



U.S. Fish & Wildlife Service

Great Dismal Swamp National Wildlife Refuge Fire Management Program



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Fire Suppression

- Fire History
- Fire Seasons
- Fire and a Changing Environment
- South One Fire



Fire History

- There is a long history of large fires in the Great Dismal Swamp ecosystem
- In the last century, large fire activity has often coincided with intensive logging activity and hurricane impacts
- Deep organic soils make all fire operations a challenge



Cedar Salvage Operations



Wildfire in cedar slash fuels



Damage from Hurricane Isabel



Air tanker drop on wildfire

Fire Seasons

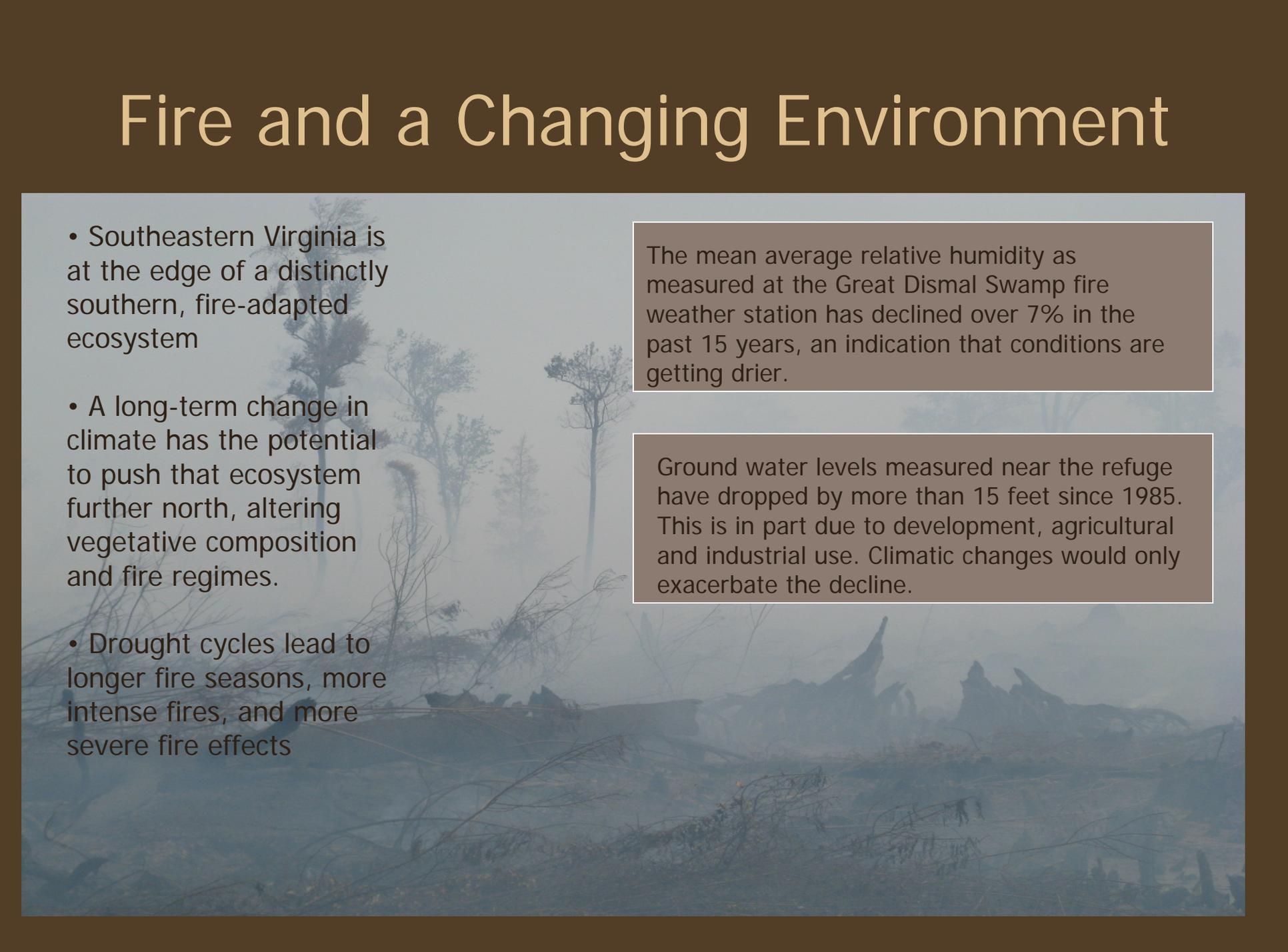
- In the spring, early season lightning events provide the best chance for large fire growth under dry, windy conditions
- In the summer months, more frequent lightning brings more starts, but less chance of large fire growth due to higher humidity and greenness of vegetation



Recent Fire Seasons

- 2004 – Corapeake Road Fire, type 2 incident (NC IMT)
- 2006 – two type 3 incidents (FWS IMT)
- 2007 – Fifteen lightning starts in one month time frame, including several multi-start days (FWS IMT)
- 2008 – Seven starts, including South 1 Fire

Fire and a Changing Environment



- Southeastern Virginia is at the edge of a distinctly southern, fire-adapted ecosystem
- A long-term change in climate has the potential to push that ecosystem further north, altering vegetative composition and fire regimes.
- Drought cycles lead to longer fire seasons, more intense fires, and more severe fire effects

The mean average relative humidity as measured at the Great Dismal Swamp fire weather station has declined over 7% in the past 15 years, an indication that conditions are getting drier.

Ground water levels measured near the refuge have dropped by more than 15 feet since 1985. This is in part due to development, agricultural and industrial use. Climatic changes would only exacerbate the decline.

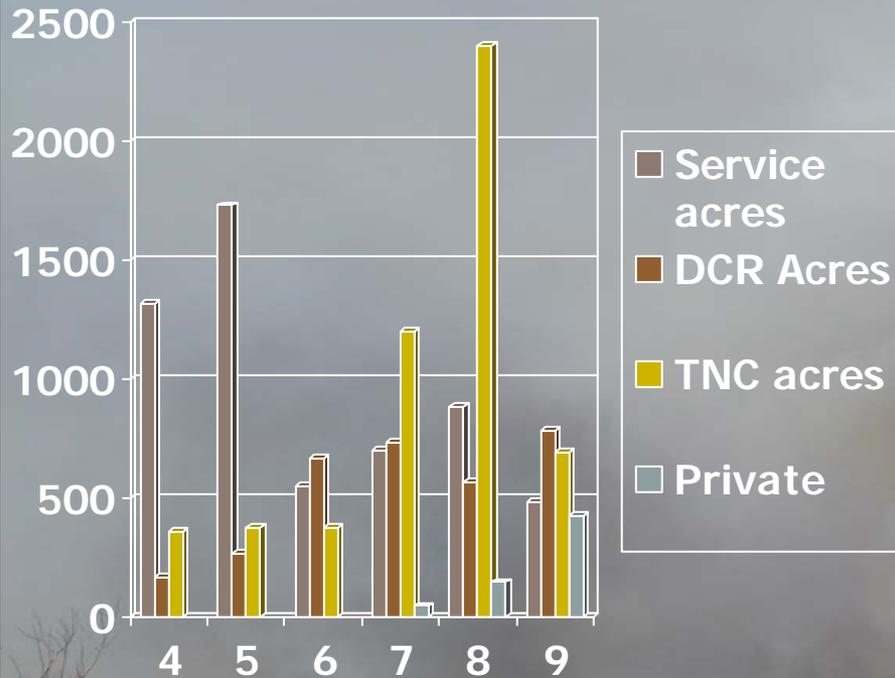
South One Wildfire - 2008

- Started June 9, 2008
- Declared out October 7, 2008
- Longest duration fire (121 days) in recorded VA state history
- Costs exceed \$12 million – most expensive fire in state history
- 425 personnel committed at height of activities
- 2 National Type 2 IMT's committed
- 4884 acres – largest fire in history on R5 Service lands



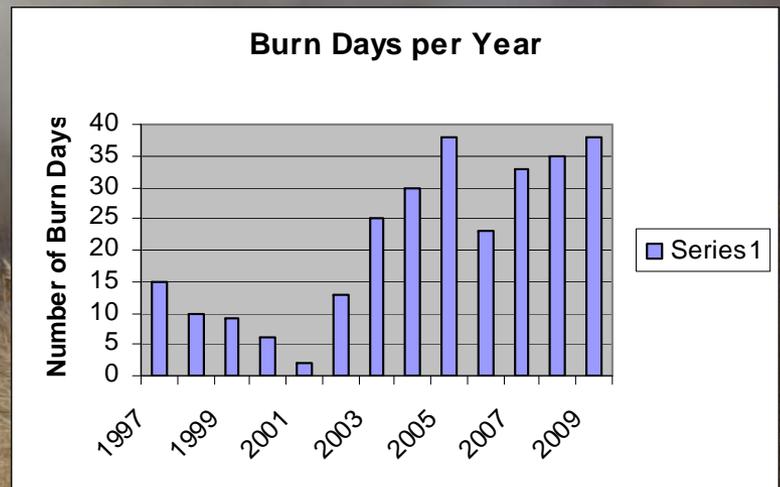
**NASA Satellite Imagery
Smoke Plumes – South One &
Evans Road Fires, June 14, 2008**

Prescribed Fire

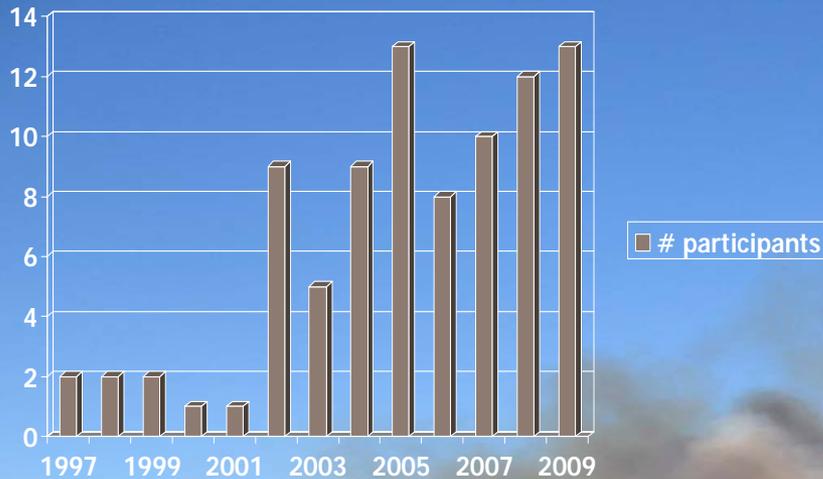


Prescribed Fire Acres Treated 2004-09

The zone program conducts burns 9 months a year, and averages 35 burn days a year. Burns are conducted in a wide range of habitat types, including marsh, grasslands, pocosins, and upland pine and hardwood forest.



Fire Support for Refuges and Partner Agencies



Programmatic Burning
Refuge and Partner
Participants



- Great Dismal Swamp NWR
Fire Support for Many
2002-2009
- 9 Refuges within the Zone
 - 6 Refuges outside the Zone
 - 5 State Natural Area Preserves
 - 4 TNC Preserves
 - 3 National Parks
 - 1 State Park
 - 1 State Wildlife Area
 - 1 National Forest
 - 4 Private Landowners

"This fire management partnership with USFWS and TNC has effectively tripled our agency's resources without significantly increasing total costs. We are getting more accomplished than ever before, and more than I thought possible. Our organizational goals are so similar that almost all the burning we do on non-state land helps to achieve the mission of our agency, which is to conserve Virginia's biological diversity."

- Rick Myers, DCR Natural Areas Stewardship Manager

Equipment

Firefighting requires hard work, skilled personnel, and lots of equipment. The coastal plain of Virginia and North Carolina is a unique environment, that sometimes requires some unique equipment.



Employment Opportunities

- The Great Dismal Swamp Fire Program and its partners hire 3-6 personnel seasonally, primarily to support prescribed fire operations
- Core employment period is February through May
- Jobs are announced on the USAJOBS website
- Fire internships may also offered.



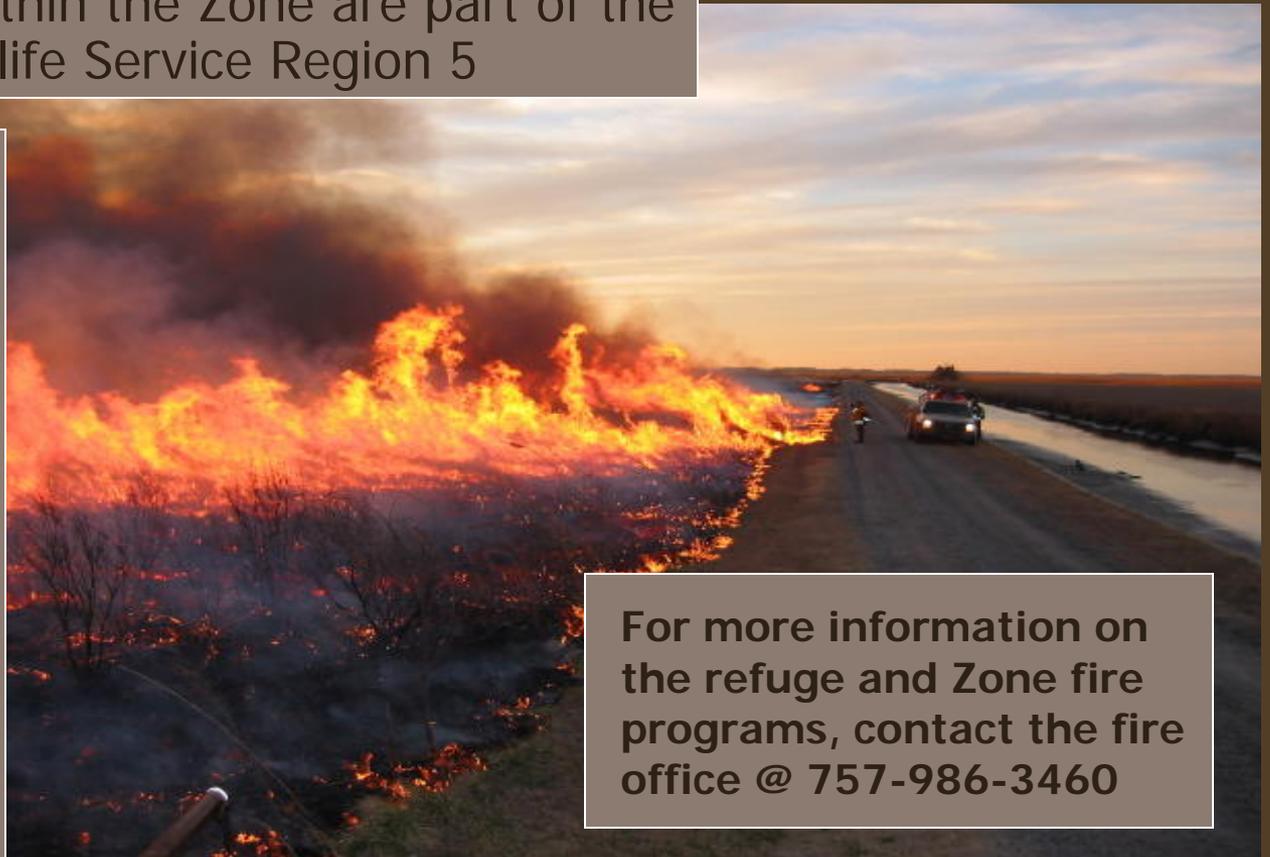
The Virginia Interagency Burn Crew was established in 2007 to support prescribed fire operations on all partner lands in the state.



Zone Fire Management Program

- Great Dismal Swamp NWR is the hub refuge for the Virginia-West Virginia Fire Management Zone.
- All refuges within the Zone are part of the Fish and Wildlife Service Region 5

The Zone Fire Management Officer and fire staff stationed at Great Dismal Swamp support operations on 16 staffed and unstaffed refuges within the two states.



For more information on the refuge and Zone fire programs, contact the fire office @ 757-986-3460

Links

- <http://www.fws.gov/fire/>
- <http://www.dof.virginia.gov/index.shtml>
- <http://www.nature.org/wherewework/northamerica/states/virginia/>
- <http://www.dcr.virginia.gov/>
- <http://www.dof.virginia.gov/fire/vpfc.htm>
- <http://jobsearch.usajobs.opm.gov/agency.aspx>