

# Technical Report



## Wetland Flora

No. 01-11 / November 2001

Gene Silberhorn

### Water Hemlock Beaver Poison

#### *Cicuta maculata* L.

##### Growth Habit and Diagnostic Characteristics

Water hemlock is a leafy, branching, perennial herb, 3 to 6 feet (1 to 2 m) tall, with pinnately compound, alternate leaves, with toothed margins. The leaves are divided into leaflets arranged along a central axis; those immediately subtending the flower head are usually divided into three parts. Farther down the stem, the compound leaves may be divided into 15 or more leaflets. Stems are erect, hollow, with longitudinal ridges and often mottled purple near the base.

In summer, the plant produces an unusual, radially branched inflorescence (compound umbel) with a multitude of tiny white flowers. The flowering head generally resembles that of Queen Anne's Lace or wild carrot (*Daucus carota*). The common names of this plant are appropriate. There are documented accounts of this plant poisoning animals and humans. A closely related Eurasian plant, poison hemlock (*Conium maculatum*), was introduced to the New World, and was very likely the cause of Socrates' death.

##### Distribution

Water hemlock is often found in freshwater wetlands throughout much of North America, as well as the Mid-Atlantic Coastal Plain.

##### Habitat

*Cicuta maculata* grows in various wetland habitats such as ditches, swales, tidal freshwater marshes, and the edges of swamps. Because it is a perennial, the plant is commonly found in the same location year after year. The author has consistently found it growing in one spot of Sweet Hall Marsh on the Pamunkey River for over 25 years. It is associated with northern wild rice (*Zizania aquatica*) at this location.

##### Ecological Value/Benefits

Beaver poison has little wildlife value and is a dangerous poison to wetland browsers such as beavers and muskrats.

##### Wetland Indicator Status

According to the *Revision of the National List of Plant Species that Occur in Wetlands, 1997*, *Cicuta maculata* is classified as an **obligate wetland plant (OBL)**. OBLs are plants that almost always occur in wetlands (> 99% probability).

*Cicuta maculata* L. -----



Wetlands Program  
School of Marine Science  
Virginia Institute of Marine Science  
College of William and Mary  
Gloucester Point, Virginia 23062  
Dr. Carl Hershner, Program Director

This report was funded, in part, by the Department of  
Environmental Quality's Coastal Resources Management  
Program through Grant No. NA97020181-01 of the  
National Oceanic and Atmospheric Administration,  
Office of Ocean and Coastal Resource Management,  
under the Zone Management Act of 1972, as amended.



Illustration by  
Kent Forrest

Printed on  
recycled  
paper: 