

# Recovery Criteria

Reclassify to Threatened:

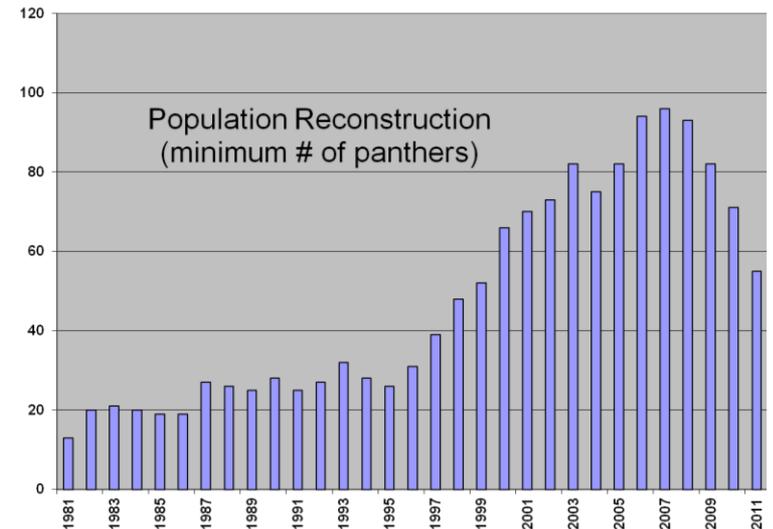
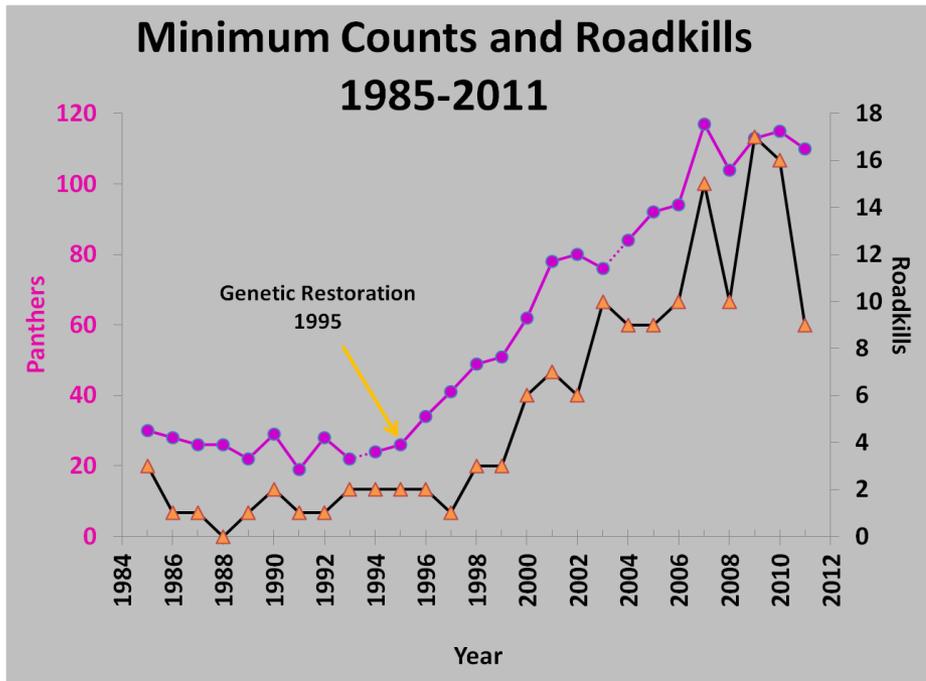
1. Two viable populations of at least 240 individuals (adults and subadults) maintained for 12 years
2. Sufficient habitat ... to support these populations is protected for the long-term

Delist (no longer Endangered or Threatened):

1. Three viable populations of at least 240 individuals (adults and subadults) maintained for 12 years
2. Sufficient habitat ... to support these populations is protected for the long-term

# Population size and trend

- Develop inventory and monitoring techniques that produce reliable population estimates



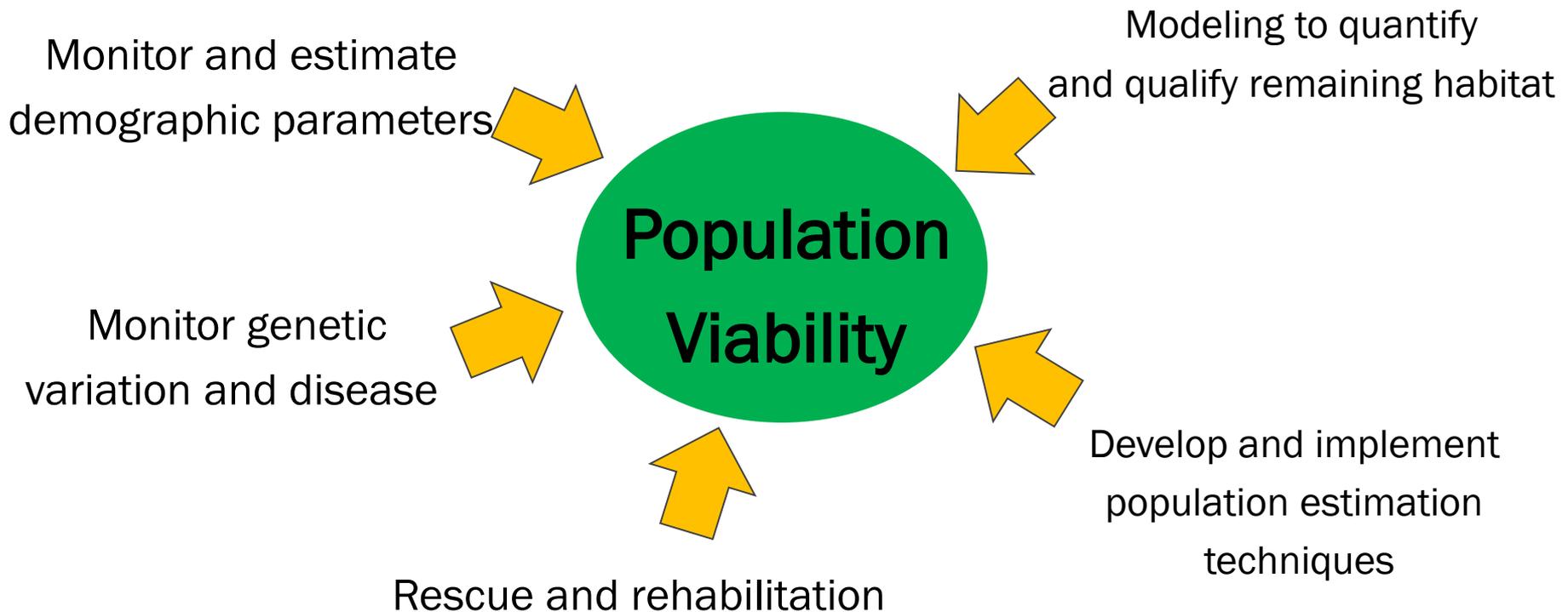
# FWC Panther Camera Trap Study

- Objective
- Phased approach
- Addition Lands of BCNP
- 162 km<sup>2</sup> study area
- 4 month sampling period
- Collect data on
  - Panthers
  - Deer
  - Other wildlife



# Current Research Priorities

## Assessing Progress Towards Recovery



# Genetic Management



*Attack*

9/24/2012 3:40 PM



# Florida Panther Taxonomic Status

15 Subspecies of  
*Puma concolor*

Young and Goldman 1946  
Hall 1981

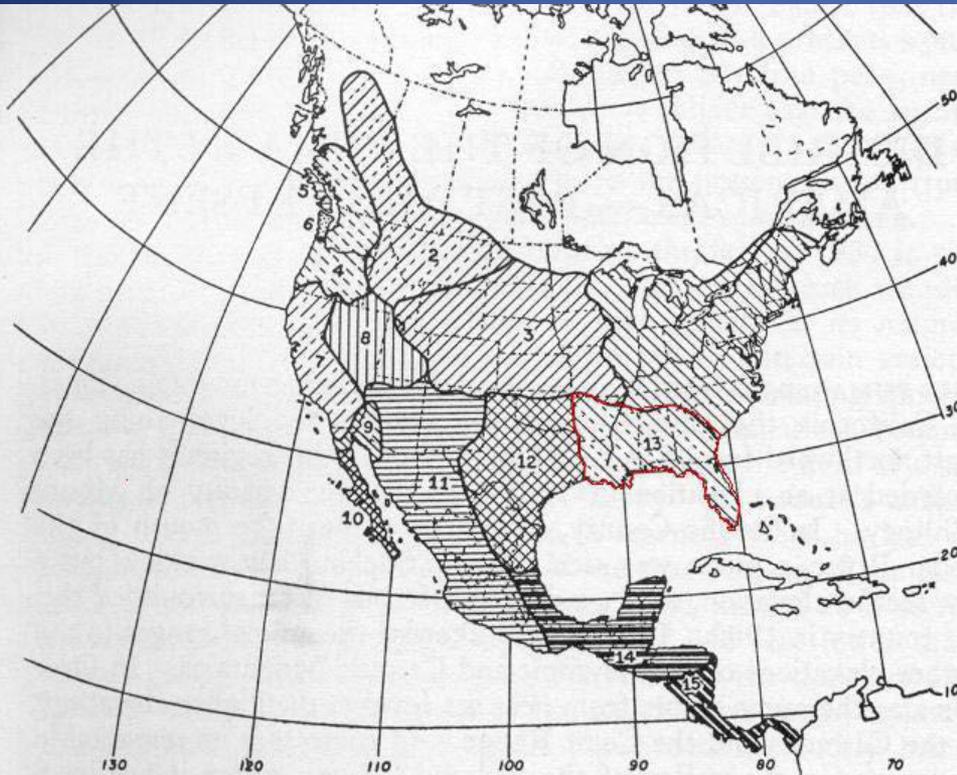


Figure 1. Distribution of subspecies of *Felis concolor* in North and Middle America

- |                                |                                |
|--------------------------------|--------------------------------|
| 1. <i>F. c. cougar</i>         | 9. <i>F. c. browni</i>         |
| 2. <i>F. c. missoulensis</i>   | 10. <i>F. c. improcera</i>     |
| 3. <i>F. c. hipplestes</i>     | 11. <i>F. c. azteca</i>        |
| 4. <i>F. c. oregonensis</i>    | 12. <i>F. c. stanleyana</i>    |
| 5. <i>F. c. vancouverensis</i> | 13. <i>F. c. coryi</i>         |
| 6. <i>F. c. olympus</i>        | 14. <i>F. c. mayensis</i>      |
| 7. <i>F. c. californica</i>    | 15. <i>F. c. costaricensis</i> |
| 8. <i>F. c. kaibabensis</i>    |                                |

J Hered. 2000 May-Jun;91(3):186-97.

## **Genomic ancestry of the American puma (*Puma concolor*).**

Culver M, Johnson WE, Pecon-Slattery J, O'Brien SJ.

Laboratory of Genomic Diversity, National Cancer Institute, Frederick Cancer Research and Development Center, MD 21702-1201, USA.

### **Abstract**

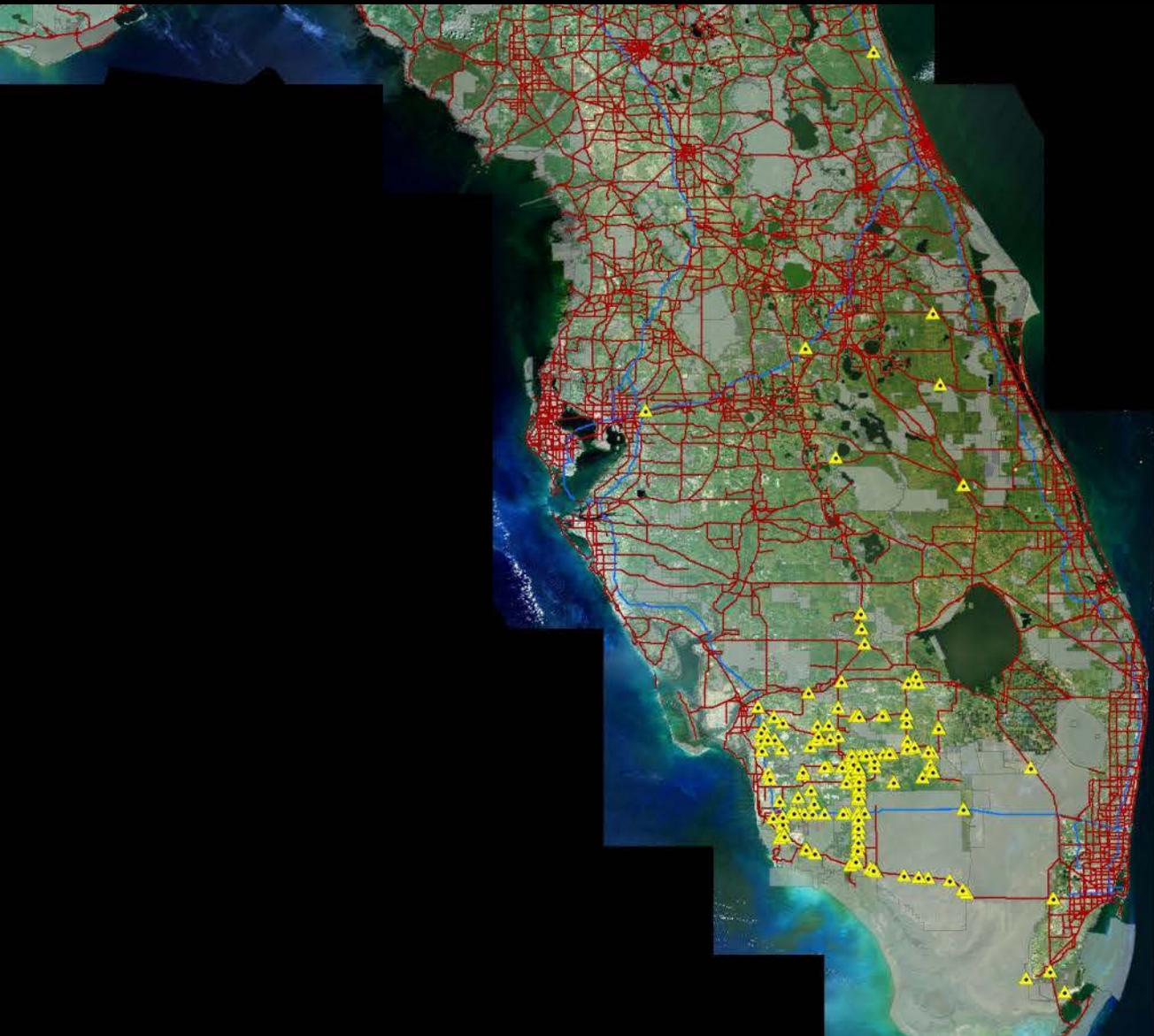
*Puma concolor*, a large American cat species, occupies the most extensive range of any New World terrestrial mammal, spanning 110 degrees of latitude from the Canadian Yukon to the Straits of Magellan. Until the recent Holocene, pumas coexisted with a diverse array of carnivores including the American lion (*Panthera atrox*), the North American cheetah (*Miracynonyx trumani*), and the saber toothed tiger (*Smilodon fatalis*). Genomic DNA specimens from 315 pumas of specified geographic origin (261 contemporary and 54 museum specimens) were collected for molecular genetic and phylogenetic analyses of three mitochondrial gene sequences (16S rRNA, ATPase-8, and NADH-5) plus composite microsatellite genotypes (10 feline loci). Six phylogeographic groupings or subspecies were resolved, and the entire North American population (186 individuals from 15 previously named subspecies) was genetically homogeneous in overall variation relative to central and South American populations. The marked uniformity of mtDNA and a reduction in microsatellite allele size expansion indicates that North American pumas derive from a recent (late Pleistocene circa 10,000 years ago) replacement and recolonization by a small number of founders who themselves originated from a centrum of puma genetic diversity in eastern South America 200,000-300,000 years ago. The recolonization of North American pumas was coincident with a massive late Pleistocene extinction event that eliminated 80% of large vertebrates in North America and may have extirpated pumas from that continent as well.



North American puma = *P. concolor cougar*

# Transportation Subteam









2013-07-15 10:35:57 AM M 2/5 77°F



POSSE2

RECONYX



8:18:22

# HABITAT RESTORATION AND MANAGEMENT

Florida Panther Recovery  
Implementation Team Meeting

May 22, 2014

# Hydrologic Restoration



**Historic Flow**



**Current Flow**



**The Plan (CERP) Flow**

# Mimic natural fire regime



# Control invasive plants



UGA5275055

# Accomplishments

- **Recognized the need for a sub-team for this topic**
- **Combine hydrological, botanical, and fire ecology expertise**
- **Relationship between panther and prey populations**
- **Guidance where restoration efforts could occur**

# Importance of Private Lands

