Phragmites and Cattail Treatment Frequently Asked Questions

Do I have Phragmites or Cattails?

Proper Identification is the key! If you are unsure if you have Phragmites or Cattails, there are a couple major physical identification distinctions. Phragmites are an invasive species and are capable of growing to heights of 18 ft where Cattails usually only 5-10 feet tall. They both have dense stands and are capable of having long life spans. Phragmites have woody, hollow stems and leaves that taper from the base to a pointed tip. The leaves are often 8-16" long and .5-1.5" wide. Phragmites Flowers develop by midsummer and are arranged in purplish gray spikelet's with many tufts of silky hair. Cattails have flat to rounded leaves that twist slightly over their length. The flowers look like dense dark brown sausages attached to the spikes at the top of the cattails which can reach lengths of up to 1 foot.

For your reference a line drawing of Phragmites is located on the backside of this page. The Michigan DEQ has assembled a helpful guide entitled "A Landowner's Guide to Phragmites Control"; it is available for free on the DEQ website at:

http://www.michigan.gov/documents/deq/deq-ogl-Guide-Phragmites 204659 7.pdf

A 46 page guide for resource and land managers is also available on the Michigan DEQ website. The guide is entitled "A Guide to the Control and Management of Invasive Phragmites" and is available at the web address:

http://www.michigan.gov/documents/deq/deq-ogl-ais-guide-PhragBook-Email 212418 7.pdf

Why are Phragmites undesirable?

Phragmites are an aggressively reproducing, invasive species that have a tendency to create a monoculture in areas that it takes root. Mono-cultures can be undesirable because they displace the beneficial native species, and at times, the animals that utilize the resources these plants provide. They re-organize the ecosystem and can forever alter habitat. Phragmites are also undesirable because they can reach 18 ft in height blocking views, access, and creating fire hazards.

What Products can I use to treat my Phragmites or Cattail problem?

There are a number of products labeled for use on Phragmites and Cattails; we always recommend the services of a commercial applicator. If state, local, and federal laws allow and a homeowner chooses to do it themselves; Glyphosate (AquaPro®, AquaNeat®, Refuge™ or Shore-Klear™), Imazamox (Clearcast®), Imazapyr (Habitat®), or Triclopyr (Renovate® 3) product approved for use in aquatic environments. Most products require the use of a non-ionic surfactant labeled for aquatic use when used for emergent foliage sprays. We always recommend Cygnet Plus™ when you need a non-ionic surfactant/penetrant. Some treatment options that use a combination of active ingredients can have better results and faster knockdown. One of the common combinations available to the commercial applicator is a Glyphosate/Habitat®/Cygnet Plus™ mixture. Studies have shown you can achieve

greater control using this mixture; however label restrictions only allow it to be applied by a professional.

What are the costs involved in treating my Phragmites and Cattail problem?

The cost/acre to treat can vary. The product cost involved is approximately \$100-\$600/acre. This depends on the management goal, plant density, and products chosen. It does not include any labor or permit fees that may be required.

When should I treat my Phragmites and Cattails?

Treatment should be made when plants are green and actively growing. The best timing is when the plants are fully bloomed but before the first killing frost. This occurs in late summer before the first killing frost.

What are the label restrictions on products used in a Phragmites and Cattail treatments?

A re-entry period of 4 hours may be applicable when used according to the label.

Label restrictions are as follows:

Glyphosate (AquaPro®, AquaNeat®, Refuge™ or Shore-Klear™)

• Drinking: 2 days or assay of .7 ppm

Imazamox (Clearcast®)

Drinking: Assay of 50 ppb

Irrigation: 1 day

Imazapyr (Habitat®)

Drinking: 2 days

Livestock watering: 2 days

Irrigation: 120 days or assay of 1 ppb

Triclopyr (Renovate® 3)

• Drinking: assay of .4 ppb or less

Livestock watering: 120 days or assay under 1 ppb

• Irrigation: 120 days or assay under 1 ppb (N/A to established grasses)

Non-Ionic Surfactant (Cygnet Plus™)

No Restrictions

What are the rates I should be using for the treatment of Phragmites and Cattails?

Glyphosate or Habitat® should be applied at 4-6 pints per acre (1 acre = an area approx. 208 ft X 208 ft or 43,560 ft²). For Clearcast® the label rate ranges from 1 to 4 quarts per acre. For Renovate® 3 the rate is 2 to 8 quarts per acre. An activator/surfactant is also required to be mixed with the herbicide, we recommend Cygnet Plus™. The surfactant is applied at no more than 4 pints per acre. When using the combination of the two products, the rate is 3 pints of each product per acre. Always read label mixing instructions for recommended preparation.

^{**}See label for more specific restriction details**

How are Phragmites and Cattails treated?

The method used generally will be chosen based on the sensitivity of the surrounding environment and the size of the stand to be treated. When using spray methods please be conscious of your spray and drift, do not apply product using spray technique within 100 ft of desirable vegetation or crops. If you must apply when there is a wind greater then 5mph leave a buffer zone of greater than 500 ft.

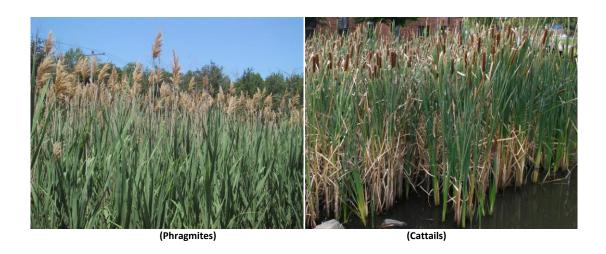
There are multiple methods you can use to apply the herbicide mix to Phragmites or Cattails.

These include:

- 1. Backpack sprayer or handheld sprayer
- 2. Hand swiping
- 3. Wick/Dauber
- 4. Aerial Spraying

How long until I see initial results?

Due to the systemic action of these products, results are often slower than with other herbicides. The herbicide needs time to move throughout the plant to kill the root system. Results are usually seen in 1-2 weeks, but visual control symptoms may be delayed. Visual symptoms can include but are not limited to; discoloration, yellowing, and/or wilting.





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The information provided is for reference only and should not be considered a recommendation of any description. Always read and follow the product label instructions, applications and restrictions. Various local, state and/or federal regulations may preempt this information. Cygnet Enterprises, Inc. recommends contacting a certified commercial applicator for herbicide and algaecide application. Again, this is general information and is not intended to provide specific advice. This general information is provided as an educational service by Cygnet Enterprises Inc