

## Short-necked tortoise - information about the short-necked tortoise Serendipity - finding the world's rarest reptile

The faculty of making a happy and unexpected discovery by chance is the way the Oxford Dictionary defines the word serendipity. Robert Boyd, when he first spoke to Vin Serventy in September 1953, had no idea his unexpected find would echo around the world. It was during a Wildlife Show in Perth where Vin was the organiser, together with the Gould League of Birdlovers. It was an outstanding success, sometimes with people queuing a hundred metres outside the hall doors. It was a time when the city was starved of entertainment and the Society's youth and enthusiasm struck the right chord.

Robert Boyd came to Vin with a problem at the 1953 Wildlife Show as he believed that Vin was 'the expert who knew everything', as far as the children were concerned. He had a tortoise which a farmer friend had found near Bullsbrook, north of Perth. What label should he put on it?

'A long-necked swamp tortoise,' Vin said with confidence as there was only one species in the southwest. 'Mine's got a short neck.' Robert replied.

Vin decided that it must be a pet which had escaped. Fortunately Vin had a friendly director of the Western Australian Museum who was an expert on reptiles and he showed him the tortoise. Ludwig Glauert's eyes gleamed as he handled the small creature. Robert told him how it had been found by a farmer, Arthur Gates, one misty morning as it crossed the road from a swamp on his property. Knowing he was a keen naturalist, Arthur had given Robert the animal.

Glauert asked whether he would be happy to give his specimen to the museum. The lad was overwhelmed. The State's expert on reptiles wanting his tortoise! He agreed and on the Sunday as the Wildlife Show was ending, Glauert was there to make sure of his tortoise. His excitement was explained the next year when Glauert published an item in the *WA Naturalist*. It was a new species! Glauert wrote '... it is remarkable that so large a creature should have been overlooked for so many years ...' and this report travelled around the world.

Then, from the United States came the sad news for Glauert that he had been beaten in creating a new scientific name. The first such tortoise known to science had been found in 1839 by an Austrian, Ludwig Preiss, who sent it to the Vienna Museum. Here it was named *Pseudemydura umbrina*. Glauert's name, *Emydura inspectata*, had to be discarded under the international rules of naming new species of plants and animals. The original specimen was described as coming from New Holland, the old name for Australia.

Today we know the short-necked tortoise as possibly the most endangered reptile in this country. Those small swamps to the north of Perth had about 100 animals in the mid 1960s. Vin hoped to find more but the most careful search revealed that the two swamps at Bullsbrook were their only homes.

Vin travelled to these swamps in the summer when the ponds dried out to search for specimens. With him was Dr David Ride, the new director of the Western Australian Museum.

'Where would you expect to find a tortoise during the dry season?' Vin asked him.

'Under lumps of clay like that,' he pointed. 'Spots where it will be safe from predators like foxes. Also away from too much heat.' Vin put his hand into the shelter and pulled out a tortoise.

Why had the tortoise become so rare? Ephemeral swamps that dry out in summer to fill again after winter rains were their only home. Food in the form of water 'fleas' and other aquatic life became abundant only in winter. In the permanent swamps the competition of the abundant long-necked swamp tortoise would have been too much for the short-necks' survival.

The arrival of the Aborigines perhaps would have reduced their numbers as they would have walked through the shallow pools until they felt a tortoise with their bare feet. Vin Serventy used the same method to find the more common water tortoises in the northwest, but the short-necks would have been too rare to entice keen hunting. There were plenty of long-necks in the permanent pools.

The European settlers were a graver threat. Those shallow swamps proved attractive to potato farmers and most were drained and cultivated. Arthur Gates and his brother had planned the same fate in the near future for the last two swamps. Only the excitement of the short-neck find saved them. True serendipity.

Fortunately Vin had a good friend in the Chief Warden of Fauna, Mr J Fraser. Plans were soon in hand to first save some individuals for captive breeding, then save the habitat. Vin received a letter from Mr Fraser describing how the State Government had begun a public appeal. By 1961 he was able to report to the Wildlife Preservation Society of Australia, first thanking them for the donation of twenty pounds, a considerable sum in those days, next detailing how there had also come a thousand pounds from the State Treasury.

In 1963 Vin mounted a special display at the Wildlife Show to help raise funds to buy the swamps in which the tortoises had their precarious hold on life. A flood of small money and a torrent of letters were received. One Vintreasures was from a ten-year old girl who wrote 'I hope he keeps on living like the fairies ...' It was for that kind of education the Wildlife Shows had begun.

The combination of government help and the public appeal, together with the generosity of the Gates' family, meant that approximately 250 hectares of swampland was purchased.

What of the captive animals? Tom Spence, the director of the Perth Zoo had kept some for breeding in 1964. Twenty-six were hatched between 1966 and 1977, then all of them were stolen. Tom told Vin that in 1978 a pair of smuggled tortoises fetched \$5,000 in Germany. Criminals will always be with us but now the international organisation called TRAFFIC is fighting this trade.

Vin had visited the swamp with a young scientist, Andrew Burbidge, an honour student in zoology. Later Andrew received a doctorate for his work on the species. In those early days he had erected a low fence around the swamp so live tortoises leaving the shelter of the water would be trapped and tumble into pits. He rescued them every morning to fit each one with a radio collar, using a counter-balancing lightweight material, so the animal could swim freely.

So far so good, but there was still a long way to go to save the tortoise. Scientists needed to solve the breeding problems. Guards were needed to protect the tortoises against people in search of pets, for themselves and for export. A fox-proof fence was needed to foil the major predator which has driven so many of our smaller animals either into extinction or onto the verge of it. All this needed money.

Serendipity to the rescue once more. Vin's and his wife Carol Serventy had become friends with Sir Peter Scott in the 1950s when they had taken him camping in the Western Australian bush. In 1962 when they met again Sir Peter Scott was enthusiastic about the newly formed World Wildlife Fund (WWF) in which he was a key figure. Its main task was to provide funds for

worthwhile conservation projects around the world.

The numbers of the tortoise had dropped to around 20 to 30 by 1985, but by 1987 the various State Government departments were ready to begin a breeding programme. They asked for and received funds from the World Wide Fund for Nature (the new name for the World Wildlife Fund) as well as from the Australian National Parks and Wildlife Service. Dr Gerald Kuchling headed the team that carried out the breeding programme to a successful conclusion. Now there is a ten-year recovery plan, set up in 1990, and controlled by the WA Department of Conservation and Land Management (CALM).

More important is the recreation of some of those destroyed swamps along the Darling Scarp of the Swan Coastal Plain. Here sand over clay soils provides ideal habitats. Today, with our greater knowledge, we can recreate dozens of these ephemeral swamps and the Wildlife Preservation Society has suggested this to CALM.

A 1997 press release by Ms Cheryl Edwardes, the WA Minister for the Environment, announced that twenty-eight more captive-bred animals had been released into the Twin Swamps Reserve near Bullsbrook. The Minister also announced a drum roll of those who were working to save the tortoise - CALM, Perth Zoo, the University of Western Australia, Curtin University, Environment Australia and WWF. Ms Edwardes is too young in the task to mention all those people and conservation groups without whose hard work little would have happened in those early days. A number of them have helped save this engaging tortoise from certain extinction. Keen naturalists, not forgetting those juniors like Robert Boyd, sympathetic government departments as well as State Governments of every political persuasion, non-governmental groups like the Wildlife Preservation Society, as well as the scientists who are essential for any wildlife management plan. There are now a hundred short-neck tortoises living in the wild in Twin Swamps and the Ellen Brook Nature Reserve.

In Western Australia that happy combination of science and keen naturalists has led to many wildlife victories and made this State a leader in nature conservation in Australia.



Short- necked swamp tortoise