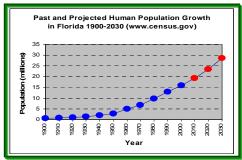
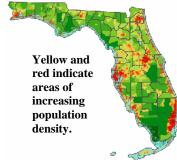
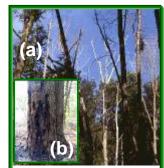


Florida's forests are expansive and diverse, ranging from subtropical systems to baldcypress wetlands, pine flatwoods, pine-oak scrubs, gum-cypress swamps, coastal mangroves, isolated hardwood hammocks, and more extensive upland hardwoods. Forest Service data estimate some 16.7 million acres of forest 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.





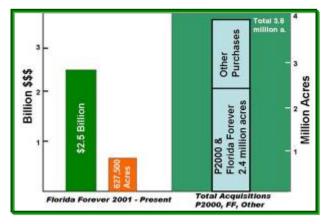
Population growth, "development," and associated forest fragmentation continue to take their toll. The timber industry's divestiture of land holdings and the State's aggressive acquisition of environmentally sensitive and other

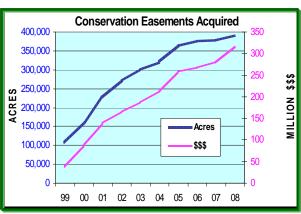


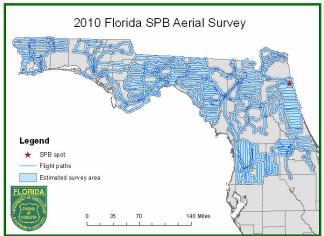
Oak Mortality (a) is a continuing reality in Florida. "Sudden Oak Death" (S.O.D.) caused by *Phytophthora ramorum* is unknown in the state, but basal cankers (b), caused by a related pathogen (*Phytophthora cinnamomi*) and similar to those associated with S.O.D. are sometimes seen on *Quercus hemisphaerica*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

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.







Efforts continue to evaluate the overall threat of annosum root disease in partially harvested pine stands. The USDA Forest Service's Early Detection Rapid Response (EDRR) survey program was conducted in Florida again in 2010, in collaboration with the FDACS Division of Plant Industry (DPI) through the Cooperative Agricultural Pest Survey program (CAPS). An Asian ambrosia beetle previously undetected in North America, *Xylosandrus amputatus*, was detected in 2010 through this program in traps in Orlando, Gainesville, and Jacksonville. Work is underway to determine this insect's hosts, range, and potential pest status.

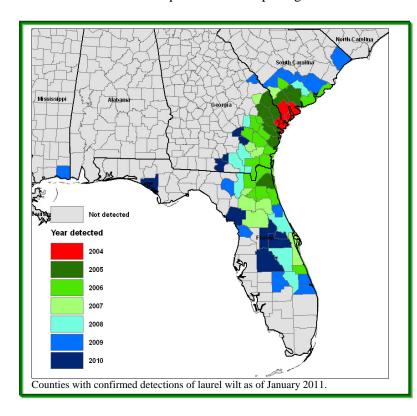
Efforts continue to detect *Phytophthora ramorum*, the cause of "**Sudden Oak Death**," downstream from plant nurseries with confirmed presence of the pathogen.

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 7 years. Consistent with the prediction from the annual SPB Spring Pheromone Trapping Survey of "low" activity statewide, in 2010 there was only 1 confirmed infestation affecting 4 acres. No spots were detected on national forest or other federal lands.



Redbay mortality, caused by a vascular wilt pathogen (*Raffaelea lauricola*) vectored by the imported redbay ambrosia beetle (*Xyleborus glabratus*, inset left) continues to spread in Florida, impacting biodiversity and threatening the state's avocado industry.



The current **laurel wilt epidemic** continues to decimate populations of redbay (Persea borbonia) and negatively affect other species in the family Lauraceae. 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. The first detection of laurel wilt in Florida occurred in 2005, and it has since spread to at least 28 Florida counties. Fungicide infusion treatments are being used by some private landowners and public land managers in an effort to protect highvalue redbay trees. University of Florida researchers are actively investigating the biology of the laurel wilt pathogen and its vector, as well as potential host resistance and methods to protect commercial avocado groves.



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 fourstate 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 treatment program.html). Contracts with 173 private non-industrial forest landowners and agreements with 12 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 impenetrable 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:

Florida Dept. of Agriculture and Consumer Services Division of Forestry Forest Health Section 1911 SW 34th Street Gainesville, FL 32608 (352372-3505, ext. 191 http://www.fl-dof.com/forest_management/fh_index.html USDA Forest Service Forest Health Protection PO Box 2680 Asheville, NC 28802-2680 (828)257-4858