

Athel pine (*Tamarix aphylla*)

Weed management guide

Weed type
Tree

November 2022

www.lls.nsw.gov.au/regions/central-west



In NSW, weeds are regulated by the NSW Biosecurity Act, 2015. All land managers have a General Biosecurity Duty to contain the spread of weeds.

“General Biosecurity Duty means that any person dealing with plant matter must take measures to prevent, minimise or eliminate the biosecurity risk (as far as is reasonably practicable).”

The Regional priority for Athel pine is to protect assets from the weed’s impacts and to prevent its arrival and establishment in the region. In order to achieve this, Land Managers are asked to:

Whole region: *The plant should not be bought, sold, grown, carried or released into the environment. Mitigate the risk of new weeds being introduced to their land.* **Exclusion zone:** *Eradicate from the land and maintain.* **Core infestation area:** *Reduce impacts to priority assets.*

For further information, contact your local Biosecurity (Weeds) Officer via Central West Local Land Services or visit NSW WeedWise.

NSW WeedWise



Habit and description

Athel pine is an evergreen tree that reaches up to 15m in height. The trunk of this tree can either be single or multi-stemmed. The stems transform from light grey in immature trees to greyish brown in mature ones, the latter having thick, rough and dark grey to black bark. The leaves of this tree resemble those in conifers which misleads people to think it is a pine. Athel pine bears flowers, not cones. It has pale pink to white flowers which become tiny bell-shaped fruits about 3mm long covered with tufts of fine hair. This is what distinguishes it from native she-oaks which have fruits resembling small pinecones. Athel pine prefers a riverine environment, but it is also drought resistant and tolerant of saline and alkaline soils making it adaptable to a wide range of environments especially on arid or semi-arid rangelands.



Photo: © Les Tanner | NSW DPI



Photo: © John Stretch | NSW DPI



Photo: © John Stretch | NSW DPI



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Reproduction and spread

The tree can reproduce sexually via seeds and vegetatively, through pieces of root and branch that are detached and through root growth from buried/submerged stems. The seeds are mainly spread by wind and water, through machinery and animals can also play a role. Up to 600,000 seeds can be produced by a mature plant per year and it is highly viable but only for a few weeks. Flowering occurs during summer while the seeds drop during autumn (Gavin et al., 2003). Root and branch pieces are mainly spread by water (floods) and through machinery (Gouldthorpe et al., 2008).

Impacts

Agriculture



- This plant is notorious for extracting moisture from the soil. It is one of the reasons for the drying of watering holes which affect pasture animals (reduce carrying capacity of an area).
- Increased mustering cost from the woody weed infestation.

Native vegetation



- Athel pine is a Weed of National Significance (WoNS) in Australia (NSW Department of Primary Industries, 2017).
- By sucking up water, Athel pine makes the surrounding land saline allowing only salt-tolerant plants to persist as the dominant ground vegetation.
- This tree also excretes salt through its leaves which contributes to the already saline soil when leaves join the litter below.
- As it is not a hollow-bearing tree, the displacement of Eucalyptus species by Athel pine results in the loss of nesting sites for native birds.
- Being fire resistant, it also alters the fire regime when it takes over, and affects the regeneration of native species dependent on fire.

Management

Chemical



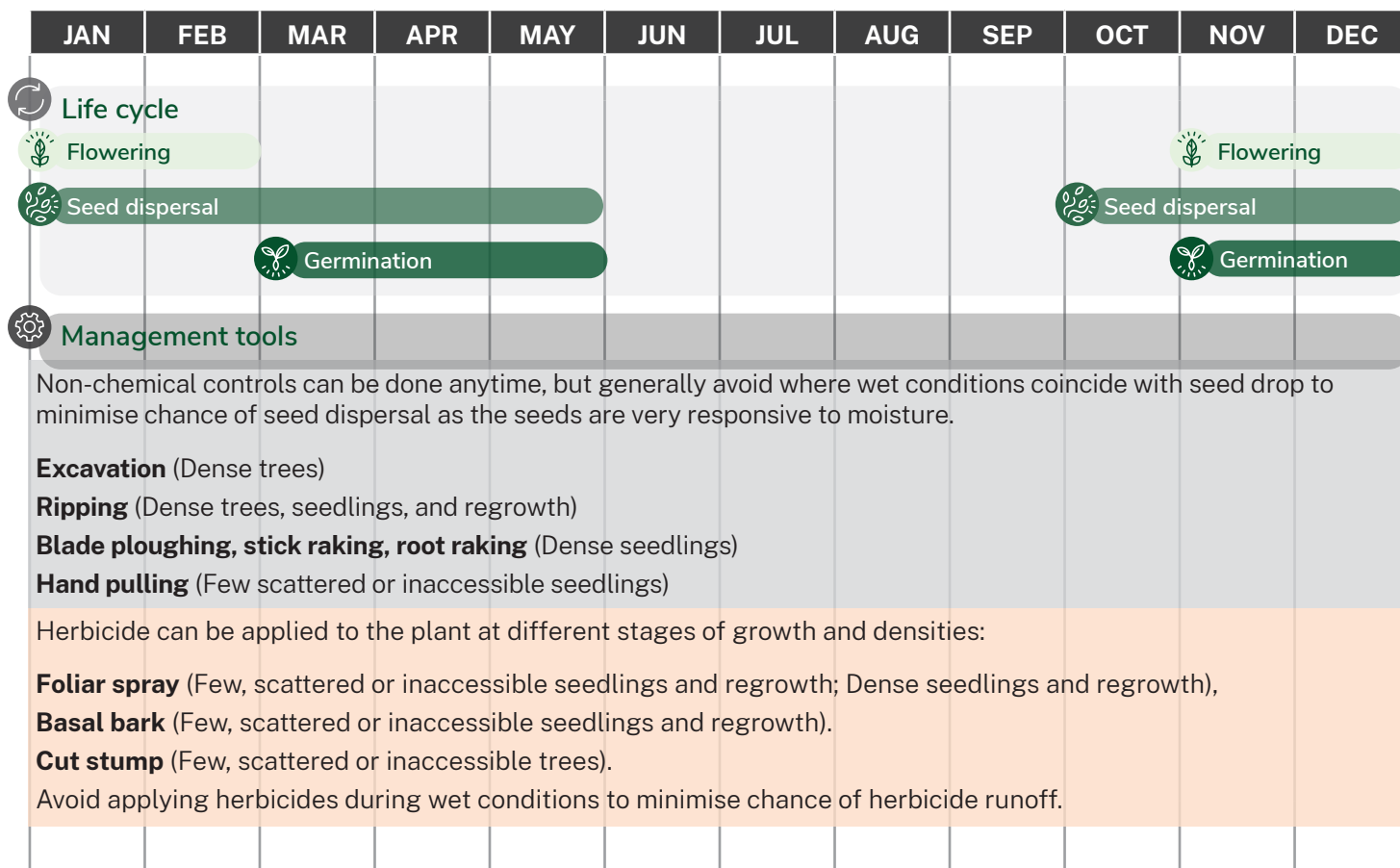
- Herbicide application is effective against Athel pine and is recommended where the use of mechanical methods will contribute to erosion.
- Seek the guidance of an experienced Weeds Officer for expert advice on herbicide use.
- Visit www.apvma.gov.au for a list of registered products, product labels and permit requirements.
- NSW DPI (2021) provides a list of recommended herbicides for the control of Athel pine at <https://weeds.dpi.nsw.gov.au/Weeds/AthelPine>.

Non-chemical



- Non-chemical controls are advised in conjunction with chemical applications.
- Hand pulling is ideal for uprooting seedlings while mechanical methods like ripping and bulldozing is needed for mature trees. Remove as much of the root system as possible because re-shooting is likely.
- Planting suitable pasture should be sown to compete with any regrowth of Athel pine.

Management calendar



Optimal control options may vary depending on your location and climate. Consult an experienced Weeds Officer based in your local government area for control methods suited to your conditions.

All herbicides must be used in accordance with the herbicide label and permit requirements.

Further information

For more information on your general biosecurity duties, visit www.dpi.nsw.gov.au/biosecurity.

For the best guidance on how to meet this duty on your property, contact your expert Weeds Officer at your local council or via Local Land Services www.lls.nsw.gov.au/regions/central-west.

NSW WeedWise



References

NSW DPI. (2017). *Weed categories*. <https://www.dpi.nsw.gov.au/biosecurity/weeds/weed-categories>

NSW DPI. (2021). *NSW WeedWise*. <https://weeds.dpi.nsw.gov.au/Weeds/AthelPine>

Gavin, J., Carter, R., Maher, P., Collopy, D., Peirce, J., Stretch, J., Thorp, J. (2003). *Athel pine Weed Management Guide*. CRC for Australia Weed Management. <https://profiles.ala.org.au/opus/b6be6ec2-37e5-43c6-a2c0-7f5427cb8d93/profile/b3aca8b0-0b68-458d-8f7e-588aa75ba18e/attachment/38a61eb6-7764-47d3-8e34-653d123e7134/download>

Gouldthorpe, J., Clarke, S., Clarke, W., Harvie, A., Leighton, S., Lloyd, B., & McDaniel, K. (2008). *Athel pine National Best Practice Management Manual*. Managing athel pine and other Tamarix weeds in Australia. Palmerston: Northern Territory Government. https://nt.gov.au/_data/assets/pdf_file/0004/407632/athel-pine-management-plan.PDF

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