

Indigo bush

Amorpha fruticosa

Pea Family

Identification Tips

- Indigo bush is a perennial shrub in the legume family.
- It is a thornless, deciduous, multi-stemmed shrub with woody branches growing 4' to 12' tall, and about twice as wide.
- Compound leaves contain 13-25 leaflets of one to two inches long. They are hairy with smooth margins and glandular dots.
- In the spring and summer flowers dense upright clusters in the upper branches. They are blue-violet to dark purple and have 10 stamens.
- Seeds form in kidney-shaped seed pods, each about ¼ inch long and containing 1-2 seeds.



Amorpha fruticosa flowers

Impacts

- Indigo bush displaces native plant communities, particularly in wet areas. It forms dense thickets along shorelines, shading native habitat, affecting hydrology, and impeding recreational access.

Habitat & Distribution

- Indigo bush has an extensive root system which has been used for bank stabilization, erosion control, and windbreaks.
- It tolerates poor site conditions.
- It forms dense thickets along waterways, riparian areas, prairie draws, and in moist upland locations.
- It's commonly found growing in sand and rip rap along waterways.



Amorpha fruticosa infestation

Reproduction & Spread

- Indigo bush reproduces by seed, suckers, and plant fragments.
- Seeds may remain viable in the soil for up to 5 years.
- Seeds move downstream in water and stick to people, animals, and equipment.

CONTROL INFORMATION

Integrated Pest Management

- Integrated Pest Management (IPM) involves selecting from a range of possible control methods to match the management requirements of each site. The goal is to maximize effective control and to minimize negative environmental, economic, and recreational impacts.
- Use a multifaceted and adaptive approach. Select control methods reflecting the available time, funding, and labor of the participants, the land use goals, and the values of the community and landowners. Management will require dedication for a number of years and should allow flexibility in methods.

Planning Considerations

- Survey the area for weeds, set priorities, and select the best control method(s) for the site. Select control practices that minimize soil disturbance. Minimizing disturbance prevents secondary infestation of weeds.
- Start work on the perimeter of the infestation and move.
- Monitor the site and treat plants that germinate from the seed bank.
- Revegetate treatment areas to improve ecological function and prevent new infestations.

Early Detection and Prevention

- Small seedlings can be pulled in moist soil.
- Dispose of cut material properly. Stems can root in moist soil.

Manual, Mechanical, & Cultural Control

- Seedlings or small plants can be removed by hand. This is not effective on older plants.
- Indigo bush is difficult to control mechanically as it sprouts vigorously from root crowns. It can be controlled by repeated defoliation and digging and severing the root 3-4 inches below the crown.
- Mowing of this woody species is usually not an option, although stems can be cut in midsummer to decrease seed production and limit the spread.

Disposal

- Dispose of debris properly; stems may take root if disposed of on moist ground. Remove seed pods to prevent seeding out after stems are cut.

Herbicide Control

- Apply herbicides at proper rates and for the site conditions or land usage specified on the label. **Follow all label directions** and wear recommended personal protective equipment (PPE).

- Choose selective herbicides over non-selective herbicides when applying in a grassy area.
- **Minimize impacts to pollinators by controlling weeds before they flower. When possible, make herbicide applications in the morning or evening when bees are least active. Avoid spraying pollinators directly.**

Specific Herbicide Information

Herbicides are described here by the active ingredient. Many commercial formulations are available which contain specific active ingredients, but often are not formulated for use near aquatic sites. Always be sure to select an aquatically-approved herbicide and surfactant for use near water. **References to product names are for example only.** Directions for use may vary between brands.

- Since indigo bush frequently grows in wet areas, always be sure to select an aquatically-approved herbicide and surfactant for use near water. As with all herbicide use, be sure to **read and follow all label instructions** and to abide by all state regulations. Permits may be required to make herbicide applications in a wetland.
- **Glyphosate** (e.g. Rodeo) as a foliar spot treatment when leaves are fully emerged. Thoroughly moisten all leaves without creating run-off.
- If plants are large, cut the stems a foot above the ground and spray the regrowth once it's reached 18-24" to reduce the amount of herbicide.
- For cut-stump treatments, cut stems at or near ground level and immediately apply herbicide solution. Cut-stump treatments use an undiluted glyphosate concentrate. Stump treatments can occur anytime but late summer or early fall is recommended.

This BMP does not constitute a formal recommendation. **When using herbicides, always consult the label.**

Resources

- <http://Extension.wsu.edu/whitman/2013/11/indigobush/>
- <http://www.NWCB.wa.gov/weeds/indigobush>
- http://www.NWCB.wa.gov/images/weeds/Indigo_bush.pdf
- http://WRIC.UCDavis.edu/information/natural%20areas/wr_A/Amorpha.pdf