# Kangaroo Island dunnart Sminthopsis fuliginosus aitkeni

Status National (EPBC Act): Endangered I State (NPW Act SA): Endangered

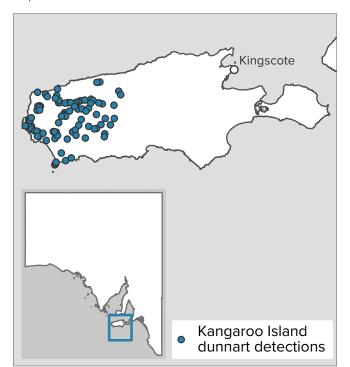
The 2019–20 Kangaroo Island (KI) bushfires burnt more than 96% of known KI dunnart habitat. This was thought to have severely impacted the dunnart population. Following extensive surveys using new motion camera technology the dunnart was discovered to have persisted through the fire and has now been detected at over 100 sites across western KI.

#### **Distribution and habitat**

The KI dunnart occurs across a broad range of native vegetation types and is restricted entirely to conservation reserves and private properties on the western end of KI. Before the 2019–20 bushfires, most sites where KI dunnarts were known to occur were in higher rainfall areas (over 600 mm per year) and the species was thought to be restricted to just 8% of the island. Recent surveys and monitoring have shown dunnarts occur widely across the western end of KI with the area of occupancy estimated at 19% of the island's total area.

#### **Population trend**

Dunnart occupancy increased in the 3 years following the 2019–20 bushfires. In the first 12 months post-fire, occupancy was highest in unburnt native vegetation while in years 2 and 3 occupancy increased in burnt areas and decreased in unburnt habitats. This suggests recovering burnt habitats supported dispersal and recolonisation.



Data source: Kangaroo Island Landscape Board. Project: Supporting the recovery of the Kangaroo Island dunnart through conservation and management actions (ERF-MU17-P1).

### Threats to the species

Threats to the KI dunnart are poorly known. Major threats to the species include inappropriate fire regimes and climate change. Dunnarts are threatened by feral cat predation, particularly following large fires when shelter is very limited. *Phytophthora* dieback and blue gum weed infestations threaten habitat quality.

## What is being done?

A collaborative species recovery approach involves the following partners: Kangaroo Island Landscape Board, National Parks and Wildlife Service SA, Department for Environment and Water, Zoos SA, Kangaroo Island Land for Wildlife and private landholders. Landscape-scale feral cat control has been implemented to protect the Kangaroo Island dunnart and other native wildlife left vulnerable to predation in the aftermath of the bushfire. In 2022, a long-term monitoring strategy was developed and the first targeted monitoring program for Kangaroo Island dunnarts commenced. This will improve understanding of trends in abundance and area of occupancy, and inform future management strategies.

