

Are these weeds Invading Your Neighbourhood?

Ginnindera Catchment Group

✚ Serrated Tussock (ST) (*Nassella trichotoma*)



ST originates from South America and is also a perennial tussock forming grass that can live for more than 20 years. It grows to a height of 60cm and the maximum diameter of each tussock is usually 15cm. ST looks similar to many native grasses but has barbs (or serrations) along its leaves. While these are minute and can't be easily seen by the naked eye they can be easily felt. The leaves are extremely narrow (0.5mm) and tightly rolled. The most distinguishing feature of ST is the ligule which is a small flap carried by most grasses and found at the junction of the leaf and the leaf sheath. To find the ligule, trace down a leaf to its junction with the

leaf sheath. Bend the leaf back at this point, and a small, white hairless flap, 1mm long, will protrude vertically. Other grasses will have different ligules, eg: hairy, toothed or none at all. ST ligules may be difficult to see with the naked eye and a hand held magnifying glass may be needed for accurate identification.

✚ African Love Grass (ALG) *Eragrostis curvula*



ALG is a dense, usually erect, perennial tussock 30-70cm high with flower heads up to 120cm high. The plant is generally erect but stems may bend at their base and the whole plant often adopts a weeping habit. The leaves are narrow, of varying lengths and pale green to blue-green colour. Leaves are generally hairless, tough to break and have distinct parallel veins. They also usually taper to a fine curly tip. A distinguishing feature is the black colour of young seed heads, which are usually branched and spreading and up to 30cm long. The flowering stems or seed heads are smooth and round and have a purple band at the joints or nodes.

Photo captions:

1. Chilean Needle Grass seed head in detail (by Keith Turnbull Research Institute)
 2. Chilean Needle Grass seed heads (by Kate Blood)
 3. Close up Serrated Tussock Seed Heads (by Kate Blood)
 - Serrated Tussock Ligule, located at junction of Leaf and Leaf Sheath (by Eurobodalla Shire Council)
 4. African Love Grass in flower (by Geoff Robertson)
 5. Seed heads of African Love Grass (by Geoff Robertson)
 6. Chilean Needle Grass seeds transported by socks (by Nicky Bruce)
- Cover Image: Serrated Tussock in flower (by Jacki Miles)



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Communities Caring for Catchments

Three SILENT INVADERS

Chilean Needle Grass, Serrated Tussock and African Love Grass

✚ Gungahlin's Grassy Reserves

Gungahlin has possibly the best grassland and grassy woodland reserves in Australia, including Mulligans Flat and Goorooyaroo Reserves in the east, and along Gungahlin Drive at the Mulanggari, Gundgaderra, and Crace Grassland Reserves. However, three introduced grasses are threatening the continued survival of these important reserves. They are Chilean Needle Grass, Serrated Tussock and African Lovegrass. This brochure provides information on these highly invasive grasses. For the reserves' neighbours and visitors, the brochure also outlines some practical steps to stop these grasses invading.

✚ Why Are Native Grasslands Important?

Before white settlement the lower areas of Canberra were covered with natural grassland, while the slightly higher slopes were covered with woodland. The grasslands were naturally treeless, while mature woodlands had large but sparsely placed trees (largely Yellow Box and Blakely's Red Gum) and the ground layer was grasses and wildflowers. Our grasslands and woodlands have now largely disappeared.

The areas were attractive to early settlers because of their productive soils and rich grasses but, over time, heavy grazing and cropping, use of fertiliser and weed invasion, saw their demise. These Gungahlin reserves are precious and provide habitat for many plant and animal species, including several threatened birds and a reptile. In Canberra our natural temperate grasslands and Yellow Box-Blakely's Red Gum grassy woodlands have been listed as threatened ecological communities.

✚ Chilean Needle Grass, Serrated Tussock and African Love Grass; three silent invaders of our Nature Reserves

Weeds are without a doubt, one of the greatest threats to the continued survival of the ACT's grassland and grassy woodland reserves. The three most invasive and dangerous species are Chilean Needle Grass, Serrated Tussock and African Love Grass. These three grasses have the potential to out compete our native grasses in all of the ACT's reserves and, if left unchecked, rapidly set seed to form dense stands. Our native fauna and many introduced stock, such as sheep and cattle, cannot thrive on pastures or grasslands where these weeds occur in large numbers.

✚ How do these weeds spread?



These three weeds all produce a large amount of seed that is easily transported by human activities as well as natural dispersal mechanisms. In urban environments these weeds are most commonly transported by attaching themselves to vehicles and machinery such as slashers, mowers and brush cutters, or through the movement of contaminated soil and garden mulch. Seeds can attach to the fur of native and introduced animals, as well as to socks and clothing. They can then be carried and deposited in new locations. Natural mechanisms such as wind and water also disperse the seed of these grasses.

✚ How can you stop these weeds spreading into our reserves?

Here are some practical things you can do to stop these weeds spreading into our reserves:

- 1) Learn to recognise these plants (see descriptions below) and encourage and teach others.
- 2) If you recognise these weeds in your lawn or garden dig them out ensuring you get the whole plant including seed heads and root system. Place in a plastic bag and seal. Leave them in the sun for 3-5 days so that the heat generated kills the seeds. The dead plants can then be composted or taken to green recycling.
- 3) Avoid walking, driving or mowing in areas known to have these weeds, especially when they are in flower and have seeds that can be transported.
- 4) Ask garden suppliers to ensure soil and mulch you purchased is free of weed seeds.
- 5) Don't stockpile or dump garden waste and prunings in areas where their seeds can escape into reserve areas.
- 6) Clean garden equipment (eg: mowers and brushcutters) after being used in known infested areas.
- 7) Get involved in regular weed monitoring and landcare activities (contact the Ginninderra Catchment Group on 6278 3309 or landcare@ginninderralandcare.org.au).

✚ Are These Weeds Growing In Your Garden, Lawn or Nature Strip?

These three grass species can be difficult to identify, as they are easily confused with other exotic and native grass species. The descriptions and photos below provide a basic guide on how to identify these species. However, if you suspect you have one or more of these species on your property and are finding it difficult to identify them, please don't hesitate to contact the Ginninderra Catchment Group (6278 3309) for further information and assistance.

✚ Chilean Needle Grass (CNG) (*Nassella neesiana*)

CNG is a tussock forming grass named after its country of origin and its sharp pointed seed. CNG is a perennial and is easiest to identify when the flowers or seeds are present. This is usually from November to February or in winter from June to August, when the plant's foliage takes on a strawing or yellowing effect, making it distinct from other native species. The flowering seed heads are a purplish colour and the seeds are very sharp at the point. The adult plant is long-lived and very hardy. Its leaves are 1-5mm wide, around 20cm long, flat and strongly ribbed on their surface, with leaf edges that are rough to touch.

The most distinctive feature of CNG seed is the corona at the joint of the seed body and seed awn (see picture below) though these features can usually only be seen with a hand held magnifying glass. Another feature of CNG that can distinguish it from native grasses are the tiny hairs that grow on both sides of the leaf surface, these are obvious when the foliage is held in direct sunlight and may also be felt if you rub a Chilean Needle Grass leaf over your top lip.

