

Text and photos - **Dr Peter Howard**, Cultural Heritage Consultant Independent Consultant and Africa Focal Point for World Heritage, World Commission for Protected Areas (WCPA)

he United Republic of Tanzania's Ngorongoro Conservation Area (NCA) is one of Africa's most important wildlife areas and a bold experiment in multiple land use. At its core is the world famous Ngorongoro Crater — a giant caldera in which the dramas of life on the African plains are played out each day by a diverse assemblage of large mammals — wildebeest, zebra, lion and rhino — in a primeval 'Garden of Eden'. Beyond the crater rim, Maasai pastoralists in bright red shukas proudly herd

their cattle across the plains, seemingly oblivious to the herds of wild animals sharing this vast landscape, the 'endless plains' of Serengeti.

Ngorongoro was one of the first natural sites to be accorded World Heritage status in Africa, back in 1979. It was an obvious candidate to join the list of Earth's most precious places: not only does it encompass the extraordinary crater with its resident populations of wildlife, but also provides critical wet season grazing for the great herds of wildebeest, zebra and gazelle —

nearly 2 million animals – which make their annual traverse of Serengeti in the world's most spectacular wildlife migration, following the rains in a perpetual quest for fresh nutritious grazing. And, hidden below the surface, are clues to human origins and the species our ancestors encountered as they strode across this landscape for nearly 4 million years at places such as Laetolil and Olduvai Gorge – now world-renowned palaeontological sites.

The NCA covers some 8,300 km2, but its attributes and ecological integrity are inti-

mately linked with those of adjacent protected areas in northern Tanzania and southern Kenya, including Serengeti National Park; the Maswa, Grumeti and Ikorongo Game Reserves; and Kenya's Maasai Mara national reserve. Together these protected areas cover an area of almost 30,000 km2, encompassing most of the great migration route.

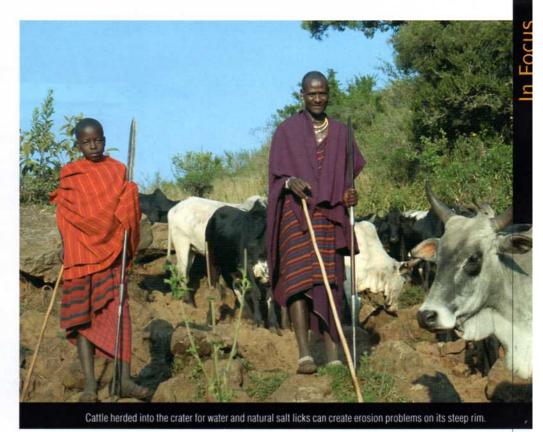
The NCA is the southernmost portion of this protected area complex, and includes a portion of the low-lying Serengeti plains, and a highland area of volcanic origin which includes Ngorongoro Crater as well as eight other extinct volcanic craters and calderas. It is a dramatic landscape, ranging in altitude from 3,700 m at the top of Lolmalasin to below 1,100 m at the base of the rift vallev at Lake Evasi. There are highland forests draped in lichens and mosses; swamps, rivers and cascading waterfalls; granite kopjes (steep-sided hills) punctuating the endless short-grass plains; shifting sand dunes; eroded gulleys exposing ancient secrets, layered with tales of changing climates over the millennia; flat-topped Acacias and giant succulent Euphorbias.

The pastoral life

According to most reports, the Maasai moved into this area about 150 years ago, herding their cattle to areas of fresh pasture as the seasons and environmental conditions dictated. Their traditional way of life revolves around cattle, a nomadic existence with the majority of the people's nutritional requirements provided by cow's milk and blood. Traditionally, the Maasai never stay in an area long enough to grow crops. They do not hunt wild animals for meat except under exceptional circumstances. Co-existence with wildlife is deeply rooted in Maasai culture and the wildlife of Ngorongoro - and broad swathes of land straddling the rift valley in Tanzania and Kenya - owes its continued existence to the protection of the Maasai over past centuries.

New demands on resources

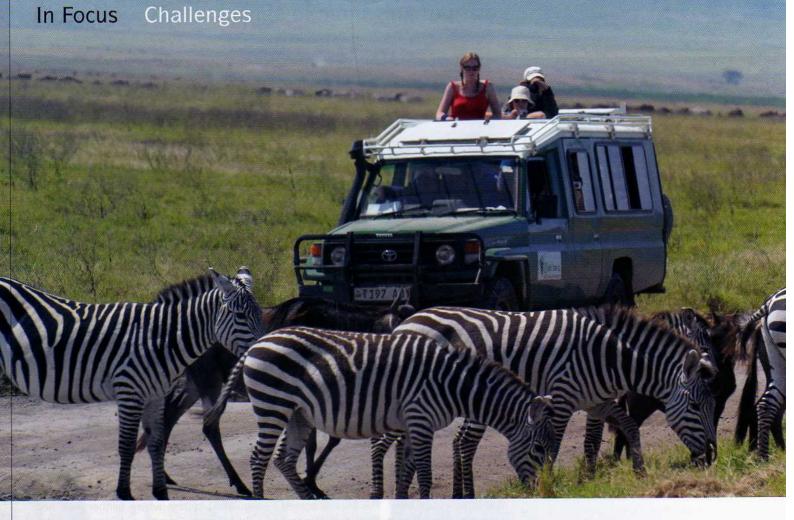
The NCA came into existence in 1959 under an agreement between the Maasai elders and the Tanzanian Government 'to conserve and develop the natural resources of the conservation area' and 'to safeguard and promote the interests of the Maasai citizens of the United Republic engaged in



cattle ranching and dairy industry within the conservation area'. The Maasai agreed to leave the adjacent Serengeti National Park and participate in a bold initiative to integrate conservation and human development within the NCA. The Ngorongoro Conservation Area Authority (NCAA) was established as a semi-autonomous body to implement this conservation and development mandate.

As the Maasai have demonstrated for hundreds of years, man and wildlife can co-exist in harmony – at least within a self-regulating system where neither man nor wildlife exerts excessive demands on the productive capacity of the natural environment. But as demand on the natural environment increases, so does the potential for conflict between development and conservation needs. Inevitably, the NCAA faces many challenges in its efforts to reconcile these needs. 'There were fewer than 8,000 Maasai living in the area when the NCA was created, but this had doubled by the time





the area became a World Heritage site in 1979. Today there are an estimated 60,000 residents, together with about 300,000 cattle, sheep and goats', reports Bernard Murunya, chief executive of the NCAA. 'All these people have legitimate demands on the area's resources, and aspirations for a better life.'

The demands of tourists have risen even

more steeply – from an estimated 30,000 visitors in 1979 to 350,000 in 2006. Providing essential services for all these visitors – accommodation, roads, walking trails, guide services, etc. – is a major challenge, particularly as the main attraction – the Ngorongoro Crater itself – is only 300 km2 in extent, or about 3.5 per cent of the conservation area.

Remarkably successful

'The NCAA has been remarkably successful,' David Sheppard, head of IUCN's Protected Areas Programme, told me on his return from a recent official mission to evaluate the site. 'Key to this success has been revenue retention, the ability of NCAA to return park entry fees and other revenues straight back into the conservation and

