Invasive Species Profile: Japanese Pachysandra (Pachysandra terminalis)

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Native Range: Japan, northern China U.S. Introduction: undocumented Life Cycle: evergreen perennial

Means of Spreading: rapid vine growth

Commercially Available: yes

Control Method: hand-pull, may use garden knife to loosen soil near roots: cover with black tarp for

several months until completely dead

Good Alternative Species: Allegheny spurge

(Pachysandra procumbens)

Comments:

Hot on the heels of last month's article about periwinkle, this Eco-Article installment examines another common, non-native invasive groundcover: Japanese pachysandra. Imported from eastern Asia, pachysandra found favorable growth conditions in America. The garden trade successfully marketed this plant as an easy-to-grow groundcover and from there its popularity soared. These days, people seem to plop pachysandra down anywhere they want a prosaic gardening solution. It forms a thick, leafy mat that smothers other herbaceous plants and seedlings so the end result is a monoculture pachysandra bed.



Figure 1. Japanese pachysandra keeps its leaves throughout the year. The creamy blossoms seen here emerge in March.

Some advertising ploys claim that pachysandra is great because it "naturalizes." That is their nice way of saying it is invasive and grows outside of where it is planted. People often confuse "naturalize" with "native," the latter referring to a species that occurs within a naturally extended range. The severity of pachysandra's invasive inclinations, especially in the Mid-Atlantic region, is gaining recognition. It primarily enters woodlands by:

- 1) being pulled from gardens and illegally dumped into natural areas; parts of it survive, take root, and multiply.
- 2) expanding across private property lines and into parkland.
- 3) pieces of it breaking off, getting carried by water, and rooting after landing on suitable ground.

Volutella pachysandrae, a fungal leaf blight infecting pachysandra, inadequately controls this weed's expansion. To manage pachysandra in parklands, the Fairfax County Park Authority's (FCPA) Invasive Management Area (IMA) program recruits volunteers. The best way to get rid of this weed is by hand-pulling it with a garden knife or similar tool. Although the roots remain close to the surface, some tenacious ones are inevitably left behind. To remove any new sprouts, volunteers monitor IMA sites for years after the initial completion. Covering the entire patch with black tarp and solar-baking the plot for several months is another method folks can try, but it also requires subsequent monitoring. Private landowners considering herbicides for their pachysandra beds usually find the previous discussed physical control methods are both more effective against waxy-leafed plants and environmentally healthier.

While pachysandra is sometimes used as a hackneyed and inefficient erosion controller, alternative native plants do a far better job at securing the soil. Some native species good at gripping the ground and providing verdant cover include green and golds (*Chrysogonum virginianum*), Robin's plantain (*Erigeron pulchellus*), and low phloxes. Consider incorporating rhizomatous ferns, such as New York fern (*Thelypteris noveboracensis*), which unfurls its fronds later after the previously listed plants finish their springtime blooms. For an ever better aesthetic appeal and root complexity, include some hardy clumping plants, like golden Alexander (*Zizia aurea*) and Jacob's ladder (*Polemonium reptans*). Folks fond of

pachysandra's foliage but not its invasive tendencies could try Allegheny spurge (*Pachysandra procumbens*). Unlike the rapidly spreading Asian import, this pachysandra forms controllable clumps. Allegheny spurge is native mostly to southeastern and some Mid-Atlantic states but not Virginia.

Would you like to help eradicate Japanese pachysandra and other non-native invasive species from local parks? Please contact me about future workdays. See you in the field!

Learn more about pachysandra:

http://www.invasiveplantatlas.org/subject.html?sub=3058

http://www.dcnr.state.pa.us/cs/groups/public/documents/document/dcnr_010261.pdf

http://wildones.org/download/invasivehorizon/invhorizonmarapr09.pdf

http://www.gardeningknowhow.com/ornamental/groundcover/pachysandra/pachysandra-weed-control.htm



Figure 2. Allegheny spurge's unusually shaped flowers (A) open along stalks that originate from the base of the stems. During its early spring blossoming season, new leaves develop. The broad foliage (B) remains vibrant much of the year.

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