# Leucochrysum albicans subsp. tricolor



*Leucochrysum albicans* subsp. *tricolor*. H&A Wapstra.

#### FAMILY: ASTERACEAE

**BOTANICAL NAME:** *Leucochrysum albicans* (A.Cunn.) Paul G.Wilson subsp. *tricolor*, (DC.) N.G.Walsh, *Muelleria* 34: 13 (2015)

COMMON NAME: grassland paperdaisy

**NAME HISTORY:** Helipterum albicans var. incanum, Leucochrysum albicans subsp. albicans var. tricolor, Leucochrysum albicans var. tricolor

**COMMONWEALTH STATUS:** (*EPBC Act*) Endangered

TASMANIAN STATUS: (TSP Act) endangered

# 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.





# **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.

#### **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* subsp. *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.
- Kirkpatrick JB 2007, Collateral benefit: unconscious conservation of threatened plant species. *Australian Journal of Botany*, vol. 55, pp 221–224.
- Threatened Species Unit 2003, Draft Listing Statement: Grassland paper daisy Leucochrysum albicans ssp. albicans var. tricolor, Department of Primary Industries, Water & Environment, Hobart.
- Walsh, NG 2015, Elevation of rank for Leucochrysum albicans var. tricolor (Asteraceae: Gnaphalieae), Muelleria, vol.34, pp.11-13.

# Preceding text last modified 3/9/2003. Following updated 31/8/2017.

#### **Survey Time and Habitat Guide** (*black* = best, *dark grey* = possible, *light grey with slash*=poor time to survey, as guided by collection dates of specimens and records)

Leucochrysum albicans subsp. tricolor	Spring						Summer						Autumn					Winter						
grassland paperdaisy	S	S	0	þ	X	N	D	D	J	J	F	F	М	М	X	Å	М	М	J	J	J	J	А	А

- Flowers are required to confirm the identity and aid detection of this perennial herb from the daisy family. Flowering occurs between November and January but the basal clumps of leaves can be identified a litle earlier (if familiar with the species). Most herbarium specimens have been collected from mid-November to March. No other subspecies are known in Tasmania.
- In Tasmania, *Leucochrysum albicans* subsp. *tricolor* occurs in the west and on the Central Plateau and the Midlands, mostly on basalt soils in open grassland. This species would have originally occupied *Eucalyptus pauciflora* woodland and tussock grassland, though most of this habitat is now converted to improved pasture or cropland.

# Distribution

(Atlas of Living Australia 31/8/2017)



#### **Known Reserves**

Reserved in Liawenee Conservation Area, Township Lagoon Nature Reserve, The Nut State Reserve and Vale of Belvoir Conservation Area It also occurs on three private properties in areas covered by a conservation covenant under the Tasmanian *Nature Conservation Act 2002*.

# **Tasmanian Distribution**

(Natural Values Atlas May 2017)



#### Cite as:

Threatened Species Section (2017). *Notesheet for* Leucochrysum albicans *subsp.* triclor (*grassland paperdaisy*). Department of Primary Industries, Parks, Water and Environment, Tasmania.

#### View

http://www.dpipwe.tas.gov.au/threatenedspecieslists

#### **Contact details**

Threatened Species Section, Department of Primary Industries, Parks, Water and Environment, GPO Box 44, Hobart, Tasmania, Australia, 7001. Ph. (03) 6165 4340.

#### Permit

It is an offence to collect, disturb, damage or destroy this species unless under permit.