

Making a Difference for Wildlife

Hundreds of local conservation projects are undertaken annually by SCI Chapters. They are reinforced by many notable conservation initiatives funded by the SCI Foundation.



Endangered Species Biomaterials Banking and Cloning

South Africa

Total Funds: \$3,500, including matching grant

AS WORLDWIDE human populations increase and communities expand into once wilderness areas, wildlife is affected and many valuable species are decreasing. Certainly, other environmental factors impact wildlife, but when a species population is reduced to a very low level, wildlife management efforts may need to go beyond providing adequate habitat and protection. The decrease in genetic diversity can reduce the effective population even below gross numbers.

The Wildlife Biological Resources Center, a wildlife conservation organization in South Africa, is banking biomaterials now for species at risk. Biomaterials include sperm, egg cells, embryos, hair, skin and blood, all of which contain the DNA of individual animals. Cell lines have been banked from bontebok, roan, cheetah, black rhino, black-faced impala and many other animals.

While currently valuable for research into genetic diversity and disease, at some future time this DNA may be used to recover species through cloning. Cloning is currently being used to recover an indigenous cattle breed in New Zealand from a single animal.

Future cloning work by the Wildlife Biological Resources Center requires a CL-150B pulse generator instrument. This device is used to fuse early developing embryo cells by generating short electric pulses. These pulses dissolve cell membranes, allowing nuclei and cytoplasm to fuse into a single cell. SCI's *Chesapeake Chapter* has provided the \$3,500 necessary for the purchase, thus combining advanced science and technology with an ancient appreciation of the natural world.

To help fund this and other meaningful wildlife conservation initiatives, contribute to the SCI Foundation. Call 800-377-5399 or visit www.sci-foundation.org.

