



Small-leaf Bramble

Rubus parvifolius

Identification & Management Guide



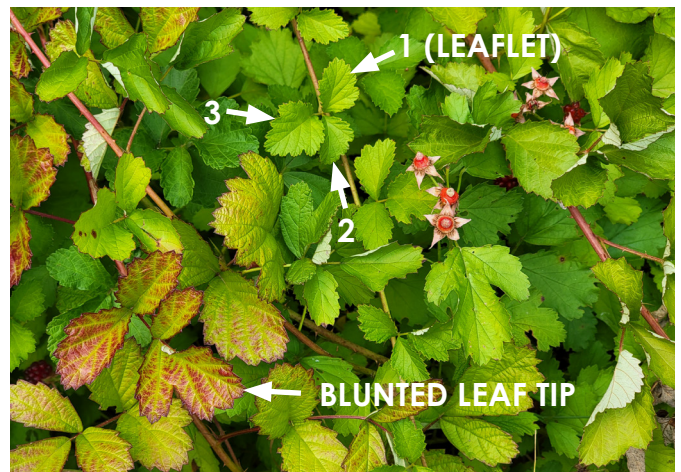
Background & Identification

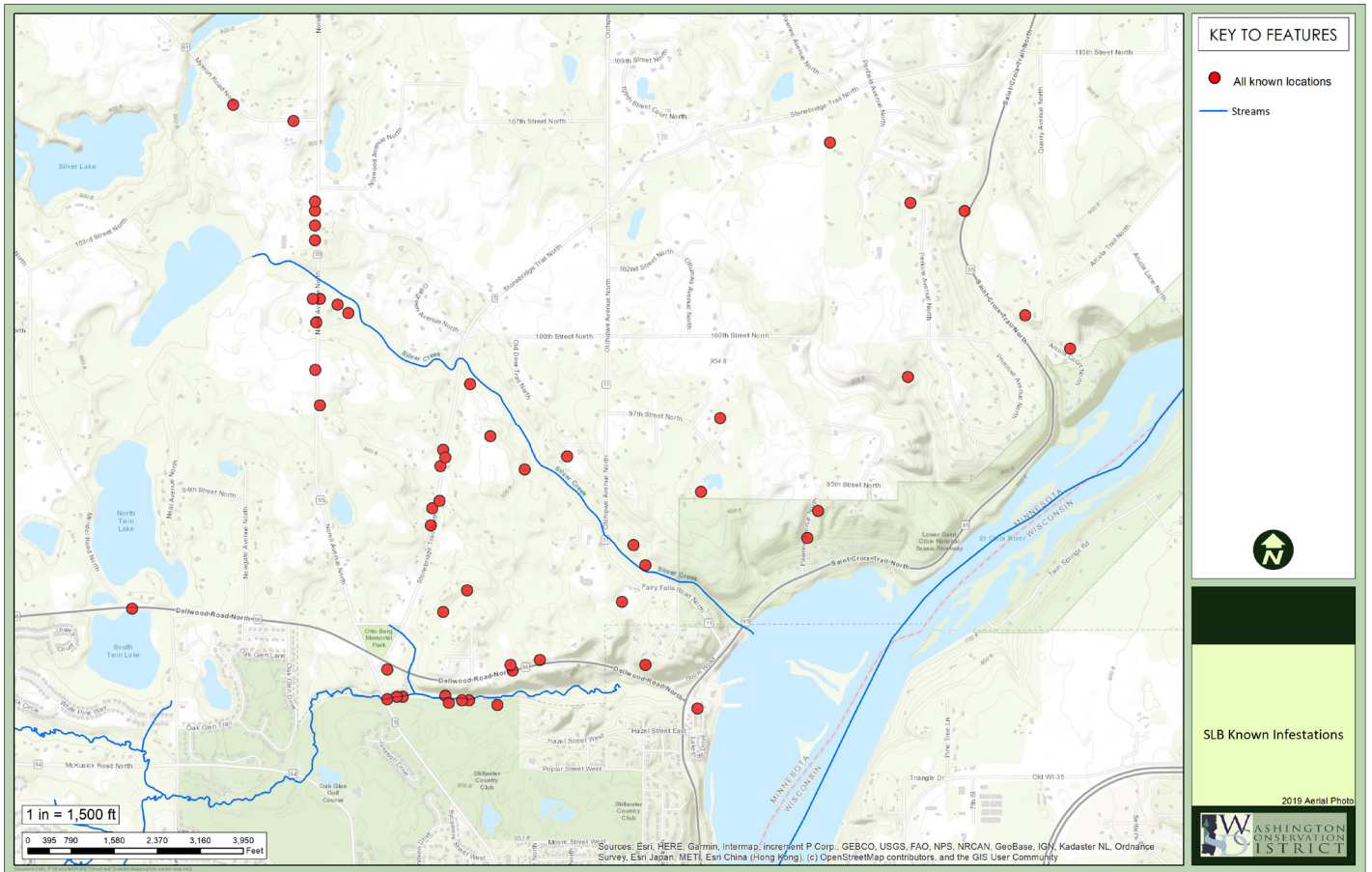
Small-leaf bramble is a low-growing shrub in the raspberry family native to parts of eastern Asia and Australia. It has been introduced to the United States and can quickly form dense colonies that crowd out native species. Small-leaf bramble can invade a wide variety of habitats from woodland and pine stand understories, pasture and prairies, and even turf lawns. Its ability to grow in both full sun and dense shade is part of what makes this species so successful and difficult to control.

Washington County is currently the only county known to have infestations of small-leaf bramble in Minnesota, making early detection and management a top priority. State-wide it is considered an *emerging species* and is not yet on the state list for noxious and invasive species.

Key identifying characteristics for small-leaf bramble include:

- Low, arching canes 4 to 24 inches high.
- Leaves with 3 to 5 fan-shaped leaflets.
- Leaflets rounded at the tip, as opposed to pointed.
- Hairy or prickly stems.
- Rosy-pink five-petaled flowers.
- Bright red fruit.





What We Know

Small-leaf bramble is wide-spread in other areas throughout the United States, but so far the only known populations in Minnesota occur along the Silver Creek and Brown's Creek corridors near Stillwater. Recent mapping and outreach efforts by Washington Conservation District (WCD) staff have started to reveal the extent of small-leaf bramble along these corridors, but so far little is known about effective integrated pest management (IPM) strategies for control and eradication of the species.

What's Working

WCD is in the process of testing three different control methods (mowing, foliar herbicide application, and a combination thereof) to evaluate the efficacy of each method and to determine which of these is the most cost-effective and efficient option for controlling the spread of this emerging species. Early results from the research experiment suggest several possible methodologies for managing small-leaf bramble in both forested and grassland environments.

Mowing:

Repeated mowing is one possible way to control the spread of small-leaf bramble by limiting vegetative growth and preventing fruit and seed production. Mowing alone may not be sufficient for eradication, however. If you choose to implement mowing as a management strategy, we recommend you mow at least three times annually during the growing season and consider at another strategy to use in conjunction with mowing (e.g. herbicide application, grazing, or prescribed fire).

Herbicide Application:

Broad-leaf herbicides containing the active ingredient *triclopyr* can be effective in controlling established populations if applied responsibly (*always* adhering to the product label) and timed appropriately. Herbicides can be applied to the leaf surface using a backpack sprayer, boom, or wick applicator in the fall to maximize the efficacy of the treatment and to avoid non-target impacts to desirable vegetation. Herbicide application can also be done proceeding one or multiple rounds of mowing to improve site access and augment the effects of the treatment.

Combined Approach:

Early research results from WCD plot experiments indicate that a combination of mowing and herbicide application may be the most effective way to control existing small-leaf bramble populations. Repeated mowing throughout the growing season can deplete the plant of its nutrient and energy stores, stressing the plant and making it more vulnerable to systemic herbicides. For best results, apply herbicides in the fall (late September to Early October). Herbicides absorbed through the leaf tissue will move readily into the root system at this time of year as the plant prepares for winter. Cut-stem treatment is also a viable option for smaller infestations or in high-quality areas with desirable vegetation. Please contact WCD staff for questions on specific treatment methods, herbicide products, safety, and handling. Product labels include *legally enforceable* information on appropriate use, mixing, handling and disposal, environmental hazards, personal protective equipment, safety procedures and much more. Always read the label before handling or using pesticides. Remember, the label is the law!



Remaining Questions

While early research from WCD staff and other practitioners through the county have started to shed light on possible control options, there are many questions that still remain unanswered, for example:

- *What is the long-term impact of grazing or prescribed fire on this species?*
- *How is this species moving across the landscape and where else can it be found?*
- *What non-chemical methods can be used to result in eradication over the long term?*

We would like to hear from you as a landowner to help us investigate some of these questions and to find the best way forward in preventing the spread of small-leaf bramble to other areas of the state.

Conclusion

Small-leaf bramble is an emerging species in Minnesota with the capacity to rapidly invade prairies, woodlands, pastures, and even turf. WCD staff are now working with the Minnesota department of agriculture staff to gather more information on the biology and phenology, along with distribution information within the county and effective methods for control. Please contact WCD staff if you suspect you have small-leaf bramble on your property so a staff member can schedule an in-person site visit, confirm small-leaf bramble identification, and discuss management options. It takes all of us to fight the spread of invasive species in the state and protect our native ecosystems. We look forward to working with you!

The Washington Conservation District (WCD), in coordination with the Minnesota Department of Agriculture, has identified the Stillwater area as a high priority area for Small-leaf Bramble management. In order to prevent its spread and succeed in eradication, WCD is offering free on-site evaluation and technical assistance.

Please visit www.mnwcd.org/invasive-plants for more information or to schedule a site visit.

