Whitman County Extension
Weeds

Washington State University
WHITMAN COUNTY EXTENSION

SEPTEMBER 2010

STEVE'S

Weed of the Month

Yellow Flag Iris

Also Known As: yellow flag, yellow water-flag, water flag, yellow iris, pale yellow iris

Yellowflag Iris is a **Class C Noxious Weed:** Non-native plants that are already widespread in Washington State. Counties can choose to enforce control, or they can educate residents about controlling these noxious weeds.

Yellow Flag Iris (*Iris pseudacorus* L.), an aquatic perennial native to North Africa, Europe, temperate Asia, and the Mediterranean region, was introduced into the United States as an ornamental. This wetland plant is fast growing and spreads by seed as well as vegetative reproduction from its rhizomatous roots; both seeds and root fragments are often carried downstream by water. The plant's thick fleshy rhizomes can form dense mats that exclude native vegetation, alter ecological relationships and interfere with water movement, impacting fish, plants, animals, and human activity. This robust species grows in upright clumps and stands 2–5 feet tall. It has broad, flat, sword-like leaves that are stiff, have a waxy coating and overlap at the base; during mild winters, the leaves persist and remain green. The flower stalks of yellow flag iris grow 3–4 feet tall; each stem may have several flower heads that bloom from late spring to early summer in the Pacific Northwest. The showy yellow flowers (sometimes cream-colored) consist of 3 backward-curving sepals—often with brown or purple markings—and 3 smaller upward-pointing petals. After the plant blooms, seed pods develop. The glossy green, elongated pods are 2–4 inches long and can float. A single seed capsule generally contains 50-60 seeds (flat, brown, disc-shaped), but can exceed 100 seeds in native plants.

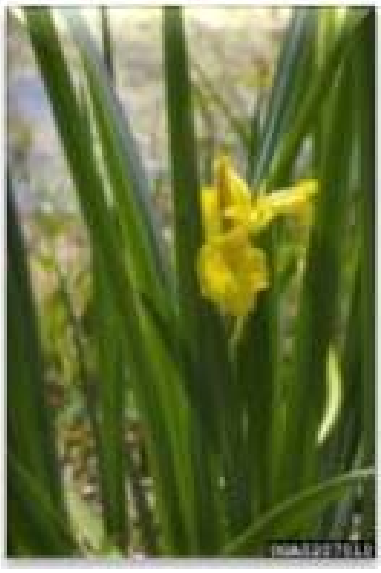

Photo by: Nancy Loewenstein, Auburn University, Bugwood.org

Yellow flag iris has been intentionally planted not only as an ornamental, but also for erosion control and to remove metals and collect sediments from wastewater ponds and other contaminated water bodies. This invasive aquatic species commonly occurs in very shallow water or mud; however, it can tolerate water up to 10 inches deep. It can also tolerate extended dry spells, as well as some salinity and high soil acidity. It does well in nutrient-rich conditions and has a high nitrogen requirement. It prefers part shade or full sun exposure.

Although livestock generally avoid yellow flag iris, the plant contains large amounts of glycosides that are poisonous to grazing animals; common symptoms include vomiting and diarrhea. Resin from the plant can irritate the skin, so gloves and other protective clothing are recommended for those handling the plant.

Bloom

Photo by: John M Randall, The Nature Conservancy, Bugwood.org

Leaf

Photo by: Stevens County Noxious Weed Control Board

Fruits

Photo by: Joseph M DiTomaso, University of California-Davis, Bugwood.org

Seeds

Photo by: Steve Hurst, USDA NRCS PLANTS Database, Bugwood.org

Root

Photo by: Joseph M DiTomaso, University of California-Davis, Bugwood.org

Infestation

Photo by: Todd Pfeiffer, Klamath County Weed Control, Bugwood.org

Control Methods

Because yellow flag iris may be found in sensitive wetland areas, extreme care should be taken when using any control method so that the disturbance does not further harm fragile ecosystems.

Cultural Control: Yellow flag iris should not be used in landscaping; if already present, consider replacing it with noninvasive species—preferably native vegetation. While not eradicating the plant, certain measures can be taken to contain its spread, such as covering the infested area with plastic or landscape fabric and harvesting the plant's seed pods. Prescribed burns are generally not only impractical in wetland areas but are also ineffective since yellow flag iris can resprout from rhizomes; furthermore, fire can actually encourage seed germination.

Manual/Mechanical Control: Small infestations of yellow flag iris can be controlled by pulling or diligently digging out the plant and as much of the rhizomatous root system as possible. Long-term monitoring will be necessary to remove new growth from any remaining rhizome fragments. Repeated mowing or cutting off of this species may eventually eradicate it. An integrated approach, such as mowing or cutting followed by herbicide treatment, is often most effective.

Chemical Control: Because yellow flag iris is an aquatic plant, aquatic herbicides must be used; state regulations require aquatic herbicides be applied by a licensed aquatic applicator. The non-selective herbicides glyphosate and imazapyr can be used for controlling yellow flag iris. However, nonselective herbicides can injure or kill all plants they contact, so special care must be taken when using these chemicals. To minimize non-target injury, use spot applications or apply the chemical directly to freshly-cut stems.

More information can be found in the
PNW Weed Management Handbook

Use pesticides with care. Apply them only to plants, animals, or sites listed on the label. When mixing and applying pesticides, follow all label precautions to protect yourself and others around you. It is a violation of the law to disregard label directions. Store pesticides in their original containers and keep them out of the reach of children, pets, and livestock.

Biological Control: No biological control insects are currently available for control of yellow flag iris. Grazing is not a good option because the plant contains poisonous glycosides.

Questions: contact Steve Van Vleet or phone (509) 397 - 6290