



# **FIRE INFORMATION NOTE** | GEOPHYTES, INCLUDING ORCHIDS







#### **Species and conservation status**

Many geophytes are listed as threatened under the Biodiversity Conservation Act 2016.

## **Description**

A geophyte is an herbaceous plant with underground storage organs such as a bulb, corm, tuber or rhizome. All orchid species are geophytes. These underground storage organs allow plants to remain dormant for periods of time until conditions are suitable for growth. Although small, geophytes play an important role in ecosystems. They are a food source for many native insects and many develop a symbiotic association with mycorrhizal fungi.

## Where are geophytes found?

Threatened geophytes are found in a range of habitat throughout Western Australia, from moist swamps on the south coast to the semi-arid areas towards Shark Bay in the north.

# **Ecology and biology**

- In the south-west of Western Australia, most geophytic species are dormant over the summer drought period and typically resprout between late March and May with the onset of rainfall and cooler conditions.
- Geophytes are perennial and can produce one or more storage organs annually to assist their survival. Some species are able to produce more than one new storage organ each year, resulting in large colonies of plants.
- Flowering in the south-west is mostly in late winter and spring (July-November depending on location) and most species are cross-pollinated by insects. Large quantities of seed are produced that are dispersed by wind.

### What should I consider when undertaking fire mitigation activities?

- Plan for low intensity burns in early autumn or late spring that create a mosaic of fuels.
- Plan to burn when orchids are not actively growing, or once plants have flowered and have died off.
- If plants have emerged, avoid burning the areas where plants are present. This can be through raking around the area to remove fuel, wetting down the area, or planning your burn for different sections of your property.
- Plan to maintain some unburnt areas within the planned burn or adjoining areas. Burn or undertake mechanical fuel reduction in successive small areas over time to maintain habitat each year.
- Appropriate fire management activities can help to protect orchid habitat from large, intense summer bushfires.

## **More information**

**Threatened species management contact:** DBCA's Species and Communities Program: speciesandcommunities@dbca.wa.gov.au or your local DBCA Regional or District office: www.dpaw.wa.gov.au/about-us/contact-us/locations

Fuel management on your land: www.dfes.wa.gov.au/plannedburning/