Wavyleaf Basketgrass Alert!

By Greg Sykes (greg@grsykes.com) and Margaret Chatham

Wavyleaf basketgrass (*Oplismenus hirtellus* ssp. *undulatifolius*) is a major Eurasian pest. Over the past few years, this emerging weed was limited to few localities within the Washington, D.C., Metropolitan Area, such as Fraser Preserve in Fairfax County. Despite total elimination efforts, it keeps popping back up which may mean unidentified locations or private properties exist where thriving populations produce the seed bank. Its leaves die back after a hard frost, sending the grass into winter dormancy. Those long, rooted stems are perennial and will grow new shoots the following year.



Figure 1. Wavyleaf basketgrass seedlings (A) first look like wide bladed <u>Japanese</u> <u>stiltgrass</u>, but the former soon develops its namesake ripples. B) This mature basketgrass specimen is probably all one plant, connected by stems running along the ground. C) The blossoms are small and close to the stem. Photos by Margaret Chatham.

In autumn 2014, a small patch of wavyleaf basketgrass was discovered in Long Branch Stream Valley Park (LBSVP). Its extremely sticky seeds are most likely the way that this plant is gaining ground. The exact vehicle distributing the seeds is unclear but could include human foot traffic brushing against the seeds, birds coincidently landing near a patch and contacting the seeds, or traveling deer or other large mammals and accidently picking up seeds along the way. According to Erin Stockschlaeder, naturalist for the Fairfax County Park Authority (FCPA), rodents rustling through the forest floor locally disperse seeds: new patches sprout along fallen logs and other features attractive to small critters. However, mice certainly are not to blame for this weed's escape from Fraser Preserve. Carrie Wu at the University of Richmond is finding answers to other questions surrounding wavyleaf basketgrass, such as how long the stickiness lasts and the seeds' longevity in the soil.



Figure 2. Deer-tongue is a native species occasionally mistaken for basketgrass. Pictured is a young plant; the insert depicts a mature seed cluster. Photo by Greg Sykes.

Within Fairfax County parks, monitoring for wavyleaf basketgrass falls under the FCPA's Early Detection and Rapid Response (EDRR) program <u>http://www.fairfaxcounty.gov/parks/resource-</u> <u>management/ima/ima-edrrvol.htm</u>. Once spotted by a team of trained biologists or volunteers, GPS coordinates of patches, like the one at LBSVP, are sent to FCPA. Then, in the early growing season, contractors spray glyphosate-based herbicides onto designated targets. If untreated and seeds form, people are asked to stay away from the site to prevent spreading this grass. A native resembling basketgrass is deer-tongue (*Dichanthelium clandestinum*, Figure 2). The following table could further assist you to distinguish the difference between the two plants.

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Identifying Character	Wavyleaf Basketgrass	Deer-Tongue
Leaf Form	Tiny ripples perpendicular to the central vein	Relatively smooth leaf or having few minor waves
Growth	Close to the ground until seeding, then raises to better distribute seeds	Stems stand tall
Flowering and Fruiting Time	July to frost-kill	May to September

 Table 1. This character list helps with field identification of basketgrass and deer-tongue.

Some folks who have grown up with other foreign, weedy species find the whole "non-native invasiveness" concept esoteric. They try to justify inaction to remove the plant by commonly saying, "It's been here for as long as I remember," "But it's so pretty so it must be OK," "It's only a few plants so there's no harm," or, "It has already naturalized and here to stay, anyway." These sentiments are far from the truth for other invasive alien species such as English ivy or oriental bittersweet. However, none of these excuses even apply to wavyleaf basketgrass. Right now, wavyleaf basketgrass is actively invading Fairfax County. Together, we can stop this clear and present danger in its infancy. Here are some general ways you can help curtail non-native invasive weed expansion:

- Stay on the trails to reduce inadvertently contacting and spreading the seeds.
- Always walk your pets on a leash so they do not wander into patches, either. Dogs are a possible vector for spreading seeds into different parks and forests.
- Never dump yard debris or anything else into parklands, which, among other problems, introduces exotic seeds into natural areas.
- Participate in an EDRR or Invasive Management Area (IMA) workday. Find out more about these programs and how to join a workday here: <u>http://www.fairfaxcounty.gov/parks/resourcemanagement/ima/</u>

Ways you can specifically fight wavyleaf basketgrass:

• Recognize it from similar-looking species.

Figure 3. Many seeds that cling to passing animals do so through tiny hooks, which inspired Velcro's invention. Instead of hooks, wavyleaf basketgrass seeds adhere to and are distributed by animals via incredibly sticky goo—reminiscent of the sundew secretions which snare insects. The magnified inset shows droplets backlit by sunlight. Photographed in mid-November 2014 at LBSVP by Greg Sykes.

- If you have basketgrass in your yard or signed up for a weed-pulling workday, take care to remove all of the stems.
- Keep out of known wavyleaf basketgrass infestations during its blooming and fruiting season (July through the first several hard frosts).

- After visiting parks, check yourself and pets for seeds, ticks, and other unwanted hitchhikers. Make special note (include photographs) of any wavyleaf basketgrass seeds found prior to throwing them into the trash destined for landfill or incineration.
- Never send wavyleaf basketgrass seeds or fruiting parts to the compost bin or recycling center.
- If you encounter wavyleaf basketgrass in Fairfax County, report it to FCPA naturalist Erin Stockschlaeder (<u>Erin.Stockschlaeder@fairfaxcounty.gov</u> or 703-324-8681). Include as many details as possible, such as photo-verification, GPS coordinates, and address/description of location.
- Document sightings of it anywhere with your Droid or iPhone. Towson University offers an app for mobile devices; learn more about this project and additional wavyleaf basketgrass identification tips here: <u>http://heron.towson.edu/wavyleaf/home/</u>.

Please get the word out about wavyleaf basketgrass! Thank you in advance for your help!

More information about and images of wavyleaf basketgrass can be found here: <u>http://www.nps.gov/plants/alien/pubs/midatlantic/ophiu.htm</u> <u>http://www.dnr.state.md.us/wildlife/Plants_Wildlife/WLBG/pdfs/wlbg_poster011108.pdf</u>

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