



Arctic *National Wildlife Refuge*

Invasive Plants: Too Close for Comfort

The Arctic Refuge is one of the largest intact wilderness areas in the United States and one of the few places that is largely free of invasive plants. That could change as more invasive plants make their way to Alaska and the Refuge with the aid of human travel and activity. And as climate change brings warming temperatures and lengthening growing seasons, plants introduced to the Refuge may find life progressively easier.

The Refuge is an important home for many species of wildlife. Just as important are the native plants that provide them with food and shelter. Invasive plants could threaten Arctic ecosystems if they replace the native vegetation.

Many Refuges are waging costly battles to contain invasive plants. Arctic Refuge is in a unique position to work with visitors and commercial service providers to prevent the problem before it happens.

One likely way for invasive plants to reach the Refuge is with the help of humans. We need look no further than Fairbanks for an abundant source of invasive plants. Seeds and plant fragments can travel far by hitching rides from unsuspecting people and their vehicles. Seeds can stick in the soles of a boot or on a sock. Plant fragments can wrap around a boat motor or make their way into the float of an airplane.

Help reduce the chances of invasive plants reaching the Refuge.

Don't bring invasives in from outside.

- Before entering the Refuge, make sure clothing, equipment, vehicles and aircraft are clean by removing all dirt, mud and debris.
- Watch out for “hitchhikers”—those seeds that stick to your socks, clothing or domestic animals’ fur.

Invasives are non-native species that may cause environmental or economic harm if they become established. Here are two examples of invasive plants to watch for—one on land and one in the water. These are just some of the many invasive plants that are moving closer to the Refuge each year.

White sweetclover—anything but sweet (*Melilotus alba*)

White sweetclover is a biennial 2 to 5 feet tall. Its fragrant white flowers bloom throughout the summer. Each plant can produce up to 350,000 seeds which may remain alive in the soil for decades.

Impacts in Alaska: White sweetclover was used in the past for roadside erosion control in Alaska. Now it has formed large stands along rivers and roadways, replacing native plants such as willow and fireweed. It has spread north into the Brooks Range along the Dalton Highway, and is present in Fort Yukon.

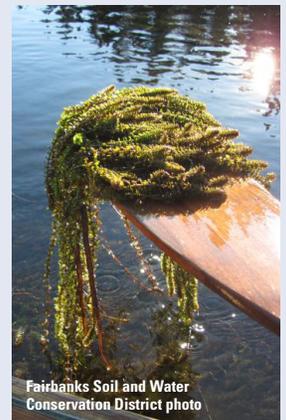


Common waterweed—tangled messes (*Elodea canadensis*)

Common waterweed is an underwater perennial that forms dense masses in lakes, ponds, and ditches. Its leaves are arranged in whorls around long, trailing stems. It reproduces from broken-off pieces of stem.

Impacts in Alaska: Common waterweed was discovered in 2010 growing in a Fairbanks slough. If it expands it could form a barrier to fish and boaters.

Common waterweed is an aquarium plant probably introduced into Fairbanks waterways when someone dumped out their aquarium.



- Don't pick flowers and then discard them where they don't belong.
- Don't use felt-sole waders. They have been known to transport invasive algae.
- Clean and dry anything that comes in contact with rivers or lakes before entering new waters.
- Visitors who bring animals to the Refuge should choose bedding and feed materials that will not introduce new plants.
- If you see an invasive plant on the Refuge, let us know. Take photos, note its location (GPS coordinates if possible) and email to arctic_refuge@fws.gov.

