

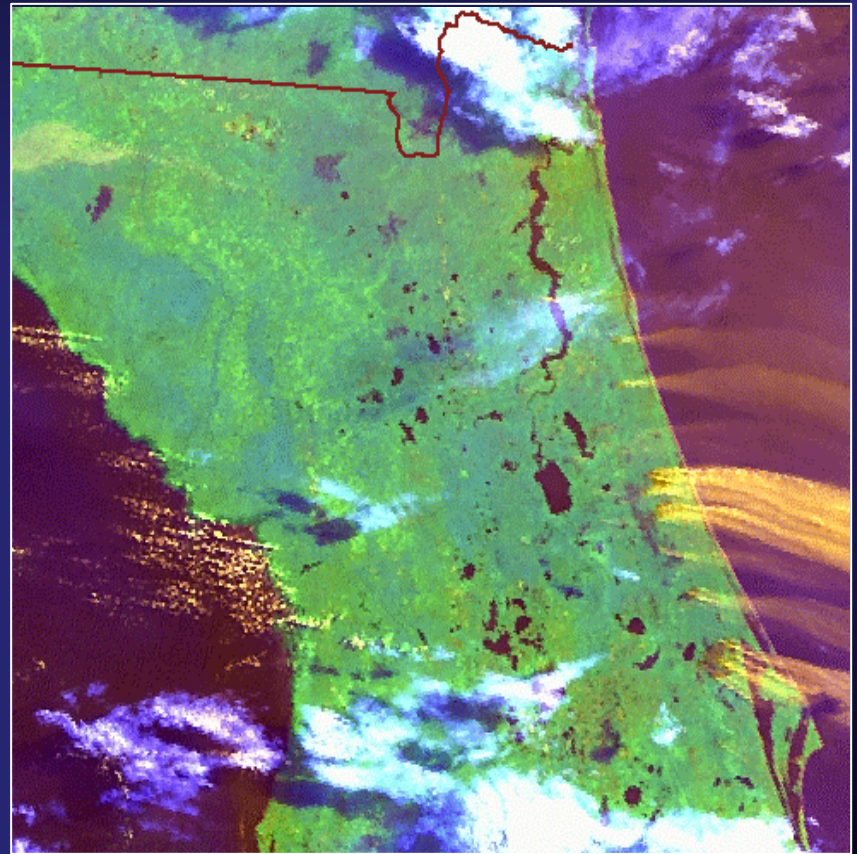
Fire in the Wildland-Urban Interface

Martha C. Monroe
School of Forest Resources &
Conservation
University of Florida

An Interface Problem

Wildland fire is a problem when human lives and resources are threatened.

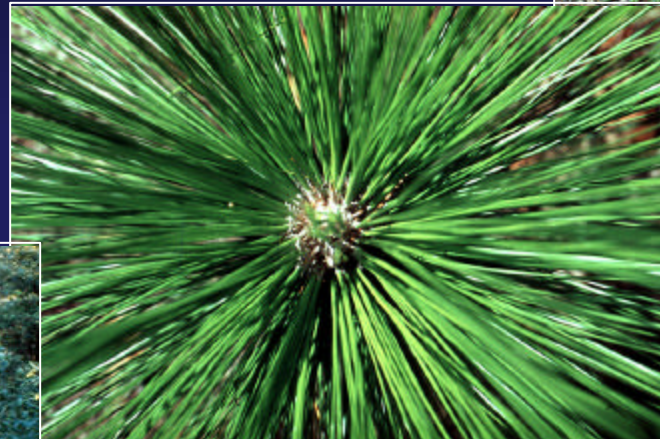
Population growth in rural areas has exacerbated this natural event.



Florida, July 1998

Ecosystems and fire

We often focus on
longleaf pine and
its adaptations to
fire,



though many
other southern
forests also
experience fire.

People at Risk

Those who live in
and near fire-prone
ecosystems are at
risk.



A Partial Solution

- Prescribed fire offers a management tool that temporarily reduces fuel loads.

But it also brings air quality and safety concerns.



A Difficult Dilemma

- Fire helps maintain healthy southern forests.
- Can we learn to live with fire, or do we forfeit these ecosystem services?



A Challenging Problem

Social dimensions

**Ecosystem
science**

**We need to protect
ecosystem
services with good
resource**

**Natural
resource
management**

**management tools,
while we protect
human lives in fire-
prone ecosystems.**

**Economic
concerns**

Land use policies

Demographic issues

Who lives in the interface?

- Demographics of the interface vary:
 - Retirees
 - Vacation or weekend residents
 - Spanish-speaking residents
 - Urban escapees
- And so do their attitudes about wildland fire

Economic Loss

- Interface fires are expensive to suppress
 - One complex near Orlando in 1998 totaled \$5.2 million in 3 weeks, with 40 homes lost:
 - 28% on machinery, engines
 - 23% on food, lodging, transportation
 - 18% on personnel
 - 15% on air support
- Plus timber loss



Resource Management Options

- Carefully controlled prescribed fire
 - smoke modeling
 - media alerts, neighbor alerts
- Goats, sheep and other grazers
- Herbicide
- Thinning, chipping, brush-hogging
- In combination

Policy Challenges

- Private property rights vs. right to burn
- Expectations of public fire protection services and the reality of the interface
- Many different agencies work in the fire arena with different authority
- Investment and insurance incentives
- Resources and technology for building homes economically

Policy Solutions

- Florida's Prescribed Burning Act
 - Training and certification for burners
- Local ordinances about clearing brush
- Local practices to inform home buyers of nearby areas maintained with fire
- Zoning and building guidelines for defensible communities
- Multi-agency training and communication

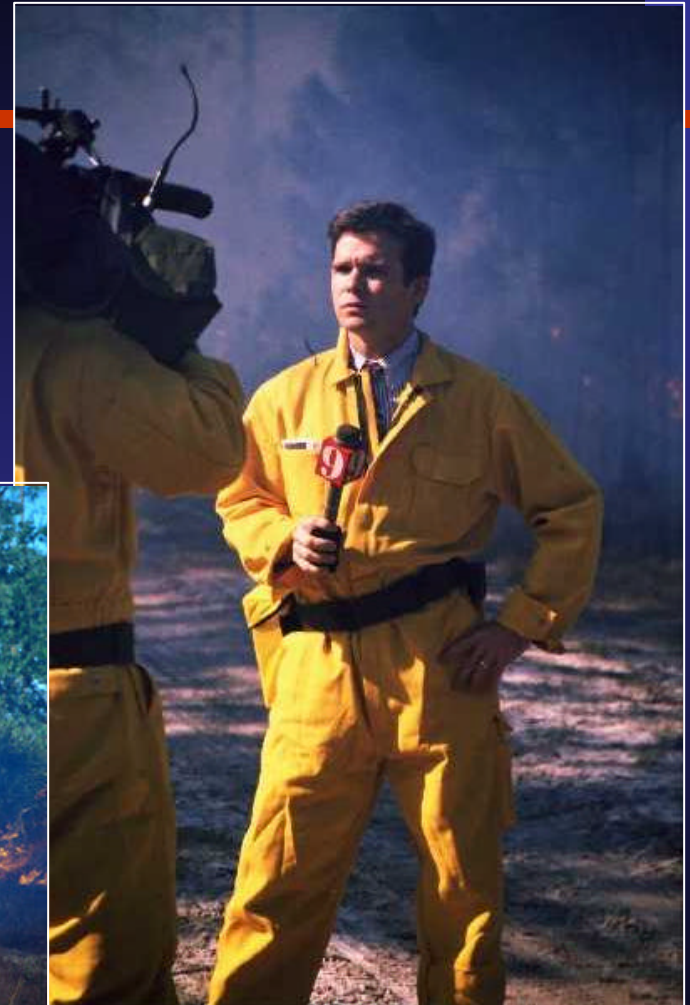
Public education strategies



- Landscape guidelines for defensible space
- Structural modifications for fire protection
- Create acceptance of prescribed fire

Involving the media

- Demonstration burns in subdivisions



Training and capacity building

- Cross training for local fire departments
- Investments in gear and machinery



Comprehensive Approach

- Using information and perspectives from each discipline, we can craft better solutions to wildland-urban interface issues.

