

A Management Shift

Command and Control

Nantahala and Pisgah NFS
Plan Revision
Cullen and Neumann, 2011

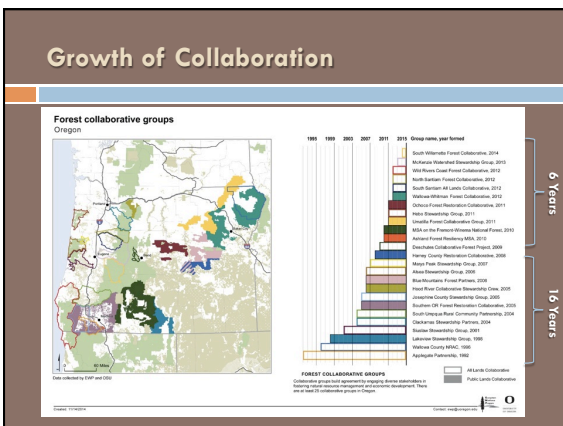
Collaboration

SCIENCE

A Shifting Approach to Saving Endangered Species

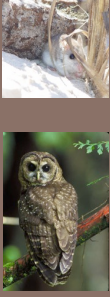
By ERICA GOODE OCT 5, 2013

(Cheng and Mattor, 2006; Koontz and Thomas, 2006; Leong, Emmerson, and Byron, 2011)



Endangered Species Act

- Endangered Species Act of 1973
- TVA v. Hill, 1978

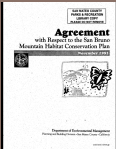


The ESA "Box Score"

THREATENED	ENDANGERED
200	484
Extinct	Recovered
10	30

(Olive, 2015; Schuckman, 2001)

Habitat Conservation Plans



- Assesses impacts likely to result **Chances of Intent:**
 - Reduce conflict
 - Outline steps to monitor, foster partnerships, minimize, and mitigate
 - Encourage creative solutions
- Examines alternatives

Single Landowner
Single Species
Small

Multi-Landowner
Multi-Species
Large

Increasing Complexity

(HCP Handbook, 1996)

Habitat Conservation Plans

What do we know about them?

Uncertainty + Politics + No Surprises = Controversy

But...

"HCPs can have a positive impact on species recovery and that, overall, endangered species' chances of survival are greater with an HCP than without."

(Langpap & Kerkvliet, 2012)

(James, 1999; Kareiva, et al., 1999)

Where are we now?

- ✓ Social science does have a role
- ✓ Interest in collaborative approaches
- ✓ Habitat Conservation Plans offer an opportunity

But, what is actually happening?

Research Objectives

(1) Determine stakeholder beliefs and value orientations related to conservation of endangered species.

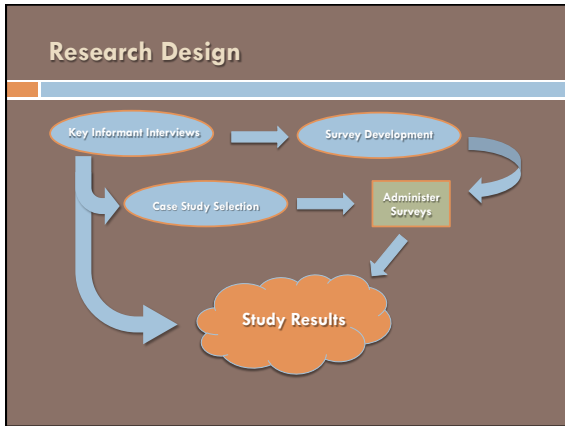
(2) Identify beliefs and attitudes of participant and USFWS staff about the development process for the Habitat Conservation Plans.

Proposed Methods

Research Design

Mixed Methods:

- Qualitative (Key Informant Interviews)
- Quantitative (Surveys)



Key Informant Interviews

Goals:

- (1) Identify Key Concepts
- (2) Rich Data
- (3) Buy-in

Interview Guide: Key Informant Interview

Briefly describe your involvement with HCPs.

Please describe how effective HCPs have been in achieving conservation and development goals.

What are the major advantages of HCPs?

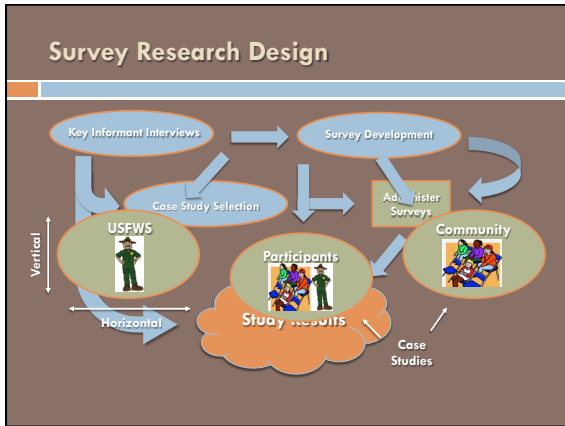
What do you think about the process of developing an HCP?

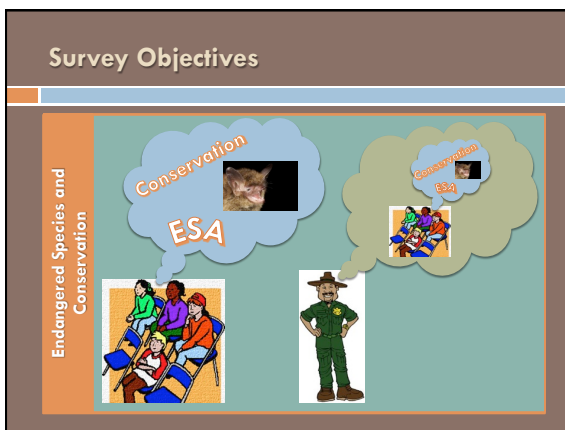
(Peterson, et al., 2004)

Key Informant Interviews: Using the Data

Qualitative Analysis	Inform the Survey
<ol style="list-style-type: none">1. Open Coding2. Organize Ideas3. Select Representative Quotes4. Look for Patterns and Connections	<ul style="list-style-type: none">□ Key Themes (Survey Structure)□ Specific Ideas (Questions)□ Customized Model ?


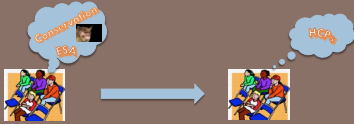

(Prokopy, 2011; Young, 2015)






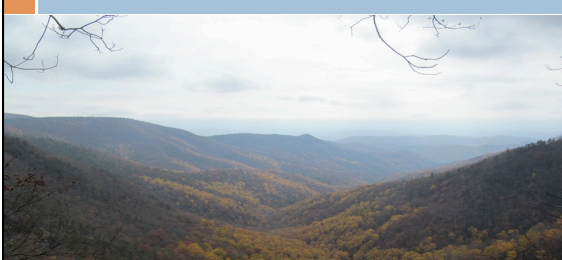


Quantitative Analysis

1. ANOVA to look for differences between groups

2. Discriminant Function Analysis to find explanatory values for attitudes toward HCPs

3. Multiple Regression to test hypothesized relationships between HCP process components


(Belton and Jackson-Smith 2010, Clement and Cheng, 2011)

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Melquisedec Gamba-Rios
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QUESTIONS?

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 WFS 512 Seminar

Hypotheses

Knowledge and Attitudes

H₁: Community members hold more positive perceptions of conservation, endangered species, and the Endangered Species Act than USFWS staff believe.

H₂: Community members are less knowledgeable about the Endangered Species Act than Agency personnel believe.

Hypotheses

Collaboration

H₃: USFWS staff at national and regional levels believe the HCP program is more effective at achieving collaboration and innovation than at field office levels.

Figure 3: Mean perceived effectiveness by administrative level and region

Administrative Level	Region	Supervisors office	Ranger districts
National	national	3.45	2.91
	region	3.25	2.85
Regional	national	3.11	2.97
	region	3.45	2.91

Note: These are adjusted means.

H₄: Participants in development of HCPs believe they are less collaborative than USFWS staff.

H₅: Participants in development of HCPs believe the process has led to innovative outcomes.

Collaboration – Theoretical Perspectives

Figure 1: A Model of Collaborative Governance

Starting Conditions: Power, Resource, Knowledge, Asymmetries; Incentives for and Constraints on Participation; Prehistory of Cooperation or Conflict (initial trust levels).

Institutional Design: Participatory Inclusiveness, Forum Inclusiveness, Clear Ground Rules, Process Transparency.

Collaborative Process: Trust-Building, Face-to-Face Dialogue, Good Faith Negotiation, Intermediate Outcomes, Shared Understanding, Clear Mission, Common Problems, Definition, Identification of Common Values.

Facilitative Leadership: (including engagement).

Outcomes: Mutual recognition of interdependence, Shared Ownership of Process, Openness to Exploring Mutual Gains.

(Ansell and Gash, 2008)

