



Aquatic Plant Management

South Carolina Department of Natural Resources

SLENDER SPIKERUSH

Eleocharis baldwinii

Common Name
Needlerush/Spikerush

Distribution and Habitat

Slender spikerush is found statewide and is particularly common in the midlands and coastal plain of the state. This species thrives in still, shallow ponds with substrates of organic mud but can tolerate a wide range of habitats and grow in water depths up to 6 feet.

Description

Spikerush may exhibit several distinctly different growth modes, ranging from a rooted, submerged plant to dense, free floating mats on the pond surface. It also grows in marshy areas or at waters edge, where it resembles a soft, bright green, carpet-like grass. The stem of slender spikerush is extremely narrow, 0.1-.25mm wide, and ranges from 2-14 inches long. Leaf blades are lacking or are reduced to a simple sheath. These characteristics give the plant a tangled, wiry or stringy appearance. The flowers of this species are very inconspicuous, being small, flattened spikelets, reddish brown or yellow in color.

Recommended Control Methods

Currently there is no herbicide labeled for the control of slender spikerush. This species can be controlled by the use of sterile grass carp (White Amur).

Sterile Grass Carp for the Control of Slender Spikerush

Only **sterile (triploid) grass carp** can be legally sold in South Carolina by vendors approved by the South Carolina Department of Natural Resources. A list of these vendors is available from the agency. **The average cost for 10-12 inch grass carp is \$7.00-\$8.00 per fish.**

The number of grass carp required to control the vegetation is dependent on a number of factors, including the size of the water body, amount of vegetation present and the abundance of predators. Generally, **a stocking rate of 10-20 fish per surface acre** is sufficient to control spikerush. A reduction in the vegetation should be evident within several months after stocking, but a longer period of time is usually required before control is complete.

The size of the grass carp and the time at which they are stocked is important to ensuring the successful



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use of the fish. In most cases, the fish should be a **minimum length of 10 inches** and be stocked in the spring (March-April) for best results. **Grass carp should not be stocked later than early October.**

Grass carp are subject to predation by a number of animals including largemouth bass, otters, alligators and various species of fish eating birds. This predation is usually greatest in young fish (less than 12 inches). The impact of predators on grass carp is often the major reason the fish fail to control the aquatic vegetation in a water body. Fish may also be lost due to escapement. Given the opportunity, grass carp fish will leave a pond via the pond spillway system or feeder stream. Various barrier designs may be employed to reduce the chances of escapement in cases where this potential exist.

Grass carp are primarily herbivores but they will feed on a number of the same food items utilized by the pond gamefish population. Serious competition with gamefish is usually restricted to instances where over stocking of grass carp has occurred and the vegetation has been depleted.

Grass carp will readily feed on floating pelleted fish food and may become highly competitive where supplemental feeding is conducted for bluegill and/or catfish.

This information is intended for educational purposes only. References to commercial products or trade names is made with the understanding that no discrimination is intended of other products which may be available. Any herbicides recommended herein for the treatment of aquatic vegetation have been registered by the Environmental Protection Agency for use in the manner described. The registration and use of a particular product may change, therefore the information provided here may not remain current indefinitely. It is the responsibility of the user to read and follow the manufacturers label to prevent misuse of the product.



South Carolina Department of Natural Resources
Freshwater Fisheries Section

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