Contact your local weed officer immediately if an infestation is suspected

- Don’t attempt to control or remove the plants until you have contacted your local weeds officer
- Mark infestations with high visibility markers
- Reporting an infestation enables local weed officers to assist with control and disposal

Further Information

For advice on identification, prevention of spread and control of alligator weed contact your local weeds officer.

Detailed information is provided in: “Alligator weed control manual – Eradication and suppression of alligator weed (Alternanthera philoxeroides) in Australia”. For copies contact NSW DPI Bookshop 1800 028 374 or your local weeds officer.

Alligator weed is a Weed of National Significance and is declared noxious in all States and Territories.
What is alligator weed?

Alligator weed is a highly invasive weed that grows both on land and in water. It can tolerate herbicides and spreads easily by fragments, making it a serious weed of waterways, wetlands and floodplains in Australia.

Irrigated and floodplain-based farming is threatened by alligator weed. The worst infestations currently affect turf farming, cropping and grazing in the Hawkesbury and Hunter regions of NSW. Alligator weed has the potential to spread to most non-arid parts of Australia including inland river systems. In catchments with high rainfall alligator weed can persist and grow above the floodplain.

Impacts of having alligator weed on your farm include:

- Reduced yields and production losses
- Contamination of crops and pastures
- High costs of ongoing control
- Loss of use of irrigation bays, paddocks and pastures for periods up to 5 years (during suppression and eradication programs)

Impacts for graziers include:

- Photosensitivity in livestock (leading to skin lesions, liver damage, and death)
- Malnutrition due to lack of essential amino acids (alligator weed should not make up more than 15% of a ruminant diet)
- Loss of pasture productivity (alligator weed will slowly dominate a pasture over a number of years)

Impacts for irrigators include:

- Floating plant masses reducing downstream supply flows and efficiencies. (Infestations of between 2m² and 10m² can reduce flows by at least 50%)
- Obstruction of supply channels causing collapse or channel bank breaching and flooding
- Reduced flows and pressure at the discharge side of the system
- Increased maintenance and replacement costs of foot valves, strainers and pumps
- High risk of spread to other irrigated areas
A new infestation can start from a single plant fragment.

The following table describes how alligator weed spreads onto and within farms. **Alligator weed does not produce viable seed in Australia. Spread is via plant fragments.**

<table>
<thead>
<tr>
<th>Alligator weed can spread ONTO a farm when:</th>
<th>Flood irrigation (rice, wheat, grains)</th>
<th>Pressurised irrigation (turf, crops, horticulture)</th>
<th>Grazing</th>
<th>Dryland cropping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irrigation water from infested supply channels carries fragments into a crop or irrigation bay</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irrigation pipelines pumping from an infested water source carry fragments into a crop</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Fragments are carried in stock hooves</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Slashing or cultivation occurs close to infestations</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Plants grow into paddocks from aquatic bankside infestations</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Contaminated feed, soil, gravel, sand or turf is introduced to the farm</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Fragments are carried on watercraft, vehicles and machinery</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Flood waters deposit fragments</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Alligator weed can spread WITHIN a farm when:</th>
<th>Flood irrigation (rice, wheat, grains)</th>
<th>Pressurised irrigation (turf, crops, horticulture)</th>
<th>Grazing</th>
<th>Dryland cropping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fragments are carried in stock hooves and mouths</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Fragments are moved in soil (from banks into cropping bays or paddocks)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Plants are slashed or cultivated over</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Fragments are carried on watercraft, vehicles and machinery</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Fragments are carried in water</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

Always maintain good vehicle, watercraft and machinery hygiene and ensure equipment entering your property is weed free.

Don’t move soil from banks, drains or ditches.

Don’t graze, slash or cultivate close to banks or near known infestations.

BRIAN WORBOYS
GRAHAM PRICHARD
BRIAN WORBOYS
Early detection is critical for eradication

Early detection increases the chances of successful eradication. Years of expensive control will be necessary before an established infestation may be eradicated.

What to look for:
- Floating mats of stems on water surfaces
- Creeping, layering and upright stems on land
- Upright growth in warmer months
- Runner-like stems in cooler months
- Small papery white ball-shaped flowers (1.2 –1.4cm) on short stalks
- Dark green, glossy, spear-shaped leaves (2-12cm) in opposite pairs along stems
- Hollow stems

When to look:
- Regularly, during the growing season from September to May (flowering occurs mid to late summer)
- After floods and heavy rains
- Prior to cultivation or planting
- After irrigation

Where to look:
- Drainage lines, waterways, wet depressions, swampy areas and floodplains
- In bankside vegetation – check from the bank to the paddock
- Where earthmoving equipment has been operated
- Where feed, soil, gravel, sand or turf has been introduced

Be vigilant and check regularly and repeatedly