White Beauty Spider-orchid
Caladenia argocalla

White Beauty Spider-orchids are perennial plants which are only present above the ground in winter and spring and are dormant from summer to autumn. They grow with an understorey of native herbs and grasses. After a single hairy leaf (12-20cm long) emerges in winter, it produces a single flower stem in spring with one or two flowers. Flowers have white petals (9-15cm long) with red, pointed tips which usually droop down. Petals and sepals are long and tapered.

Like many other orchid species, White Beauty Spider-orchids rely on underground tubers that provide plants with the nutrients and energy necessary for new growth.

After a survey in 2007, it was estimated that there are only around 4,500 White Beauty Spider-orchid plants in existence. Many of these are thought to be in decline, with the largest populations found in the Clare region. They have a north-south range of approximately 130 kilometres.

Reproduction
To reproduce they need to cross-pollinate with another plant, which is done with the help of male wasps. This orchid only attracts one particular species of wasp, and it does this by making the same pheromone that the female wasp gives off. They then form seeds when the flowers dry up from which new plants grow.

Habitat
A SA endemic, it grows in 15 known locations in grassy eucalypt woodlands from Clare to Harrogate. These woodlands usually include the South Australian Blue-Gum (Eucalyptus leucoxylon). These plants are quite specific in their habitat preferences. They usually grow in clay loam soils with high humus content on gentle hill slopes, often facing south.

Threats
The greatest threat to White Beauty Spider-orchids comes from weed invasion, especially from Topped Lavender (Lavandula stoechas), Cape Tulip (Homeria flaccida) and Bulbil Watsonia (Watsonia bulbillifera). Grazing by kangaroos, livestock, such as sheep and cattle, rabbits and hares also reduces their numbers. Spider-orchids also suffer from a lack of pollination and recruitment. Phytophthora can kill plants that provide habitat to this species, so it poses an indirect threat. Climate change, road and track management activities and illegal collection are other threats to this species.
Some Aboriginal groups in the South East of SA dig up and eat the tubers of different orchid species. These contain many nutrients and apparently taste quite sweet!

Conservation

A recovery project is underway in the Lofty Block region aimed at conserving White Beauty Spider-orchids as well as 11 other endangered orchids. This involves preserving current habitat and attempting to increase the populations of these orchids.

You can help the White Beauty Spider-orchid by:

- getting involved in weed eradication projects in your local area, which gives native plants a chance to grow
- keeping a look out for White Beauty Spider-orchids if you are in the Clare region. Report sightings to: DEWRN, Clare or Black Hill office
- cleaning your shoes whenever you see a Phytophthora cleaning station to stop this disease from spreading
- never digging up orchids from bushland.

For further information

Public enquiries

For more local information on any of the species in this resource please contact your nearest Natural Resource Centre office on:

- **Eastwood**: (08) 8273 9100
- **Gawler**: (08) 8523 7700
- **Lobethal**: (08) 8389 5900
- **Willunga**: (08) 8550 3400

Education enquiries

For teachers wanting more information about environmental education resources and opportunities please contact the relevant NRM Education sub regional team on:

- **Northern Adelaide**: (08) 8406 8289
- **Barossa**: (08) 8563 8436
- **Central Adelaide**: (08) 8234 7255
- **Southern Adelaide**: (08) 8384 0176
- **Southern Fleurieu**: (08) 8551 0524