



Purple Loosestrife: A Pretty, Purple Predator

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Have you been seeing pink plants around? I'm sure you have! When I see a pink plant in ditches, I tend to panic slightly. The question that comes to my mind is, "Is that purple loosestrife, or is that fireweed, or is that showy tick trefoil?" Two of those mentioned are native and the other one is extremely invasive! I'll let you guess which are native and which one is invasive. I'll even give you a hint, check the title!

Yup! You guessed it, purple loosestrife is invasive and it is taking over aquatic areas across the states! Today we are going to discuss key characteristics of the loosestrife and how to differentiate between its two counter native species. We will also touch on what it is doing to other aquatic and terrestrial species. Lastly we will discuss how to control loosestrife, if you happen to find a patch.

The tough thing with all three of these species is that they all have bright pink/purple flowers on a long spike above the leaves. Because from a distance they all look very similar, you have to get up close and look at the details. The first thing to look at is the stem. The stem differs in that loosestrife, compared to the two native species, has a squarish-shaped stem. The other two native species have circular stems and do not have edges like loosestrife.

Next thing to compare is the flowers. As for showy tick trefoil, the flower is different from loosestrife which can help for identification from a little farther away. Showy tick trefoil flowers come to a halt at the end of the stems and are in elongated clusters. Loosestrife and fireweed both have spike-like flowers. To distinguish fireweed from loosestrife, it is best to look at the petals. Fireweed has only four petals per flower and loosestrife can have anywhere from five to seven petals per flower. To see that difference, you will have to get up close and personal with the plants.

Leaves would be next to compare. Showy tick trefoil leaves are very different from loosestrife. Tick trefoil leaves are compound, meaning there are 3 "leaflets" that belong to the one leaf, and they are completely round/oval. Tick trefoil leaves often resemble leaves of a clover. Loosestrife leaves are simple, slender and triangular. Fireweed leaves are also simple and slender, so you have to look at how they are attached to the stem. Fireweed leaves are attached alternately, they

are not directly across the stem from each other. Loosestrife are opposite/whorled, meaning that they are directly across the stem from another leaf.

The last thing to compare among these three species is the seeds. This is the easiest characteristic to distinguish them from each other. Seeds are often unique to the plant they derive from (as long as you can look at the details), which helps in identification. Tick trefoil seeds are often thought to look similar to a tick, hence the name. They are found in pods, with anywhere from two to five seed pods per grouping, and they have little bristles that can stick to your clothing very easily! Next is fireweed. Fireweed seeds are very fluffy, similar in look and style to a dandelion seed. There are a multitude of seeds per plant and they can travel effortlessly. Finally, loosestrife seeds. Loosestrife seeds are very small and difficult to notice. They are white, in the shape of a teardrop, and found at the top part of the plant. Loosestrife is able to produce many seeds per plant, and they can be established easily.

There are many problems that purple loosestrife plants cause, which is why we want to control it so badly. To start with, it is a non-native, invasive species. Purple loosestrife was brought over to the states from Eurasia in the mid-1800s. It was introduced multiple ways, some that were accidental and others that were purposeful. Some people thought the flowers were so pretty that they were introduced as an ornamental plant. It was also accidentally introduced via ship ballast water, similar to how many other invasive species were introduced.

Once the species was introduced, it hit the ground running. Loosestrife does prefer moist organic soils, but can really survive anywhere. On top of being able to survive anywhere, the plant has no natural predators (disease or insects) here in the states. This means it can outcompete just about anything in its way. Once it outcompetes the native vegetation, it can form a large dense stand. Then the native vegetation can no longer survive and native plant diversity is lost.

There are a few control methods for loosestrife; the two most common are mechanical and chemical. Mechanical control is done by physically pulling the plants from the ground or digging them up. This practice can be easily done in small stands/groups or individual plants. However for larger stands, chemical control can be the better option. Chemical control or herbicide applications can be very useful in cutting back populations of loosestrife. Careful consideration is required, however, because loosestrife typically grows in wet areas where aquatic herbicides are required and a permit from the DNR is potentially needed, especially when dealing with public waterways.

All in all, it is important to be aware of your surroundings and know invasive species from native species. See next page for photos identifying purple loosestrife, fireweed, and showy tick trefoil.

Below from left to right: Purple Loosestrife, Fireweed, & Showy Tick Trefoil. A close up of the flowers is above a photo of showing a stand of the plants.

Images from Minnesota Wildflowers Information (MWI) website:

<https://www.minnesotawildflowers.info>

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PURPLE LOOSESTRIFE

FIREWEED

SHOWY TICK TREFOIL



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