

[From Summer 2003]

## Prescribed Burn Study Begins



In an effort to manage Delmarva fox squirrel habitat, Chincoteague National Wildlife Refuge has begun a study of prescribed fire effects on forests in the mid-Atlantic region. In May and early June, 2003, refuge staff and regional fire crews conducted a prescribed burn in the refuge's White Hills area. This study is the first of its kind to assess the effects of prescribed fire on Delmarva fox squirrel habitat.

The prescribed burn is believed to have potential benefit for the endangered Delmarva fox squirrel (*Sciurus niger cinereus*) by reducing the thick undergrowth of shrubs and vines. The fox squirrel is a large, heavy-bodied squirrel that prefers to travel and forage on the ground. The species has been reported to select forests with large mature trees and little understory vegetation. By removing the ground vegetation, the squirrels may prefer the open habitat created by the fire. In order to assess the effects of fire on the habitat, the squirrels have been radio-collared and are being tracked by radio-telemetry.

In addition to managing habitat for the squirrels, this study is important for gaining information on the general ecological effects of prescribed fire in the mid-Atlantic region. Refuge staff and volunteers will be collecting data on the fire's effect on forest plants. Information collected before the fire such as existing plant species, density of the plants, and the amount of leaf litter and dead wood, will be compared with post-fire data scheduled to be collected in July 2003.



By determining the effects of prescribed fire on Delmarva fox squirrels, the types and density of plants, and the amount of woody debris, this study will provide valuable information for natural resource managers in the region. In addition, by reducing fuel loads of leaf litter and fallen wood, prescribed fire may help prevent large destructive fires in the future.

Erin Kulynych  
SCEP Student

(Erin is a graduate student at the University of Maryland Eastern Shore and is participating in the Student Career Experience Program)

