

North West Regional Best Practice

Guide for:

Water Lettuce



Botanical name: Pistia stratiotes

Common names: Water lettuce, Nile cabbage, water lily

Water Lettuce is a free-floating aquatic plant native to Asia, Africa and equatorial America. It was believed to have been introduced as an aquarium and water garden plant sold in nurseries. Under favourable conditions, water lettuce will produce abundant growth that can expand rapidly and form an obstructive mat that can interfere with irrigation, boating and water sport activities. These mats can have negative impacts on native aquatic plants and animals, and harbour disease causing mosquitoes. It can reproduce vegetatively as well as from seed.

Your responsibilities

Under the the General Biosecurity Duty - Biosecurity Act 2015, a General Biosecurity Duty applies to all dealings (as defined in the Act) with this species. Any person who deals with this species who knows (or ought to know) of any biosecurity risk posed by the plant, a carrier or a dealing, has a duty to ensure the biosecurity risk is prevented, eliminated or minimised, so far as is reasonably practicable.

The penalties

The maximum penalties for not complying with the general biosecurity duty or a direction issued under the Biosecurity Act 2015 are:

- In the case of an individual—\$220,000 and, in the case of a continuing offence, a further penalty of \$55,000 for each day the offence continues, or
- In the case of a corporation—\$440,000 and, in the case of a continuing offence, a further penalty of \$110,000 for each day the offence continues.

The maximum penalty for an offence that is committed negligently is:

- In the case of an individual—\$1,100,000 and, in the case of a continuing offence, a further penalty of \$137,500 for each day the offence continues, or
- In the case of a corporation—\$2,200,000 and, in the case of a continuing offence, a further penalty of \$275,000 for each day the offence continues.

Recommendations and requirements

Under the Regional Recommended Measure, the following is needed to demonstrate compliance with the Act:

- The plant or parts of the plant are not traded, carried, grown or released into the environment
- The plant is eradicated from the land and the land is kept free of the plant.
- Land managers should mitigate the risk of new weeds being introduced to their land.
- The plant should not be bought, sold grown, carried or released into the environment.
- Notify Local Control Authority if found.

Under Gunnedah Shire Local Control Requirements:

1. The land is kept free of the plant, and
2. Land managers will mitigate the risk of the plant being introduced to their land.

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Control Calendar



Growth cycles

Flowering and seeding: Mid-September through to beginning of January

Active growth: Mid-September to beginning of April

Integrated control techniques and alternatives

Physically remove plants and destroy by burning anytime throughout the year

Optimum herbicide use: Beginning of November to end of March

Registered herbicide application rates:

PERMIT 83083 Expires 31/03/2022 Carfentrazone-ethyl 240 g/L (Shark™ Aquatic Herbicide) Rate: 933 mL of product per ha Comments: DO NOT apply more than two (2) applications per year with a minimum re-treatment interval of 90 days between consecutive treatments

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PERMIT 84767 Expires 31/05/2020 Metsulfuron-methyl 600 g/kg (Brush-off®) Rate: 10 g per 100 L water plus a wetter at 200 mL per 100 L water Comments: May only be applied in enclosed water bodies, and not within 400 m of potable water supply uptakes. WARNING: very toxic to aquatic plants and algae. Apply a maximum of 3 applications per year at minimum intervals of 90 days.

2,4-D 300 g/L (Affray 300®) Rate: 1.0 L in 200 L of water bComments: Avoid causing submersion of sprayed plants. Coverage: 200 L spray solution per 1000 square metres.

Diquat 200 g/L (Reglone®) Rate: 400 mL per 100 L of water Comments: Add Agral 600 wetter, use clean water for best results. Observe withholding period.

Diquat 200 g/L (Reglone®) Rate: 5.0–10.0 L/ha Comments: Add Agral 600 wetter, use clean water for best results. Observe withholding period

Glyphosate 360 g/L (Only products registered for aquatic use) Rate: 1.0–1.3 L in 100 L of water Comments: Best results are obtained from mid-summer through to winter.

Use higher rate on dense infestations.

Critical Comments:

- Apply when plants are actively growing.
- Consult your LCA Biosecurity Officer- Weeds for application tips.
- Always read and follow the Label instructions and SDS of respective herbicides.

Note:

- (a) All Control Techniques involving herbicide use must comply with the directions on the herbicide label or the conditions set out in a current permit to use a nominated herbicide.
- (b) All chemical control programs must be carried out in accordance with the Pesticides Act 1999 and Pesticide Regulation 2017.
- (c) All Chemical application programs used must be undertaken by or be designed and supervised by an appropriately Certified and Accredited Chemical user.
- (d) Growth patterns and the changes to optimum treatment times will vary with seasonal conditions due to air temperature changes that may coincide with soil and moisture availability.

For further information:

Gunnedah Shire Council Biosecurity Officer - Weeds.

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