

Running bamboo status update

The Invasive Plant Council (IPC) has been collecting information on “running bamboo” in Connecticut since Ms. Caryn Rickel, a Connecticut resident, brought the issue to the attention of the IPC in 2010. The Department of Energy and Environmental Protection (DEEP) and the CT Agricultural Experiment Station (CAES) staff have conducted site visits to numerous locations; most of the sites visited were in Fairfield and New Haven Counties.

CT Agricultural Experiment Station

A letter (see next page) dated July 21, 2011 from Jeff Ward indicates that “golden bamboo” (*Phyllostachys aurea*) can cause severe, localized impacts to disturbed forests and riparian habitats. “I have never seen a species so thoroughly dominate a site and form a monoculture that completely excludes other plant species.” (see next page)

CT Department of Energy and Environmental Protection

Nancy Murray, DEEP, presented a “Draft” proposal to list golden bamboo (*Phyllostachys aurea*) and yellow groove (*Phyllostachys aureasulcata*) as “**potentially invasive**”. *Phyllostachys aurea* and (*Phyllostachys aureasulcata*) meet the five mandatory invasive species characteristics required for inclusion on the CT state “**potentially invasive**” in accordance with Connecticut General Statutes Section 22a-381b 1-5. 1.) the plant is nonindigenous to the state; 2.) the plant is naturalized or has the potential to become naturalized or occurring without the aid and benefit of cultivation in an area where the plant is nonindigenous; 3.) under average conditions, the plant has potential for rapid and widespread dispersion and establishment in the state or region within the state; 4.) under average conditions, the plant has the biological potential for excessive dispersion over habitats of varying sizes that are similar or dissimilar to the site of the plant’s introduction into the state; 5.) under average conditions, the plant has the biological potential for existing in high numbers outside of habitats that are intensely managed.

These species also meet the following two characteristics: 6.) the plant occurs widely in the region of the state or particulate habitat within the state and 8.) the plant is able to out-compete other species in the same natural plant community.



The Connecticut Agricultural Experiment Station

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July 21, 2011

Dr. Louis A. Magnarelli, Director
The Connecticut Agricultural Experiment Station
New Haven, CT

Dear Dr. Magnarelli,

Per your request, I visited several sites in Fairfield County on July 14, 2011 that were infested with golden bamboo (*Phyllostachys aurea* Carrière ex A. Rivière & C. Rivière). I met with, and was guided by, Ms. Caryn Rickel (Seymour, CT) who is a passionate advocate for listing golden bamboo as an invasive species and its complete eradication in Connecticut.

Observations made during my site visits are on the attached pages. At this time, I can not recommend that golden bamboo be listed as an invasive species in Connecticut because there is no direct evidence that “the plant has the potential for rapid growth, high seed production and dissemination and establishment in natural plant communities” [CGS Sec. 22a-381b(9)]. Although golden bamboo has been planted in the United States since at least 1882, reproduction by seed has not been observed (Gucker 2009).

Notwithstanding the aforementioned recommendation, golden bamboo can cause severe, localized impacts to disturbed forests and riparian habitats. I have never seen a species so thoroughly dominate a site and form a mono-culture that completely excludes other plant species. It may have the ability to eventually colonize riparian corridors if rhizome fragments are washed out during floods and deposited downstream. If yard wastes dumped alongside forest roads (an all too common occurrence) contain rhizome fragments, there is the potential for new infestations to become established in state and private forests. Lastly, it is possible that golden bamboo could produce viable seed at some future date. This potentiality would lead to its rapid, wide-spread dispersal across the state and region.

Because there is the potential for dispersal of golden bamboo by rhizome fragments along riparian corridors and infestations displace all native species, I do recommend that it be listed as potentially invasive plant.

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Because golden bamboo infestations can cross property boundaries, another possibility is to amend Connecticut's noxious weed law to include all reproductive tissues and not just seeds. The law currently defines "prohibited noxious-weeds" as "perennial weeds such as not only reproduce by seed, but also spread by underground roots, stems and other reproductive parts, and which, when well established, are highly destructive and difficult to control in this state by ordinary good cultural practice" [CGS Sec. 22-55e].

Sincerely,

A handwritten signature in blue ink, appearing to read "Jeffrey S. Ward", is written over a horizontal line.

Jeffrey S. Ward
Chief Scientist, Forestry and Horticulture

Gucker, C.L. 2009. *Phyllostachys aurea*. In: Fire Effects Information System, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory. Available: <http://www.fs.fed.us/database/feis/> [2011, July 21].

Nonnewaug High School, 5 Minortown Tpke, Woodbury



Most of the golden bamboo infestation was observed growing in full sunlight adjacent to a forested edge (left). However, there were a couple of clumps growing under intact canopy in the wetland adjacent to the stream (below). This was the only location on visited sites where bamboo was able to penetrate the forest interior.



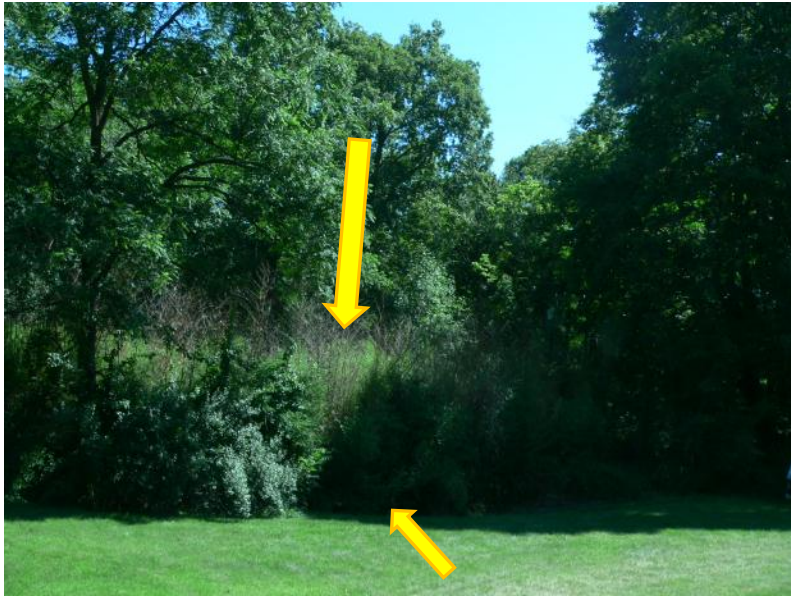
11 Bears Hill Rd, Woodbury



This infestation (left and below) in an abandoned oxbox of the Pomperaug River was incredibly dense and completely displayed at other plants in this riparian zone.



30 Old Grassy Hill Rd, Newtown



Most of this infestation was growing in a forest gap (left), though there were some clumps growing in the extended forest gap zone (below).



North and central Woodbury

We also visited several other sites where bamboo was growing in the full sun of canopy gaps (see below), but not invading surrounding forests or growing into the partial shade of extended canopy gaps.

