF	Blog post	Observation Deck	web	mythbri, so it goes	http://observationdeck.kinja.com/cheetah-cub-meets-puppy-bff-1700718730
30-Apr-15	Using Assisted Reproduction to Save the Cheetah	Photo Slideshow	Scientific American	web		http://www.scientificamerican.com/slideshow/using-assisted-reproduction-to-save-the-cheetah-slide-show/
7-May-15	Why You Should Visit Namibia and Not Just for the Cheetahs	Travel blog	Yahoo Travel	web	Bill Fink	https://www.yahoo.com/travel/why-you-need-to-visit-namibia-now-118261456487.html
9-May-15	Occidental Educator bound for Galapagos after landing National Geographic fellowship	Article	The Press Democrat	web	Stephen D. Gross	http://www.pressdemocrat.com/news/3783837-181/occidental-educator-bound-for-galapagos
10-Apr-15	Slow Train Through Africa with Griff Rhys Jones: Episode 1	TV show	ITV	web		http://www.itv.com/prescentre/ep1week15/slow-train-through-africa-griff-rhys-jones
10-May-15	BOOK NOTES: 'The Eagles FAQ'...'Chasing Cheetahs'...'The Truth About Nature'	Book descriptions for books recently acquired by the public libraries	Grand Forks Herald	web		http://www.grandforksherald.com/entertainment/3740765-book-notes-eagles-faq-chasing-cheetahs-truth-about-nature
25-May-15	Hunde Retten Katzen	Article - magazine	Partner Hund	print		http://www.agartenschutz.de/fileadmin/editor/pdf/PartnerHund_05_Reportage_Geparde.pdf
26-May-15	N\$1 million for Cheetah Conservation Fund	Article - press release	New Era	web		https://www.newera.com.na/2015/05/26/n1-million-cheetah-conservation-fund/

30-May-15	Cheetah Conservation Fund gets head start	Article	Namibia Economist	web		http://www.economist.com/na/2011-12-07-11-05-31/environment/7789-cheetah-conservation-fund-gets-head-start
1-Jun-15	Changing the World to Save the Cheetah	Article	Air Namibia - In-flight Magazine	print		https://mail.google.com/mail/u/1/#search/article/14e0221fdebdfce7?projector=1
8-Jun-15	Award-winning wildlife photographer Suzi Eszterhas to speak Thursday at Tahoe	Article - event announcement	Sierra Sun	web		http://www.sierrasun.com/entertainment/thearts/16702626-113/award-winning-wildlife-photographer-suzi-eszterhas-to-speak-thursday
17-Jun-15	Learners leave Waterberg with a new appreciation for biodiversity	Article - press release	New Era	web		https://www.newera.com/na/2015/06/17/learners-leave-waterberg-appreciation-biodiversity/
15-Jul-15	Cheetah Mobile Partners with Cheetah Conservation Fund to Save the Wild Cheetah	Article – press release	Market Watch	web		http://www.marketwatch.com/story/cheetah-mobile-partners-with-cheetah-conservation-fund-to-save-the-wild-cheetah-2015-07-15
15-Jul-15	Fabulous Five to Receive Eleanor Roosevelt Val-Kill Award	Press Release	PRNewswire	web		http://www.prnewswire.com/news-releases/fabulous-five-to-receive-eleanor-roosevelt-val-kill-award-300113247.html
15-Jul-15	Join us, Save the Cheetah	Blog	Linkedin	web	Sheng Fu	https://www.linkedin.com/pulse/join-us-save-cheetah-sheng-fu
16-Jul-15	Cheetah Mobile Partners with Cheetah Conservation Fund to Save the Wild Cheetah	Article – press release	IT Business Net	web		http://www.itbusinessnet.com/article/Cheetah-Mobile-Partners-with-Cheetah-Conservation-Fund-to-Save-the-Wild-Cheetah-3977518
16-Jul-15	Former NY Sen. Stephen Saland, who cast key vote for gay marriage, among this year's Val-Kill Medal honorees	Article	Daily Freeman News	web		http://www.dailyfreeman.com/general-news/20150716/former-ny-sen-stephen-saland-who-cast-key-vote-for-gay-marriage-among-this-years-val-kill-medal-honorees
16-Jul-15	Saland among five to receive Eleanor Roosevelt Val-Kill Medal Award	Article	PoughKeepsie Journal	web	Abbott Brant	http://www.poughkeepsiejournal.com/story/news/2015/07/16/saland-among-five-receive-eleanor-roosevelt-val-kill-medal-award/30215629/
16-Jul-15	Stock's Trend Analysis Report – Cheetah Mobile (CMCM), Kosmos Energy (KOS), Microchip Technology (MCHP), YY (YY)	Blog	Techsonian	web		http://www.techsonian.com/stocks-trend-analysis-report-cheetah-mobile-cmcm-kosmos-energy-kos-microchip-technology-mchp-yy-yy/12537233/
17-Jul-15	Stocks with Upward Trend – Cheetah Mobile (CMCM), Owens Corning (OC), Euronav	Blog	Techsonian	web		http://www.techsonian.com/stocks-with-upward-trend-cheetah-mobile-cmcm-owens-corning-oc-euronav-nv-ordinary-

	NV Ordinary Shares (EURN), Qorvo (QRVO)				shares-eurn-qorvo-qrvo/12537950/ http://www.albanyherald.com/news/doug-porter-chehaw-lectures-are-naturally-enlightening/article_e64a6e1d-60eb-5f1e-8d6f-69988443ff26.html	
18-Jul-15	DOUG PORTER: Chehaw lectures are naturally enlightening	Blog	Albany Herald	web	http://www.techsonian.com/stocks-trend-analysis-report-general-dynamics-gd-tim-participacoes-tsu-ameren-ae-cheetah-mobile-cmcm/12539940/	
21-Jul-15	Stock's Trend Analysis Report – General Dynamics (GD), TIM Participacoes (TSU), Ameren (AEE), Cheetah Mobile (CMCM)	Blog	Techsonian	web	https://economist.com.na/2011-12-07-11-05-31/environment/8123-25-years-of-speed-and-elegance	
24-Jul-15	25 years of speed and elegance	Event Announcement – press release	Namibia Economist	web	http://allafrica.com/stories/201507241659.html	
24-Jul-15	Namibia: 25 Years of Speed and Elegance	Article – press release	allAfrica	web	http://www.marketwatch.com/story/cheetah-mobile-and-cheetah-conservation-fund-release-30-second-video-psa-for-savethecheetah-campaign-2015-07-24	
24-Jul-15	Cheetah Mobile and Cheetah Conservation Fund Release 30-Second Video PSA for #SaveTheCheetah Campa	Article – press release	MarketWatch	web	http://www.benzinga.com/pressreleases/15/07/p5703351/cheetah-mobile-and-cheetah-conservation-fund-release-30-second-video-ps	
24-Jul-15	Cheetah Mobile and Cheetah Conservation Fund Release 30-Second Video PSA for #SaveTheCheetah Campaign	Article – press release	Benzinga	web	http://www.poughkeepsiejournal.com/story/opinion/editorials/2015/07/26/cheers-val-kill-honorees-jazz-valley/30615377/	
26-Jul-15	Cheers to Val-Kill honorees, Jazz in the Valley	Editorial	Poughkeepsie Journal	web	http://www.stocktranscript.com/active-watch-list-alexion-pharmaceuticals-inc-nasdaqalxn-popular-inc-nasdaqbpop-zulily-inc-nasdaqzu-cheetah-mobile-inc-nysecmcm-live-nation-entertainment-inc-nyselyv/41725/	
27-Jul-15	Active Watch List: Alexion Pharmaceuticals, Inc. (NASDAQ:ALXN), Popular, Inc. (NASDAQ:BPOP), zulily, Inc. (NASDAQ:ZU), Cheetah Mobile Inc. (NYSE:CMCM), Live Nation Entertainment, Inc. (NYSE:LYV)	Blog	Stock Transcript	web	http://spacecoastdaily.com/2015/07/brevard-zoo-announces-the-arrival-of-three-new-cheetahs/	Shawn Miller
28-Jul-15	Brevard Zoo Announces Arrival of Three New Cheetahs	Article	Space Coast Daily	web	http://www.propertymentorgroup.com/news-activity-peabody-energy-corporation-nysebtu-nrg-energy-inc-nyse-nrg-cheetah-mobile-inc-nysecmcm-tekmira-pharmaceuticals-corporation-nasdaqtkmr-vertex-energy-inc-nasdaqvtmr/12105075/	
28-Jul-15	News Activity: Peabody Energy Corporation (NYSE:BTU), NRG Energy (NYSE:NRG), Cheetah Mobile Inc. (NYSE:CMCM), Tekmira Pharmaceuticals Corporation (NASDAQ:TKMR), Vertex Energy (NASDAQ:VTNR)	Blog	Property Mentor Group	web		Stephanie Byars

28-Jul-15	Cheetah Mobile, Cheetah Conservation Fund release #SaveTheCheetah campaign PSA	Article – Press release	FinancialNews.co.uk	web		http://www.financial-news.co.uk/29622/2015/07/cheetah-mobile-cheetah-conservation-fund-release-saveth/
28-Jul-15	Stocks Trend Analysis – Cheetah Mobile Inc (ADR) (CMCM), Unit Corporation (UNT), Carrizo Oil & Gas, Inc. (CRZO), Synergy Pharmaceuticals Inc (SGYP)	Article Press Release	Investor Wired	web		http://www.investorwire.com/stocks-trend-analysis-cheetah-mobile-inc-adr-cmcm-unit-corporation-unt-carrizo-oil-gas-inc-crzo-synergy-pharmaceuticals-inc-sgyp/1746223
29-Jul-15	Support Cheetah Conservation Fund At Saratoga Event	Event Announcement – Press Release	Saratoga Patch	web	Susan C. Schena	http://patch.com/california/saratoga/support-cheetah-conservation-fund-saratoga-event-0
1-Aug-15	Cleaning the land, learning to recycle	Article	Namibia Economist	web		https://economist.com.na/2011-12-07-11-05-31/environment/8165-cleaning-the-land-learning-to-recycle
10-Aug-15	Animal presentation will feature live cheetah	Event Announcement	MLIVE	web	Sherry Kuyt	http://www.mlive.com/wayland/index.ssf/2015/08/animal_presentation_will_featu.html
13-Aug-15	Cheetah Fundraiser at Savannah Vineyards! 25th Anniversary Celebration!	Event Announcement – Press Release	Saratoga Patch	web	Thea Rose	http://patch.com/california/saratoga/cheetah-fundraiser-savannah-vineyards-25th-anniversary-celebration-0
18-Aug-15	Wildlife Heroes Vie for Top Honor in Animal Conservation	Press release	PRNewswire	web		http://www.prnewswire.com/news-releases/wildlife-heroes-vie-for-top-honor-in-animal-conservation-300129480.html
18-Aug-15	Nat Geo Explorers Nominated for Top Conservation Prize	Articles	National Geographic	web	Brian Clark Howard	http://news.nationalgeographic.com/2015/08/150818-indianapolis-prize-nominees-animal-conservation-awards/
21-Aug-15	Tanzania: What's Behind the Conflict Between People and Animals in Tanzania	Articles	allAfrica	web	Amy Dickman	http://allafrica.com/stories/201508211711.html
28-Aug-15	Mediaplanet Gives a Voice to the Voiceless in New "Saving Our Wildlife" Campaign	Press Release	benzinga	web		http://www.benzinga.com/pressreleases/15/08/p5799685/mediaplanet-gives-a-voice-to-the-voiceless-in-new-saving-our-wildlife-c
28-Aug-15	Cheetah Mobile and Cheetah Conservation Fund Sponsor New Campaign to Save Our Wildlife	Press Release	MarketWatch	web		http://www.marketwatch.com/story/cheetah-mobile-and-cheetah-conservation-fund-sponsor-new-campaign-to-save-our-wildlife-2015-08-28
31-Aug-15	Cheetah Mobile, CCF start new wildlife campaign for cheetah	Article - press release	telecompaper	web		http://www.telecompaper.com/news/cheetah-mobile-ccf-start-new-wildlife-campaign-for-cheetah--1099732
31-Aug-15	Cheetah Mobile, Cheetah Conservation fund wildlife campaig	Article – press release	financialnews.co.uk	web		http://www.financial-news.co.uk/30346/2015/08/cheetah-mobile-

2-Sep-15	Market Movers: Catabasis Pharmaceuticals, Inc. (NASDAQ:CATB), Cheetah Mobile Inc. (NYSE:CMCM), India Globalization Capital, Inc. (NYSEMKT:IGC), Tri Pointe Homes Inc (NYSE:TPH), Gerdau (NYSE:GGB)	Blog	Stock Transcript	web	William	cheetah-conservation- fund-wildlife-campa/ http://www.stocktranscript.com/market-movers-catabasis-pharmaceuticals-inc-nasdaqcatb-cheetah-mobile-inc-nysecmcm-india-globalization-capital-inc-nysemktigc-tri-pointe-homes-inc-nysetph-gerdau-nyseggb/60040/
16-Sep-15	Dr. Laurie Marker Wins Two Major U.S. Awards for Cheetah Conservation Work	Press Release	PRWeb	web		http://www.prweb.com/releases/2015/09/prweb12964054.htm
18-Sep-15	Greenwich cheetah, yes, cheetah, bonds with dog	Article	Greenwich Time	web	Silvia Foster- Frau	http://www.greenwichtime.com/news/article/Greenwich-cheetah-yes-cheetah-bonds-with-dog-6512592.php
21-Sep-15	Zoological Conservation Center	Article	ohmidog!	web	John Woestendiek	http://www.ohmidog.com/tag/zoological-conservation-center/
28-Sep-15	Pancake and Dayo to Appear at 15th Annual Big Cat. Big Party. Gala at Oregon Zoo for Cheetah Conservation Fund	Press Release	PRWeb	web		http://www.prweb.com/releases/2015/09/prweb12987265.htm
28-Sep-15	Learn about cheetahs at free event in SLO	Event Announcement – Press Release	The San Luis Obispo Tribune	web	Nick Wilson	http://www.sanluisobispo.com/news/local/article39063744.html
3-Oct-15	Beloved cheetah Legolas is killed by poachers in Botswana	Article	Metro	web	Nicholas Reilly	http://metro.co.uk/2015/10/03/beloved-cheetah-legolas-is-killed-by-poachers-in-botswana-5419771/
4-Oct-15	Conservation In Action! Dogs Saving Cheetahs in Namibia	Event Listing	Bay Area Indymedia	web		https://www.indybay.org/newsitems/2015/10/03/18778387.php
5-Oct-15	African Cheetah Named Legolas Killed in 'Unnecessary' Attack	Article	Time	web	Charlotte Alter	http://time.com/4062146/cheetah-legolas-killed/
8-Oct-15	Cheetah conservation expert to speak Oct. 14	Event Announcement	Source	web	Mary Guiden	http://source.colostate.edu/cheetah-conservation-expert-to-speak-oct-14/
14-Oct-15	Stunning photos of Cheetahs for sale to aid conservation effort	Event Announcement	Express.co.uk	web	Stuart Winter	http://www.express.co.uk/news/nature/612066/cheetahs-photos-for-sale-cheetah-conservation-fund
19-Oct-15	Val-Kill Medal recipients continue legacy of Eleanor Roosevelt	Video	Poughkeepsie Journal	web	Amanda J. Purcell	http://www.poughkeepsiejournal.com/story/news/local/northern-dutchess/2015/10/18/val-kill-medal-recipients-continue-legacy-eleanor-roosevelt/74173760/
19-Oct-15	Cheetah Seminar – “The Biology and Conservation of Cheetahs”	Event Announcement	The Harvard Club of Washington DC	web	Gary J. Kopff	http://www.harvard-dc.org/article.html?aid=1104
19-Oct-15	Cheetah conservationist links successful efforts in Africa to local economic drivers and education	Article	Santa Cruz Sentinel	web	Jennifer Pittman	http://www.santacruzsentinel.com/general-news/20151019/cheetah-conservationist-links-

						successful-efforts-in-africa-to-local-economic-drivers-and-education
20-Oct-15	Cheetah Conservation Fund and International Cheetah Experts Offer Public Seminar at The National Zoo Tomorrow Night to Raise Awareness	Press release	Press Release Rocket	web		http://www.pressreleaserocket.net/cheetah-conservation-fund-and-international-cheetah-experts-offer-public-seminar-at-the-national-zoo-tomorrow-night-to-raise-awareness/350235/
23-Oct-15	Take a 'family-friendly journey into Africa'	Article	Poughkeepsie Journal	web	Paola Bari	http://www.poughkeepsiejournal.com/story/entertainment/arts/2015/10/23/keepsafe-project-africa-cheetahs-paola-bari/74466494/
2-Nov-15	Threatened cheetahs: why saving big cats means getting big dogs	Article	The Toronto Star	web	Raveena Aulakh	http://www.thestar.com/news/world/2015/11/02/threatened-cheetahs-why-saving-big-cats-means-getting-big-dogs.html
5-Nov-15	This Scientist Live-Tweets Cheetah Hunts	Article	Smithsonian.com	web	Danny Lewis	http://www.smithsonianmag.com/smart-news/scientist-live-tweets-cheetah-hunts-180957170/?no-ist
22-Nov-15	Columbus Zoo visits elementary school	Article	Ironton Tribune	web	Heath Harrison	http://www.irontontribune.com/2015/11/22/walk-on-the-wild-side/
23-Nov-15	Cheetah Population Management in Namibia: A Controversial Experiment	Article	Nikela	web		http://www.nikela.org/cheetah-population-management-in-namibia-a-controversial-experiment/
27-Nov-15	Namibia: Turkish Dogs Run After Namibian Cheetahs	Article – Press release	AllAfrica	web		http://allafrica.com/stories/201511271116.html
5-Dec-15	Race To Save The Cheetah	Article	Travel by Lightfoot	web	Victoria Macmillan Bell	http://www.lightfoottravel.com/collections/wildlife/race-to-save-the-cheetah/
10-Dec-15	Genetics of the African cheetah continues to surprise and excite researchers	Press release	EurekaAlert!	web		http://www.eurekaalert.org/pub_releases/2015-12/nsu-got121015.php
10-Dec-15	Genetics of the African cheetah continues to surprise and excite researchers	Press release	Science Codex	web		http://www.sciencecodex.com/genetics_of_the_african_cheetah_continues_to_surprise_and_excite_researchers-171564
11-Dec-15	Cheetah genome shows a cat with nine lives	Article	Fox News	web	Michael Casey	http://www.foxnews.com/science/2015/12/11/cheetah-genome-shows-cat-with-nine-lives.html
13-Dec-15	Elephant Elves event thrills guests at Wildlife Safari	Article	News-Review today	web	Vera Westock	http://www.nrtoday.com/news/19570033-113/elephant-elves-event-thrills-guests-at-wildlife-safari
28-Dec-15	Gepardungar offer i brutal smuggling	Article	Hufvudstadsbladet (Finland)	web	Mattias Areskog – TT News Agency	http://gamla.hbl.fi/nyheter/2015-12-28/783817/gepardungar-offer-i-brutal-smuggling

30-Dec-15	Gepardungar smugglas för att bli lyxhusdjur	Article	Störst – Metro (Sweden)	print	Mattias Areskog – TT News Agency	http://www.readmetro.com/en/sweden/malmo/20151230/
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