

Eucalyptus strzeleckii Field Identikit

Common Problems with Identification

E. strzeleckii and *E. ovata* var. *ovata* resemble each other closely. Features that can be particularly troublesome are bark, adult foliage, buds and fruits.

The main diagnostic features of *E. strzeleckii* versus *E. ovata* are:

- Habitat (fertile soils versus a variety of soils of poor quality which are often poorly drained).
- Habit (erect and generally tall versus small-medium in height and spreading).
- Juvenile leaves (narrow and slightly lustrous versus round and dull).
- Spring growth tips (waxy and purple versus lustrous and yellow green).
- Adult leaf oil glands (richly glandular and strongly aromatic versus sparsely glandular and insipidly aromatic or slightly apple like).

Despite these generally sound diagnostic features, there will be individuals that show non-typical features. Another common problem is that *E. strzeleckii* does not always exhibit strongly aromatic leaves, particularly in immature plants. Whether the levels of volatile oils vary both within and between populations and whether there is variation during the year is not clearly understood.

There are also times in the year when the distinctive red mottled trunk of *E. strzeleckii* may not be as obvious and looks similar to that of *E. ovata* var. *ovata*. As well, some individuals of *E. strzeleckii* carry short stockings of dark, roughish bark whereas others are almost clean trunked. Bark variations may also lead to problems with identification throughout its range.

In both species fruit and bud size and shape can be variable and using these features alone is not recommended. Using a range of features to identify *E. strzeleckii* is the most reliable way to identify the tree.

Think You Have *E. strzeleckii* On Your Property?

For further information please contact any of the organisations listed below:

Department of Sustainability and Environment - Traralgon Regional Office 5172 2111

Baw Baw Shire - 5624 2411

Wellington Shire Council - 1300 366 244

Latrobe City Council - 1300 367 700

South Gippsland Shire Council - 5662 9200

Trust for Nature - 5678 8925

Greening Australia - Leongatha 5662 5201

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Photos: Tania Brooker, Kylie Singleton, Nicole Kimm

Eucalyptus ovata (EUCLID - 4) © Centre for Plant Biodiversity Research

Eucalyptus strzeleckii (EUCLID - 4) © Centre for Plant Biodiversity Research

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Description

This identikit is intended to assist with the identification of this species in the field. *Eucalyptus strzeleckii*, Strzelecki Gum is a large tree within the swamp gum group, growing to 30m tall.

Its preferred soils are deep, moist fertile loams which may be associated with a variety of sites, including hill tops and slopes, as well as adjacent to watercourses.

Eucalyptus strzeleckii is listed as Vulnerable under the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* and is listed as Threatened under the *Victorian Flora and Fauna Guarantee Act 1988*. The Advisory list for Victorian Rare or Threatened Species also lists this species as Vulnerable (DSE 2006).

Distribution

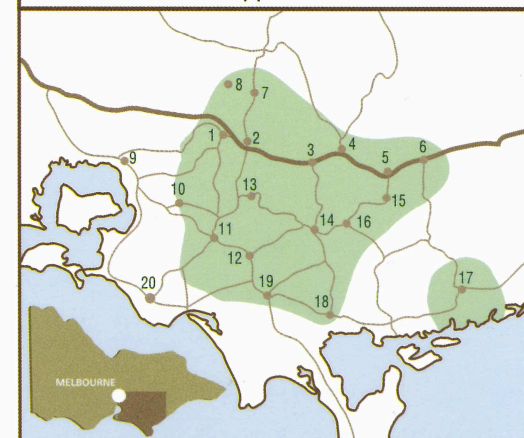
The species is largely endemic to the Strzelecki Ranges in the Gippsland region of Victoria. Its range extends at least as far north as Neerim South, south to Foster and possibly Wilson's Promontory, west to the east coast of Westernport Bay (isolated individual stands near the mouth of the Bass River) and east to Yarram. A recent discovery of the species has occurred in the Otway Ranges.

Decline and Threats

Major threats to this species include grazing, weed invasion, vegetation clearing and altered hydrology. The species has suffered a major decline in abundance, with initial declines attributed to widespread timber harvesting in the Strzelecki Ranges in the 1800s, then extensive clearing for agriculture on deep fertile soils and, to a lesser extent, urban development and infrastructure.

The number of Strzelecki Gums still remaining is difficult to quantify, largely due to it having been confused with *Eucalyptus ovata* var. *ovata* (Swamp Gum).

Known Range of *E. strzeleckii* in West & South Gippsland



1 Drouin	6 Traralgon	11 Korumburra	16 Boolarra
2 Warragul	7 Neerim South	12 Leongatha	17 Yarram
3 Trafalgar	8 Jindivick	13 Seaview	18 Foster
4 Moe	9 Kooweerup	14 Mirboo North	19 Meenyan
5 Morwell	10 Nyora	15 Churchill	20 Wonthaggi

Eucalyptus strzeleckii (Strzelecki Gum)

Eucalyptus ovata var. *ovata* (Swamp Gum)

Growth Tips

- ◀ Growth tips are reddish purple
- ◀ The tips have a bluish wax on the leaf surface



Form

- ◀ Medium-tall erect tree
- ◀ Mature trees can measure up to 40m in height



Growth Tips

- ◀ Growth tips are usually green
- ◀ The tips have a shiny surface

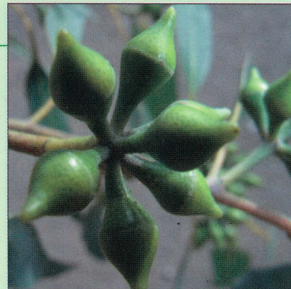


Form

- ◀ Small-medium spreading tree
- ◀ Mature trees can measure up to 25m in height

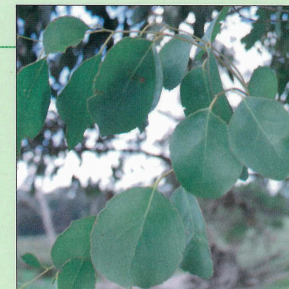
Juvenile Leaves

- ◀ Lanceolate to ovate
- ◀ 100mm x 40mm
- ◀ Slightly lustrous
- ◀ Darker on one side
- ◀ Green
- ◀ Alternate



Buds

- ◀ Diamond shaped with a conical cap, usually more ovoid than *E. ovata*
- ◀ 8mm x 4mm
- ◀ Usually 7 per cluster on a broad peduncle
- ◀ Flowers June-October



Juvenile Leaves

- ◀ Ovate to orbicular, sometimes almost circular
- ◀ 100mm x 90mm
- ◀ Dull
- ◀ Blue-green
- ◀ Alternate

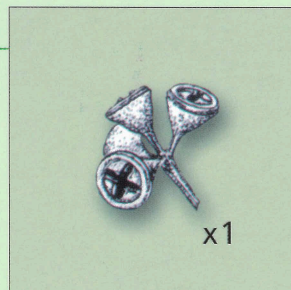


Buds

- ◀ Diamond shaped with a conical cap
- ◀ 8mm x 4mm
- ◀ Usually 7 per cluster
- ◀ Flowers May-September

Adult Leaves

- ◀ Lanceolate to ovate
- ◀ Glossy green
- ◀ Wavy edges
- ◀ Leaves usually narrower than *E. ovata*



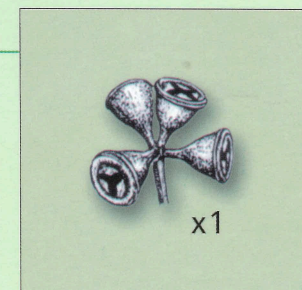
Fruit

- ◀ Short wineglass-shape (broader than long)
- ◀ 4-5mm x 5-6mm
- ◀ 3-4 valves at the rim level
- ◀ Commonly smaller than *E. ovata* tapering to thinner pedicels



Adult Leaves

- ◀ Broadly lanceolate to ovate
- ◀ Thick, dark green
- ◀ Sub-glossy both sides
- ◀ Wavy edges

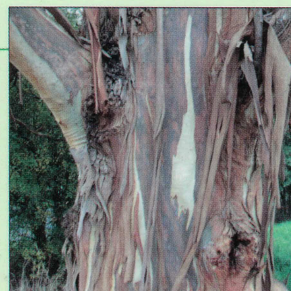


Fruit

- ◀ Funnel-shaped and flat-topped
- ◀ 5-8mm x 5-8mm
- ◀ 3-4 valves near rim level

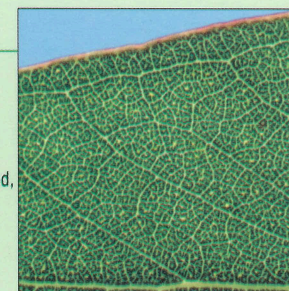
Oil Glands

- ◀ Adult and juvenile leaves are both very glandular
- ◀ The leaves produce a strong peppermint smell when crushed



Bark

- ◀ Base of trunk covered by thick, dark, hard and rough bark to various heights.
- ◀ Shed in ribbons from upper trunk and branches with a red, green and brown mottling
- ◀ Immature trees have a stocking of grey-brown sub-fibrous bark.



Oil Glands

- ◀ Oil glands are generally absent from adult leaves but are present in juvenile leaves
- ◀ Adult leaves have a very faint smell



Bark

- ◀ Base of trunk covered by thick, dark, hard and rough bark to various heights
- ◀ Shed in ribbons from upper trunk and branches leaving smooth greyish surface