

What to do if you find Needle Grass

Needle Grasses are introduced weeds that can be very invasive, and can do great harm to agricultural land and natural ecosystems. If not removed promptly, huge amounts of time and money can be wasted trying to control them later.

Thoroughness and vigilance are critical to efficiently getting rid of Needle Grasses. Timing and sequence are also critical.

Sequence:

1. Check often from mid-October to November, to see if any Needle Grasses have heads.
2. Delay mowing the infested area.
3. Check identification.
4. Destroy the plants.
5. Mow promptly.
6. Repeat steps 1-5 until January or February.

Step 1. Checking

Spring is the best time to deal with most Needle Grasses. In Castlemaine they usually start to flower in about mid-October. Check often to see if any have heads. After you find the first heads, keep checking once or twice a week until about December or January. Check after rain, as it can restart the cycle.

Step 2. Delay mowing

As soon as Needle Grasses have heads, delay mowing the area, as Needle Grasses with heads are much easier to see.

Do not mow or slash plants that are seeding, as this spreads the seeds to other areas.

If there is an urgent need to mow before seeding plants have been destroyed, cut off all seed heads and bag before mowing. There may also be hidden seeds in the lower stems, so clean mower thoroughly before moving it elsewhere.

Step 3. Check identification

It's important to identify them correctly, to avoid removing native grasses (some of which look similar to Needle Grasses), and to not spend too much time on less invasive weeds. Resources to help with identification are over the page.

Step 4. Destroy the plants

Remove the Needle Grasses straight away and bag them. Or mark the spot (e.g., with a stake and coloured twine) so you can easily find them again.

There are only about two weeks from when a Needle Grass plant flowers to when it sets viable seed. The plants must be removed or killed during this time

Flowers are small and pale, without petals. The flower has small pollen-bearing anthers, only a few millimetres long, dangling in the wind. Seeds follow the flowers. If the seed is soft and can be squashed easily it is not yet ripe. Once it is hard (when squeezed between finger and thumb) the seed is viable, and can germinate.

Small plants can be pulled out. Big ones can be dug out. A small (heavy) hand mattock is a useful tool – whack the mattock under the plant with one hand and pull with the other. Hand removal is the best technique where there are indigenous plants or other plants you don't want to harm nearby.

If the infestation is too big to pull or dig out, it can be sprayed with a mixture of glyphosate (e.g., Roundup) and flupropanate (e.g., Taskforce). Glyphosate kills the plant and flupropanate kills germinating grass seedlings for about two years. This can greatly reduce the infestation and the need for future control work.

If using herbicide, always follow the label (i.e., manufacturers' instructions) and read safety data sheets.

If the plant has viable seed, herbicide won't kill the seeds.

The seeds (including any stem seeds) will have to be cut off and removed before spraying. As well as the seeds at the top of the plant and the self-fertilised seeds lower down the stem, Needle Grasses can have bulb-like 'seeds' at the base of the plant.

Step 5. Mow promptly after destroying plants

As well as minimising fire risk, this makes it easier to see the next lot of Needle Grass plants that throw up heads. If they have been sprayed, wait a week after spraying before mowing, to allow glyphosate to act. Leave the clippings on the ground, to avoid moving seeds to another area and to allow flupropanate to wash into the soil.

Step 6. Repeat steps 1-5

Needle Grasses can continue to germinate and flower through spring and summer, especially after rain. Espartillo's cycle is later than the other Needle Grasses—new tufts can be found in January, and flowers up until autumn.

If the infestation has been there long enough for it to have dropped its seeds the previous season, steps 1-5 will have to be repeated for years, as seeds can stay viable in the soil for 12 years.

Eradication involves persistence and time, but this is not a reason to give up and do nothing. It's better to do a small amount to help stop their spread than to do nothing.

Disposal

As plants are removed, put them into sturdy bags (e.g., potting mix bags or animal feed bags without open weave or holes). To dispose of, incinerate the plants or bury in a secure place (at least 50 cm deep) where they won't be dug up for 20 years). Or they may be put in the bin after taping bags shut and putting each bag in a second bag and taping it shut.

Needle Grasses in Mount Alexander Shire

Cane Needle Grass (*Nassella hyalina*) Alert List for Environmental Weeds.

Chilean Needle Grass (*N. neesiana*) Noxious weed (Restricted category). Weed of National Significance. Environmental weed.

Espartillo (*Amelichloa caudata*) Environmental weed.

Serrated Tussock (*N. trichotoma*) Noxious weed (Regionally Prohibited category). Weed of National Significance. Environmental weed.

Texas Needle Grass (*N. leucotricha*) Environmental weed.

More information

Connecting Country may be able to help with identification. ph. 5472 1594.

Department of Primary Industries, *Management Guide: Chilean Needle Grass*, 2008. http://weeds.ala.org.au/WoNS/Chileanneedlegrass/docs/83_CNG_management_brochure_2008.pdf

Department of Primary Industries, *National Best Practice Management Manual: Chilean Needle Grass*, 2007.

matt@wildmatters.com.au Knowledge of control methods.

Richardson, E.J., Richardson, R.G. & Shepherd, R.C.H., *Weeds of the south-east*, 2011 pp 86-89 (581.652 RIC in Goldfields libraries).

Upper Campaspe Landcare Network, *A Ute Guide to Chilean Needle Grass & Texas Needle Grass Identification & Management* uclandcare@gmail.com.

Victorian Serrated Tussock Working Party, *Identification of Serrated Tussock*, 2011.

Walter, J., *Texas Needle Grass Identification Guide* (Malmsbury District Landcare ph. 5423 9383).

What to do if you find Needle Grass

Needle Grasses are introduced weeds that can be very invasive, and can do great harm to agricultural land and natural ecosystems. If not removed promptly, huge amounts of time and money can be wasted trying to control them later.

Thoroughness and vigilance are critical to efficiently getting rid of Needle Grasses. Timing and sequence are also critical.

Sequence:

1. Check often from mid-October to November, to see if any Needle Grasses have heads.
2. Delay mowing the infested area.
3. Check identification.
4. Destroy the plants.
5. Mow promptly.
6. Repeat steps 1-5 until January or February.

Step 1. Checking

Spring is the best time to deal with most Needle Grasses. In Castlemaine they usually start to flower in about mid-October. Check often to see if any have heads. After you find the first heads, keep checking once or twice a week until about December or January. Check after rain, as it can restart the cycle.

Step 2. Delay mowing

As soon as Needle Grasses have heads, delay mowing the area, as Needle Grasses with heads are much easier to see.

Do not mow or slash plants that are seeding, as this spreads the seeds to other areas.

If there is an urgent need to mow before seeding plants have been destroyed, cut off all seed heads and bag before mowing. There may also be hidden seeds in the lower stems, so clean mower thoroughly before moving it elsewhere.

Step 3. Check identification

It's important to identify them correctly, to avoid removing native grasses (some of which look similar to Needle Grasses), and to not spend too much time on less invasive weeds. Resources to help with identification are over the page.

Step 4. Destroy the plants

Remove the Needle Grasses straight away and bag them. Or mark the spot (e.g., with a stake and coloured twine) so you can easily find them again.

There are only about two weeks from when a Needle Grass plant flowers to when it sets viable seed. The plants must be removed or killed during this time

Flowers are small and pale, without petals. The flower has small pollen-bearing anthers, only a few millimetres long, dangling in the wind. Seeds follow the flowers. If the seed is soft and can be squashed easily it is not yet ripe. Once it is hard (when squeezed between finger and thumb) the seed is viable, and can germinate.

Small plants can be pulled out. Big ones can be dug out. A small (heavy) hand mattock is a useful tool – whack the mattock under the plant with one hand and pull with the other. Hand removal is the best technique where there are indigenous plants or other plants you don't want to harm nearby.

If the infestation is too big to pull or dig out, it can be sprayed with a mixture of glyphosate (e.g., Roundup) and flupropanate (e.g., Taskforce). Glyphosate kills the plant and flupropanate kills germinating grass seedlings for about two years. This can greatly reduce the infestation and the need for future control work.

If using herbicide, always follow the label (i.e., manufacturers' instructions) and read safety data sheets.

If the plant has viable seed, herbicide won't kill the seeds.

The seeds (including any stem seeds) will have to be cut off and removed before spraying. As well as the seeds at the top of the plant and the self-fertilised seeds lower down the stem, Needle Grasses can have bulb-like 'seeds' at the base of the plant.

Step 5. Mow promptly after destroying plants

As well as minimising fire risk, this makes it easier to see the next lot of Needle Grass plants that throw up heads. If they have been sprayed, wait a week after spraying before mowing, to allow glyphosate to act. Leave the clippings on the ground, to avoid moving seeds to another area and to allow flupropanate to wash into the soil.

Step 6. Repeat steps 1-5

Needle Grasses can continue to germinate and flower through spring and summer, especially after rain. Espartillo's cycle is later than the other Needle Grasses—new tufts can be found in January, and flowers up until autumn.

If the infestation has been there long enough for it to have dropped its seeds the previous season, steps 1-5 will have to be repeated for years, as seeds can stay viable in the soil for 12 years.

Eradication involves persistence and time, but this is not a reason to give up and do nothing. It's better to do a small amount to help stop their spread than to do nothing.

Disposal

As plants are removed, put them into sturdy bags (e.g., potting mix bags or animal feed bags without open weave or holes). To dispose of, incinerate the plants or bury in a secure place (at least 50 cm deep) where they won't be dug up for 20 years). Or they may be put in the bin after taping bags shut and putting each bag in a second bag and taping it shut.

Needle Grasses in Mount Alexander Shire

Cane Needle Grass (*Nassella hyalina*) Alert List for Environmental Weeds.

Chilean Needle Grass (*N. neesiana*) Noxious weed (Restricted category). Weed of National Significance. Environmental weed.

Espartillo (*Amelichloa caudata*) Environmental weed.

Serrated Tussock (*N. trichotoma*) Noxious weed (Regionally Prohibited category). Weed of National Significance. Environmental weed.

Texas Needle Grass (*N. leucotricha*) Environmental weed.

More information

Connecting Country may be able to help with identification. ph. 5472 1594.

Department of Primary Industries, *Management Guide: Chilean Needle Grass*, 2008. http://weeds.ala.org.au/WoNS/Chileanneedlegrass/docs/83_CNG_management_brochure_2008.pdf

Department of Primary Industries, *National Best Practice Management Manual: Chilean Needle Grass*, 2007.

matt@wildmatters.com.au Knowledge of control methods.

Richardson, E.J., Richardson, R.G. & Shepherd, R.C.H., *Weeds of the south-east*, 2011 pp 86-89 (581.652 RIC in Goldfields libraries).

Upper Campaspe Landcare Network, *A Ute Guide to Chilean Needle Grass & Texas Needle Grass Identification & Management* uclandcare@gmail.com.

Victorian Serrated Tussock Working Party, *Identification of Serrated Tussock*, 2011.

Walter, J., *Texas Needle Grass Identification Guide* (Malmsbury District Landcare ph. 5423 9383).