



Invasive Species Management Plans for Florida

Nandina

Nandina domestica (Thunb) Berberidaceae

INTRODUCTION

Originally from China and Japan, nandina, or heavenly bamboo, was introduced to the United States in 1804 for use as an ornamental plant. This plant has many uses in the garden as the foliage and fruit are particularly attractive and desirable to homeowners. However its ability to grow tall quickly and reproduce by seed and root fragments becomes a major nuisance for most avid gardeners. Nandina has been placed on the Florida Exotic Pest Plant Council's invasive list as a Category I species. Nandina has been observed throughout Florida in Gadsden, Leon, Jackson, and Citrus counties, in conservation areas, woodlands, and floodplains.

DESCRIPTION

Nandina is an evergreen or semi-evergreen woody shrub that can grow 6 to 8 feet in height. The tri-pinnately compound leaves are alternately arranged. Leaflets are ovate, 1 to 2 inches long while the entire leaf is 10 to 20 inches long. Leaves start out reddish bronze, eventually turning green and then reddish in the fall. The inner bark of nandina is yellow, a characteristic of many plants in the Berberidaceae. Some refer to nandina as bamboo because of the visual similarity between genera. Bamboo however is in the family Poaceae, or the grass family. White flowers are borne in panicles at the end of the stem. Fruit is red and often persists until consumed by birds or other wildlife.

IMPACTS

Not only does wildlife facilitate the spread of nandina, it also spreads vegetatively via suckers and rhizomes. Nandina has the habit of forming dense thickets that displace native vegetation. Even though this invasive is available for sale in the nursery trade, there are cultivars being hybridized that do not produce seed.

MANAGEMENT

Preventative: The first step in preventative control of nandina is to limit planting and remove of existing plants within the landscape. If possible, removal should occur before

seeds are produced. Since seeds remain on the plant for several months, care must be exercised to prevent seed spread and dispersal during the removal process.

Cultural: Plant native or non-invasive alternatives. Inform the public to refrain from purchasing, propagating, or planting nandina due to its ability to escape from cultivation.

Mechanical: Hand pull smaller infestations careful to remove all fragments of root to prevent reinfestation. Frequent mowing will be effective but the plant may continue to spread via underground runners.

Biological: There are no known biological control agents for nandina.

Chemical: There is limited research in this area. Spot treatments of glyphosate or triclopyr (1% solution with 0.25% surfactant) are the best alternatives to date.

REFERENCES AND USEFUL LINKS:

Floridata Homepage: <http://www.floridata.com>

University of Florida Center for Aquatic and Invasive Plants:
<http://aquat1.ifas.ufl.edu/welcome.html>

University of Florida's Cooperative Extension Electronic Data Information Source:
<http://edis.ifas.ufl.edu/index.html>

Langeland, K.A. and K. Craddock Burks. 1998. Identification and Biology of Non-Native Plants in Florida's Natural Areas. IFAS Publication SP 257. University of Florida, Gainesville. 165 pp.

The Plant Conservation Alliance's Alien Plant Working Group. Weeds Gone Wild: Alien Plant Invaders of Natural Areas: <http://www.nps.gov/plants/alien/index.htm>

Pacific Island Ecosystems at Risk (PIER). Plant Threats to Pacific Ecosystems:
<http://www.hear.org/pier/threats.htm>

Invasive Plants of the Eastern United States: <http://www.invasive.org>

USDA Natural Resources Conservation Service. Plants Database: <http://plants.usda.gov>

Mature Plant

- Evergreen shrub, grows 4 to 8 feet tall
- Inner bark is yellow
- Spreads vegetatively through root suckers



Leaves

- Leaves are tri-pinnately compound
- Alternately arranged
- Reddish bronze, turning green, then returning to reddish color in fall



Flowers and Fruit

- Flowers are white, borne in panicles
- Fruit are round berries, red and persist on the plant until consumed

