The Eastern Forest Environmental Threat Assessment Center

The Eastern Forest Environmental Threat Assessment Center (EFETAC) provides the latest research and expertise concerning threats to healthy forests—such as insects and disease, wildland loss, invasive species, wildland fire, and climate change—to assist forest landowners, managers, and scientists throughout the East.

Who We Are

Established in 2005, EFETAC is a joint effort of the USDA Forest Service’s Research and Development, National Forest System, and State and Private Forestry. Headquartered with the Southern Research Station in Asheville, NC, the Center also has offices in Raleigh and Research Triangle Park.

What We Do

EFETAC generates knowledge and tools needed to anticipate, evaluate, and respond to environmental threats, which often involve complex factors interacting at multiple scales. The Center strives to maintain a holistic and integrated research program to tackle these complex issues.

EFETAC researchers work with other scientists nationally as well as with a variety of Federal, State, and local government agencies, universities, and non-governmental partners to leverage expertise and resources. Products are delivered to partners and stakeholders in a timely, useful, and user-friendly manner. Key projects include—

Tools & Science Delivery

• Prototyping an early warning system that detects forest threats across the continental United States using remote sensing and geographic information systems.

• Collaborating to develop high speed access to models and databases useful in threat assessments.

• Creating the Comparative Risk Assessment Framework and Tools (CRAFT) decision support system for strategic natural resource planning.

• Developing a Forest Tree Genetic Risk Assessment System to reveal where communities of genetically similar tree species may be more susceptible to certain forest threats.
Invasive Species

• Compiling a database of key life history and genetic traits for all currently known introduced plant species to allow for continental scale analyses of species invasiveness and distribution.

• Adapting a generic bioeconomic modeling framework for examining forest insect and disease invasions through time to map risk and associated output uncertainties.

Wildland Fire

• Providing scientific support for development of a National Wildfire Management Cohesive Strategy to guide future management and wildland fire investments.

• Compiling historical wildland fire data for the eastern United States and modeling fire regimes to effectively restore fire-dependent ecosystems and address future risks.

Climate Change

• Collaborating to develop the Template for Assessing Climate Change Impacts and Management Options (TACCIMO), a tool for integrating climate change science into land planning and management.

• Using spatial models of future environmental conditions to predict the location and quality of habitat and susceptibility to extinction for forest tree species under different climate change scenarios.

• Developing an integrated model to estimate ecosystem water and carbon balances and the interactions among ecosystem processes and biodiversity at the continental scale.

Loss of Open Space

• Creating maps viewable in Google Earth to reveal patterns of land use, land cover, and changing conditions in the continental United States.

For Additional Information

For additional information concerning EFETAC programs and partnerships, please contact Perdita Spriggs, Communications Director, at (828) 259-0542 or by email at pspriggs@fs.fed.us. Please visit our interactive Web site at www.forestthreats.org.