# Myriophyllum spicatum

**Daphnia, Water flea**

General
- Submersed, rooted, perennial aquatic herb

Ecological Impacts
- Particularly troublesome in waterbodies that have experienced disturbances (nutrient loading, intense plant mgmt, or abundant motorboat use)
- Competes aggressively to displace and reduce diversity of native aquatic plants
- Canopy formation and light reduction
- Less value as a food source for waterfowl
- At high densities, foliage supports a lower abundance and diversity of invertebrates which in turn affects fish
- Degrades water quality and depletes dissolved oxygen levels
- Restricts swimming, fishing, and boating
- Clogs water intakes and results in decaying mats that foul lakeside beaches

Management Options
- Mechanical harvesters and chopping machines
- Rototilling and underwater vacuuming
- Water level manipulation
- Insect biocontrols
- Biocontrol fish
- Registered aquatic herbicides (endothall, 2,4-D, and fluridone)

Geography and Habitat
1. Native: Europe, Asia, northern Africa
2. Introduced: All states except Idaho, Nevada, Wyoming, Kansas, Maine, and Hawaii, Canadian provinces of British Columbia, Ontario, and Quebec
3. Habitat
    - Lakes, ponds, shallow reservoirs and low energy areas of rivers and streams
    - Brackish water (up to 10 ppt) of protected tidal creeks and bays
    - Winter-hardy, able to overwinter in frozen lakes and ponds
    - Also able to grow in shallow, over-heated bays

Invasion Pathways
1. Intentional introduction
2. Motorboat traffic increases fragmentation and spread
3. Transport on boating equipment

Sources
1. http://nas.er.usgs.gov/taxgroup/plants/docs/my_spica.html
2. http://plants.usda.gov/java/profile?symbol=MYSP2
3. http://plants.ifas.ufl.edu/node/278