

Cattail Control in Sewage Lagoons

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Four approaches can be used for controlling cattails in sewage lagoons.

1) Mechanically removing the tops

One can keep cattails in check, and eventually obtain control, by repeatedly cutting the tops. If possible, the plants should be cut below the water line. If they must be cut above the water line, the water level in the lagoon should be raised to submerge the cut stems at least eight inches. Research in Iowa (Weller, 1975) found that cutting shoots two or three times during the growing season before flower production, reduced a cattail stand by 95–99% in one year. A single cutting in August followed by submergence resulted in 80% control. It is important to remove all dead and live cattail stems to achieve this control.

Power equipment that has been used to cut cattails includes sickle mowers and hand operated power trimmers equipped with metal cutting wheels instead of strings. Hand scythes, machetes (corn knives) and long-handled shovels also have been used to manually cut cattails that are close to the shoreline.

2) Hand pulling

Where feasible to do so, pulling rather than cutting, will result in faster control because one is removing the structures where energy is stored by the plant (crowns, rhizomes and roots). Repeated pulling so the plants never grow taller than three feet above the water surface will prevent seed production. Sometimes the rhizomes become so intertwined, it is nearly impossible to pull the plants out by their roots. In this case, use a shovel to first divide the clumps into square foot sections and then pull them.

3) Using a contact herbicide

A contact herbicide only kills the green tissue that comes in contact with the herbicide. It does not translocate to (move to) other parts of the plant as in the case of a systemic herbicide. Thorough coverage of the green tissue is essential for effective control. Expect plants to regrow from the roots. Treat three to four times during the growing season to prevent seed production and to eventually starve the root system.

For each 1,000 ft² of surface area treated, use:
3 Tbsp (1.5 fl oz) **Reward**[™] + 3 Tbsp non-ionic surfactant
in 2¼ gallons of water.

See last paragraph for more information.

4) Using a systemic herbicide

Systemic herbicides applied to the foliage are absorbed into the plant tissues and then translocated (moved) throughout the entire plant. Cattails are most susceptible to systemic herbicides during growth stages when the plant is translocating larger amounts of photosynthate into the root system. The optimum treatment period is from boot stage (noticeable bulge caused by the flowering structure growing up through its protective sheath) to early flowering (green cattail head freshly emerged from the boot).

For each 1000 square feet of surface area treated use:
9 Tbsp (4.5 fl oz) **2,4-D ester** (4L) + 3 Tbsp Methylated seed oil (MSO) or 3 Tbsp Crop Oil Concentrate (COC)
in 3½ gallons of water
- or -
4½ Tbsp (2.25 fl oz) aquatic glyphosate (**Aquamaster**[™] or **Rodeo**[™]) + 3 Tbsp non-ionic surfactant (X-77 or equivalent)
in 2¼ gallons of water

Mention of trade names in this educational resource is for clarification only and should not be interpreted as an endorsement by the University of Nebraska or Lancaster County Extension.

Products mentioned can be purchased at most major garden supply centers, landscape nurseries or from agricultural chemical suppliers. Be sure to read and follow all label directions.

Apply herbicide mixtures to the green foliage, not to the water in the lagoon, using a pressurized hand sprayer. For information on calibrating a hand-held sprayer call 441-7180 and ask for Lancaster County educational resource 026-99 "Calibrating a hand-held sprayer," or visit online at <http://lancaster.unl.edu/ag/crops/handspray.pdf>.