



The case of the *mystery chuditch*

by Rhianna King and Keith Morris

A chance sighting of a dead chuditch outside a suburban Perth primary school has provided clues into the distribution of a distinctive threatened species and highlighted the importance of 'citizen science' in the conservation of our State's plants and animals.

What started out as a normal morning walk for Department of Water scientist and school mum Frances D'Souza and her husband Neil Loneragan became significant for conservation when she spotted a dead animal lying on the footpath near Bateman Primary School. Recognising the distinctive white spots, Frances was sure it was a chuditch (*Dasyurus geoffroii*), or western quoll, having seen one in the wild some 27 years before. Later that morning, Frances made a series of calls to government and local government authorities to alert them to her discovery. She also phoned the school, but was advised that the dead chuditch was distressing the children so the school gardener had buried it in a patch of bush on the school grounds.

Later that day, word about the discovery made its way to Parks and Wildlife senior principal research scientist and animal science program leader Keith Morris, whose interest was piqued. He visited the school the next day – shovel in hand – to retrieve the specimen for research. Thankfully, it had been a cool day, and an even cooler night, so the chuditch had been well preserved.

The chuditch was, as Keith puts it, “a very good specimen” – intact, with few obvious signs of injury or trauma. However, it had a broken rear leg indicating that it had most likely been hit by a car. It was a male, and based on its size (1300 grams) and the condition of its teeth, was estimated to be around two years old.

But where had it come from?

CHAPTER TWO

Bateman Primary School is located in Perth's southern suburbs – between Leach Highway and South Street and across from Piney Lakes Reserve. One obvious theory was that the chuditch came from Piney Lakes, where there are known populations of quenda (*Isodon obesulus fusciventer*). This theory was supported by reports from two members of the public who came forward to advise they had seen chuditch in the bushland in the weeks before. However,



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Main Chuditch have distinctive features.

Photo – Jiri Lochman

Inset Chuditch occur in the Perth Hills.

Photo – Marie Lochman

Above Piney Lakes Reserve.

Photo – Peter Miller

Right The dead chuditch that sparked the interest.

Photo – Keith Morris/Parks and Wildlife

Opposite page

Far right Quenda are also known to inhabit Piney Lakes Reserve.

Photo – Jiri Lochman



Piney Lakes is probably not large enough to support a chuditch population, indicating that it must have come from somewhere else to occur there in the first place.

One possibility was that the chuditch used the remnant bushland corridor associated with the Canning River to journey from the Perth Hills. But this would have involved a risky crossing of the Kwinana Freeway. Another theory was that the chuditch had moved north from the southern rural and urban areas around Baldivis and Mandogalup, possibly via Beeliar Wetlands. We do know that a population of chuditch was found recently

in the Paganoni Road area, just north of Mandurah, as some were trapped there by researchers from The University of Western Australia. While remarkable, these possibilities are not totally unbelievable, considering the species' ability to travel long distances.

As solitary animals, chuditch live in large territories (1,000 hectares for males and 600 for females) and have been known to travel several kilometres in a day. They are even more mobile during breeding season, which occurs once a year. Community reports again provided information that supported the theory of a



southern suburbs origin with several people coming forward to say they'd seen dead chuditch in those areas on the side of the Kwinana Freeway and Forrest Highway.

CITIZEN SCIENCE

The case of the mystery chuditch has once again highlighted the importance of citizen science in conservation. Had it not been for Frances's keen eye and the reporting of the discovery to Parks and Wildlife, we may have never known about the chuditch and it may have been entombed forever on the school's grounds without anyone knowing its significance.

But the role of citizen science didn't stop with Frances. Her puzzling discovery generated media interest and featured in local and national news outlets. This generated further public interest and resulted in members of the public coming forward with more information about sightings in the area, proving to be invaluable in building a theory about where the animal might have come from. This information also helps build a profile of where this species might still occur, which helps inform land managers and owners, and would-be developers about the distribution of chuditch around the Swan Region.

YESTERYEAR

Chuditch once occurred throughout most of the southern half of mainland Australia, including the Swan Coastal Plain, where they were considered a pest from the 1930s to the 1950s when they preyed on the chickens in semi-rural blocks and poultry gardens. They were often shot and poisoned, and have been affected by loss of habitat through land clearing. The species now occurs in just over five per cent of their former range and is predominately confined to the south-west of WA where chuditch live in the jarrah forest, in some Wheatbelt areas, and along the south coast.



In the 1990s a recovery team was established to help protect chuditch and a number of captive breeding programs were carried out to reintroduce the species to its former range. By 2000, more than 330 individuals had been translocated to six sites – Julimar State Forest, Lake Magenta Nature Reserve, Kalbarri National Park, Cape Arid National Park, Mt Lindesay National Park and a trial release at Lane Poole Reserve. Most of these were successful, but a recent review of their population trends and conservation status suggests that they should still be classified as a threatened species. Since 2014, three contingents of chuditch, totalling 93 animals, have been translocated to the Flinders Ranges in South Australia to expand their distribution beyond WA for the first time in about 60 years (see ‘Postcards to home’, *LANDSCOPE*, Summer 2014–15).

So, while we may never know for sure where the Bateman chuditch came from, we can be assured that with translocation

plans and conservation programs in place, and with the support of astute community members like Frances, the future of the chuditch seems a bit more certain.

Did you know?

Chuditch spots are believed to help the animal camouflage at night when their spots match the dappled light of the moon on the forest floor. Adult males can weigh up to 1.5 kilograms and reach about 60 centimetres in length, while females are smaller at about 55 centimetres and about one kilogram in weight. Females give birth to two to six young at a time, which when born are around five millimetres long and remain in the pouch for 60 days. After they become too big for the pouch, the young are kept in a den (usually a burrow or hollow log). ‘Chuditch’ is the Nyoongar word for the animal which is also known as a western quoll and native cat.

Above Parks and Wildlife nature conservation operations officer Rebecca Kay releasing a chuditch at Julimar State Forest.

Photo – Rebecca Campbell/Parks and Wildlife

Learn more about
chuditch

Scan this QR code or visit Parks and Wildlife’s ‘LANDSCOPE’ playlist on YouTube.



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To provide reports of sick, injured, orphaned or displaced native wildlife contact the Wildcare Helpline on (08) 9474 9055.