

## Elephant Corridors: Connecting Fragmented Areas across Africa

By Robin Cook

The 21<sup>st</sup> century has witnessed the continuous increase of the human population, coupled with the further fragmentation of protected areas. In Africa, the human matrix continues to spread across the continent, isolating both floral and faunal species in the process. Fragmentation of protected areas becomes a major issue for elephants, which have recorded home ranges covering 10 - 10,738 km<sup>2</sup>, and require vast areas of space to move through. If seasonal home ranges of elephants are separated by a human matrix, then human-elephant conflict (HEC) in the forms of human/elephant casualties, crop raiding events, and damaged infrastructure are bound to increase.



By placing satellite collars on elephants, we are now able to understand long distance movements of elephants by allowing the elephants to tell the stories themselves. Information from the satellite collars allow researchers to understand how elephants cross the human matrix between protected areas and therefore, how to protect these so called 'elephant corridors' for future elephant crossings. Further assistance comes from community interviews. In Tanzania for example, researchers have been able to map out 3 elephant corridors between Saadani National Park and Wami-Mbiki Wildlife Management Area using knowledge provided by the various communities' sightings. Therefore, by combining satellite technology with community information, land-use planners can preserve these elephant corridors to allow elephants to continue their seasonal movements whilst minimising HEC in the process.

Finally, our own collared elephants in the Kruger National Park (KNP) have shown us the possibilities of elephant corridors between KNP and Zimbabwe's Gonarezhou National Park (GNP). One of our bulls, Gila (see map), crossed between the two National Parks in 2010, taking 2½ days to travel to GNP and 1 day to travel back to KNP. Therefore, movement information provided by Gila is vital for land-use planning in this region if the parks' managers wish for elephants to travel safely between the two National Parks without coming into conflict with humans.

