



File Code:

Date: January 17, 2011

Ms. Caryn Rickel
13 Edgehill Terrace
Seymour, CT 06483

Dear Ms. Rickel:

It always concerns me when a citizens' property is being invaded by an alien plant species. The "Invasive Bamboos" form some of the densest monoculture infestations and present some of the most formidable challenges too contain, control, or eradicate. I agree from your emails that barriers would be difficult to impossible to retrofit, while they are used in formal garden collections. The most common invasive bamboo species is golden bamboo (*Phyllostachys aurea*), which is the species invading your property and others in your town as you have described.

Please permit me to give some information about me and my career with invasive plant research and management. After 33 years, I retired on January 1, 2011, as a Research Ecologist with the U.S. Forest Service, Southern Research Station, and an Affiliate Professor of Forestry with Auburn University's School of Forestry and Wildlife Sciences, on the Auburn University Campus. I will continue my research and outreach missions as an emeritus scientist being a U.S. Forest Service volunteer. Until my successor is named I still have Southern Regional responsibility for invasive plant research and development within Forest Service Research.

I have published over 150 reports and popular articles: most noteworthy is the book and CD-version entitled *Forest Plants of the Southeast and Their Wildlife Uses*, coauthored with Dr. Karl Miller, noted wildlife professor at the University of Georgia. [Over 16,000 copies have been sold by the University of Georgia Press with proceeds going to the graduate student program for the Southern Weed Science Society.] This 1999 and revised 2003 release testifies that my main concern has been to safeguard as many native plant communities as possible from takeovers by nonnative invasive species. To further this cause, I cooperatively designed and initiated a regional monitoring system for tracking invasive plants used by the Forest Service and state partners in the South, and the protocols and results are at http://srsfia2.fs.fed.us/nonnative_invasive/Southern_Nonnative_Invasives.htm. The identification guide used for this survey, *Nonnative Invasive Plants of Southern Forests: A Field Guide for Identification and Control*, has 140,000 copies distributed since its release in 2003 in the U.S. It has been one of the most requested and used invasive plant guides in the South.

The latest results from that region-wide survey of forest lands shows that invasive bamboos occupy 56,581 acres and are spreading by about 440 acres per year. As you know, nonnative



bamboos rarely produce viable seeds and spread is via rhizome (underground stem) growth up to this point. Bamboos are known to only produce viable seed every 50 to 100 years, thus we cannot rule out that this will not eventually occur.

In the past few months, the Southern Research Station has released a revised and expanded two-volume set for this popular guide.

Miller, J.H.; Chambliss, E.B.; Loewenstein, N.J. 2010. A field guide for the identification of invasive plants in southern forests. General Technical Report SRS-119. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 126 p.
web published: http://www.srs.fs.fed.us/pubs/gtr/gtr_srs119.pdf

Miller, J.H.; Manning, S.; Enloe, S.F. 2010. A field guide for the management of invasive plants in southern forests. General Technical Report SRS-131. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. 120 p.
web published: <http://www.srs.fs.usda.gov/pubs/36915>

In both books, golden bamboo is described, illustrated in images, and management methods are outlined, mainly using herbicides. These methods are mainly for use on forestlands, where bamboo is a problem on the broader landscape. My control methods have been used by many consultants with varying success, since as mentioned before it is difficult to control. It is not evident how dense the rhizome-root networks are, which has much to do with the difficulty of control with perennial woody invasive plants. Methods suitable for urban situations, like yours, are more restricted in the herbicides that can be used. In fact, I would say that containment in your situations shown in your images would be impossible or cost prohibitive.

Bamboos are rarely used for screen hedges in our region, but might increase as you explain owing to availability and gardening fades. Also, the climate in Connecticut would favor this species to be more aggressive. It is my opinion that this is an highly unsuitable plant for anyone to be planting without a containment barrier and definitely unsuitable for urban or small town plants, since it will spread to neighbors.

I trust that you can find a solution for your dilemma through reasoning with reasonable citizens.

Sincerely yours,

James H. Miller

JAMES H. MILLER
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Senior Certified Ecologist, The Ecological Science Society