## Eastern Forest Environmental Threat Assessment Center

Danny C. Lee, Center Director • Accomplishment Highlights • FY2009

Researchers and partners working with **the Eastern Forest Environmental Threat Assessment Center (EFETAC)** significantly contributed to integrated research focused on *risk assessment, climate change, forest health monitoring, and multiple forest threats*. Progress was also made on *technology transfer* efforts.

The Eastern Center launched the Comparative Risk Assessment Framework and Tools (CRAFT), a user-friendly, Web-based support system that helps natural resource managers address uncertainties inherent in land management decisions. EFETAC offered a training workshop, with additional sessions planned for 2010. Tutorials, a wiki-inspired tool, and real-life case studies are available on-line at <a href="http://CRAFT.forestthreats.org">http://CRAFT.forestthreats.org</a>.





Progress continues on EFETAC's early warning system. The Center's partnership with NASA's Stennis Space Center produced a series of high resolution phenology (seasonal changes in vegetation) map products to support regional scale risk assessments. Detailed detections of forest change provide scientists and land managers with more accurate predictions on where future forest change is likely to occur and why. Online viewers for the data will soon be available.



- A wide range of users can now view landscape patterns in Google Earth. EFETAC posted several Google Earth applications to enable visualization of three landscape and forest spatial metrics at local to national scale. This work was completed in response to the need for improved visualization tools for readers of official forest assessment reports. Examples, links and instructions may be found at <a href="http://www.forestthreats.org/tools/landcover-maps">http://www.forestthreats.org/tools/landcover-maps</a>.
- ➤ EFETAC's assessment of long-term impacts of projected changes in climate, population, and land use and land cover on regional water resources is critical to the sustainable development of the southeastern United States. Researchers developed a modeling system that fully budgets annual water availability for water supply and demand from multiple users. The simulation system benefits water resource planners addressing water shortages.
- ➤ EFETAC is working on a collaborative project to update the Climate Change Resource Center (CCRC, <a href="www.fs.fed.us/ccrc/">www.fs.fed.us/ccrc/</a>) to better reflect eastern issues. To gain a complete national perspective, the Southern Research Station, Northern Research Station, and EFETAC—with input from Regions 8 and 9 and Northeastern Area—will expand the CCRC scope to include eastern United States climate change research and resources. Initial integration is underway.



Related to the Fire Program Analysis, EFETAC researchers are interacting with fire managers across the eastern United States to assess the value of FPA products and have identified reasons why fire behavior models may perform poorly in the east relative to the west. Future work will address these deficiencies and improve the reliability of the modeling tools.



➤ EFETAC initiated a Region 8 partnership to develop a template to enhance integration of climate change science into forest management and planning. Initial draft tools for a *Template for Assessing Climate Change Impacts and Management Options (TACCIMO)* included a Web-based template delivery and report generation system, literature, and forest plan database. Issue meetings with forest planners and key public stakeholders were also held.

