



## GONAREZHOU CONSERVATION PROJECT



The Frankfurt Zoological Society (FZS) and the Zimbabwe Ministry of Environment and Tourism signed a memorandum of understanding in 2010, valid for a 10-year period. This agreement enabled FZS to enter into a partnership with the Zimbabwe Parks and Wildlife Management Authority (ZPWMA) for the conservation and development of Gonarezhou National Park. Work on the ground had already started in 2007 through an earlier MoU that FZS had signed with ZPWMA.



Some key achievements of this partnership to date include, amongst others:

- **Review of the Gonarezhou Park Management Plan** which serves as a roadmap for the activities of the Gonarezhou Conservation Project (GCP), and provides the blueprint for the envisaged Park infrastructure and tourism development. The Plan emphasises that the wilderness character of the Park is one of its most important features to be retained in the future, and this factor needs to be taken into consideration when planning and implementing any new development or management activity.
- **Increased law enforcement coverage and effectiveness** through regular monthly supply of ranger patrol rations, operational fuel and field equipment. Rangers have also participated in anti-poaching and bush skills training courses, and received training in the use of GPS units. Availability of a project aircraft has also greatly increased the capacity for detection of illegal activities and support to ranger units in the field.
- **Infrastructure maintenance and improvements** e.g. renovation of the vehicle workshops and staff housing, overhaul of water provisioning equipment, and renovations of the tourism camping facilities.

A 37 km electrified fence line was recently completed in the northwest section of the Park in order to minimise human-wildlife conflict, and to halt the escalating number of cattle herds that were entering into the Park for grazing.

- **Comprehensive aerial survey** of the number of large mammals in the Park and surrounding areas in 2009, inclusive of border areas in Mozambique
- **Provision and maintenance of equipment** crucial for effective park management such as vehicles, tractors, earth-moving equipment, radios, fire-fighting and office equipment
- **Increased ecological knowledge** through provision of equipment, resources and/or support for studies into elephant movements, river health monitoring, disease prevalence, large carnivore status and vegetation mapping.



## FRANKFURT ZOOLOGICAL SOCIETY

The Frankfurt Zoological Society (FZS) was established in 1858 and is an internationally operating conservation organisation based in Frankfurt/Main. The Society's main focus lies in eastern Africa, where our long-serving president, Professor Dr. Bernhard Grzimek invested much time and effort.

The Society is an independent, non-profit organisation. Our projects are financed through membership fees, private donations and bequests as well as from investment returns from the "Help for Threatened Wildlife" Foundation. Financial support also comes from third-party funds such as other foundations and charitable trusts.

Our work is committed to conserving biological diversity. FZS is therefore faced with one of the greatest challenges of the 21st century: the preservation of the world's natural environments. FZS is momentarily involved in 60 conservation projects in 25 countries.

# GONAREZHOU NATIONAL PARK FACT SHEET

- **Gonarezhou National Park (GNP)** is one of the 11 areas designated as a national park in Zimbabwe. GNP is situated in the south-eastern Lowveld of Zimbabwe, and occupies a total area of 5,053 km<sup>2</sup>. The Park was proclaimed in 1975, although various parts of it was designated as a game reserve as early as 1934.
- Gonarezhou forms part of the **Great Limpopo Transfrontier Park** which straddles the borders of Mozambique, South Africa and Zimbabwe and joins some of the most established wildlife areas in Southern Africa into a huge conservation area of 35 000km<sup>2</sup>. The GLTP forms the core of the Great Limpopo Transfrontier Conservation Area (TFCA), measuring roughly 100 000km<sup>2</sup>
- The **mean annual rainfall** is 466 mm, most of which falls between November and March. Two severe droughts have occurred since 1961 and the 1991/92 drought led to the death of large numbers of wildlife.
- **Temperatures** range from 27°C in June to 36°C in January. The park experiences a short dry winter season in June and July with temperatures below 30°C and a hot wet summer season from November to April when temperatures exceed 40°C The remaining months are hot and dry periods which precede and follow summer rains.
- The **landscape** is scenic as a result of various sandstone incisions. The spectacular Chilojo Cliffs are more than 180m high and are a result of the river incision of the sandstones. Perennial and temporal pans are also a common feature of the sandstone plateaus. Steep rocky gorges with falls and rapids characterize the banks of the Save and Runde rivers. Noticeable peaks in the north are the Makamandima (578m) and Mutandahwe (571m) and in the south is Nyamutongwe (516m). The Save Runde junction is 165m above Cape Town at sea level and is the lowest point in Zimbabwe.
- There are four main internal **drainage basins** in the Gonarezhou – Save, Runde, Guluwene/Chefu and Mwenezi. The Save and Runde rivers all drain into the sea via the Save and the Guluwene and Mwenezi basins are part of the greater Limpopo catchment.

The **pan system** in the Gonarezhou is quite extensive. Apart from the two extensive pans near the Save/Lunde junction (Tambaharta and Machaniwa) there are a number of larger pans which hold water well into the dry season.

- **No artificial water** is supplied for wildlife, with the exception of two historical weirs at Massasanya and Benji. It is part of the recommendations of the newly revised general management plan that historical artificial game water supplies are not re-established, in line with the adopted management policy of minimum interference in natural systems.
- The **vegetation** of Gonarezhou is typical of the semi arid *Colophospermum mopane* zone, and consists predominantly dry deciduous savanna woodlands. Physiognomic types are woodland and woodland savannah (59%), scrubland (40%) and savannah grassland (1%). The plant checklist for the park includes 924 species from 118 families and 364 genera, with 265 trees, 310 shrubs, 55 woody climbers and 137 grasses. The list is regarded as incomplete as no systematic survey has been undertaken.
- Fifty **fish** species have been recorded in Gonarezhou, primarily from the Save and Runde Rivers, but recent declines in water quality and flow patterns of the major rivers may have reduced this number. The killifish *Nothobranchius fuzeri* has historically been only found in pans of the Guluwene/Chefu catchment, making it a Park endemic, but recent findings seem to suggest that its distribution also extends into the drainage system downstream into Mozambique, but the Park remains its type locality, and probably contains the core of its range. Other noteworthy species include lungfish that occur in seasonal pans in the Guluwene/Chefu catchment, and the Zambezi Shark and Small-tooth Sawfish, recorded at the Save/Runde confluence.
- The **herpetofauna** of Gonarezhou is unusual in Zimbabwe, as it includes many species which typically occur on the East African coastal plain. Reptiles and amphibians, being poikilothermic and less mobile than higher animal groups, are good indicators of bio-geographic boundaries, and their occurrence in Gonarezhou illustrates the bio-geographic importance of the Park. The Gonarezhou species list includes about 6% of the Southern African endemics and 14 species of special conservation interest
- The **bird** checklist of 400 species includes a further 92 species regarded as 'likely to occur'. The bird list includes 13 species that are rare or of limited distribution and of conservation interest. The scrub mopane areas of the park are one of the more significant breeding sites for the Lappet faced vulture in southern Africa.

A total of 89 species of mammals in 71 genera and 31 families have been recorded from the Gonarezhou. A further 61 species, mostly insectivores or small rodents as likely to occur. Most of the work on mammals was carried out in the 1960s and 1970s and there is a need to re-evaluate some of the collections. The Yellow Golden Mole and Cape Hare are only known from Gonarezhou in Zimbabwe, and the red squirrel only occurs in the southeast Lowveld of the country.

Latest estimates, for large mammals in the Park are: Impala 6 005, kudu 2 285, buffalo 2 274, zebra 1 385, nyala 370 (Gonarezhou is the only place in Zimbabwe where nyala are found in significant numbers), wildebeest 364, eland 317 and giraffe 251. The results of all surveys since 1993 (the last management offtake) implies that the Gonarezhou elephant population is increasing at a mean annual rate of 6.2 %, and that the current population estimate of 9 123 is the highest ever recorded.

Gonarezhou has the dubious distinction of having twice lost its **black rhino** population. Records indicate that the last of the original population had gone extinct by the early 1940s. A total of 77 black rhinos were released into the Park between 1969 and 1971, with the population building to more than 100 animals, but the species went locally extinct again due to poaching by the early 1990's.

