

FIRE MANAGEMENT STRATEGY FOR CAPE SABLE SEASIDE SPARROW HABITAT

EXECUTIVE SUMMARY

On November 13-15, 2001 Everglades National Park (ENP) Fire & Aviation Management hosted a symposium on managing fire and its effects on Cape Sable Seaside Sparrow (CSSS) habitat. The FY 2001 Farm Bill funded this symposium. The purpose of the symposium was to develop a five year strategy for managing fire within and adjacent to CSSS habitat. The main participants were personnel from ENP Fire & Aviation Management, ENP research, the United States Fish and Wildlife Service (USFWS), cooperative Cape Sable Seaside Sparrow (CSSS) researchers. Also participating were representatives of Big Cypress National Preserve Fire and Aviation Management, the Seminole Agency Fire Management (BIA), the Florida Division of Forestry, Big Cypress National Preserve Biological Research Division (USGS), and Louisiana State University fire research. The outcome of the meeting was a strategy that addresses how fire will be managed in each CSSS sub-populations and the research needs to support a continuing adaptive management strategy. Meeting participants agreed that it is essential that this strategy be able to reflect changes in understanding of CSSS, of fire in the Everglades ecosystem, and of fire's effect on the Cape Sable Seaside Sparrow. To achieve this goal of having an adaptive management strategy, the participants resolved to meet yearly (in Fall) as a working group to review the CSSS fire management strategy. This meeting would integrate current knowledge, current fire events, current ecosystem and management needs and increased scientific information to specific fire management activities and associated research actions for each succeeding year.

Symposium participants agreed on these overall strategies:

- **Firefighter and Public Safety:** The highest priority of any fire management action is firefighter and public safety. The Fire Management Strategy for CSSS Habitat will not compromise firefighter and public safety.
- **Wildland Fires¹:** All human caused wildland fires that threaten sparrow populations (A,B,C,D,E,F) will be suppressed with the objective of minimizing acreage of sparrow habitat burned.
- **Wildland Fire Use²:** Naturally ignited wildland fires will be managed to accomplish specific resource management objectives if they meet the park's wildland fire use (natural fire) criteria and do not pose risks/threats to CSSS populations.
- **Prescribed Fire:** Areas with an identified CSSS population will not be prescribed burned unless USFWS has been consulted.
 - Areas will be targeted for prescribed burning to buffer CSSS population from wildland fires. These areas will be burned frequently (2-4 year fire return interval) to buffer or assist in controlling fires adjacent to CSSS populations.
 - Areas within CSSS habitat that have exotic-pest plants will be targeted for prescribed burning as part of the treatment for exotic plant eradication.

¹ **Wildland Fire:** Any nonstructural fire, other than prescribed fire, that occurs in the wildland. This term encompasses fires previously called both wildfires and prescribed natural fires (Wildland and Prescribed Fire Management Policy, 8/98).

² **Wildland Fire Use:** The management of naturally ignited wildland fires to accomplish specific resource management objectives in predefined geographic areas outlined in FMP's (Wildland and Prescribed Fire Management Policy, 8/98).

FIRE MANAGEMENT GUIDELINES FOR 2002

Firefighter and Public Safety:

- Firefighter and public safety is the highest priority for managing all fires in or adjacent to CSSS habitat.
- All fire management decisions will be based on firefighter and public safety.

Sub-Population A - NW Shark Slough:

- Human caused wildland fires that threaten sparrow populations will be suppressed with an objective of minimizing sparrow habitat that is burned.
- Naturally occurring wildland fires that can affect Sub-Population A will be managed as wildland fire use if they meet management parameters³. These fires will burn in a mosaic that is desirable for the habitat and break up the continuity of fuels in this area. Naturally occurring fires that exceed these parameters will be suppressed.
- Prescribed fire will be used to establish a corridor / fire break from east to west in Sub-Population A and to protect the Miccosukee Reserved Area (MRA) from fire hazards and reduce the threat of human caused wildland fires emanating from the MRA. MRA prescribed burns will be limited to a narrow strip south of the MRA to reduce impacts to CSSS habitat. USFWS must be consulted on all burns that can potentially impact CSSS habitat.

Sub-Population B – Ingraham:

- Human caused wildland fires that threaten sparrow populations will be suppressed with the objective of minimizing acreage of sparrow habitat burned.
- Naturally occurring wildland fires will be managed as wildland fire use if they meet the park's wildland fire use (natural fire) criteria; management action must be taken to keep these fires from crossing either the Main Park Road and/or the Old Ingraham Highway.
- Prescribed fire can be used in and adjacent to CSSS habitat to treat slash pine (*Pinus elliotii var densa*) and exotic-pest plants as long as impact to CSSS habitat is minimized. USFWS must be consulted on all burns that can potentially impact CSSS habitat.

Sub-Population C - North of Pinelands/Taylor Slough

- Human caused wildland fires that threaten sparrow populations will be suppressed with an objective of minimizing sparrow habitat that is burned.
- Naturally occurring wildland fires will be managed as wildland fire use if they meet the park's wildland fire use (natural fire) criteria; management action must be taken to keep these fires from crossing Main Park Road.
- Prescribed fire can be used in and adjacent to CSSS habitat to treat slash pine (*Pinus elliotii var densa*) and exotic-pest plants as long as impact to CSSS habitat is minimized. USFWS must be consulted on all burns that can potentially impact CSSS habitat.

³ ENP Fire Management and Skip Snow are developing parameters for wildland fire use for Sub-population A. Once completed, the CSSS working group will review these parameters and include them as part of this plan.

Sub-Population D - Southern Glades Wildlife and Environmental Area

- Florida Division of Forestry will suppress all human and natural caused fires.
- Florida Game and Fish will not conduct any prescribed fires in CSSS habitat; this will be reviewed annually.

Sub-Population E - Eastern Shark Slough

- Human caused wildland fires that threaten sparrow populations will be suppressed with an objective of minimizing sparrow habitat that is burned.
- All natural caused fires that threaten sparrow populations will be suppressed with the objective of minimizing sparrow habitat that is burned.
- Prescribed fire will be used in and adjacent to CSSS habitat to treat exotic-pest plants; fire management will limit the impact of fire to CSSS habitat.
- USFWS must be consulted on all burns that can potentially impact CSSS habitat.

Sub-population F - East Everglades

- Human caused wildland fires that threaten sparrow populations will be suppressed with an objective of minimizing sparrow habitat that is burned.
- All natural caused fires that threaten sparrow populations will be suppressed with the objective of minimizing sparrow habitat that is burned.
- Prescribed fire will be used in and adjacent to CSSS habitat to treat exotic-pest plants; fire management will limit impact of fire to CSSS habitat. Prescribed fire will be used to create a narrow firebreak on the eastern edge of Population F habitat to reduce the threat of human caused wildland fires. USFWS must be consulted on all burns that can potentially impact CSSS habitat.

CAPE SABLE SEASIDE SPARROW RESEARCH AND MONITORING

Current

- Extensive annual surveys of all CSSS sub-populations (primary contact: Sonny Bass).
- Maintain intensive CSSS study plots (contacts: Stuart Pimm and Julie Lockwood).
- Study the effects of the Lopez Fire on CSSS habitat and population (primary contact: Julie Lockwood)
- Use satellite imagery to refine fire perimeter maps in CSSS habitat (primary contact: Stuart Pimm)
- Compare impacts of prescribed fires conducted west of pine block A in 1999 (ENP#9977) and 1994 (ENP#9452) on sub-population B (primary contact: Stuart Pimm).

Proposed

- Shark Slough to Lostmans Pine Vegetation Transect and CSSS Survey:
 - Monitor change and possible recovery of habitat in Pop A after proposed transition period (dry to wet season) corridor/firebreak prescribed burns are completed. Include vegetation transects in areas with and without birds (current and historic) at different elevations. Monitoring of vegetation before and after the fires (contacts to be determined).

- Intensive helicopter CSSS survey with in Sub-population A; 0.5 km grid in burn area (primary contact: Sonny Bass).
- Extensive Vegetation Study in CSSS habitat (primary contact: Jim Snyder):
 - Vegetation study and soil depth survey at all CSSS survey points.
 - Establishment of vegetation transects within CSSS habitat.
- Digitize paper fire maps 1948-1979 (contacts: Julie Lockwood and Nate Benson).
- Re-examine LSU vegetation transects in Sub-populations B and C (contact: Bill Platt and Nate Benson).

MANAGEMENT ACTIONS

- Everglades National Park Fire Management and Skip Snow will develop parameters that define permissible conditions for wildland fire use for Sub-population A. Once completed, the CSSS working group will review these parameters and include them as part of this plan.
- CSSS working group will conduct a yearly assessment, in the fall, of the CSSS fire management strategy and integrate current knowledge, fire history, management needs and experience with fire and CSSS into this strategy.
- Everglades Fire Management will seek funding for satellite mapping of burns in CSSS habitat, digitizing paper-fire maps from 1948-1979, and reexamine LSU vegetation transects in Sub-population A and C.
- Everglades National Park Fire Management will review the feasibility of establishing a cooperative agreement with the Florida Game and Fish Commission to address fire management issues along the ENP / Southern Glades Wildlife and Environmental Area boundary.