

Dear Weed Enthusiasts,

This week's weed of interest is **Milk Thistle, *Silybum marianum***, aka Blessed Milk Thistle. It is a Class A weed in Island County and throughout Washington. Class A weeds are the highest priority in the state due to their significant potential impact and limited distribution. **Property owners are required to eradicate Class A weeds** on their property.

Milk Thistle is a member of the family Asteraceae, in the Order Asterales. It is an annual or biennial herb that ranges from 2-6 ft. (0.6-1.8 m) in height. The leaves have shiny, green upper surfaces and are noticeably variegated with white markings, and like most thistles have spiny margins. The purple flower heads develop at the apex of the stems. They are 0.8-2.5 in. (2-6.4 cm) in diameter at the base and are enclosed in a projecting, spiny involucre. Flowers from April to July. Milk Thistle can be distinguished from other thistles by its distinctive white-mottled leaves.



Native to the Mediterranean region, Milk Thistle invades roadsides, ditches, disturbed areas and fertile fields. Seed dispersal is the only means by which the milk thistle spreads. The seeds are equipped with a large pappus which allows effective spread by wind. Spread can also be attributed to their presence in grain and fodder. The seedlings prefer disturbed soils which provide suitable bare areas for litter-free germination, and *Silybum* seed has the potential to remain viable in the soil for **up to 9 years!**

Milk Thistle can be poisonous to livestock. The poisonous principle is nitrate (Macadam 1966). Cattle and sheep eat the plant material which contains potassium nitrate and break it down by means of ruminal bacteria into the poisonous form (Knott 1971). "The nitrite ion...combines with haemoglobin to form methaeglobin ...[which is] incapable of combining with oxygen. If large amounts of methaeglobin are present in the blood stream, affected animals will begin to show respiratory distress for lack of oxygen." (Knott 1971)

To achieve control and potential eradication of *S. marianum*, physical removal, cultivation and mowing can prove effective if complemented by sowing a perennial, or otherwise competitive grass. The most effective herbicide used on *S. marianum* is 2,4-D. The plant is most susceptible to the chemical from the seedling to the rosette stages of growth.

For more information on Milk Thistle, visit the Washington Noxious Weed Control Board website here:
<http://www.nwcb.wa.gov/detail.asp?weed=57>

As always, if you have more questions you can contact Janet Stein, Island County Noxious Weed Coordinator, at 678-7992, or at: janet.stein@wsu.edu.