

## **Project Update: December 2010**

My most recent field trip to Namibia in October-November 2010 was very productive. As planned I am extending the mountain zebra work to wider areas of southern Namibia both for comparison between local populations and because large areas are needed to study this highly mobile species. My main study areas are Gondwana Cañon Park and Fish River Canyon NP, the NamibRand Nature Reserve and Büllsport Guest Farm. But, in spite of the fact that these protected areas cover huge areas of land, in all of them mountain zebras often move into neighbouring areas; their populations are dependent on far more widely spread food and water resources that in turn depend on unpredictable local rainfall. So I am extending the study in NamibRand and Büllsport to the adjacent and vast, Namib Naukluft NP and adjacent private land.

The need for this expansion became clear in a recent population estimate of the mountain zebra in the northern part of the NamibRand reserve. This estimate, the first ever carried out in this reserve, was carried out by identifying individual mountain zebras and using mark-recapture technique for the animals that visit five main waterholes. The estimate was  $178 \pm 9$ , and, significantly, this is less than the number (at least 217) of individually known animals that visit the water holes over a longer period. Another finding was that when water ran out at the most popular waterhole only 22% of the animals were seen at alternative water holes in the reserve. Where the rest go at such times is unknown but I plan to test the possibility that they have climbed over the nearby Nubib mountain range to find water elsewhere. In other words the population may depend on resources outside the protected area. Contact has been made with the landowners involved and hopefully this puzzle can be solved. Needless to say, unless we understand such movements we will not be in a position to effectively conserve mountain zebras over their entire ranges.

The population estimate in NamibRand was carried out using five camera traps (BuckEye cams); one purchased using earlier Rufford Small Grant funds and the remainder by the NamibRand directors. Camera trapping is a highly effective technique, particularly for water-dependent species that visit water points every day or two, and the new mini cameras (DLC Covert II HR 8.0) bought under the current grant have proved to be highly effective. They are cheaper than previous models and much easier to transport and deploy.



Competition at Porcupine Water NRNR May 2010.