

FAUNA PROFILE

Chuditch Dasyurus geoffroii

Conservation Status: Vulnerable

Identification

The chuditch *Dasyurus geoffroii*, also known as the western quoll, is the largest carnivorous marsupial that occurs in Western Australia. The northern quoll *Dasyurus hallucatus* is the other quoll that occurs in WA, but its current distribution in the Pilbara and Kimberley does not overlap with the chuditch in the southwest of WA.

The chuditch has mostly brown fur with distinctive white spots. It has large rounded ears, a pointed muzzle and a mostly black, brushy tail about three-quarters the length of it head and body. Unlike many other marsupials, chuditch do not have a hopping gait.

Head and Body Length: 26-40cm

Tail Length: 21-35cm

Weight: 1.3kg (male) and 0.9kg (female)

Taxonomy

Family: Dasyuridae Genus: Dasyurus Species: geoffroii

Other Common Names: western quoll

The chuditch is closely related to the northern quoll *Dasyurus hallucatus*, which is found in the Pilbara, Kimberley and across the northern areas of the Northern Territory and Queensland.



Photos: K. Page/DBCA

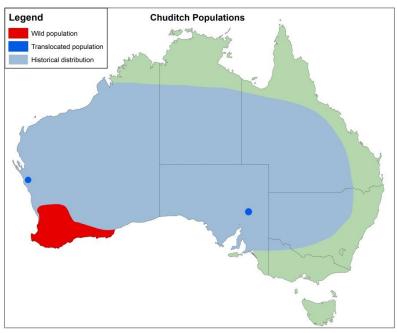
Distribution and Habitat

Chuditch were previously known from most of Australia, occurring in every Mainland State and Territory. It was relatively abundant until European settlement, when the species underwent a drastic decline and contraction. It went extinct in New South Wales in the 1940s, Victoria in the 1950s and in Queensland between 1880 and 1910.

It is now largely restricted to the south-west of Western Australia, with small numbers in the Midwest, Wheatbelt and South Coast Regions.

Historically, chuditch inhabited a wide range of habitats, but today it survives mostly in Jarrah *Eucalyptus marginata* forests and woodlands, mallee shrublands and heathlands.

For further information regarding the species distribution, please refer to www.naturemap.dpaw.wa.gov.au.



A map of the historical and current distribution of chuditch, including translocated populations

Community Involvement

If you think you have seen a chuditch, fill out a <u>fauna report form</u> and send it to the Department's Species and Communities Branch at <u>fauna@dbca.wa.gov.au</u>. The Department keeps track of the distributions of threatened species to help monitor population trends and inform management decisions.

The Department runs a variety of volunteer projects across WA including scientific research, community education and manual labour. Further information about these opportunities can be found on the Department's webpage.

Biology and Behaviour

Chuditch are opportunistic feeders and primarily forage on the ground at night. They will also climb trees to obtain prey or escape from predators. They have a keen sense of sight, hearing and smell that they use to locate and capture their prey. Their carnivorous diet includes mammals, birds, lizards, frogs, and lizard and bird eggs, but the majority of their diet consists of a range of large invertebrates (e.g. crickets, scorpions, spiders). They are also known to consume the red pulp on *Zamia* seeds, small fruits and part of flowers.

Chuditch are largely nocturnal, but are sometime active during the day during the breeding season or when cold and wet weather restricts their nocturnal foraging. They are solitary animals with home range extending up to 15km² for males and 3-4km² for females. Their relatively large home ranges can overlap except in their core areas which contain numerous den sites. Dens are located in hollow logs, tree limbs, rocky outcrops and burrows.

Chuditch breed seasonally, mating between April and July. Litters of up to six young are born between May and September. The young stay in the mother's pouch for approximately nine weeks, after which they are left in a den while the mother forages. At 15 weeks the young are fully furred and beginning to eat solid food, and at 24 weeks they are fully weaned and begin to disperse. Both male and female chuditch can breed from one year of age and their maximum lifespan is generally three to four years.

Conservation Status

The chuditch is recognised as a threatened species under State and Commonwealth legislation. In Western Australia the species is listed as fauna that is 'likely to become extinct' in the wild (Specially Protected) under the <u>Wildlife Conservation Act 1950</u> and has been assigned the threat status ranking of Vulnerable using <u>International Union for Conservation of Nature</u> (IUCN) criteria. Nationally the species is listed as Vulnerable under the Commonwealth <u>Environment Protection and Biodiversity Conservation Act 1999</u>.

Various factors have contributed to the species decline and the major threats to the species are:

- Land clearing,
- Removal of suitable den logs and den sites;
- Predation by, and competition from, foxes and feral cats.

Management

Recovery Plan

A <u>national recovery plan</u> has been produced for the chuditch, and it outlines the recovery actions required to reduce the threats to the species and increase population densities to ensure the species long-term survival. Recommended actions from this plan include:

- Retain and improve habitat critical for survival
- Determine the impacts of feral cats and effectiveness of feral cat control methods, and continue, expand and improve fox and feral cat baiting.
- Determine population abundance and distribution.
- Establish reference sites for monitoring population abundance to evaluate the effectiveness of fox and feral cat control.
- Undertake and monitor translocations to increase the extent of occurrence.
- Increase public awareness through community education and enforcement of regulations.

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Existing Conservation Measures

The Chuditch Recovery Team, led by the Department of Biodiversity, Conservation and Attractions, has been assisting with the implementation of recovery actions as outlined in the current recovery plan since 2014.

The Department's <u>Western Shield</u> wildlife recovery program conducts feral fox baiting sites in the south-west of WA, with additional feral cat baiting at some sites.

Chuditch are monitored at various sites in Western Australia as part of the Department's Western Shield, translocation and research programs.

The Department has undertaken translocations to areas where they previously occurred in Western Australia, including successfully to Kalbarri National Park. More recently, the Department and the South Australian Department of Environment, Water and Natural Resources, has translocated chuditch from several sites in Western Australia to the Flinders Ranges in South Australia. This <u>reintroduced population</u> is being monitored to determine if it will be self-sustaining into the future.

The chuditch is one of the species that will be translocated to Dirk Hartog Island for fauna reconstruction and conservation purposes as part of the <u>Dirk Hartog Island Return to 1616 Project</u>. This project is being implemented by the Department with funding from the Gorgon Barrow Island Net Conservation Benefits Fund.

Chuditch are included in the list of the 20 threatened species in the Commonwealth's <u>Threatened Species Strategy</u> released in July 2015, which priorities the federal government's approach

Citation

Department of Biodiversity, Conservation and Attractions. (2017). Fauna profiles - Chuditch Dasyurus geoffroii. Retrieved from http://www.dbca.wa.gov.au/

Key References and Further Reading

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