How to play the quagga mati

Cape project releases its first graduates into the wilds of the Karoo National Park

ANDREA WEISS

Mariette is about to have a fling with Luke, but Shaun might come between them. Luke is in with a chance because Allen has moved up-country. But it's not clear whether Luke is mature enough to handle Mariette.

This may sound like the plot of a complicated television soap opera, but, in fact, we're talking about the love lives of zebras - and a serious scientific endeavour. Mariette, Luke, Shaun and Allen are all plains zebras, and they are important players in the Cape project to breed the extinct quagga from their close relation, the zebra.

The project has captured the imagination of a wide range of people, from the King of Sweden to the Confederation of Hunters Association of Southern Africa, the main sponsors of the project.

Started by taxidermist Reinhold Rau, the project is in its 11th year and has bred 53 animals that have some of the features of the quagga. The project took a bold step recently when it moved the first of its animals to the Karoo National Park (among them the stallion Allen), in a visible demonstration of the SA National Parks' commitment to bring back to life a sub-species that was hunted into extinction in the last century.

The project's objective is to breed quaggas so that they can be restored to their original environment, and to right a moral wrong of the 19th century.

Quaggas were a variety of zebra, once common south of the Orange and Vaal rivers. The animals were hunted indiscriminately, and the last mare died in the Amsterdam Zoo on August 12 1868 before anyone realised she was the last of her kind.

It was originally thought that the quagga might be a separate species from the plains zebra, until genetic tests carried out in the early 1980s on quagga tissue samples revealed that the animals were in fact closely related and the quagga was, therefore, a subspecies.

Unlike zebras, quaggas do not have any stripes, except on the head, neck and shoulders. Theories about the different patterning abound. One suggests that the quagga's brownish coats allowed them better camouflage in the desert-like conditions of the Karoo. Another argues that the quagga did not need to protect against itself against the tsetse-fly. (Apparently the tsetse-fly is unable to detect the zebras through their heavy stripes).

Some plains zebras taken from the wild reveal a remarkable similarity to some of the less typical quaggas in museums around the world, indicating that the quagga genes are still floating about in zebra populations.

Only 23 examples of the true quagga remain - stuffed, of course. One is a two-week-old foal at the South Africa's Museum, which was what sparked Mr Rau's interest.

Mr Rau recalls arriving at the SA Museum in 1959 to find the little quagga foal in a neglected state. He was tempted to do something about it, but he was afraid the skin would disintegrate.

Ten years later, he had a chance to experiment with some untanned skins discovered in a wooden box in the museum. He then felt confident to tackle the quagga.

Mr Rau said he went about the task very gingerly, first wetting one hoof, and then slowly working his way up one leg.

After reconstructing the foal, he visited Europe in the early 1970s to look at the remaining examples of quaggas in museums there. In 1974, he published a catalogue of the 23 stuffed quaggas. He has also remounted four other quaggas in Europe - three at the Mainz museum and one in Munich.

So how close is the project to achieving the ideal quagga? Because there is nothing other than the appearance of the museum specimens to go on, it is unclear whether there are any other typical characteristics, such as habitat adaptations, of the quagga.

Of the 53 animals in the breeding programme, Mr Rau says: "They are better than average zebras and one or two are very good."

Interestingly, two of the best animals (that is with the least striping) were caught in the wild. These animals correspond remarkably well with some of the less typical examples of quaggas in the museums around the world.

"We are concentrating the animals. It is up to further generations to concentrate them even further," says Mr Rau.

"Nobody can say how many generations it will take. A brown foal could be born tomorrow or it could take another 50 years."

Mr Rau says Mr Rau
The quagga mating game

A year ago, South Africa's National Museum of Natural History in Pretoria (SA) took its first graduates into the wilds of the Karoo National Park.

Tests carried out in the early 1980s on quagga tissue samples revealed that the animals were in fact closely related and the quagga was, therefore, a subspecies.

Unlike zebras, quaggas do not have any stripes, except on the head, neck and shoulders. Theories about the different patterning abound. One suggests that the quagga's brownish coats allowed them better camouflage in the desert-like conditions of the Karoo. Another argues that the quagga did not need to protect itself against the tsetse-fly. (Apparently the tsetse-fly is unable to detect the zebras through their heavy stripes).

Some plains zebras taken from the wild reveal a remarkable similarity to some of the less typical quaggas in museums around the world, indicating that the quagga genes are still floating about in zebra populations.

Only 23 examples of the true quagga remain - stuffed, of course. One is a two-week-old foal at the South Africa's Museum, which was what sparked Mr Rau's interest.

Mr Rau recalls arriving at the SA Museum in 1959 to find the little quagga foal in a neglected state. He was tempted to do something about it, but he was afraid the skin would disintegrate.

Ten years later, he had a chance to experiment with some untanned skins discovered in a wooden box in the museum. He then felt confident to tackle the quagga.

Mr Rau said he went about the task very gingerly, first wetting one hoof, and then slowly working his way up one leg. After reconstructing the foal, he visited Europe in the early 1970s to look at the remaining examples of quaggas in museums there. In 1974, he published a catalogue of the 23 stuffed quaggas. He has also re-mounted four other quaggas in Europe - three at the Mainz museum and one in Munich.

So how close is the project to achieving the ideal quagga? Because there is nothing else in the appearance of the museum specimens to go on, it is unclear whether there are any other typical characteristics, such as habitat adaptations, of the quagga.

Of the 23 animals in the breeding programme, Mr Rau says: "They are better than average zebras and one or two are very good." Interestingly, two of the best animals (that is with the least striping) were caught in the wild. These animals correspond remarkably well with some of the less typical examples of quaggas in the museums around the world.

"We are concentrating the animals. It is up to further generations to concentrate them even further," says Mr Rau.

"Nobody can say how many generations it will take. A brown foal could be born tomorrow or it could take another 50 years."