

Leucochrysum albicans ssp. *albicans* var. *tricolor*



FAMILY: ASTERACEAE

BOTANICAL NAME: *Leucochrysum albicans* ssp. *albicans* var. *tricolor*, (DC.) Paul G. Wilson, *Nuytsia* 8: 443 (1992)

COMMON NAME: Grassland paper daisy

COMMONWEALTH STATUS: (*EPBC Act*)
Endangered

TASMANIAN STATUS: (*TSP Act*) endangered

Leucochrysum albicans ssp. *albicans* var. *tricolor*.
H&A Wapstra.

Description

A perennial herb with a stout, erect, woody rootstock. **Stems:** The stems are branched and woody near the base or can be erect with the older stems spreading horizontally. The young stems are white with woolly hairs. The stems grow to between 10-40 cm long. **Leaves:** The leaves are stalkless, between 4-12 cm long and arranged alternately on the stem. They are crowded near the base of the stem and threadlike to almost flat with margins that are bent backwards. Both surfaces are covered in soft cotton like hairs that are white. The older leaves are persistent at the base of the stems. **Flowers:** The flower heads are solitary and at the ends of long stalks that bear a few small, scattered bracts (leaf-like structures). The outer phyllaries (bracts of the flower) are shorter than the inner ones, oblong shaped and very thin and clear. The inner phyllaries are between 18-20 mm long and have narrow-oval thin blades, which are white or tipped with reddish purple. The florets contain both sexes. The second whorl of floral leaves is greenish-yellow and shorter than the phyllaries. Flowering occurs between November and January. **Fruits:** The fruit is a small, dry structure with leathery walls. The fruit is hairless and the pappus (ring of scales or hairs found on top of fruit) is not joined at the base, rather it is slightly thickened towards the tip and feather like (description from Curtis 1963). Most herbarium specimens have been collected from October to March. **This species was previously known as *Helipterum albicans* var. *incanum* or *Leucochrysum albicans* var. *tricolor*.**



Distribution and Habitat

There are four varieties and three recognised forms of *Leucochrysum albicans*. These occur in Victoria, New South Wales and Queensland. In Tasmania, *Leucochrysum albicans* ssp. *albicans* var. *tricolor* is restricted to non-sandy soils. This species would have originally occupied *Eucalyptus pauciflora* (cabbage gum) woodland and tussock grassland, however most of this habitat is now converted to improved pasture or cropland. Records are known from Ross, Tunbridge, The Nut, Middlesex Plains near Cradle-Mountain and Liawenee Moor (Curtis 1963, L. Gilfedder pers. comm.).

Key Sites and Populations

There are between 9-26 populations of this species in Tasmania, however approximately 90% of the total 175 000 individual plants are contained within 2 key populations (Gilfedder & Kirkpatrick 1994, TSU 2003). The number of plants can fluctuate greatly from year to year.

Known Reserves

Known from the Liawenee Conservation Area, Township Lagoon Nature Reserve, The Nut State Reserve and Vale of Belvoir Conservation Area.

Ecology and Management

This species is wind dispersed and does not rely on a soil borne seed bank for germination of seedlings (Gilfedder & Kirkpatrick 1994). This can result in relatively widely dispersed patches within populations. This daisy is unpalatable to stock and does not suffer insect attack. Stock grazing is largely beneficial in two ways, by creating bare soil for seedling establishment and the reduction of competition, particularly vigorous perennial grasses. Research by Gilfedder & Kirkpatrick suggests that grazing and sufficient general disturbance is required for the maintenance of these populations.

Most occurrences are on private land at risk from conversion of native vegetation, particularly for pasture improvement and cropping. Many older records have not been verified with dedicated searches of this distinctive species in recent years suggesting a significant decline in its distribution since settlement.

Insects are the most likely pollination vector for this species (A. Hingston pers. comm.).

Conservation Status Assessment

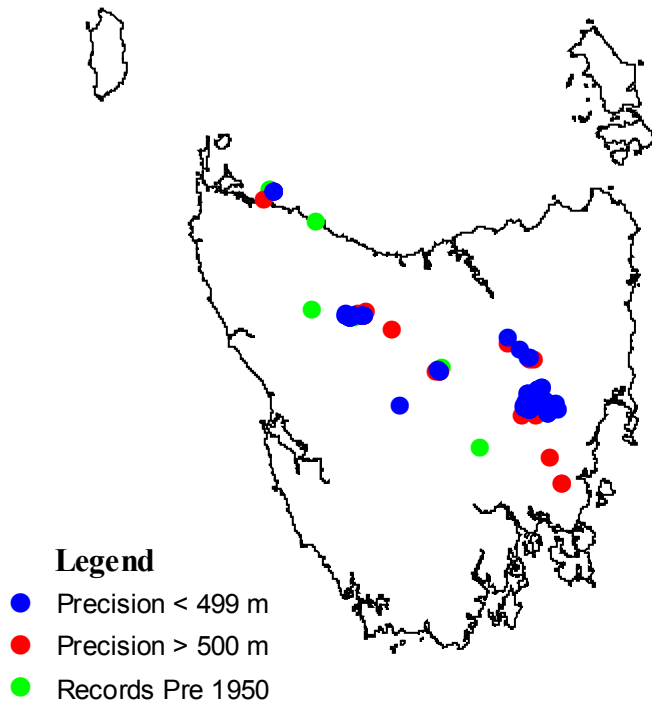
Leucochrysum albicans ssp. *albicans* var. *tricolor* could be considered for downlisting to vulnerable at the State level.

Further Information

- Curtis, WM 1963, *The Student's Flora of Tasmania*, Part 2, Government Printer, Hobart.
- Gilfedder, L & Kirkpatrick, JB 1994, 'Climate, Grazing and Disturbance, and the Populations Dynamics of *Leucochrysum albicans* at Ross, Tasmania', *Australian Journal of Botany*, vol.42, pp.417-430.
- Threatened Species Unit 2003, *Draft Listing Statement: Grassland paper daisy *Leucochrysum albicans* ssp. *albicans* var. *tricolor**, Department of Primary Industries, Water & Environment, Hobart.

Tasmanian Distribution

(As per Threatened Species Unit records, June 2003)



1:25 000 Map Sheets

Bothwell, Bronte, Buckland, Cethana, Cleveland, Conara, Cressy, Ellinthorp, Lea, Liena, Morriston, Nile, Pearse, Pencil Pine, Ross, Split Rock, Stanley, Tunbridge, Whiteford, Wynyard.

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