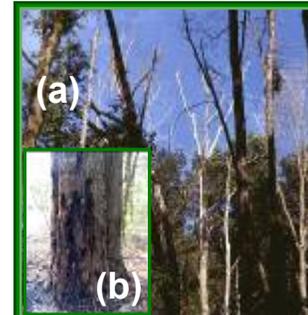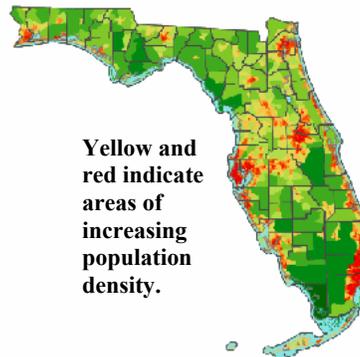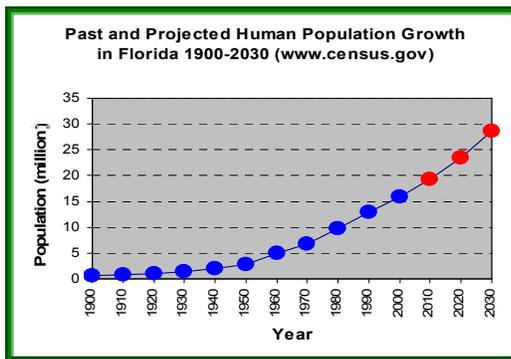# Florida

Forest Health Highlights 2009

Florida's forests are expansive and diverse, ranging from subtropical systems to baldcypress wetlands, pine flatwoods, pine-oak scrubs, gum-cypress swamps, coastal mangroves, isolated hardwood hammocks, and more extensive upland hardwoods. Forest Service data estimate some 16.7 million acres of forest land in Florida. Although encouraging, this is not a call for complacency. Overall forest acreage in Florida is down from its original (estimated) 27 million acres, and challenges to forest health in the Sunshine State are myriad and complex.
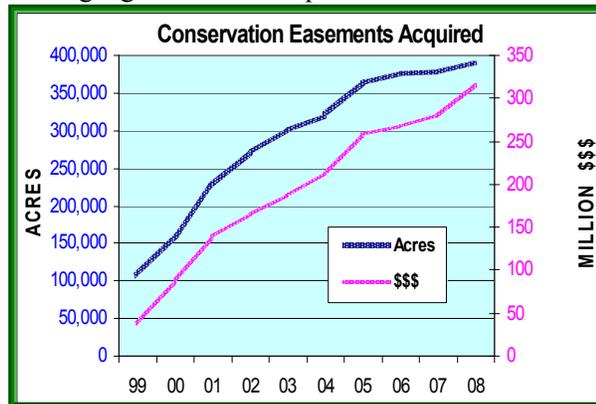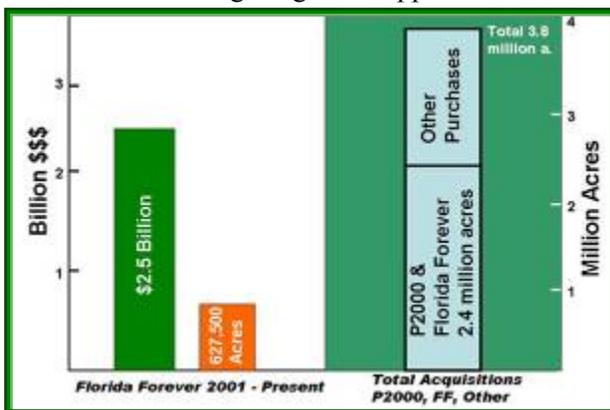
Population growth, "development," and associated forest fragmentation
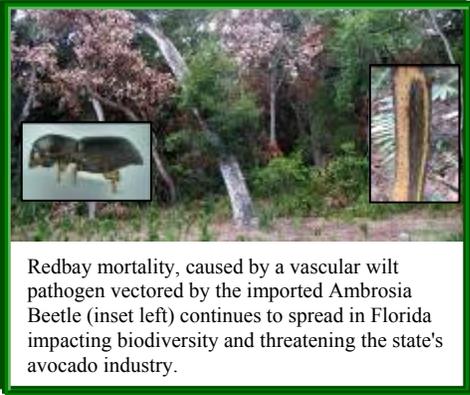
(a)

(b)

Oak Mortality (a) is a continuing reality in Florida. "Sudden Oak Death" (S.O.D.) caused by *Phytophthora ramorum* is unknown in the state, but basal cankers (b), caused by a related pathogen (*Phytophthora cinnamomi*) and similar to those associated with S.O.D. are sometimes seen on *Quercus hemisphaerica (5 counties to date)*.

Past and Projected Human Population Growth in Florida 1900-2030 (www.census.gov)

Population (million) vs. Year (1900–2030)

Yellow and red indicate areas of increasing population density.

continue to take their toll. The timber industry's divestiture of land holdings and the State's aggressive acquisition of environmentally sensitive and other lands for conservation, preservation and recreation programs have and will have impacts (both positive and negative) on the health of Florida's forests. These latter realities continue to influence a shift of emphasis from "traditional" economic pest issues affecting wood product production to pest issues of ecological significance affecting species survival, biodiversity, habitat quality, and ecosystem services.

Substantial funding through the USDA Forest Service's Cooperative Forest Health Protection and Forest Health Monitoring Programs support initiatives addressing significant biotic pest/forest health issues.

Florida Forever 2001 - Present
$2.5 Billion — 627,500 Acres

Total Acquisitions P2000, FF, Other
Total 3.8 million a.
Other Purchases
P2000 & Florida Forever 2.4 million acres

Conservation Easements Acquired

ACRES / MILLION $$$ vs. year (99–08)

Legend: Acres, $$$

Important Biotic Pest/Issues

Some native pests of economic importance continue to receive attention. The **Southern Pine Beetle** (SPB) Prevention Program provides financial assistance and incentives to private landowners to implement silvicultural operations that reduce the susceptibility of their forests to the SPB. Southern pine beetle activity in Florida has been at relatively low levels for the past 6 years. In 2009 there were 15 confirmed infestations in 4 counties totaling only 37.6 acres. No spots were detected on national forest or other federal lands.
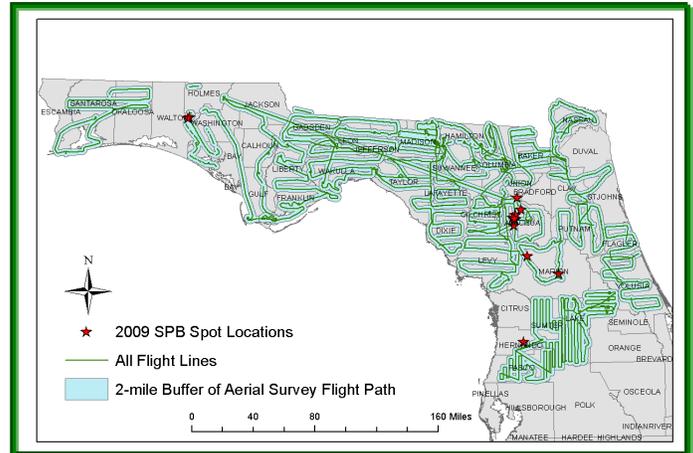

Redbay mortality, caused by a vascular wilt pathogen vectored by the imported Ambrosia Beetle (inset left) continues to spread in Florida impacting biodiversity and threatening the state's avocado industry.


★ 2009 SPB Spot Locations
— All Flight Lines
▢ 2-mile Buffer of Aerial Survey Flight Path

Efforts continue to evaluate the overall threat of **annosum root disease** in partially harvested pine stands. **Oak mortality** is being evaluated in cooperation with the University of Florida's School of Forest Resources and Conservation. 2008 marked the second consecutive year of widespread defoliation of oaks by the **variable oakleaf caterpillar** (*Lochmaeus manteo*) across a broad area of northeast Florida. The first North American detection of the **blue gum chalcid** (*Leptocybe invasa*), a gall-forming pest of Eucalyptus, occurred in south Florida in 2008.

Efforts continue to detect *Phytophthora ramorum*, the cause of "**Sudden Oak Death**," downstream from plant nurseries with confirmed presence of the pathogen.
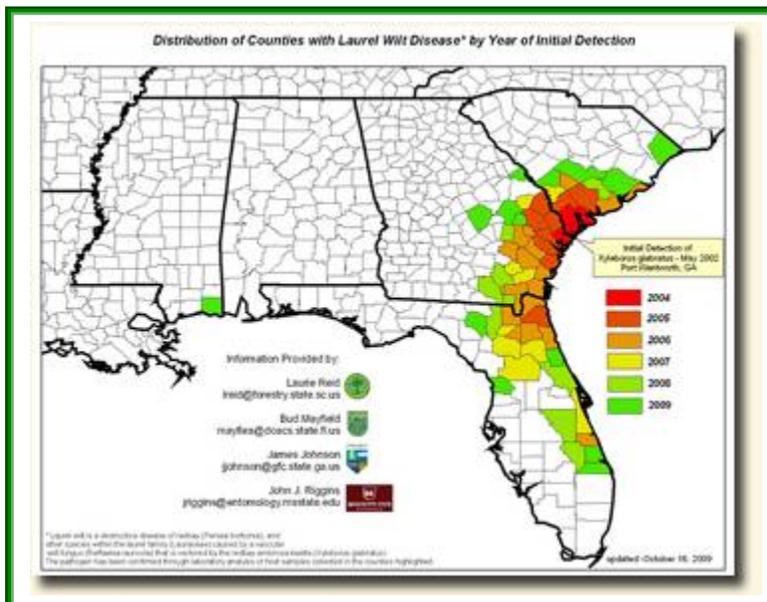
The current **laurel wilt epidemic** is decimating populations of redbay (*Persea borbonia*) and negatively affecting other species in the family Lauraceae. Laurel wilt was first detected in Florida in 2005 and has since spread to at least 21 counties. The first detections of the disease in Florida on camphor, sassafras, and pondspice (an endangered shrub) occurred in 2008. Fungicide infusion treatments are being used in an effort to protect high-value redbay trees in landscapes. The fungal pathogen causing this vascular wilt disease is vectored by an imported ambrosia beetle and poses a serious threat to the avocado industry in South Florida.

http://www.fs.fed.us/r8/foresthealth/laurelwilt/index.shtml

Cogongrass, one of the "world's worst weeds," invades grassland, roadsides, residential areas, agricultural croplands and forests, seriously impacting plant biodiversity, wildlife habitat, fire behavior, and forest land management.

Non-native pests pose serious ecological threats to Florida's forests. Non-native invasive pest plants top the list of these damaging organisms. As part of a four-state initiative funded by the U.S. Forest Service (Region 8, CFHP), the Florida Division of Forestry is implementing a pilot project to assist county road/public works departments and private landowners with **cogongrass** control. (http://www.fl-dof.com/forest_management/fh_invasives_cogon.html). Contracts with 82 private non-industrial forest landowners and agreements with 7 county governments have been put in place to fight this pest. Efforts continue re detection and control of non-native invasive pest plants on State Forests and other public and private lands.

Melaleuca, a non-native invasive tree species, invades both wet (a) and dry (b) sites in south Florida, creating impenatrable stands and seriously influencing wildfire (c) behavior and impacts. (Photos: Tony Pernas, USDI National Park Service).

Old World Climbing Fern (a) and air potato (b) illustrating the serious ecological and habitat impacts of invasive pest plants. (Photo: at left, Peggy Greb, USDA Agricultural Research Service)

Forest Health Assistance in Florida

For further information or assistance, contact:

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http://www.fl-dof.com/forest_management/fh_index.html

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