# Lewa Conservation's History - To Better the Future

Ian Craig took over the running of his parents' cattle ranch, Lewa Downs, in 1977. The ranch covers some 40,000 acres of thorn-bush plains on the northern slopes of Mount Kenya. When the mountain's craggy heights aren't hidden by cloud, their snow-capped peaks dominate the view to the north. Wildlife used to roam freely on the ranch, but as poaching escalated in the seventies their numbers were threatened especially those of the rhino.

In 1983 Anna Merz, an English woman living in Kenya, approached Ian with the proposal that she build and finance a rhino sanctuary on the western side of the ranch. The Craig family was enthusiastic. They had had no rhino at Lewa Downs for 10 years. None had ever been killed while on the ranch, but as soon as they left its safety, poachers murdered them. The Craigs gave Anna 5,000 acres and later, another 5,000. Her work was the catalyst for what would become the Lewa Wildlife Conservancy. However, it was the sickening sight of an elephant massacre in 1988 that caused Ian to realize that wildlife had no future unless local communities participated in its protection. Land erosion, poaching and over-grazing were destroying the land, but Ian believed that with the right action and cooperation this could be reversed. His ambition was to take down the fences between neighboring ranches and open up the migratory routes between Mount Kenya and the Mathews Mountains in the north. First though, he had to convince local communities to stop seeing animals as competition for food and instead see them as a source of income.

In 1995, the Craig family turned the entire farm into a conservancy, known as the Lewa Wildlife Conservancy (LWC), with a mandate to protect and conserve the wildlife of Kenya. A fence to protect the animals runs around the whole perimeter except for a single monitored entrance allowing for seasonal movements to the northern frontier regions. (The government-owned protected forest of Ngare Ndare - 5000 acres to the south-east of the ranch - is also included within the fence's perimeter.)

As the Conservancy has grown, the amount of wildlife it supports has increased. Today the 45,000-acre Conservancy has more than 25 per cent of the world's threatened Grevy's zebra population, 31 indigenous black rhino and 30 white rhino as well as many other animals native to this part of East Africa. Animal management and research is now a vitally important part of the work carried out, producing valuable scientific data, which influences decisions. For example, scientists from Princeton were invited to study the Grevy's zebra. Insights gained from studying its impact on the environment and vice versa will influence management and conservation strategies for the species throughout Kenya. Community development projects are ongoing at LWC, and two additional areas have benefited from the Conservancy's experience and support. Il Ngwesi is a 16,500-acre group ranch to the north-west which now has a lodge owned and run by the Il Ngwesi people who are Laikipiak Maasai. All profits are returned to the community who are now avid supporters of conservation. The lodge was runner-up in the British Airways Tourism for Tomorrow Award in 1998, and is a great success story of East Africa.

Further north is Namunyak, a larger 75,000-acre trust, which is owned by the Samburu community. Lewa Wildlife Conservancy's involvement with wildlife conservation and community development projects has significantly contributed to the security of the area. There has been no commercial poaching there since 1998. In 2001 Lewa Wildlife Conservancy translocated 15 giraffes to Namunyak,

relieving an overpopulation problem at Lewa and simultaneously helping to build up Namunyak's stock of wildlife. Lewa Wildlife Conservancy is proud to be a source of wildlife, contributing to the restocking of the whole of the northern region.

Although its boundaries technically stop at the gates, Lewa Wildlife Conservancy works closely with the Kenya Wildlife Service to control poaching and stock thieving throughout the northern regions. This is a long-term policy, which aims to protect the whole area, developing wildlife conservation hand-in-hand with the prosperity and security of local communities. Eighteen of Lewa Wildlife Conservancy's armed rangers are Police Reserves, authorized to carry out protection work outside Lewa Wildlife Conservancy boundaries. Every year, visiting enthusiasts, scientists and conservation experts leave Lewa Wildlife Conservancy inspired to continue similar work in the rest of East Africa. With the support of private donors and international financial bodies, Lewa Wildlife Conservancy is working towards its vision of a time when the remote bush areas of northern Kenya will once again be teeming with wildlife.

# The Conservation Of The Endangered Black Rhino In Kenya

Early in 2000, Lewa Wildlife Conservancy had a small but very welcome guest. Every day at noon, escorted by his three keepers and barely discernible above the long yellow grasses, Omni, a baby rhinoceros could be found ambling down to a muddy stream for his bath. When he was barely four weeks old he was rescued from his partially blind mother who had been neglecting her son's safety. Two men have the privilege of looking after Omni and his sidekick - Digby, the warthog rescued when a predator took his mother. Digby has become his playmate as well as his hot water bottle. At night, anybody peeping into Omni's night pen would see baby warthog asleep on the back of baby rhino, both covered by a large blanket. More than one keeper is vital to allow for rotation, preventing the young rhino from becoming too attached to one man and pining if he leaves. The sight of them playing with the baby rhino in the river is comical but serious business is afoot. The men are rolling him over and covering him in mud to provide protection against biting flies and ticks in his first lesson of survival. Ultimately, he and Digby will be returned to the wild.

Lewa Wildlife Conservancy 's pioneering work as one of the first intensive rhino protection sanctuaries has contributed to the success of many rhino introductions throughout Northern Kenya. Most significant is the importance of giving rhinos enough space to exist within their own territories and of introducing them simultaneously so that residents do not cause problems for new arrivals. In 1995, with the removal of the fence, the sanctuary expanded to incorporate the whole conservancy as well as the Ngare Ndare forest, a move that has eased social pressures. Undisturbed by any new introductions over the last five years the rhinos are now breeding more regularly. The year 2000 heralded a breakthrough with the birth of four black rhino as well as three white rhino.

However, it is the breeding interval between conceptions, which are most relevant. The gestation period for a rhino is 18 months. After years of sluggish performance and three-year inter-calving intervals, the females are now conceiving eight to 12 months after calving with calving intervals of just over two years, which is comparable with other top-producing rhino sanctuaries in Africa.

Security is a vital aspect of rhino care. Eighty-seven out of the 205 men employed at Lewa Wildlife Conservancy are detailed to protect the rhino, each of which has a name and a specific territory which is walked daily by security guards who radio in details of which rhino they have seen there.

White rhinos have large territories, which overlap; black rhinos tend to be more protective over their smaller areas. All rhino activity, specifically location and mating, is recoded by the Research Officer and marked onto a database.

Using customized software, a picture is built up of each rhino's range, frequency of movement, distance traveled, when traveled and its preferred diet. As far as possible this information is used to determine paternity of each calf, but the picture is complicated by the promiscuity of the white rhino cow who might have enjoyed the company of as many as three bulls while in estrus. For black rhino the data is more reliable as the male has a more specific territory, which seldom overlaps so the position of the cow can be recorded and matched to a bull's territory.

Older and larger males are the main threat to an orphaned rhino. A newly born male calf begins marking its territory immediately, relying on its mother to protect it from any challenging male. In 1998, a two-year-old orphan, Larangoi was killed during the night by an older male who challenged him. His keepers only narrowly escaped injury in their efforts to protect him. Lewa Wildlife Conservancy are hoping to solve the dilemma of how to protect Omni from the same fate by sending him to one of the group-ranches north of Lewa Wildlife Conservancy, Il Ngwesi, where it is easier to monitor Omni's movements and keep up the supply of baby milk which he will continue to drink for the next five years. Omni's keepers will remain until he is familiar with his new Samburu guardians. And Digby will go too.

# The Conservation of The Magical Sitatunga Antelope In Kenya

The Sitatunga is a shy aquatic antelope, which likes to hide in swampy areas, occasionally permitting a lucky person a glimpse of its fluffy brown chest backlit against a soft evening sun.

But in too many of its favourite haunts, the Sitatunga is a creature of the past. While there are believed to be around 170,000 in the world, there are less than 50 in Kenya. Many of the areas where it is abundant such as the Congo and the Central African Republic are inaccessible to most visitors. Tanzania, Zambia and Botswana have more accessible populations. Its secretive habits enable it to persist in settled areas as long as its habitat remains intact. But meat and trophy hunting, as well as competition from man for the same areas, has drastically reduced its numbers. In Kenya, it is indigenous to both the Lake Victoria swamps where it is now very rare and the Saiwa Swamp National Park.

The sitatunga's long-term survival is dependent upon the existence of well-protected areas of natural habitat. Dr Richard Leakey, the then Director of KWS, approached Ian Craig in 1989 with the suggestion that he might like to house some of these rare creatures, brought to Lewa Downs from Kisumu. Ian readily accepted. The Eden Trust offered its support and soon there were six Sitatungas settling into the swamps at Lewa Downs. Ten years later the herd has at least doubled in size. It is hard to count the elusive antelope but every now and again a young calf has been sighted slipping into the water; they swim with only their noses cutting the surface. An aerial count has established that now at least 22 Sitatunga slide through the yellow fever trees and tall reeds on the banks of the Lewa River.

### The Conservation of The Grevy Zebra In Kenya Before Extinction

Grevy's zebra is listed as an Appendix 1 species with Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), which means that no commercial trade of the species is allowed. There are less than 3,000 left in the world. A report by the Equid Specialist Group recently declared, "the decline in numbers of the Grevy's is so serious that extinction within 50 years is probable, if' the trend continues at the current rate." Lewa Wildlife Conservancy has the single largest population of Grevy's zebra in Kenya. It has risen from 80 in 1977 to 640 in 1999 and accounts for over 25 percent of the world total. The rest of Kenya's Grevy's live outside protected areas for all or part of the year making Lewa Wildlife Conservancy 's zebra particularly important. The medium-term objective is to be able to supply other conservation areas in northern Kenya with Grevy's zebra. The Grevy's zebra is not to be confused with its more common cousin: the Burchell's or plains' zebra which has fatter stripes and is common across Africa. The taller, donkey-like Grevy's with large, fat, trumpet-shaped ears and smaller and closer together stripes is indigenous only to north-eastern Kenya, and small parts of Somalia, Eritrea and Ethiopia where its total range is 160,000 square kilometres. In the late 60s and 70s, there were about 15,000 but competition from cattle for grazing and water saw numbers drastically depleted to less than 3,000. They were also hunted for the tenderness of their meat and for their skins, which could be found in the curio shops of Nairobi being sold for as much as \$1000 (in 1978). War and famine all but took care of both the populations of Ethiopia and Somalia - where the last sighting was in 1973.

At Lewa Wildlife Conservancy, however, the news is positive. In spite of recent droughts, Grevy's increase in breeding rates is high. To determine the long-term viability of Grevy's zebra and the most effective way of managing them to improve breeding rates, Lewa Wildlife Conservancy has instigated a collaborative research program with two scientists from Princeton University, with funding from the St Louis Zoo and Marwell Preservation Trust. The study is looking at the survival rate of young zebras, habitat and food selection, the extent, if at all, that Grevy's are competing against Burchell's for the same food and grazing areas, and whether the Grevy's zebra are using the larger plains' herds as a buffer against predators. (In the Laikipia area, their habitats overlap and the two species herd together.) Using a digital camera donated by Zurich Zoo, members of the Lewa Wildlife Conservancy research team have set up a database of Grevy's, loading photographs of their rump patterns (the zebra equivalent of finger prints) into a computer. Interpretation of these results indicates that Grevy's are thriving at Lewa Wildlife Conservancy within a normal social organization. The mortality rates from drought and disease are much the same as for Burchell's, but the Grevy has a longer minimum inter-birth interval at 429 days, which means 17 generations in 20 years instead of the 20 produced by the Burchell's.

The Princeton scientists are currently monitoring the progress of females with six-month-old foals. They are also recording how the Grevy's associates with giraffe and eland as well as analysing the grass composition in the mares' and foals' favourite grazing areas. With all of this research Lewa Wildlife Conservancy is optimistic of an increasing population of donkey-like black and white equids at Lewa Wildlife Conservancy.

#### The Conservation and Translocation of The Reticulated Giraffes In Kenya

The reticulated giraffes at Lewa have been so successful that the Conservancy is faced with the novel problem of over-population. Giraffes are fussy eaters and their 'browse' is a diet of acacia trees at a certain height - on Lewa there is enough browse to keep 120 giraffes happy. However, the

population has grown to 240 and is denuding the trees. Culling is not a preferred option and so Ian and his experienced African capture team have embraced the more precarious alternative of translocation. Moving one 18 feet bolshy giraffe is hard enough: it is risky both for the captors, who have to be light on their feet to avoid flying forward kicks, and for the giraffe, but the task of moving 120 giraffes is huge, expensive and ongoing as they continue to breed.

In June 1999, the first 15 were moved 80 kilometres north to the Namunyak ranch in the under populated Samburu country, effectively solving two problems with one translocation. Namunyak is a group-ranch owned by members of the Samburu tribe who are trying to encourage tourists into the area with photographic safaris and a taste of true wilderness. Poaching is under control but it would take a long time for giraffe numbers to rise naturally. Namunyak needed more animals, and Lewa Wildlife Conservancy needed less, here was the solution. Tusk Trust, a UK-based African conservation charity, headed the translocation. Its director, Charlie Mayhew, flew out with filmmakers James Lindsay and Patrick Marks and presenter Kathaleen Stephenson who were planning to make a pilot video for the National Geographic.

Five giraffe at a time were moved in a rhino box, which had been modified, to allow their long necks to stick out of the top. First, though, they had to be caught and put into a boma (a small outdoor pen) to accustom them to captivity and the four-hour drive ahead to their new home. A moving vehicle is a less stressful way of herding giraffe than helicopter or horse. First a giraffe is selected (ideally a sub-adult between the ages of four and seven) and separated from the herd. It must neither to tall nor too small, not too young and not too old. The animal is then darted with a tranquillizer gun from a moving vehicle, a difficult and skilful operation. Before the animal has gone down, two men are on the ground binding its legs and blindfolding the animal. It is impossible to carry an animal of this size so once the ropes are in place, the tranquillizer is partially reversed and while the animal is in a drugged state it is led into the lorry, moved to the boma and then released down a tunnel into temporary captivity. As long as everything goes to plan, that is. Paddy, the cameraman, had to make a run for it once when a giraffe recovered a little too quickly. If the situation is judged to be becoming too stressful for the animal, as happened once, then it is released. After a week in the boma, each giraffe was moved to Namunyak where it was coaxed out of a trailer using branches of its favourite food and white sheets to pull it After a three-week stint in a shared boma, to encourage the giraffes to get used to each other and their new home, they were released to browse happily amongst the acacias deep in the bush surrounding the spectacular Mathews Range of mountains. The operation was 100 percent successful with 20 giraffes moved and no casualties.

Initially, keeping them there proved more difficult. The giraffe were monitored by Namunyak Wildlife Conservation Trust staff on the ground and by the Lewa Wildlife Conservancy 's super-cub plane in the air, which was able to home in on the giraffe using radio collars placed on two of the animals. A couple of giraffes did succeed in making the long journey home but were relocated. If giraffe continue to return from Namunyak then they may have to be sent to Meru National Park. It would be quite a feat for them to get through the heavily cultivated Nyambeni Hills. A few homing pigeons aside, it is important not to lose sight of the bigger picture which is that the translocation was a huge success and that Lewa Wildlife Conservancy is the southern point of a huge region stocked full of browse. As Lewa Wildlife Conservancy's breeding projects reach their optimum levels it will be possible to gradually restock the 250,000 square kilometres of the wilder regions of

northern Kenya and return them to their proud pre-poaching glory. Already plans are afoot to translocate a herd of waterbuck and another of impala to Namunyak as well as to Meru National Park which also has been depleted of wildlife by poaching in the past.

# The Migration, Movements and Translocations of The Elephants in Northern Kenya

Lewa Down's history and philosophy is closely linked to the elephants of the Samburu and Laikipia districts. There are around 3000 of these, a substantial part of the free-ranging elephant population outside national parks in Kenya. Elephants' habits have changed drastically since the mid-sixties when heavy poaching in the north forced them to alter their migration pattern. In the dry season, the few permanent water sources that they were used to frequenting were becoming battle zones between poachers and cattle-herders. So they began to migrate south to avoid these areas on a route, which took them from the Samburu Namunyak area, via Lewa Downs to the Ngare Ndare on the edge of Mount Kenya. In 1984 Lewa hosted its first herd of 300 elephant.

Each elephant guzzles up to 300 lbs of grass, trees and bushes a day. Inevitably a herd of 300 caused problems among the local agricultural community. There were too many bulls, fond of pulling down trees and reluctant to move north again during the wet season because of the escalating threat of poachers. The first Scientific Advisory Committee meeting set up in response to this problem resolved that troublesome bulls should be rounded up and relocated as quickly as possible. The Kenya Wildlife Service (KWS) funded the relocation of the first eight to Kora National Reserve. In 1999, the LWC capture team assisted the KWS with the task of moving an extremely aggressive young cow elephant trapped in a small patch of farmland back to Meru Park. She was living in a patch of very thorny bush and charged at the slightest provocation. By the time the tranquilizer team succeeded in getting a dart into her backside they all looked as if they had been pulled backwards through a thorn bush, which, in fact, they had, several times!

The problem of what to do with the elephants and how to protect them helped to define the Lewa Wildlife Conservancy 's philosophy of re-populating the wilder regions of northern Kenya. Lewa Wildlife Conservancy could no longer be considered as a single entity. If its work was to have any long-term impact on the wildlife of northern Kenya it needed to embrace a much larger and bolder scheme, pulling together the support of neighboring communities against poaching and opening up the whole of the migratory corridor between Mount Kenya and the Samburu area.

The Lewa Wildlife Conservancy has been working with the Namunyak and II Ngwesi communities in the north to develop areas as sources of tourism as a result poaching has been reduced.

Because tourism brings extra money into the area, the locals now appreciate the value of elephants, and co-operate with the work to protect them. In 2001, the US Fish and Wildlife Service made a grant to Lewa Wildlife Conservancy under the African Elephant Conservation Act with the purpose of conserving elephants, concentrating on security (radio communication and surveillance) and restoring elephant fencing destroyed by the El Nino rains. Between August and September 1999, local Namunyak people reported no less than seven occasions when baby elephants had fallen into wells built by the pastoralist farmers. This wasn't because baby elephants had suddenly developed a vertigo problem, but because Namunyak locals were now concerned for the welfare of the elephants. Previously, well owners speared and killed elephants found in wells, now they recognised their commercial value. Where possible the babies were rescued and reunited with their families,

failing that, they were flown to the David Sheldrick Memorial Foundation Orphanage in Nairobi run by Daphne Sheldrick. Elephants are now choosing to stay in Samburu during the dry season. Also, research by lain Douglas-Hamilton shows that this is a direct result of the increased security in the area, as their new routes correspond closely with the protected areas of Lewa Wildlife Conservancy, Namunyak and Il Ngwesi.

Where they strayed from these protected areas, or had to pass from one to another, they did so as quickly as possible. It is proof, if needed, that the work of the Conservancy is reaping rewards. Poaching does continue and the need for vigilance remains constant. At the risk of being accused of anthropomorphism, however, it seems that the elephant is more than capable of responding to the overtures of man and seeking his protection when it is given. Lewa Wildlife Conservancy 's aim is not to let them down.

# Eco-Tourism and Conservation Through Community Involvement & Outreach Programs in Laikipia, Northern Kenya

Once the Lewa Wildlife Conservancy had embraced the concept of opening up the whole of the elephant migration route to the north, it set about the task of persuading its neighbours to join the venture. This involved working with everyone from small-scale farmers who had no interest in seeing wildlife anywhere near their land to cattle-herders living closely with wildlife. The objective is to promote goodwill and long-term security through economic prosperity. Lewa Wildlife Conservancy's community work is divided between a Good Neighbours policy and Community Conservation. The latter is expected to have an almost instant impact on wildlife conservation.

# **Good Neighbors Policy at Lewa Wildlife Conservancy**

Lewa Wildlife Conservancy provides bursaries for schoolchildren at the four schools attached to the Conservancy, which are funded by the Gemini Trust and Cooper Motor Corporation. Each quarter, £400 is allocated from the recurrent budget towards school development. The quality of teachers' housing has been improved which is essential to encourage good teachers. Lewa Wildlife Conservancy hopes to buy a school bus for school visits to the conservancy. With funding from Jan Reed Smith (American Association of Zoo Keepers) and her team, Lewa Wildlife Conservancy has built a meetinghouse for the Lewa woman's group. Work concentrates on developing and honing individual skills to produce artefacts to sell in the Lewa Wildlife Conservancy shop. In 1997, The Ngare Sergoi Water Users Association was set up by LWC and a local engineering company, Rural Focus, with the objective of protecting the water supply in the form of the Ngare Sergoi River, from over-consumption and pollution. The association comprises all those who use the water, whether for irrigation, drinking and domestic use or livestock. It has been a huge success promoting peaceful collaboration between all the users and the guarantee that the river runs right through to its final destination with everyone getting a fair share.

With each new project, the policy remains the same: to assist the community through education, health, water supply and revenue generation so that Lewa is seen as an engine of economic growth in the area.

# **Eco-Tourism and Community Conservation at Lewa Wildlife Conservancy**

Some communities do have lifestyles directly compatible with wildlife, primarily the pastoral people of the north whose land forms part of the greater North Kenyan ecosystem which stretches to the Ethiopian border and beyond. Lewa Wildlife Conservancy's policy is to encourage these local communities to take responsibility for their own wildlife conservation, to promote tourism and photographic safaris to supply an incremental income and to provide their own security. There are currently five active Community Conservation programs and more in the pipeline. The first one started in 1995 at Il Ngwesi, a 16,500 acre group-ranch owned by a sub-clan of the Maasai tribe to the north-west of Lewa Wildlife Conservancy, followed by Ngare Ndare, Lekurruki and Kalama group ranches.

Namunyak, further north in the Samburu area, came next. In 2001, LWC, in collaboration with a neighbouring ranch Borana, persuaded Lekurruki group-ranch to follow these examples. Through the co-operation of these communities, LWC has been able to increase the activity of its rangers to the north of the Conservancy. Working closely with men from these ranches, as well as the Kenya Wildlife Service (KWS), Lewa Wildlife Conservancy has been able to locate and anticipate poaching attempts, apprehend the poachers and confiscate their guns.

In 2000, Lewa Wildlife Conservancy took the first step towards co-operative management with these communities with the establishment of a joint committee with II Ngwesi. The committee coordinates all policies of common interest: security, tourism, movement of wildlife, schools, roads, communication and liaison with the Government and the KWS. The committee sits quarterly under the chairmanship of a member elected by the committee. Ian Craig, Lewa Wildlife Conservancy 's Executive Director has been appointed, by Il Ngwesi and Namunyak Ranches, as an unpaid Managing Director for their commercial developments. Both projects have significant government support the Speaker of the National Assembly is chairman of Il Ngwesi and the Chief Whip chairman of Namunyak. Lewa Wildlife Conservancy 's community programme took a major step forward with the appointment of a highly experienced Community Development Officer, who is a specialist in the Samburu region and head of overall training in the Community Wildlife Service in Nairobi. His responsibilities include managing and developing existing community programs and expanding community areas participating in wildlife management to the north.

Slowly, Lewa Wildlife Conservancy is building awareness and support and filling in the jigsaw pieces of the elephants' migration route north to the huge wild areas of the 250,000-square-mile expanse of the Northern Frontier. "It is a relief to hear of community work which is concentrating on security not bee-keeping," said a visiting conservationist.