

Meeting Summary
Panther Recovery Team, South Florida Subteam Meeting
Florida Panther NWR, Naples, FL
October 22-23, 2002

South Florida subteam members present:

Mike Barry for Dennis Hardin, Florida Division of Forestry
Lincoln Borman for Jora Young, The Nature Conservancy
Monika Dey for Skip Bergmann, US Army Corps of Engineers
John Donahue, National Park Service
Karen Hill, Florida Panther Society
Tom Jones, Barron Collier Partnership
John Kasbohm, U.S. Fish and Wildlife Service
Darrell Land for Brad Gruver, Florida Fish and Wildlife Conservation Commission
Laurie Macdonald, Defenders of Wildlife
Roy McBride, Livestock Protection Company
Jeff Norment, Natural Resources Conservation Service
Mel Sunquist, University of Florida/Florida Panther Technical Advisory Council
Wesley Woolf, National Wildlife Federation

Fish and Wildlife Service participants:

Layne Hamilton, Florida Panther NWR
Dawn Jennings, Vero Beach Field Office
Larry Richardson, Florida Panther NWR

Other participants and observers:

Sonny Bass, Everglades National Park
Ron Clark, Big Cypress National Preserve
Deborah Jansen, Big Cypress National Preserve

South Florida subteam members not present:

Dana Bryan, Florida Department of Environmental Protection
Donald Cuzzo, National Home Builders Association

Pete David, South Florida Water Management District
Robert Lacy, Chicago Zoological Society
Dave Maehr, University of Kentucky
Frank Mazzotti, University of Florida
Stephen O'Brien, National Cancer Institute
Nancy Payton, Florida Wildlife Federation

Others invited but not attending:

Miccosukee Tribe of Indians of Florida
Seminole Tribe of Florida

The goals of this meeting were:

1. To review the ranked threats developed at the last meeting.
2. To develop a recovery strategy and step down outline of actions that once implemented would remove the threats to the species in South Florida.

Second Recovery Team Meeting Summary:

A summary of the second recovery team meeting held Dec 18-19, 2001 was distributed to the subteam. No comments or changes were expressed.

Project Updates:

John Kasbohm gave the following updates:

Focus groups:

An action item identified at the second recovery team meeting was for the Service to develop subcommittees to plan focus group/stakeholder meetings that would be used to solicit public input into the recovery plan revision. As a result, two planning meetings were held. The first meeting was held on August 27, in Naples, FL; in attendance were John Kasbohm, Dawn Jennings, Bert Beyers (FWS, Vero Beach), Layne Hamilton (FWS FPNWR), Tom Jones, and Jora Young. The second was held October 3 in Covington, GA among John Kasbohm, Jim Ozier, Andrew Schock (Jimmy Bullock was to attend but could not at the last minute because of a hurricane).

At the south Florida meeting, the group concluded that a productive set of stakeholder meetings directed at the recovery plan revision would not be possible until the Service released the MERIT Conservation Strategy to the public. Until that time, questions from affected stakeholders likely would center on the Strategy, its associated maps and regulatory implications. These discussions would be premature for Service staff to conduct, and without being able to provide meaningful answers, would prevent discussions of the recovery plan. Stakeholder meetings in south Florida will be postponed until the completion of the MERIT strategy. When these meetings are developed, they should be used to integrate the recovery plan revision and the conservation strategy.

At the second meeting, the reintroduction subteam subcommittee concluded that a series of four stakeholder meetings should be held in 2003. The purpose of the meetings would be to provide an opportunity for key affected stakeholder groups to share and identify their concerns, issues, conflicts, and potential solutions with regard to panther recovery and restoration in unoccupied areas of the Southeast. For each meeting, 8-10 representatives from a single and specific stakeholder group that could represent that group on a regional basis would be invited to participate in a professionally facilitated discussion of the issues. The stakeholders to target are 1) Federal and State wildlife agencies and land managers including State Forests, National Forests, National Wildlife Refuges, State wildlife/game management and State wildlife law enforcement; 2) landowners including industrial and nonindustrial forest landowners, and agricultural and livestock interests; 3) hunters including deer hunters, bow hunters, the National Wild Turkey Federation, and trapping interests; and 4) national/southeastern environmental organizations. In addition to the stakeholder representatives and Service staff, members of the recovery team associated with the stakeholder groups also would be invited to attend. Funding to hold these meetings has been requested in the Service's Jacksonville Field Office's 2003 budget request.

Communications Strategy Proposal:

The Jacksonville Field Office has included a proposal for funding to hire a public relations firm to develop a communications strategy for the recovery plan in our 2003 budget request. The goal of the project is to develop a cost-effective strategy that can be translated into recovery plan tasks that when implemented will provide a maximum level of support for panther recovery and a public/political atmosphere that will foster the best chance of success for a reintroduction program. Objectives are to: (1) evaluate other reintroduction efforts to determine "lessons learned" relative to communication; (2) identify sociopolitical data needs including appropriate public opinion and attitude surveys; (3) identify specific audiences for targeted outreach/education efforts, and 4) develop messages and effective methods to deliver them that will increase support from key constituencies and assure potential adversaries that the Service sincerely wants to cooperatively develop a reintroduction program that, to the greatest extent possible, addresses their needs and concerns, but that also meets our statutory obligation to recover the species under the Endangered Species Act. If funding is received, this project may be combined with the stakeholder focus group meetings.

Panther Scientific Review Team:

In June 2002, the Florida Fish and Wildlife Conservation Commission and the Service assembled an independent scientific review team to critically evaluate the existing panther data and literature. The team consists of Howard Quigley (Hornocker Wildlife Institute), Paul Beier (Northern Arizona University), Mike Vaughan (USGS, BRD–Virginia Tech) and Mike Conroy (USGS BRD–University of Georgia). To date, the team has classified the published and unpublished literature into four topical areas (demography; habitat and prey; genetics; and disease, health and contaminants) and assigned two reviewers to each area. Each paper has been read by at least two of the team members. For each of the topic areas, each pair of reviewers has provided a list of key papers for the other members to review. A meeting will be held in early November to discuss the strengths, weaknesses, limitations, and need for additional clarification or research. A final report will be available by June 2003.

Habitat Evaluation of Potential Reintroduction Areas:

In June, Joe Clark, Frank van Manen, and Cindy Thatcher (USGS, BRD, University of Tennessee) began a one year project to identify and rank potential restoration areas in the southeast. A project summary is available for the project. A final report is due June 2003.

Reintroduction Subteam:

A meeting of the reintroduction subteam will be held in Atlanta on November 13-14, 2002. The goals of the meeting are to develop recovery strategies and actions directed at unoccupied areas of the southeast.

MERIT Panther Conservation Strategy:

Dawn Jennings gave an update on the progress being made to develop a landscape conservation strategy for the panther in south Florida by the panther subteam of the Service's Multi-species/Ecosystem Recovery Implementation Team (MERIT). She handed out portions of the draft document (the executive summary and conservation recommendations). The Florida Panther Conservation Strategy for South Florida is currently undergoing internal review in the South Florida Ecological Services Office. Final subteam comments and scientific peer review comments were incorporated into the draft. The Field Office will be meeting to discuss the distribution of the document, and the necessary plans to meet with stakeholders concerning the document as well as any conservation incentive and regulatory issues associated with it.

Review of Ranked Threats for South Florida:

The subteam reviewed the results of the threat assessment for south Florida conducted at the last recovery team meeting. Four changes were suggested for Factor E: 1) the discovery of chronic wasting disease in Wisconsin may raise the threat level of decline in prey base from ungulate disease. Although not presently known to occur in deer in Florida, this is a new threat that needs to be monitored and considered in the recovery plan because of its potentially significant effects to panther prey. 2) Illegal kill as a type of panther mortality should have an overall threat rank of low, not medium. 3) The lack of corridors for dispersal contributes to a loss of genetic diversity and should have an overall threat rank of high. This change would result in a medium overall threat rank. 4) Panther predation on livestock may increase landowner's fear, especially given an increasing panther population.

Recovery Goal and the Role of South Florida in Recovery Strategy:

Two important questions were considered by the subteam: 1) what is the definition of the existing south Florida panther population, and 2) what is the role of this population in a recovery strategy for the panther?

The subteam agreed that the existing population should be defined as the area south of the Caloosahatchee River plus areas north of the river approximately to Interstate 4 and Orlando. This geographic area includes the current known breeding range and areas where population expansion could occur either naturally or with translocation of females. Habitat quality of areas north of the river needs to be investigated and may or may not support a population expansion because of poor quality, relative small habitat areas, many roads, and high fragmentation. However, habitat north of the river could provide areas that dispersing subadults may be able to temporarily use until they can establish a territory within the breeding range. Movements of male panthers across the Caloosahatchee River in recent years have been documented. This geographic definition of the existing population should be consistent among Service documents

With respect to the role of the existing panther population in the recovery strategy of the species, the subteam agreed that because this population is the only population in existence it will need to be the source for any restoration activities elsewhere in the historic range. Although reaching a size large enough to be considered one of the two recovery populations of 250 animals may not ultimately be possible in south Florida, a large enough population is possible that could contribute to a metapopulation and lead to down listing to threatened status. Hence, the overall strategy in south and central Florida should be to restore the largest and most secure population possible. Further losses of habitat will result in lower numbers of panthers, decrease the chances of survival of the species, and diminish the opportunities for recovery not only in south Florida, but also across the rest of the historic range.

Recovery Actions for South–Central Florida:

Using the results of the threats assessment (stresses, sources, and their rankings) conducted at the last recovery team meeting, the subteam outlined the following actions and considerations applicable to south–central Florida that should be included in the revised recovery plan. Some sources with low overall threat ranks were not discussed because of time limitations.

Factor A: The present or threatened destruction, modification, or curtailment of the Florida panther’s habitat or range.

Transportation projects:

- ▶ Insure coordination for all road projects among agencies and local planning organizations.
- ▶ Identify current roads and known planned roads that could affect panthers.
- ▶ Develop an MOU and/or precoordination procedures with DOT and local planning organizations for proactive assessment and planning of road projects.
- ▶ Develop materials and a means to educate the public on the effects of roads on panthers, including potential solutions and the value of wildlife crossings and fencing.
- ▶ Improve agency coordination on biological opinions.
- ▶ Determine the impacts of roads on range expansion and dispersal.
- ▶ Identify funding sources for mitigation/compensation (e.g., impact fees that could pay for wildlife crossings).
- ▶ Highly scrutinize the planning and construction of new roads.

Lack of suitable habitat:

- ▶ Preserve current panther habitat.
- ▶ Provide incentives to landowners to manage their lands for panthers. Focus and coordinate existing incentive programs at priority panther habitat projects.
- ▶ Develop a panther reserve program that pays, compensates, or provides economic value for

landowners to provide panther habitat and grow panthers on their lands.

- ▶ Find ways to increase the appraised value of private lands that have endangered species on them. Compare and highlight differences between the cost of purchase and restoration of degraded habitat versus paying higher acquisition costs if endangered species were to be given extra value on quality habitat.
- ▶ Improve public lands management.
- ▶ Restore degraded habitat.
- ▶ Provide incentives and mechanisms that restore or at least prevent intensification of use or development of rangeland.
- ▶ Develop/expand funding mechanisms and sources for habitat restoration and management.
- ▶ Evaluate and develop a panther habitat management strike team (e.g. see scrub fire strike team) that could capitalize on and share existing resources to implement habitat management priorities.
- ▶ Provide consultation services to public and private land managers to improve habitat management for the benefit of panthers
- ▶ Develop a panther habitat management handbook for public and private land managers. Handbook should identify the characteristics of quality panther habitat, evaluate the various land use types, and discuss prey habitat management, fire management, control of exotic species (including potential uses of low intensity cattle leases on public lands where management/restoration funding is lacking), and ways to increase economic revenue for private landowners.
- ▶ Determine the relative value of various land uses and disseminate this information to the public, landowners, and agencies.
- ▶ Secure panther habitat in the Primary, Secondary and Dispersal zones identified by the MERIT panther subteam using all means including fee title acquisition, conservation easements, management agreements, developing a panther mitigation bank, and providing land management funding.
- ▶ Implement the Florida Panther NWR preliminary project proposal.
- ▶ Continue to identify and classify panther habitat.

Water management and conversion of habitat to water:

- ▶ Avoid and minimize the impacts of water projects on panther habitat.
- ▶ Ensure that public and private projects receive equal scrutiny and treatment.
- ▶ Conduct proactive planning to avoid impacts early.
- ▶ Use CERP funding where projects affect panthers.
- ▶ Refine standard operating procedures for panthers.

Residential development:

- ▶ Explore transferred development rights and other programs to accumulate large tracts of undeveloped land.
- ▶ Explore and support local initiatives to protect panther habitat or compensate for development.
- ▶ Develop a mechanism for providing compensation for single family housing. Evaluate the possibility of establishing a panther mitigation bank.
- ▶ Provide for better section 7 consultations in panther habitat.

Mining and mineral exploration:

- ▶ Prevent rock mining in panther habitat as this land use results in complete loss of habitat.

Caloosahatchee River as a barrier:

- ▶ Foster compatible land uses and riparian habitat protection directly along the Caloosahatchee River, even in areas outside the Dispersal zone; better regulate land uses along the river.
- ▶ Maintain and enhance habitat quality in the Dispersal zone.
- ▶ Identify and protect dispersal areas north of the river.
- ▶ Define criteria to meet in order to translocate panthers across the river.

Invasive exotic plant species:

- ▶ Identify and ensure adequate funding for the prevention, control, and eradication of exotics.
- ▶ Educate the public, landowners, and decision makers about the needs and benefits of exotic control for the panther.
- ▶ Include exotic species prevention, control and eradication methods in the panther land management handbook.

Factor C: Disease and predation.

All diseases:

- ▶ Continue to monitor diseases.
- ▶ Revise vaccination protocols but continue to vaccinate panthers as they are captured. Vaccinations are cheap and very low risk. Consider evaluating the value of vaccinations.
- ▶ Determine the prevalence of diseases that could impact panthers in the environment.
- ▶ Determine the disease threats presented by feral cats and identify needed management intervention.

Factor E: Other natural or man made factors affecting the Florida panther's continued existence.

Intraspecific aggression:

- ▶ Continue to monitor and evaluate the impacts of intraspecific aggression.
- ▶ Provide secondary habitat (e.g., areas north of the Caloosahatchee River) that can be used by subadult males as a sanctuary from dominant males as they “wait” for opportunities to establish a territory in the breeding range.
- ▶ Maintain, enhance and restore habitat corridors to facilitate/promote dispersal.
- ▶ Develop a protocol for handling and rearing orphan kittens resulting from the death of adult females from intraspecific aggression or other sources of mortality. These kittens can be used released back into south Florida or placed in the captive breeding program as a source of

animals for reintroduction or for genetic management purposes. Develop any agreements with zoological facilities that would be needed to house/raise these animals.

- ▶ Do not remove adult males that are known to kill other panthers; but, may want to develop a research project to better understand the impacts of intraspecific aggression.

Mercury toxicity:

- ▶ Produce summary report and data base of contaminants in panther, and their biotic and abiotic environment. Identify any “hot spots” in the panther range and determine any available management implications.
- ▶ Continue to monitor mercury in panthers by collecting hair, blood, and tissue samples.
- ▶ Consider contaminant issues when evaluating potential reintroduction sites.

Road kill:

- ▶ Identify and prioritize needs for crossings and road improvements, including additional fencing in areas with existing crossings. Develop a protocol for identifying needs and implementation of crossings. Distribute and keep this information up to date.
- ▶ Develop materials to educate agency decision makers on the success of wildlife crossings.
- ▶ Solicit and consider ideas for new strategies to prevent road mortalities including alternative technologies and new fencing designs that might be more aesthetically acceptable.
- ▶ Build mechanisms into road projects as they are permitted to provide for future mitigation/compensation for panther mortality and/or other unforeseen problems. This could include conditions for when the Service will reinitiate consultation and potential additional compensation that could be required.
- ▶ Enforce existing speed zones.
- ▶ Improve conditions on existing roads including evaluating and using:
 - Wider shoulders
 - Lower speed limits and speed zones
 - Reducing night time driving on key highways
 - Reducing truck traffic with no truck zones or no trucks at night

- Vehicular restrictions
 - Adjusting toll regimes to reduce truck traffic (e.g., removing tolls on I75 to encourage trucks to not use US 41
- ▶ Identify issues and needs for the improvement of US 41. Ensure the coordination of NPS and DOT on US 41 improvements.
 - ▶ Evaluate the benefits and detriments of scenic highway designations.
 - ▶ Continue to monitor panther road mortality.

Illegal kill:

- ▶ Continue to enforce existing laws.

Managed releases of pumas:

- ▶ Using existing data and results from the Genetic Restoration Project, develop a genetics management plan. The plan should include protocols and triggers (specific alleles, physical attributes, percent representation, studbook...etc) for translocating, adding, or removing animals; a protocol for managing/preventing over-representation by specific lineages; the disposition of animals that may need to be removed; and monitoring needs.
- ▶ Develop a model to predict future genetic consequences of management actions and proposals.

Ungulate disease:

- ▶ Determine any threats presented by chronic wasting disease and potential eradication efforts.
- ▶ Build public and agency support for CWD monitoring for exotic and wild deer and the need to prevent CWD from entering Florida and the southeast.
- ▶ Ensure screening and monitoring of deer (wild and imported exotics) for CWD in Florida and potential restoration areas in the southeast.

Water management or conversion to water:

- ▶ Determine and monitor the impacts of CERP on panther prey species distribution and numbers.

Lack of or poor prey management (e.g., over hunting):

- ▶ Assess and monitor the status of the deer population in panther habitat.
- ▶ Continue to assess the impacts of hunting on Big Cypress NP and State lands.
- ▶ Ensure that harvest regulations include the requirements of the panther and do not compromise the panther prey base. Hunting is generally compatible with panther needs as the goal of good deer management continues to be a healthy deer population.
- ▶ Evaluate the effects of hunting on any properties acquired in panther habitat.

Prey habitat loss/degradation:

- ▶ Address prey habitat management in the habitat management handbook recommended in Factor A, including best management practices. The overall objective should be to manage for deer populations at levels that were historically present and self sustaining.
- ▶ Provide incentives to private landowners to manage for panther prey species (e.g., partners for fish and wildlife and farm bill programs).
- ▶ Review public lands management plans and ensure that they provide appropriate prey management.

Exotic prey management:

- ▶ Assess the role of hogs as an invasive exotic species in Big Cypress National Preserve and develop a long-term strategy for hog management on the preserve given the conflicting needs of the panther and NPS policy to eradicate exotic species. Continue to assess the role of hogs to the panther prey base.

Public fear of panthers:

- ▶ Develop a protocol and response plan to address domestic depredation by nuisance animals including the capture, removal, translocation, and euthanasia of problem panthers. Locate and use existing protocols for western pumas and other species as examples.
- ▶ Develop and implement an outreach and education program to proactively minimize human/panther (and other predators, e.g., bears) interactions. Target local planning organizations, the public living in and adjacent to panther habitat, potential new residents and the realtor community. Issues including garbage, livestock and potential attacks on humans should be addressed. This outreach should put possible risks into perspective.

Landowner fear of regulation:

- ▶ Identify liabilities and conflicts that the presence of panthers on private property brings to landowners. Develop mechanisms to overcome or compensate these.
- ▶ Provide incentives (values) and tools to landowners to maintain and manage for panthers on their lands. Large landowners with diversified agricultural and forestry programs may be prohibited from participating in existing governmental incentive programs (Farm Bill) and may warrant specific attention.
- ▶ Develop management agreements, considering Habitat Conservation Plans and Safe Harbor agreements, with landowners regarding panthers. Streamline processes where possible to promote and facilitate these agreements.

Monitoring:

- ▶ Synthesize monitoring needs among all recovery tasks and develop a population monitoring plan. Consider monitoring functional units (clusters) of panthers, reproduction and survival, females with kittens, presence-absence, radio telemetry, and the effects of management or manipulations.
- ▶ Identify and use new monitoring techniques if appropriate (e.g., hair/genetics sampling, scats, cameras...etc).
- ▶ Continue to monitor over appropriate time intervals panther habitat and land use changes using GIS techniques. Track land protection and restoration results with an emphasis on identifying where habitat is lost and gained.

- ▶ Track permits and compensation for Federal and State regulatory programs to determine the effectiveness of section 7 and other habitat protection regulatory mechanisms.
- ▶ Update the MERIT conservation strategy maps at appropriate intervals.