



**Student Conservation Association Fire Education Corps
Great Smoky Mountains National Park,
Tennessee/North Carolina
National Fire Plan – Community Assistance**

In summer 2005, a Student Conservation Association (SCA) Fire Education Corps Team assessed private structures along the boundary of Great Smoky Mountains National Park. The last similar assessment was conducted in the mid-1990s. Since that time, development along the Park boundary has progressed exponentially.

Since the extent of housing development for the previous ten years was unknown, a target of 300 structures was set as the goal for the summer. By the end of the summer, a total of 1,000 structures had been mapped, photographed, and given a hazard rating. Homeowners were provided with copies of their assessment. The SCAs also distributed Firewise information packets provided by the Tennessee Division of Forestry.

The Fire Education Corps utilized the Wildland Hazard Assessment Methodology (WHAM) while performing assessment on structures along the park boundary. Developed by Shenandoah National Park, WHAM is a computer program that derives a hazard rating for each structure based upon inputs including topography, fuel types and their proximity to the structure, and the type of construction and materials used in the construction.

A GIS layer showing the locations and hazard rating for each structure was then developed using ArcGIS software. Dovetailed into this GIS layer was the descriptive and photographic data derived through WHAM. This provided Park managers with a visual of areas that may be at risk from a wildfire. Future fuel reduction projects in these areas will help lessen the chance of those wildfires threatening lives and private property.

The crew leader, Nell Blodgett, came on board earlier than the full crew. She found housing for the crew, made contacts with local utility companies and municipalities to determine what GIS data they could provide to assist with the project, and set up the team's office space and computers. The full crew of four additional SCA students arrived in early June and hit the ground running after a short orientation to the Smokies.

The team was very effective in obtaining information for the Park and sharing Firewise information with the public in a professional manner. Products created by the team will be invaluable for targeting fuels treatments to protect the park and its neighbors.

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