How Can I Help?

The development costs of training and equipping the professional hunters and veterinarians, as well as the laboratory costs for the analysis of the samples represent the largest investment in this project. To be successful, we rely on the support from private organizations that support the industry such as local Safari Club International chapters, individual sportsmen and hunters, professional hunting associations, conservation organizations, private wildlife foundations, and federal and state government.



I would like to support **African Wildlife Conservation** efforts with my contribution!

(Please make your check payable to the **Safari Club International Foundation**, with **"African Wildlife Conservation Fund"** on the memo line or in a contribution letter.)

Gift Amount: \$_____(Tax deductible as defined by law.)

Contributor Information:

Email

Please send this form with your contribution to: SCI Foundation 4800 West Gates Pass Road Tucson, AZ 85745-9490 USA



College of Veterinary Medicine & Biomedical Sciences Texas A&M University 4467 TAMU College Station, TX 77843-4467 www.cvm.tamu.edu/africanwildlife

AFRICAN WILDLIFE CONSERVATION: Genomics, Genetics & Health



Dr. James Derr & Jerad Dabney Department of Veterinary Pathobiology College of Veterinary Medicine & Biomedical Sciences Texas A&M University www.cvm.tamu.edu/africanwildlife



Our Partners

The College of Veterinary Medicine & Biomedical Sciences at Texas A&M University has teamed up with the Safari Club International Foundation on this important wildlife conservation effort. Together we can accomplish the goals of this project to promote conservation, hunting, and scientific research.

Within southern Africa, our partners include the Professional Hunters' Association of South Africa (PHASA), the Namibian Professional Hunting Association (NAPHA), the Tanzania Professional Hunters' Association (TPHA), the African Professional Hunters' Association (APHA), and the Zimbabwe Professional Hunters' Association (ZPHA).

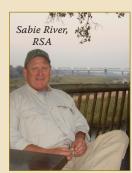




What is Conservation Genomics?

Conservation genomics is a relatively new field of study that uses biotechnology for the conservation and restoration of biodiversity. Within species, the level of genetic diversity is directly proportional to a species' ability to adapt, survive and thrive.

To date, one of the most detailed conservation genomics studies of any wildlife species focused on American bison. This species experienced a well documented population decline between the years 1800 and 1900 that reduced its numbers by over 99%! The spectacular recovery to over 700,000 animals present today is a testament to their genetic constitution and is recognized as one of the most significant accomplishments in modern conservation biology.



"We propose, using the bison studies as a model, to expand the use of these genomic technologies for the benefit of African wildlife species."

> ~ Dr. James Derr, Professor, Texas A&M Veterinary Medicine & Biomedical Sciences

It only takes two minutes and four items for a PH or veterinarian to take a DNA sample and preserve an animal's genetic information forever.



Having experienced life on safaris, we developed a quick and easy method for collecting DNA samples for use in any country or even in the bush of southern Africa.

After harvest, PHs will insert the Q-tip into the wound of the animal, absorbing a small amount of blood that is painted on the FTA card. This blood air dries in a few minutes. The PH also

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Worldwide, the scientific community is realizing the value of collecting and preserving genetic material. Repositories are now being developed for humans, livestock, wildlife, insects, and plants.

Our Wildlife Conservation Project

Our project utilizes groups of hunting professionals, outfitters and veterinarians to collect genetic materials and health information from captured or killed animals and to archive this material with hunting organizations, museums, and universities. This archive of genetic material and health information will then form the foundation for a number of proposed genetic investigations of specific species.

Our professional partners will be provided with collection kits and training enabling them to properly gather and catalog DNA samples and health information from captured or harvested wildlife.



pulls hairs from the tip of the tail using pliers, making sure that follicles are attached. These hairs are then placed into the coin envelope. The card/envelope is numbered with the species code, sex,

estimated age, GPS location and date of the collection. This information will be linked to SCI with trophy record archives. The entire collection usually takes less than two minutes.



Q-tips, coin envelopes and pliers.

Commonly Asked Questions

How does this FTA card collect the DNA?

It works by breaking down cellular membranes and locking the DNA into the paper's fibrous matrix.

How long will these samples last?

Current studies by the US FBI and others show that DNA bound to these cards are stable for decades.

Are there any special storing conditions?

No, the cards can be stored at room-temperature in any dry place. (This is the backbone of this project; until now there hasn't been a quick way to safely store DNA samples without modern day lab tools.)

How will these DNA samples be used?

Samples will be used for conservation genomics studies around the world to develop new DNA fingerprinting technologies, determine inbreeding statistics, uncover genes that control behavior traits, locate genes that influence body and horn size genetics, and identify genes responsible for natural disease resistance in wildlife species.

How will this project help animals and hunters?

This project is one of the most comprehensive efforts to catalog the large biodiversity of wildlife species in the world. The development of resources and molecular biotechnologies that this project entails will provide for conscientious stewardship of African game species, creating healthy populations and sustainable trophy hunting.