Wavyleaf Basketgrass -A New Invader of Deciduous Forests in Maryland and Virginia.

Scientific Name: Oplismenus hirtellus (L.) P. Beauv. Subspecies undulatifolius (Ard.) U. Scholz Synonym: Oplismenus undulatifolius (Ard.) Roem. & Schult.

Randy Westbrooks, U.S. Geological Survey, Whiteville, North Carolina Marc Imlay, Anacostia Watershed Society, Bladensburg, Maryland

What is Wavyleaf Basketgrass?

Wavyleaf basketgrass (WB), which is an introduced sub-species of native basketgrass [O. hirtellus (L.) P. Beauv.], is a fast spreading understory grass that forms dense stands in deciduous forests. WB was first discovered in the U.S. in Patapsco Valley State Park, Howard County, MD, by botanist Edward Uebel in 1996. In 2000, it was found growing along a woody stream at the Hernwood Sanitary Landfill, Baltimore County, MD. So far, this new invader has only been documented at a few other locations in MD and VA.

Why is it a problem?

Once it becomes established, WB spreads rapidly through wooded natural areas - crowding out native herbaceous plants, and preventing regeneration of native hardwood tree species. Unless it is completely eradicated now, it will continue to spread and will have a devastating impact on the deciduous forests of eastern North America for many decades to come.



MD. Kerrie Kyde, MD-DNR.

What does it look like?

WB, which is native to Europe and Asia, is a shade tolerant, lowgrowing, perennial grass, which looks somewhat like Japanese stiltgrass [Microstegium vimineum (Trin.) Camus]). The leaf blades are flat, dark green, about 0.5" wide and 1.5-4" long, with rippling waves across the grass blades. The leaf sheaths and stems are noticeably hairy. When it blooms, from mid-September to November, the grass spikelets form long sticky awns. The sticky awns allow the grass seeds to adhere to passing animals, people, and vehicles.

How does it differ from Japanese Stiltgrass?

WB is similar in appearance to Japanese stiltgrass, an introduced annual grass which also invades forest understories throughout the eastern U.S. However, the leaves of Japanese stiltgrass have a silvery row of hairs running down the midvein and end in a blunt gradual point. WB leaves are rippled across their width and end with an elongated sharp tip.

How was it introduced to the U.S.?

It is unclear how WB was first introduced to the U.S. It is possible that the plant was a contaminant of discarded hanging baskets in MD. Variegated varieties of native bristle basketgrass are sold by plant nurseries in the Mid-Atlantic Region. However, WB is not known to be sold in the horticultural trade.



WB Spikelets. Kerrie Kyde, MD-DNR.



Japanese Stiltgrass. Chuck Bargeron, U-GA.

What is being done about it?

Since 2006, volunteers with the Anacostia Watershed Society (AWS) have been working to detect and eradicate WB from MD and VA.

In 2006, AWS volunteers discovered and began eradicating a three acre infestation in Little Paint Branch Park, Prince George's County, MD.

In 2007, several small colonies and patches of the plant were detected and treated in the **Beltsville Area Research Center-West**, Prince George's County, MD.

In 2008, AWS led the effort to establish the Wavyleaf Basketgrass Task Force.

- A total of 163 people, representing 51 organizations participated in volunteer eradication efforts at Little Paint Branch Park.
- A 150 acre monoculture of the plant was discovered in **Patapsco Valley State Park**.
- Two small patches of the plants were detected and eradicated from the 1,000 acre **Middle Patuxent Environmental Area**, Howard County, MD.
- Three small patches of the plant were detected and eradicated from **Greenbelt National Park**, Prince George's County, MD.
- Several small patches of the plant were detected and treated in **Beltsville Neighborhood Park**, Prince George's County, MD.
- An 80 acre infestation was discovered in the Shenandoah National Park, VA.
- A 25 acre infestation was discovered in the **TNC Fraser Preserve** along the Potomac Rive, Fairfax County, VA.

Weed Alert!

There is an urgent need for an organized effort by federal, state, and local agencies, and volunteers to determine the total distribution of WB in the Mid-Atlantic Region. An effort to train additional WB volunteers is being made in the District of Columbia, and in Alexandria, VA. With the help of trained volunteers and others, AWS and the MD-DNR should be able to ascertain the true extent of the infestation over the next year or so. Increased public awareness is critical for success of the effort.

What are the chances for success?

Unless numerous other populations are discovered, Wavyleaf basketgrass can still be eradicated from the Mid-Atlantic Region....... Most of the MD and VA populations are relatively small, and can be eradicated through hand removal or by treatment with a 1-2% solution of glyphosate – based on work that has been conducted in Little Paint Branch Park. Fortunately, due to its limited distribution, *Early Detection and Rapid Response* through interagency partnering and the work of volunteers is still the best strategy for addressing the problem. If it is eliminated now, North America will be free of yet another threat to our native flora and fauna. *Now is the time for action!*

For More Information:

Wavyleaf Basketgrass in Maryland. Maryland Department of Natural Resources. URL: www.dnr.state.md.us/wildlife/wl_basketgrass.asp

Wikipedia Article on Wavyleaf Basketgrass. URL: <u>http://en.wikipedia.org/wiki/Wavyleaf_basketgrass</u>

Virginia Department of Forestry. Wavyleaf Basketgrass in Virginia. URL: <u>http://virginiaforests.blogspot.com/2008/11/wavyleaf-basket-grass-invasive-exotic.html</u>

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