

# Kidney-leaf mud plantain (*Heteranthera reniformis*)

## Weed management guide

Weed type  
**Water  
Weed**

February 2023

[www.lls.nsw.gov.au/regions/central-west](http://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 Kidney-leaf mud plantain is Prevention. In order to achieve this, Land Managers are asked to: *Mitigate the risk of new weeds being introduced to their land. The plant should be eradicated from the land and the land kept free of the plant. The plant should not be bought, sold, grown, carried or released into the environment. Notify local control authority if found.*

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

NSW WeedWise



# Habit and description

Kidney-leaf mud plantain lives either as a submerged or floating aquatic weed that is able to grow up to 50 cm high. Its leaves are kidney shaped up to 5 cm wide and are arranged alternately along the stem. Young leaves are narrow but broaden as it matures. Flowers are white and occur on a spike with each spike containing up to nine flowers. Flowers develop into small capsules 1 mm long and containing 8-14 winged seeds.

The plant grows in shallow water (15 cm deep) and the edge of water bodies. It prefers growing under full sun and does not grow well in shaded areas with taller vegetation like grasses and sedges. Records from property inspections show that Kidney-leaf mud plantain is found from Greater Sydney to the North Coast, as well as a small infestation in the Riverina.



Photo: © Charlie Mifsud | NSW DPI



Photo: © Suzanne Hayward | NSW DPI



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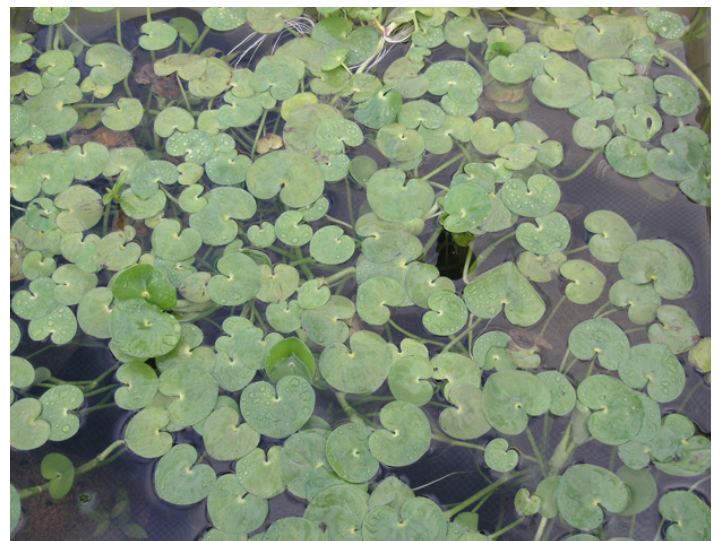


Photo: © Suzanne Hayward | NSW DPI

# Reproduction and spread

Kidney-leaf mud plantain grows mainly from stem fragments that have broken-off and drifted elsewhere. Flooding events can spread it over a considerable distance (Csurhes S., 2016).

It can also spread by seeds. The seeds are winged and able to travel by wind and water. The seeds can remain viable in the soil for many years making it hard to know if the plant has been completely eradicated in the area.

## Impacts

### Agriculture



- Water infrastructure such as dams, drain and water supply channels can be overgrown with the plant and reduce flow.
- In rice growing regions, infestations of this plant can significantly reduce crop yields.

### Native vegetation



- Its presence prevents other native aquatic plants from thriving and consequently, fish and other aquatic animals that depend on these as food.

## Management

### Chemical



- Herbicides are applied by foliar spraying. Use herbicides approved for aquatic use on plants found in shallow water.
- Seek the guidance of an experienced Weeds Officer for expert advice on herbicide use.
- Visit [www.apvma.gov.au](http://www.apvma.gov.au) for a list of registered products, product labels and permit requirements.
- NSW DPI (2018) provides a list of recommended herbicides for the control of Kidney-leaf mud plantain at <https://weeds.dpi.nsw.gov.au/Weeds/KidneyleafMudPlantain>

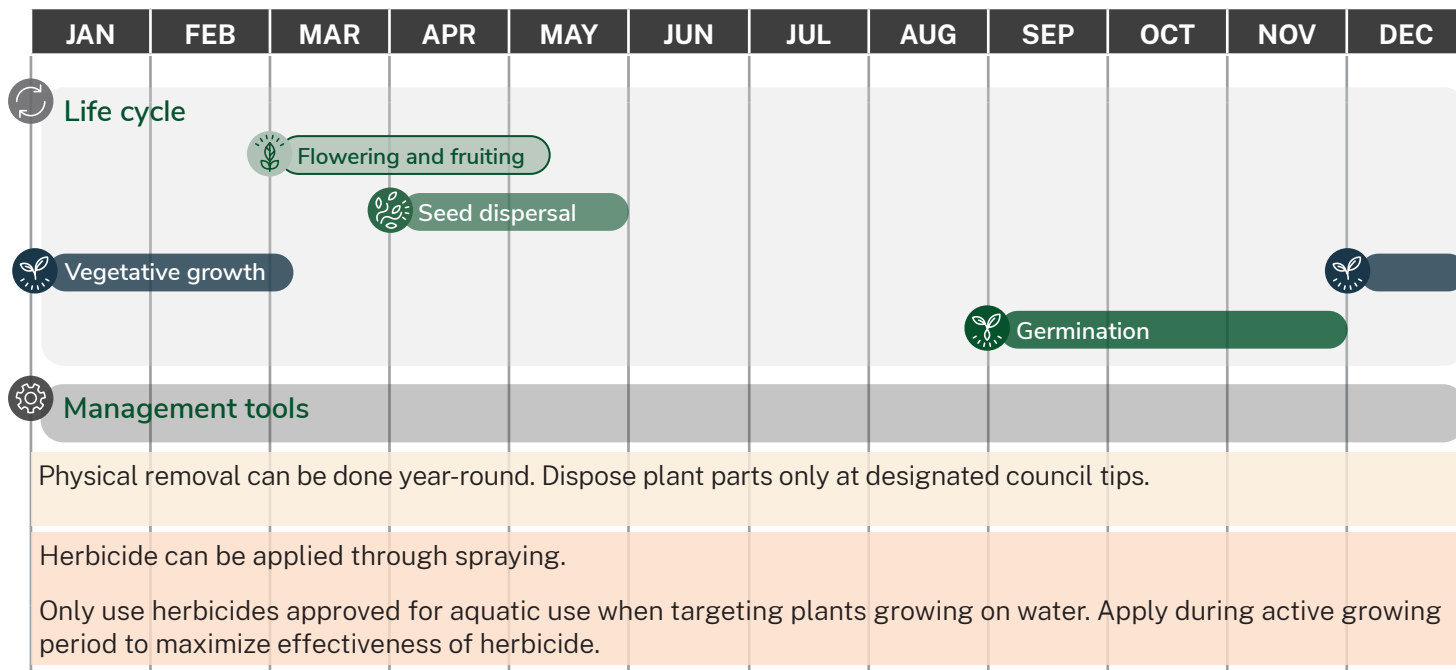
### Non-chemical



- Hygienic measures must be employed when going to areas of known infestation as mud or debris containing plant parts can be carried to other areas.
- Plants can be removed manually through physical or mechanical methods making sure to include all root parts.



# 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](http://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](http://www.lls.nsw.gov.au/regions/central-west).

NSW WeedWise



## References

Csurhes S. (2016). *Invasive plant risk assessment: Kidneyleaf mudplantain*. Queensland Government [https://www.daf.qld.gov.au/\\_data/assets/pdf\\_file/0010/55468/IPA-Kidneyleaf-Risk-Assessment.pdf](https://www.daf.qld.gov.au/_data/assets/pdf_file/0010/55468/IPA-Kidneyleaf-Risk-Assessment.pdf)

NSW DPI. (2018). *NSW WeedWise*. <https://weeds.dpi.nsw.gov.au/Weeds/KidneyleafMudPlantain>



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