Invasive Plant Species Control Options

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Invasive Plants in Shorelines & Shallows

– Displace native or other valued vegetation
– Block access and reduces recreation opportunities
– Decreases habitat for fish and wildlife
– Lowers property values
<table>
<thead>
<tr>
<th>Shoreline</th>
<th>Shallows</th>
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</thead>
<tbody>
<tr>
<td>Phragmites*</td>
<td>European frog-bit*</td>
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<tr>
<td>Yellow iris</td>
<td>Water lettuce</td>
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<tr>
<td>Purple loosestrife*</td>
<td>Water hyacinth</td>
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<tr>
<td>Japanese knotweed*</td>
<td>Parrot feather*</td>
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<tr>
<td>Black and pale swallow-worts</td>
<td>Flowering rush*</td>
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<tr>
<td>Narrow-leaf cattail</td>
<td>Water clover</td>
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</tbody>
</table>

* = prohibited or restricted species
Control Options

– Mechanical – may spread; often used in combination with herbicides
– Biological – limited
– Chemical – herbicides approved for aquatic use
Phragmites

- Glyphosate or glyphosate/imazapyr
- Late summer when seed heads are formed
- Can be combined with mowing or burning
- Follow-up necessary
- Reinvasion likely
Yellow iris

- Spreads by seed and rhizomes
- Mechanical removal
  - Dispose in landfill
  - May cause skin irritation
- Glyphosate or imazapyr
- Follow-up necessary
Purple loosestrife

- Biocontrol
  - Galarucella beetle
  - Glyphosate or triclopyr
- Mechanical
Japanese knotweed

- Aminopyralid – foliar spray in late summer or spring and summer
- Glyphosate injected into stem
- Up to four years to kill stand
- Mowing will spread
Black and pale swallow-worts

- Climbing vines can be cut
- Triclopyr
- Biocontrol?
- Seed wind dispersed
Narrow-leaf cattail

- Glyphosate or imazapyr
- Hand swiping
- Covering
European frog-bit

- Diquat or imazapyr before turions form
- Hand removal and dispose in landfill or managed compost
- Follow-up necessary
Water lettuce and water hyacinth

- Hand removal
- Glyphosate
- Keep in water gardens!
Parrot feather

- Triclopyr foliar spray until heavy frost
- Don’t release!
Flowering rush

- Triclopyr or imazapyr
- Spreads by seed and rhizome
- Hand digging
European water clover

- Control methods unknown
- Triclopyr or imazapyr
Finding Help

www.michiganinvasives.org
www.michigan.gov/invasivespecies
www.misin.msu.edu
Thank you!

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