

# Noxious Weed Garden Loosestrife: Rhizomes and Reproduction Prevention



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Garden loosestrife is a Class B designate plant species on the Washington State Noxious Weed Control Board invasives list. It is a growing concern for four reasons.

1. It is difficult to find and identify when it is not flowering (Cusick 1986).
2. Garden loosestrife is difficult to control through mechanical removal and herbicide application.
3. It is known to reproduce very effectively by seed (Dillion and Reichard 2014) and rhizomes.
4. Garden loosestrife populations have grown tremendously over the last 30 years and have spread throughout the Pacific Northwest region.

Rhizomes are modified stems that grow underground and can reproduce a daughter plant genetically identical to its parent. The rhizome networks of many wetland plants, including garden loosestrife, are a primary mode of reproduction.



I will study how effectively garden loosestrife can reproduce from rhizome fragments with just one or two nodes. By planting rhizome segments 1, 2, and 5 cm long at depths of 0, 4, and 8 cm in soil, I will be able to inform invasive aquatics managers about the viability of mechanical removal vs herbicide treatment, where rhizomes would be left in place.

Since 1978, garden loosestrife has colonized 25% of the Lake Sammamish shoreline and much of the shoreline and water-front property on Lake Washington, Lake Burien, and the Snoqualmie River, (Messick and Kerr 2007).

## References

- Cusick, A. W. (1986) "Distributional and Taxonomic Notes on the Vascular Flora of West Virginia." *Castanea* 51 (1): pg 56-66.
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- Messick, K. and Drew K. (2007) "Garden Loosestrife (*Lysimachia Vulgaris*), a Spreading Threat in Western Waterways." *Meeting the Challenge: Invasive Plants in Pacific Northwest Ecosystems*, pg 53-57.
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