

# Sanibel Island Schinus: terribleitsbeenforus

Over the past year, I've gazed into the loaded beds of the many tree service and landscape trailers leaving Sanibel Island each evening. No, I don't have a deep-seeded affection for yard tools. I do have a subconscious desire to know what kind of vegetation is involuntarily leaving the fair island. I've decided that "science and compliance" are the culprits driving this desire.

Sanibel has some of the state's strictest vegetation standards and native plant-protecting ordinances. As the city's "Conservation Officer," I should try to keep tabs on what plants are leaving Sanibel, and what parts of the island they're being taken from. The island seems to be a "bottomless pit" of vegetation. Sometimes I think there's a secret place on the island where trucks are issued loads of horticultural waste. The number of vegetation-laden trucks moving around Sanibel seems to have increased over the past year, and my interest in this phenomenon has peaked. My only consolation is that many of the trucks scurrying around Sanibel are loaded with the exotic pest plant Brazilian pepper (*Schinus terebinthifolius*).

Of all of the invasive exotic plants in Florida, I believe none are as recognizable and ubiquitous as Brazilian pepper. And the area occupied by this plant increases yearly. The South Florida Water Management District's 1997 survey estimated that pepper has invaded more than 660,000 acres in South Florida. That's a whole bunch of truckloads!

Why is this plant continuing to spread across Florida? Most places where pepper is already established are not being controlled, and this plant seems to be invading new areas before our eyes. I would compare it to time-lapse photography in "real-time." Is it a lost cause? I think not. Sanibel Island has recently adopted a Brazilian pepper removal program (Sanibel: Pepper Free!). It hopes to rid the city of Brazilian pepper by 2010. Public awareness and support, an enthusiastic city council and governmental incentives to private property owners have helped launch this program. The rest of the Florida should follow

suit. It may take longer (and cost more money), but don't we have the responsibility to take hold of the beast that's eating our state!?! -Dan Clark, City of Sanibel Conservation Officer.

I'm a pepper  
You're a pepper  
He's a pepper  
She's a pepper  
Wouldn't you like  
To kill of a pepper or two?  
-Dan Clark



Barbara Waddell (left, Pepper Patrol of Ruskin) and Ken Langeland (skinny guy with the big beard, University of Florida, IFAS) take a well-deserved break.

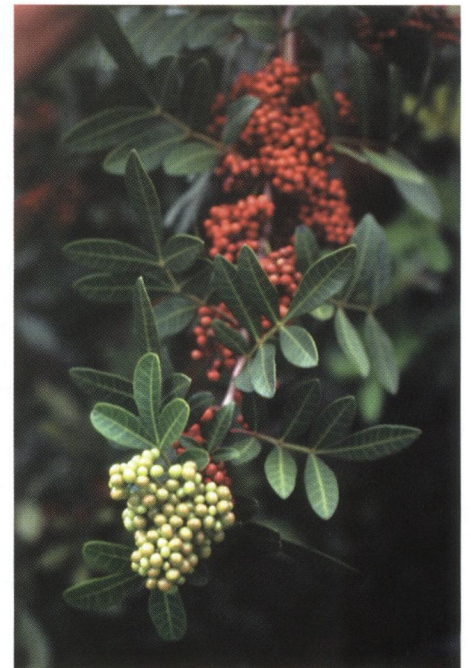


The Pepper Patrol of Ruskin gives 'em hell. Photo by Ken Langeland.

## Did you know?

Brazilian pepper (*Schinus terebinthifolius*) is thought to have been introduced into Florida in the 1840s as a cultivated ornamental plant.

*Schinus* is the Greek word for mastic-tree, a plant with resinous sap, which this genus resembles. The species name, *terebinthifolius* is a combination of the genus name *Terebinthus* and the Latin word *folia*, leaf. It refers to the leaves of Brazilian pepper that resemble the leaves of species in the genus *Terebinthus*.



# Bust This!

*Schinus*, it's not shy. Brazilian pepper covers well over one-half million acres of the state. Many hands make light work, and coordinated efforts are needed to protect our conservation lands from this pest plant. "Pepper Busting" has become downright trendy, increasing in popularity in many pepper-infested areas of Florida. It's a great way to get people interested in the problems caused by Brazilian pepper and other exotic plants, and provides a trained volunteer labor force for cost-effective pepper control.

## Pepper Busting in Three Easy Steps...

1. Gather up a group of friends (or enemies, depending on the heat index), and find an offending bunch of Brazilian pepper. Keep in mind that some people are sensitive to Brazilian pepper sap, and can develop a nasty rash if they handle any part of the tree. (Sensitive types can still help Pepper Bust by supplying refreshments to other workers...)

2. If you don't own the property that the pepper is growing on, be sure to get permission from the property owner before you "bust" anything. Don't assume everyone is as enlightened as you are, and wants to rid

Florida of this noxious weed. Vegetation vigilantes may find themselves fighting such charges as physical and chemical trespassing, criminal mischief, and destroying private property..., so I hear.

3. Evaluate the site, and use one of the following control techniques. Note: Only those herbicides that are recommended for Brazilian pepper control should be used. They are safe and effective when used correctly. If you're in doubt, contact your local county extension agent, and ask him/her for site-specific training and advice.

**Cut Stump**  
Cut the pepper down and treat the stump with a herbicide. A saw should be used to cut the trunk as close to the ground as possible. Apply a herbicide that contains the active ingredient glyphosate or triclopyr immediately (within 5 minutes). For large stumps, concentrate the herbicide on the thin living tissue (cambium) just inside the bark. The best time to use this method is when the pepper is not fruiting. Dragging the branches around might spread the seeds into other areas and cause future problems. Use the Basal Bark treatment on fruiting pepper trees if you're worried about seed dispersal.

**Basal Bark**  
An appropriate herbicide is applied to the bark of the tree from 1-15 feet above the ground. You must use a herbicide that contains the active ingredient triclopyr (ester) with a penetrating oil. "Ready to use" products are also available if you don't want to mix the herbicide with an oil. You don't have to cut or girdle the tree's trunk - the herbicide will pass through the bark and into the tree. Basal bark treatments work best in the fall when pepper trees are flowering. This method is also recommended when the trees are fruiting.

**Foliar**  
A herbicide containing triclopyr or glyphosate is sprayed directly onto the leaves of the plant. The herbicide will be taken into the leaves, and will move through the rest of the plant. This method is best to use on pepper seedlings and small saplings. Avoid using this method in areas where you have lots of desirable plants because it won't give you selective control.

1. The need for more information on the whys, wheres, and how-tos of Brazilian pepper removal was confirmed at the Brevard County Brazilian Pepper Symposium held in the fall of 1994. The *Brevard Pepper Busters* were formally organized in 1995. This group has developed a training program and a draft Pepper Buster Manual. They maintain a master list of approximately 50 people who have completed the training, and have organized pepper busting activities for more than 100 volunteers countywide. The Brevard Pepper Busters have successfully treated approximately 15 acres of Brazilian pepper. A closely-related program, the *Johnny Mangrove Seed Pepper Buster Program*, organized by the Marine Resources Council of East Florida emphasizes education and restoration.

2. St. Lucie County Commissioner Cliff Barnes has recognized the importance of increasing public awareness and garnering support for removal of Brazilian pepper from public lands. His support led to the establishment of the highly successful *St. Lucie Pepper Busters*. This group has 100 volunteer members. Training is conducted in cooperation with the County Cooperative Extension Service and IFAS. IFAS Circular SS-AGR-17 "Brazilian Pepper-tree Control" was developed as part of the St. Lucie County effort. In addition, efforts have resulted in securing over \$500,000 in grants for Pepper removal and restoration.

3. A smaller, but no less dedicated group of pepper busters, is the *Pepper Patrol of Ruskin* (Hillsborough County). Under the ambitious direction of Barbara Waddell, the Pepper Patrol has undertaken several pepper removal and native plant restoration projects. They have also produced a public information circular "Brazilian Pepper - Beautiful but Bad," and cooperated with the Hillsborough County Cooperative Extension Service in training Master Gardeners on Brazilian pepper control and other invasive plant problems.

4. *The Florida Keys Invasive Exotics Task Force*, as the name implies, focuses on more than just Brazilian pepper removal. However, similar to pepper busting, trained volunteers are used to remove invasive exotics including Brazilian pepper, Australian pine, Asiatic colubrina and lead tree from natural areas. As part of their public awareness program, a "Keys Invasive Exotic Removal Guide (IFAS Circular 1180)" was printed in cooperation with the Monroe County Cooperative Extension Service.

5. Representatives of the Cedar Key (Levy County) Garden Club kicked off *Pepper Free Cedar Key* on March 4th of this year. Cedar Key pepper busters have mapped all of the pepper on the island, cooperated with IFAS and DEP on a Brazilian pepper control demonstration, and developed a series of public information news releases. Training will be provided for all volunteers, including the DACS Forestry Youth Academy. Pepper removal will get into full swing in July, 1998 - as soon as clam farmers are assured that the Pepper Busting herbicides pose no threat to their interests.

Pepper Busting works. If you are interested in additional information on the programs mentioned in this article or interested in starting a new Pepper Buster group, contact the Florida Exotic Pest Plant Council (EPPC). If you have a Pepper Buster group and we missed you in this article, contact us so that we can add you to the statewide list. For more information about Brazilian pepper, check out the Brazilian Pepper Management Plan for Florida on the FLEPPC website at <http://www.fleppc.org> -Ken Langeland, Professor, University of Florida, IFAS ([kal@gnv.ifas.ufl.edu](mailto:kal@gnv.ifas.ufl.edu)).