

TANZANIA'S OTHER GREAT MIGRATION

Tourists flock to the dry savannas of northern Tanzania to witness one of the most impressive displays of wildlife on the planet. The Tarangire-Manyara Ecosystem of the Maasai Steppe is a world hotspot for diversity and abundance of large mammals, especially ungulates. Ungulates are herbivorous mammals with hooves and include antelopes, zebras, buffalos, wildebeests, and giraffes. These animals are critical to shaping and maintaining the vegetation of the habitats in which they live, and improving the rangelands for Maasai livestock.

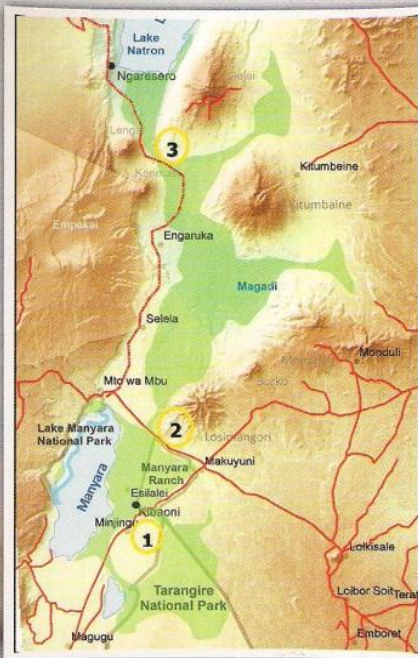
Furthermore, they provide a vital food source for a host of predators and scavengers including lions, leopards, cheetahs, and hyenas.

The region's ungulates are not only ecologically priceless but are a critical part of Tanzania's economy. Migratory ungulates like wildebeests and zebras figure prominently in photographic tourism in this country as icons of wild nature and symbols of a nomadic existence that has been lost in much of the rest of the world. Wildlife-based tourism represents an important long-term source of income – but only as long as ungulate populations are studied, protected, and managed sustainably.

The Tarangire-Manyara Ecosystem is also the heartland of the Maasai people. As pastoralists moving across the landscape in search of forage for their cattle, traditional Maasai are friends of wildlife because their livelihood does not significantly alter wildlife habitat. In fact, the relationship between the Maasai and wildlife is mutually beneficial: ungulate habitat is improved by Maasai burning practices, and Maasai profit from the maintenance of short-grass grazing swards by wild herbivores.

By Monica Bond

A new conservation initiative aims to highlight the Tarangire-Manyara Rift Valley wildlife migration corridors



GENERAL LOCATION OF THE NORTHERN PLAINS WILDLIFE MIGRATION ROUTE

Note that the migration passes through three critical pinch points:

(1) Kibaoni and Kwakujinja between Tarangire National Park and Manyara Ranch; (2) on the western slopes of Losimangori Mountain, just north of the tarmac road; and (3) between Ol Donyo Lengai and Gelai Mountain.

Map courtesy of Dr Tom Morrison



The boundary of the Tarangire-Manyara Ecosystem is defined by the large migratory ranges of the eastern white-bearded wildebeest and Burchell's zebra as they move seasonally in and out of Tarangire National Park in their recurrent, primeval search for water and forage. Research has shown that 30-50% of Tarangire wildebeest migrate northward towards the villages of Selela, Engaruka, and Gelai to breed in the northern plains, and thousands of zebra, eland, oryx, and gazelles also use the plains south of Lake Natron each wet season. The wet-season range is critical because it provides nutrient-rich forage necessary for successful reproduction. Volcanic ash from Oldonyo Lengai near Lake Natron fertilizes the nearby Gelai and Kitumbene Plains, producing forage rich in calcium and phosphorus needed by lactating female ungulates. The volcano-enriched forage provides the nourishment their nursing young need to grow healthy and strong. Water on these plains is difficult to find during the dry season however, so ungulates must migrate south to the Tarangire River, which provides a reliable year-round water source.

Historically, wildebeest and zebra migrated along eight to ten routes between their dry-season range in Tarangire National Park and their wet-season ranges outside the park, with annual distances up to two hundred fifty km. However, today only two of these migration routes remain— one north to the Gelai Plains and one east to the Simanjiro Plains. Regrettably, neither route is adequately protected. Habitat within these migration pathways is being rapidly lost to farms and permanent housing. Moreover, poaching of wild ungulates along the migration routes has become rampant, particularly in the Mto Wa Mbu Game Controlled Area. Widely available illegal bush meat is now far cheaper than legal beef and goat meat, depriving the Maasai and other producers of a fair market value for their livestock. The sad but unsurprising consequence is that the eastern white-bearded wildebeest has declined from 40,000 animals in 1988, to just 6,000 in 2001, according to data from the Tanzania Wildlife Research Institute (TAWIRI).

Without immediate protection of the remaining two wildlife migration routes, the eastern white-bearded wildebeest and other migratory ungulate populations will undoubtedly continue to dwindle and might even disappear altogether. Genetic evidence indicates that Tarangire-Manyara population of wildebeests is unique, as it has not mixed with the population in Serengeti/Ngorongoro for thousands of years. Thus, the loss of this wildebeest population could mean the extinction of an entire species. The extirpation of these migratory ungulates would devastate not only the ecological function of the Tarangire-Manyara Ecosystem but the local economy as well. Without ungulates, very few lions, leopards, and cheetahs will remain in the area – these carnivores are among the most popular animals for tourists to see on their visit to Tanzania. Tourists will travel elsewhere for their safaris, equating to far fewer tourism dollars for Tarangire and Lake Manyara national parks, village Wildlife Management Areas, and local lodges and gift shops. Furthermore, the continued loss of prime rangeland to farming and permanent housing dispossesses Maasai from their traditional pastoralist lifestyle. >>



PHOTO: DERE LEE

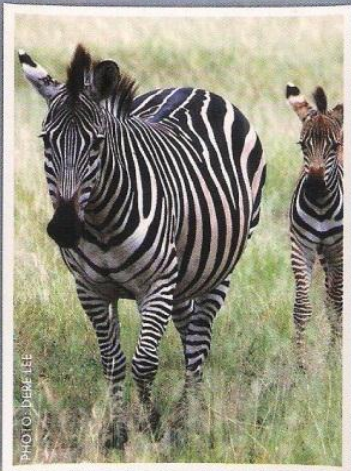


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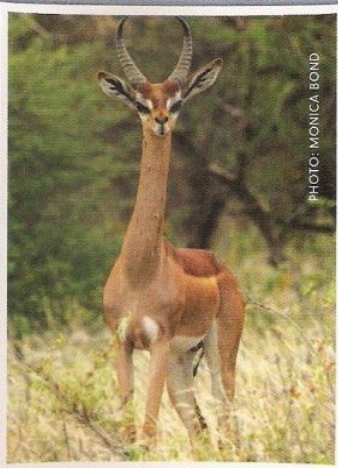


PHOTO: MONICA BOND

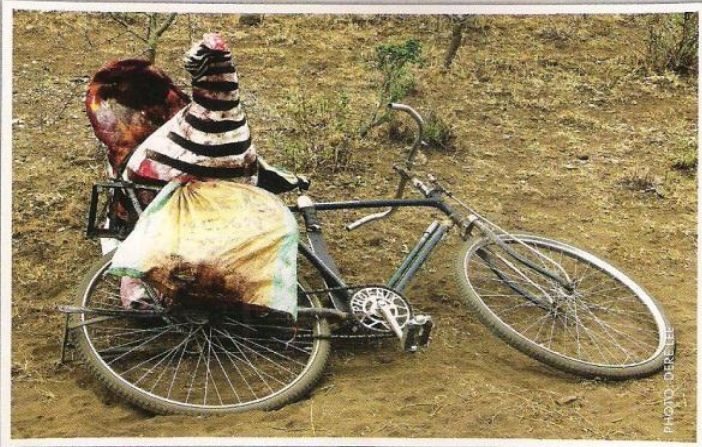


PHOTO: DEBE LEE

ABOVE LEFT:
Zebras on the move

ABOVE RIGHT:
Male gerenuk, a rarely seen antelope in northern Tanzania

ABOVE CENTRE:
Leg of a poached zebra on the back of a bicycle

LEFT:
Eastern white bearded gnu

With this in mind, the Wild Nature Institute and its partners in the conservation and tourism communities have launched a Northern Plains Campaign. The goal is to protect one of the last remaining migratory routes for the eastern white-bearded wildebeest in order to preserve the economy, culture, and ecology of the Tarangire-Manyara Ecosystem. The solution is to delineate and protect the migration pathway between Tarangire National Park and the Gelai Plains south of Lake Natron. Conservation within a Wildlife Management Area or comparable designation would permit continued multiple land uses for traditional Maasai livelihoods and the development of eco-tourism while preserving critical habitat for migrating ungulates. Habitat conversion to farms and permanent housing as well as new road construction between Tarangire and the Northern Plains should be governed by a comprehensive land-use plan drafted by local stake-holders. Conservation and land-use planning within the migratory pathway would be an economic boon to the local Maasai villagers. Their traditional livelihoods would be protected, and income would be generated via fees and grassroots eco-tourism. Fees charged for transiting travelers could fund anti-poaching patrols and community development projects. Signs and speed bumps along the Makuyuni-Mtowambu and Makuyuni-Kibaoni roads where wildlife concentrate to cross would reduce vehicle strikes, improve safety, and educate the public about the importance of the area for wildlife migration.

Without immediate action, many migratory ungulates in the Tarangire-Manyara Ecosystem, most notably the unique population of eastern white-bearded wildebeest, will be gone forever. The Maasai and the wildlife can and should thrive together in their historical landscape. The local tourism industry will strongly benefit as well. Protecting wildlife populations of the Tarangire-Manyara Ecosystem will also protect existing local investments in tourism infrastructure from losing their attractiveness to tourists. This ecosystem is perfectly situated for expanded tourism development as well: for example, the plains north of Makuyuni are one of the few places in Tanzania where the elegant, long-necked antelope known as the gerenuk can be found – and the area is very close to the tourist hub of Arusha. Action now will help preserve the unique culture, ecology, and economy of the Tarangire-Manyara Ecosystem for future generations of Tanzanians. Our children's children will thank us for our foresight as they enjoy this nation's natural bounty. ■