Cheetah
CONSERVATION FUND

CCF is a Namibian non-profit incorporated association dedicated to the long-term survival of the cheetah and its ecosystems.

RESEARCH
CONSERVATION
EDUCATION

cheetah.org

The Cheetah Conservation Fund's (CCF) research focuses on the biology, ecology and genetics of the southern African cheetah. Its findings form the basis for CCF's education and conservation programs. CCF is notable for being the first predator research program conducted outside a protected area and the first working with people on whose land the cheetah is living.

RESEARCH

GENETICS, HEALTH AND REPRODUCTION

CCF's ongoing research activities include collecting and analyzing blood, skin, tissue, sperm and fecal samples from the southern African wild cheetah. To date, CCF has sampled nearly 1,000 of these cheetahs to study genetics and the relatedness of the population. Samples indicate the incidence of disease, stress hormone levels, and the reproductive health of the population.

Wild cheetahs providing samples simultaneously undergo comprehensive examinations ("cheetah work-ups") that involve weighing and measuring for morphometric studies, analysis of their dental structure and reproductive fitness. These exams contribute to the assessment of the overall health of the world's cheetah population.

SCAT DETECTION DOGS

CCF pioneered the use of scat detection dogs to assist with cheetah census, genetic relatedness and demographic research. CCF ecologists employ dogs trained to sniff out cheetah scat with their sense of smell. The samples are processed in the laboratory, and DNA is extracted to identify individual cheetahs and gain insight into population structure.

GENOME RESOURCE BANK

Sperm, tissue and blood samples are cryopreserved and stored in CCF's Genome Resource Bank (GRB) to provide additional insurance for species survival. Established in 1991, CCF's cheetah GRB is one of the most extensive for an endangered species. To date, CCF has banked more than 320 cheetah semen collections from more 200 individuals and banked samples on nearly 1,000 cheetahs. CCF developed its best practices for storing samples and continues to refine cryopreservation methods with partners at the Smithsonian Institution. In 2007, in collaboration with Smithsonian researchers and those from University of California at Davis, CCF produced the first-ever *in vitro* cheetah embryos developed to the blastocyst stage. CCF's leadership in reproductive science also resulted in the first artificially-inseminated cheetah cub born from sperm frozen in Namibia.

LIFE TECHNOLOGIES CONSERVATION GENETICS LABORATORY

To address the challenge of effectively monitoring the wild cheetah population from a remote region in Namibia, CCF built and maintains the only fully capable conservation genetics laboratory at an *in situ* conservation site in Africa. The Life Technologies Conservation Genetics Laboratory is a state-of-the-art facility that produces analyses and results in house. The laboratory aims to address research questions involving cheetah gene flow and geographical patterns of genetic variation, as well as adaptive questions in relations to the cheetah's behavioral ecology in specific habitats. Open to researchers from other organizations, the lab benefits not only the cheetah but many other species, and it plays a key role in training the next generation of conservation geneticists

BEHAVIOR DEMOGRAPHICS, HOME RANGE AND REINTRODUCTION

CCF researchers investigate the movement of cheetah to determine home ranges, habitat preference, territoriality and behaviors of populations critical to their survival. CCF has tagged and released more than 600 cheetahs back into the wild and placed VHF satellite radio-tracking collars on more than 60 during 25 years of study. Working with CCF conservationists, CCF researchers evaluate relocation, reintroduction and non-invasive monitoring methods to support viable wild cheetah populations.

CHEETAH CENSUS RESEARCH

Cheetahs are notoriously difficult to count using conventional census techniques due to their secretive nature. CCF researchers have tested various census and monitoring techniques, including radio telemetry, spoor track counts and camera traps, while calibrating these to known density estimates. The data is used to identify potential "hot spots" for human-carnivore conflict and to persuade key stakeholders to adopt appropriate conservation measures to mitigate impact.

COLLABORATIVE RESEARCH PARTNERSHIPS

CCF has long-term research partnerships with academic and research institutions around the world, encompassing a broad spectrum of subject matter pertaining to the cheetah. CCF also maintains close ties with zoos and wildlife parks to collaborate on projects involving captive cheetah populations and genetics.

Beskee Bergen, Netherlands
Bronx Zoo, USA
Busch Gardens, USA
Cat Specialist Group of IUCN
Cheetah Species Survival Plan of AZA
Cincinnati Zoo
Colorado State University
Columbus Zoo
Dallas Zoological Society
Disney's Animal Kingdom
Durv Kralove
Earthwatch Institute
European Endangered Species Plan (EEP)
Indianapolis Zoo
Little Rock Zoo
Los Angeles Zoo
Maryland Zoological Society
Namibia Ministry of Environment and Tourism
Namibia University of Science and Technology (NUST)
Naples Zoo
National Cancer Institute
Oregon State University
Paradise Park
Park de Felines
Park de Thoiry
Saint Louis Zoo
San Diego Zoo
San Francisco Zoo
Smithsonian Conservation Biology Institute
Smithsonian Institution's National Zoo
University of California at Davis
University of Florida
University of Namibia
University of North Carolina
Virginia Zoo
White Oak Conservation Centre
Wildlife World Zoo

ECOLOGICAL RESEARCH

CCF evaluates cheetah habitat and prey base and monitors carnivores in the cheetah's ecosystem. CCF identifies vegetation and growth patterns, designates land for ecological management and investigates how bush encroachment affects biodiversity. CCF monitors habitat use by game species and determines hunting practices and prey preferences for individual cheetah populations. CCF also collects data on predation and develops methodologies for prey species reintroduction in cheetah range countries.

HUMAN-CARNIVORE CONFLICT

Research into human-carnivore conflict is critical for cheetah conservation, as more than 75 percent of cheetahs in Africa live outside protected areas and on lands shared with rural farming communities. CCF incorporates the needs of farmers in the development of agricultural management plans that benefit both farmers and cheetahs. CCF evaluates non-lethal predator control tools and livestock management techniques that reduce the number of cheetahs removed from the ecosystem by farmers.

Cheetah Conservation Fund

Cheetah Conservation Fund
P.O. Box 1755, Otjiwarongo, Namibia

Phone: +264 067 306 225
Fax +264 067 306 247

E-mail: ccfinfo@iway.na
info@cheetah.org