1 GIRAFFE 2 GIRAFFE 3 GIRAFFE MORE?

It's not easy to tell one giraffe from another. Most people wouldn't try. Even the experts find it a challenging task. However, these otherworldly mammals deserve a closer look. Giraffes are a common feature of Africa's wild places, nibbling delicately on the leaves of trees and strolling across the landscape with a gawky, trance-like grace. Little studied in the past, their falling numbers have brought them into the conservation spotlight. **Tim Jackson** looks at the work being done to secure the continued existence of nature's gentle skyscrapers.

TEXT & PHOTOGRAPHS BY TIM JACKSON

t's official; there is only one species of giraffe in Africa, and therefore the world. Unofficially, however, the picture is much more complex, with nine subspecies currently recognised across the continent. And with ongoing research, this figure may yet change. We already know that neighbouring subspecies such as reticulated and Masai giraffes have been isolated genetically from each other for perhaps as long as 1.5 million years. Now it is speculated that there may be up to six different species browsing Africa's tree line. The implications for conservation are considerable, depending on just how much the currently recognised subspecies differ from each other. It's particularly important when you consider that, overall, giraffe numbers have declined by some 40 per cent in the past decade to fewer than 80 000 individuals. In terms of giraffe conservation, Kenya could argue that it is the most important country out there, with no

fewer than three of the different subspecies: Rothschild's, reticulated (shown here) and Masai. Most other countries can lay claim to only one. Kenya is certainly home to the earliest known giraffe fossils, suggesting that the animals may have originated there too. This area is regarded as the epicentre of the species' radiation across Africa. However, what lies ahead for these elegant creatures?

It is to their credit that Kenyans were the first to blow the whistle on the pressure that is mounting in this cradle of giraffe-kind. The country is set to become the first African state to launch a national strategy for giraffe conservation, providing important guidance for the management of each of the trio of subspecies there and raising awareness of their plight. The initiative is headed by the Kenya Wildlife Service and a number of leading local and international conservation partners, whose work will play a role in securing the future of the animals.

Historically, the most troubled of the three is Rothschild's giraffe. With a

world population of fewer than 700 individuals in the wild, Rothschild's was elevated to Endangered status by the International Union for Conservation of Nature (IUCN) in 2010. It shares this unfortunate label with the West African giraffe, which was added to the list in 2008.

'As the second giraffe subspecies to be listed as Endangered, [Rothschild's needs] sound conservation strategies to improve its situation in the short, medium and long term,' says Julian Fennessy of the Giraffe Conservation Foundation. Some 40 per cent of Rothschild's giraffes live in national parks and nature reserves in Kenva: the rest occur in Uganda and possibly South Sudan. In Uganda, a visit to Murchison Falls National Park reveals a stark picture. Populations there have dropped tenfold from an estimated 2 500 individuals in the 1960s to fewer than 250. The loss of suitable habitat through farming development in the area is blamed for much of the subspecies' decline. While numbers may be relatively high in the small reserves where they do occur, the remaining populations are physically isolated from each other, so interbreeding is impossible.

No-one has ever conducted a scientific study of Rothschild's giraffe in its natural environment, which is hampering efforts to restore its numbers. In 2010 the Rothschild's Giraffe Project was launched and is based at Soysambu Conservancy – part of the recently declared Kenya Lake System World Heritage Site in the Great Rift Valley. Here researcher Zoe Muller and her colleagues are trying to learn as much as they can about the subspecies.



Rothschild's giraffe Giraffa camelopardalis rothschildi

Alternative names: Baringo giraffe, Ugandan giraffe. Named after Lord Walter Rothschild (1868–1937), the banker and zoologist who first described it.

Distribution: West–central Kenya, central Kenya (introduced), Uganda, possibly South Sudan (unconfirmed).

Population estimate: Around 670 individuals remain in the wild.

IUCN status: Endangered.

Distinguishing features: Characterised by large, dark, rectangular spots or blotches set irregularly against a cream-coloured background. The dark markings are less jagged than those of most other giraffes. The legs are noticeably pale and are not patterned, particularly below the knee. Like the reticulated giraffe, it has on its head five ossicones (horn-like protuberances) instead of the usual two: a pair on the top of the head, one in the centre of the forehead and two behind the ears.

Where to see them in Kenya: Lake Nakuru and Ruma national parks, Soysambu Conservancy, the Giraffe Centre (Nairobi).

Trivia: Almost as many individuals are kept in captivity (this figure currently stands at 450) as there are in the wild. Unlike Masai and reticulated giraffes, all Rothschild's are confined to national parks and other protected areas, mostly outside their natural range. (See *Africa Geographic* August 2011 for an account of the relocation of a group of Rothschild's to a former stronghold of the subspecies at Lake Baringo, Kenya.) The only key populations remaining in the natural range are in Uganda's Murchison Falls and Kidepo Valley national parks.





Reticulated giraffe Giraffa camelopardalis reticulata

Alternative names: Somali giraffe, netted giraffe.

Distribution: Arid regions of north-eastern Kenya and northwards into south-western Somalia and southern Ethiopia.

Population estimate: Fewer than 5 000 in the wild, from an estimated 28 000 in the late 1990s. Numbers throughout northern Kenya have decreased rapidly; those in Somalia and Ethiopia are unknown but are assumed to be very low.

IUCN status: Least Concern. (The plight of the reticulated giraffe is to be tabled to the IUCN for review within the next few months.)

Where to see them in Kenya: Samburu, Buffalo Springs and Shaba national reserves, OI Pejeta Conservancy, Lewa Wildlife Conservancy.

Distinguishing features: Polygon-shaped chestnut-orange patches on the coat are clearly defined by a network of thick white lines, or reticulations.

Trivia: Along with Rothschild's, the reticulated subspecies is a common giraffe in captivity. Approximately 450 individuals are housed in zoos around the world.

Reficulated giraffes have suffered the most devastating losses in recent years. It's reckoned that their numbers have dropped from around 28 000 to fewer than 5 000 in the past decade, a decline of more than 80 per cent. And with research suggesting the reticulated sub-species is genetically so different from other giraffes that it deserves to be considered a separate species, debate about its conservation is considerable.

Like Rothschild's giraffe, little is known about the reticulated subspecies' biology. The newly formed Reticulated Giraffe Project, based in Samburu National Reserve and headed by John Doherty of Queen's University Belfast, is studying the animal and its conservation. Poaching is thought to be the main contributor to its decline. with much of its area of distribution being volatile due to regular outbreaks of regional conflict and the availability of automatic weapons. For the local people, a single giraffe can provide a lot of meat (some individuals weigh more than 1 000 kilograms), earning the animals the name of 'bandit food'. Poverty, drought, insufficient protection, the growing human population and habitat degradation have probably also played a role in the massive decline in reticulated giraffes, which are valued highly by some communities as trophies and for their hides, tail hair and bone marrow. For example, a long bucket made from the neck skin is said to be prized to lift water from wells in the area.





The Masci giraffe may appear to be in less serious trouble than its cousins to the north. For how long, though? With an estimated population of 35 000–40 000, there were thought to be more Masai giraffes than any other subspecies, but recent population surveys indicate that it, too, has suffered losses of up to 60 per cent.

The giraffes are being hunted as bushmeat, especially in Tanzania's Serengeti region to the south, and illegal livestock disturbance and declining woodland cover in areas like the Masai Mara National Reserve have pushed them out of landscapes where they once roamed. In the Mara region, a burgeoning human population and increased agriculture are also taking their toll. For more information about Kenya's giraffes and the work being done to protect them, visit The Giraffe Conservation Foundation www.giraffeconservation.org, Rothschild's Giraffe Project www.girafferesearch.com, Reticulated Giraffe Project www.reticulatedgiraffeproject. net, The Giraffe Centre www.giraffecenter.org or The Serengeti Giraffe Project www.serengetigiraffeproject.org

Masai giraffe

Giraffa camelopardalis tippelskirchi

Alternative name: Kilimanjaro giraffe.

Distribution: Central and southern Kenya, southwards throughout Tanzania. Populations have also been introduced into Rwanda, outside the subspecies' natural range area.

Population estimate: Thought to be the most populous subspecies of the three, with estimates of up to 40 000 unconfirmed due to lack of survey data.

IUCN status: Least Concern.

Where to see them in Kenya: Nairobi, Tsavo (East and West) and Amboseli national parks and Masai Mara National Reserve.

Distinguishing features: Noticeably the darkest giraffe subspecies. The coat pattern features distinctive large, dark brown, jagged spots against a creamy-brown background.

Trivia: Masai giraffes are named after the famous nomadic pastoralists who reside in the same regions in Kenya and Tanzania.

