

STRANGE BEDFELLOWS

By Dr. Rodney Jackson, ISLT Conservation Director

Global Positioning Systems (GPSs) and Bactrian camels might seem like strange bedfellows, but both play key roles in efforts to conserve the snow leopard.

Described as the "next utility," a GPS device allows us to fix our geographical position to within 100 yards, and often within 30 yards, day and night, in all weather, and in the most remote terrain.

As the first truly global navigation system, GPS works by tracking radio signals from six or more of the 24 satellites in orbit. Through triangulation, it establishes the precise location of the GPS receiver. GPS is a godsend, since maps of snow leopard range are hard to come by or are simply unavailable.

In 1994 Trimble Navigation of Sunnyvale, California, the company that pioneered this highly sophisticated navigation system with the US Defense Department, kindly donated a GPS Scout to ISLT. I have used it in field trips and workshops in Mongolia, Nepal, Pakistan, Tibet, Sikkim, and the Gansu Province of China as part of SLIMS, the Snow Leopard Information Management System.

This ISLT program promotes standard field survey techniques and is developing a comprehensive database on snow leopards and protected areas in Central Asia. The Scout has become indispensable, not only for locating snow leopard and prey species sign, but also for navigating the Gobi Desert. Without it, I might still be wandering across the desert.

In October 1996, Don Hunter and I traveled to Gansu Province as the final segment in a scientific

exchange between the US and China (see *Snow Leopard News*, December 1996).

Don is with the Midcontinental Ecological Science Center (formerly the National Biological Service) in Fort Collins, Colorado. With biologist Gao Jun and others from the Gansu Bureau of Nature Protection and Wildlife Administration, we conducted camel-back surveys of the Black Mountain area. Even in the era of four-wheel drive vehicles, the Bactrian (two humped) camel, superbly adapted to the steppes and low mountains of Mongolia and adjoining regions of China, is the only form of transport into the habitat of blue sheep, ibex, and snow leopards where forage may be too scarce for horses. While camels cannot negotiate extreme slopes, they can travel up roadless valleys into the mountains where there are many obstacles for jeeps.

But camels have a mind of their own and are difficult to handle for the rider, perched between the humps nearly six feet above the ground. A camel can swivel its head in an instant, spraying the rider with green, belly-smelling cud, or suddenly accelerate, charging across the desert in hope of losing its rider. On encountering a deep gully, they increase their momentum downhill, putting the brakes on at the bottom of the incline. On one such instance,

the camel prevailed: Mr. Gao fell off, landing solidly on the Scout attached to his belt and damaging its delicate internal parts.

I wrote to Trimble Navigation, explaining how the camel event had done in our Scout. Bob Trimble himself phoned, and generously offered to replace our Scout.

As all biologists are aware, monitoring the status and distribution of endangered species is a vital part in their conservation. To this end, the GPS enables us to revisit any previous site or transect, even years from now, to see how things have changed.

Editor's note: In the aforementioned Snow Leopard News article it was claimed that Don Hunter was bucked off his camel. Research reveals that he could see what was coming when the camel began to jump and squeal at the noise of a water bottle clanking, making it buck all the more. Knowledgeable cowboy that he is, Hunter "chose to jump" at the opportune moment, landing on his backside. Jackson reported that Hunter and camel enjoyed a good laugh.