

# QUICK GUIDE TO THE IDENTIFICATION OF *PHYLLOSTACHYS* for Chapter 131

**Chapter 131, A Citizen Article amending the town bylaw by adding Chapter 131 Running Bamboo Control**, was passed by the Select Board in 2020 to preserve and protect private and Town-owned property and Town-owned rights of way from the damaging spread of Running Bamboo and to protect indigenous biodiversity threatened by Running Bamboo. Running Bamboo that encroaches beyond the Running Bamboo Owner's property or spreads rhizomes and new shoots pose a risk of substantial damage to the structures and land of abutting parcels. As Running Bamboo threatens to be destructive to the natural environment and to the enjoyment of public and private property including structures and paved surfaces in the Town of Lexington, the Town declared it necessary to require the control of any existing Running Bamboo, and to prohibit the planting, replanting, transplanting, installation, or reinstallation of Running Bamboo on any property in the Town of Lexington subsequent to June 15<sup>th</sup> 2021.

There are over 1,400 species of woody bamboo worldwide and are generally categorized by their growth form “clumping” vs “running”. The majority of the running bamboo species can be found in the genus *Phyllostachys*. The following information can be used to distinguish *Phyllostachys* species from other genera of woody and running bamboo commonly found in Massachusetts.

## BOTANICAL TERMS

**Culm** – A vertical aboveground stem.

**Rhizome** – A creeping underground stem from which vertical culms arise. Rhizomes resemble roots.

**Node** – A noticeable joint between segments of the culm or rhizome. The nodes are commonly swollen or slightly wider than the rest of the culm or rhizome.

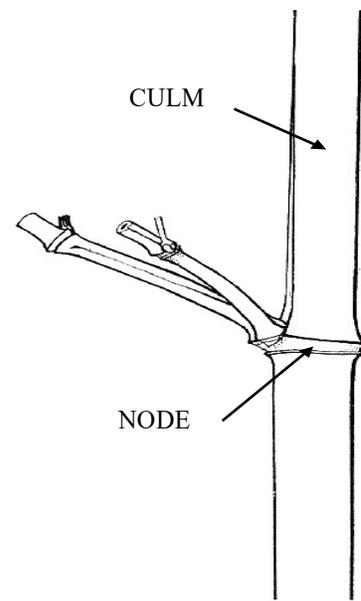
## TRAITS OF SPECIES IN THE GENUS *PHYLLOSTACHYS*

### 1. Culms grow from long, indeterminate rhizomes.

*Phyllostachys* species are commonly referred to as “running bamboo” because plants can spread as culms are produced at the nodes of long, continuous rhizomes. In contrast, clumping bamboos (not covered under Chapter 131) typically produce culms at the tips of short, thickened rhizomes.

### 2. Two unequal branches at the nodes located mid-way up the culm, sometimes with a weak third branch between the two (see diagram on back).

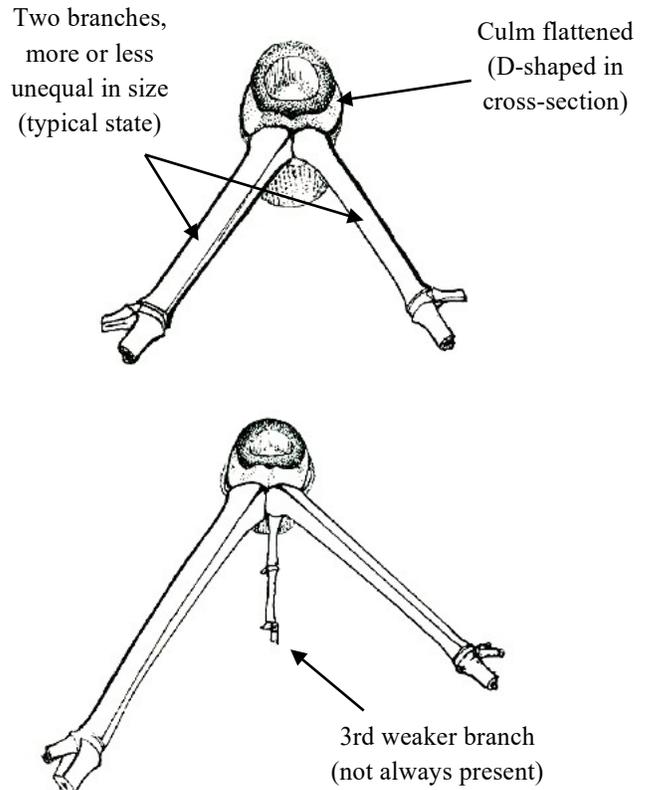
NOTE: Solitary branches sometimes develop in the lower part of the culm. Also, because of the considerable height of some culms, the middle of the culm may be above eye-level. Lastly, please note that robust specimens of *Phyllostachys nigra* may have three branches of nearly equal size, but the mature culms generally have purple or brown coloration.



Source: McClure, F.A. (1957)

**3. On smaller stems, the culm is strongly flattened (i.e. D-shaped in cross-section) for the entire length between branch-bearing nodes.**

NOTE: Sometimes this trait may be less obvious or absent on larger culms.



Source: McClure, F.A. (1957)

### MISTAKEN SPECIES

***Fallopia japonica* (e.g. Japanese knotweed or Japanese bamboo) may be mistaken for a species of bamboo since it has a similar common name, however it is not a true bamboo species.**

### Identification/Habitat

Japanese knotweed is a dense growing shrub reaching heights of 10 feet and looks like a bamboo. The semi-woody stem is hollow with enlarged nodes.



Knotweed stands can look like bamboo and reach 10ft in height



Leaves are alternate, 6 inches long, 3-4 inches wide and broadly-oval in shape. Japanese knotweed commonly invades disturbed areas with high light, such as road sides, stream banks and shore lines, but can also grow in full shade conditions with a high



Membranous sheath above each node

drought tolerance, a high temperature tolerance and high salinity conditions.



Leaves are oval in shape

As with all members of this family (buckwheat family; Polygonaceae), the base of the stem above each node is surrounded by a membranous sheath.

## Resources:

DeBarros, N and L. Senack 2013. Quick Guide to the Identification of *Phyllostachys* for Public Act No. 13-82. CT Department of Energy & Environmental Protection and UCONN College of Agriculture and Natural Resources. *Adapted from*.

McClure, F.A. 1957. Bamboos of the genus *Phyllostachys* under cultivation in the United States. U.S. Department of Agriculture, Agriculture Research Service, Agriculture Handbook No. 114. U.S. Government Printing Office, Washington, D.C., U.S.A. 69 pp.

Stapleton, C.M.A and M. Barkworth. 2007. *Phyllostachys*. In: Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 16+ vols. New York and Oxford. Vol. 24, pp. 25-27.

USDA, NRCS. 2009. The PLANTS Database <http://plants.usda.gov> National Plant Data Center, Baton Rouge, LA 70874-4490 USA.