THE KAROO RECEIVES PLAINS ZEBRAS FROM THE QUAGGA PROJECT

BY DAVID BARNABY

The Quagga Project is based at the South African Museum in Cape Town. Since 1987 the Project has been selectively breeding southern plains zebras, and its aim is to continue breeding suitable plains zebras until self-perpetuating herds of quaggas exist once more.

The Project's zebras were at first kept at a single farm where they lived in large enclosures and led the life of captive animals, i.e. they were fed and cared for on a daily basis. Later, however, they were split into groups, each of which went to live at a different place. A small group might consist of a stallion and two mares, while the largest group recently had over 20 animals in it. Although the land on which the zebra groups lived was enclosed, in every case the area was sufficiently large and varied for the animals to feed themselves and work out their social hierarchies. Within the larger groups, a subgroup might consist of two or more young stallions, or a stallion and one or more mares. The largest of the Quagga Project herds lived at a large estate called Elandsberg. All the animals were, and still are, carefully monitored, and veterinary care is always available. Detailed photographic and relationship records are kept.

The quagga disappeared probably in the 1870s. (Disregard the precise dates suggested by different authors — no one will ever really know.) In the 1980s genetic evidence from a preserved quagga skin confirmed the suspicions of many that the quagga had been, not a separate species, but a southern variety of the plains zebra. Thus, a breeding project to reconstitute the quagga became a viable undertaking. The foals born within the Project mark its progress — a 'good' foal is one which carries particularly quagga-like markings, and is a cause for some celebration.

Eleven years on, the Project has some animals which, by the known criteria for the more heavily striped of the 'old' quaggas, are quaggas themselves. However, they are not yet at a stage where the markings of their offspring are predictable. The work of the Project cannot be expected to proceed by neat Mendelian steps. The original Project animals were selected from the wild on the basis of a brown base colour, and/or lack of striping on the legs and hindquarters and other quagga characteristics. It will take generations to concentrate the quagga characteristics which the Project animals pass on to their foals in ever-varying combinations.

In 1998 three factors came together which pushed forward the Project's work and the story of South African wildlife. Each of the factors was locally significant but not, by itself, historic.

The first of these factors was that Dale Parker, the owner of the Elandsberg estates, had told the Quagga Project committee (of which he was a member) that he wanted a reduction in the number of Project zebras at Elandsberg. Elandsberg holds a wide range of African wildlife, including mountain zebras, a species separate from the plains zebra. Dale wanted the 24-strong herd of Project zebras to be reduced by about half.

The second factor was that the South African National Parks Board wanted some Project zebras in the Karoo National Park. The park was more than just a new site for the Project. The Karoo was special. That vast area of sparsely-watered low-bush undulating country had been home to the old quaggas. There were some mountain zebras already in the Karoo Park — quite rightly so — but there were not yet any plains zebras. Certain game ranches in South Africa already had 'wrong' zebras — with coat patterns representing more northern varieties, for want of truly South African ones — on their land. Which variety of plains zebras could be more appropriate for the Karoo than animals from the Quagga Project? The introduction of Quagga Project zebras into the Karoo had always been one of the long-term aims of Reinhold Rau, the Project's secretary and driving force. In some ways, the significance of the reintroduction was overwhelming. It happened quite quickly, almost unexpectedly.

The third factor was that BBC Television was interested in making a film about quaggas and the Project, involving Reinhold Rau and me, and arranged its visit to coincide with the release of Project zebras into the Karoo. The BBC itself was there to make a film, but it did ensure that some significant moments were expertly recorded. Its presence may also have helped to hold together arrangements which might otherwise have been postponed for perfectly good local reasons.

It was decided that 14 animals from Elandsberg would form a new herd in the Karoo. Elandsberg would get its reduction, the Karoo would get...
its Project animals, Reinhold would achieve an ambition and the BBC
would get its film. The repatriation of plains zebras to the Karoo had
been arranged.

It began early one morning in March. The zebras for transfer had been
selected by Reinhold and Project member Henkie Heydemrynch. Reinhold
was in that state of mind observed in people whose loved ones are about
to undergo serious surgery. He knew each zebra individually, its
position in the herd hierarchy and in any subgroup. He knew which
groups were about to be broken up. He also knew that darting the
animals, to render them temporarily unconscious, was not a completely
straightforward and safe matter. Darting can go wrong. The zebras
themselves would be upset by the sudden disappearance of key members
from their groups. Reinhold's experience with the media had not always
been favourable, but relationships with this particular BBC team were
good. Nevertheless, in the time just before the operation, he was
justifiably tense.

One of two large trucks pulled away and disappeared. A minimum
crew of Pete Morkel (the vet in charge of the whole operation) and a
colleague, Reinhold, driver and assistants, were on board. A couple of
hours passed. Then a message arrived for a few of us to follow and
observe what was happening.

The shooting had gone well, and three zebras lay unconscious. Pete
treated the dart wounds to prevent infection. Each zebra was rolled onto
a canvas stretcher, resting on its folded legs and belly. The zebra, giving
an occasional kick, was then heaved into the high truck and the antidote
was injected. They had to make the long journey to the Karoo fully
conscious. Reinhold watched every detail of the operation. There were
at least two people behind Reinhold's eyes - the impartial scientist
engaged on an important long-term project, and the human being who
drove and cared for all his animals.

The Elandsberg zebras had no inkling of what was going to happen.
They had no cause to be alarmed by the people or the vehicles. They would
just keep their normal distance. Reinhold wanted to exploit the favourable
conditions and had hoped that more than three of the chosen zebras would
be moved that morning. But Pete Morkel decided, for his own reasons,
that three zebras would be that day's quota. They would go to the Karoo
straight away. The Karoo and back was twelve hours' driving.

Allan, the dominant stallion of the Elandsberg herd, was in the truck;
Reinhold had chosen him to lead the new Karoo herd. There was at least
one other stallion at Elandsberg who could take over Allan's job. Never-
thless, his sudden disappearance would cause disturbance in the herd.
His mares would be looking and calling for him, maybe for a few days.

The second day's work started with a feeling of optimism, but the
leaderless zebras were elusive and it was not until the afternoon that
five were brought back. In moments when he was not recording, Kenny
had a chance to lift a quagga every day. Kenny had recorded many of
the important events in South Africa's recent history.

The total in the Karoo was now eight. Six to go. Quite close to Elandsberg was the high-security Krantzkop institution.

On my previous visit, the Project zebras who lived in the Krantzkop
grounds had been the only ones I could not see. Reinhold had not even
tried to gain entry for a visiting Englishman. Word came to Elandsberg
that there was a new foal with the Krantzkop herd, and after about two
hours, permission came for us to go there.

At Krantzkop we crowded into two vehicles with staff members
who were very helpful but whose real role was probably to keep an eye on us.
The foal, less than a day old, was walking confidently by its mother. It
was a 'good' foal, but not a remarkable one. Its stripes did indeed fade
off towards the rump; it did indeed have a brownish base colour. Five
years earlier the Project might have been delighted. Now, Reinhold was
merely pleased. The Project's standards were rising. True, the foal's legs
were hardly striped, but there were a few short stripes on the hock. Hock
stripes are one of the more persistent characteristics. They are a very
ancient trait,' said Dr van Bree to me in Amsterdam a few weeks later,
as we looked at the mounted skin of the last ever of the old quaggas.

Pitzi, a Krantzkop mare, had a serious bite wound low on the ramp. A
flap of skin several inches long and broad hung down. Like all zebras, the
mare moved about apparently unconcerned by the wound, but it looked
like a bad one. In the wild, zebras can sustain massive flesh wounds in
the flank and rump when they manage to shake off a lion.

By the third day of the darting, the Elandsberg zebras were disoriented
and suspicious. The mare Monika, who had a foal, was mistakenly darted
instead of the mare Libby, whom she closely resembled; but she was
quickly revived and reunited with her foal without problem. Darting was
abandoned for that day. The humans had made the return drive to the
Karoo twice in two days. Both zebras and humans needed a break.

Libby and another mare, Davida, were taken the next day. Davida had
been named David after me in 1995, but was later seen to be a mare.
Reinhold told me of the name change with a twinkle in his eye. The truck
called at Krantzkop, where Pete Morkel darted Pitzi and treated her
wound. I do not know how Pitzi got her name, but the word means 'zebra'
in one of the south-east African languages. An adjustment was now
made to the overall transfer plan; while Pitzi was unconscious, she was
loaded into the truck to join the new Karoo herd. This would be as much
to her advantage as anyone else's - the stallion at the Krantzkop, who had
been giving her a hard time, would no doubt have continued to do so.

The Elandsberg groups rearranged themselves. Luke replaced Allan
and would not let a younger stallion, Chris (named after my travel
companion and publisher, Chris Moiser), near his group. Subgroup
leader Shaun kept Monika and her foal. In the Karoo, Allan would spend
time looking for his lost mares. The Project zebras delivered there on
subsequent days would certainly find each other; natural groups and
subgroups would evolve and eventually stabilise.

The transfer operation was brought to a temporary halt. Everyone was
satisfied. So, probably, were the Elandsberg zebras. Eleven instead of 14
zebras in the Karoo was not a problem. More would follow.

Karoo Park staff had been waiting for the truck on that first day; it was
a special occasion. The truck backed up to a boma, a large enclosure
surrounded by canvas walls about seven feet high. Pete Morkel would
not authorise the release of the zebras until every bit of flapping
material had been held down with stones; he was a careful man and had seen panicking animals before. The zebras walked out of the truck utterly calmly. After a 130-year gap, plains zebras trod the earth of the Karoo. Those of us who had become involved in quagga history might not deny a shiver of excitement or a lump in the throat.

The zebras took no notice and soon started to graze. Had the animals been upset it might have been necessary to keep them in the boma for some time or even overnight. After only about 45 minutes, an exit was made at the opposite end to the truck. We had gathered at Elandsberg at sunrise that morning. Now the sun was setting in the Karoo. Nature did it better than Hollywood might have done. Allan approached the exit, sniffed and looked briefly around, then scampered through. He resumed his dignified walking pace immediately. The other two did the same. We watched them walk into the Karoo distance. They did not hurry, but neither did they pause.

David Barnaby, 189 Stockport Road, Timperley, WA15 7SF, U.K.

David Barnaby's book Quaggas and Other Zebras (reviewed in I.Z.N. 44:4, pp. 226-7) is available by post from the publishers (Basset Publications, 18 Pasley Street, Stoke, Plymouth PL2 1DP, U.K.), price including postage and packing £9.00 (U.K. and overseas surface mail) or £10.00 (overseas airmail); please remit in sterling.

Information wanted

Tim Husband, operations manager at Blue Gum Zoo in Sydney, Australia, is working on a book about aberrant behaviour in captive animals. He is hoping to put together a compilation of ‘case scenarios’. He would greatly appreciate input from as many people as possible. What he is looking for is a full description of the problem, i.e. stereotypies or other abnormal behaviours and – the important part – how it was solved. He hopes that a book of this nature would be of help to people working with captive animals everywhere. Please contact Tim on: husband@internet-australia.com.

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I work with a nearly four-year-old plains zebra stallion who self-mutilates. Since February last year, he has started biting himself on his back legs. He shares an enclosure with a two-year-old female of the same species. He has become dangerous to himself as well as other zebras and the keepers. Could this problem be psychological, dietary, or just a matter of lack of enrichment? Anyone with a similar problem or possible solutions can send replies to: Donna Doms, Washington Park Zoo, Lakefront, Michigan City, Indiana 46360, U.S.A.