

NCSSSF Project A3: Survey the Lessons Learned About Managing Forests for Biodiversity and Sustainability Based on Practical Experiences—a project by the:



**S U S T A I N A B L E
F O R E S T R Y
P A R T N E R S H I P**

Four integrated study phases to collect, summarize, simulate, and release information on biodiversity programs to forest managers across the continental United States...



**OREGON STATE
UNIVERSITY**



**UNIVERSITY
OF OREGON**

Phase I—Collect data on forest biodiversity conservation at local, state, regional, and national scales

- **Select 9 Forest Land Ownerships**

Federal, State, Municipal, Tribal, NGO, Industrial, Small-private, Consulting, TIMOs

- **Interview Key Informants**

Learn biodiversity language and issues from the informants

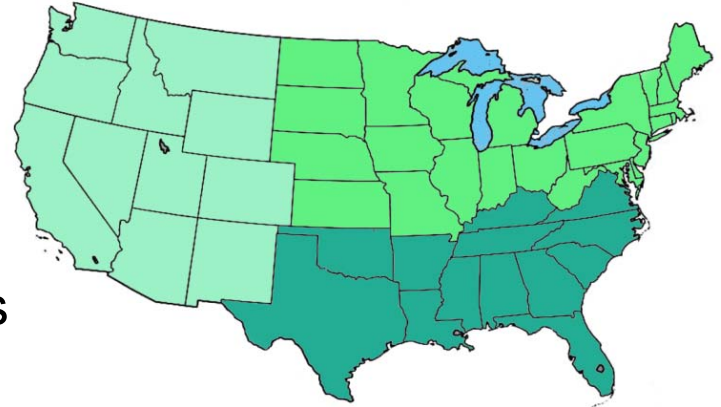
- **Build Comparative Data Matrix**

Relates survey questions to the Montreal Criteria and Indicators and other indicator systems

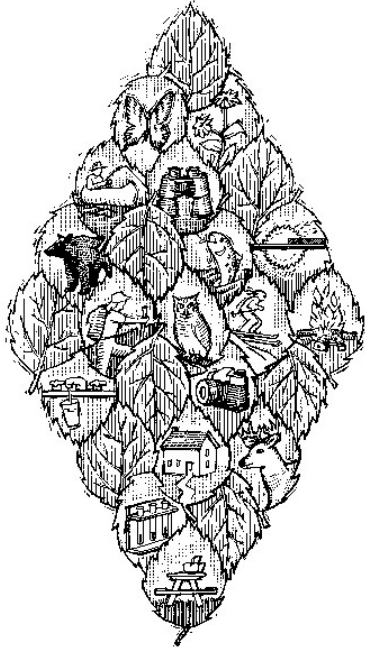
- **Develop an Extensive Survey of Landowners**

Key Informant review

Survey development and distribution subject to Federal Institutional Review Board “research subject” guidelines



The Extensive Forest Biodiversity Survey



**Forest Management and Biodiversity Project
A3, Sponsored by the National Commission on
Science for Sustainable Forestry NCSSF**

1 May 2003

- 15 Questions** (response type)
- Landowner class (9)
 - Acres (9 groups)
 - Informal or formal plans (Y/N)
 - Important business goals (15)
 - Encourage/discourage biodiversity management (14)
 - Guidelines-laws-regulations (9)
 - Biodiversity approaches (13)
 - Biodiversity indicators (21)
 - Stand-level indicators (17)
 - Landscape-level indicators (16)
 - Biodiversity tools (17)
 - Effectiveness measures (16)
 - Rate of implementation & success (1-9 scale)

Phase II—Develop a database of findings from the extensive forest biodiversity survey

- Surveys sent--examine a diverse range of forested land conditions about biological diversity

653 survey subsample of all all ownership types nation-wide, except small-private landowners

223 hard copies

430 e-mail

900 hard copies (300 each for small-private landowners in AL, OR, PA)

OR---large Federal & industrial forests; strict State forestry practices

AL---mixture of small-private and large industrial owners

PA---many small-private landowners; some large Federal & industrial owners

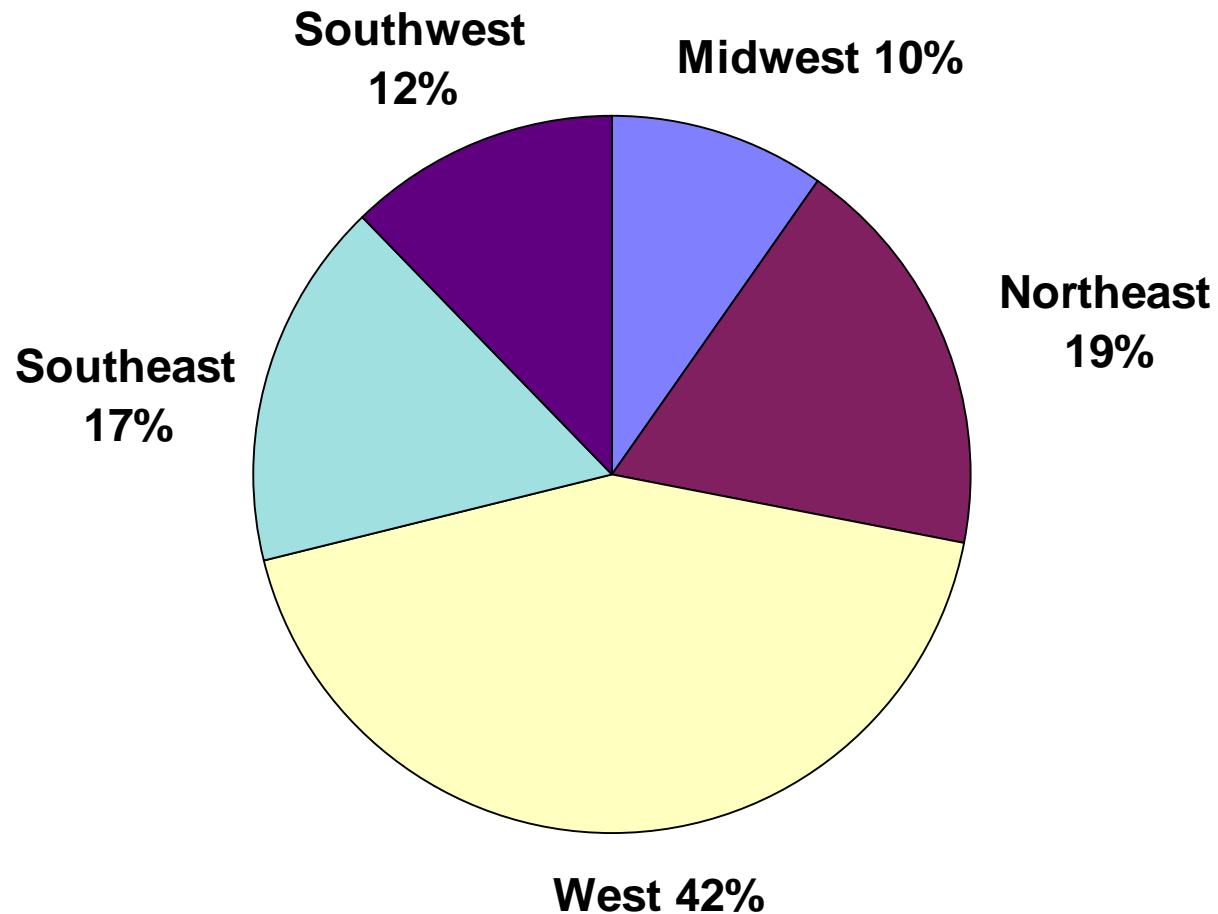
- Surveys received—25% response rate

335 in-hand surveys (e-mail, FAX, hard copy, and Internet site)

60 negative responses ,i.e. did not want to participate; do not have forest lands; do not manage the lands they own)

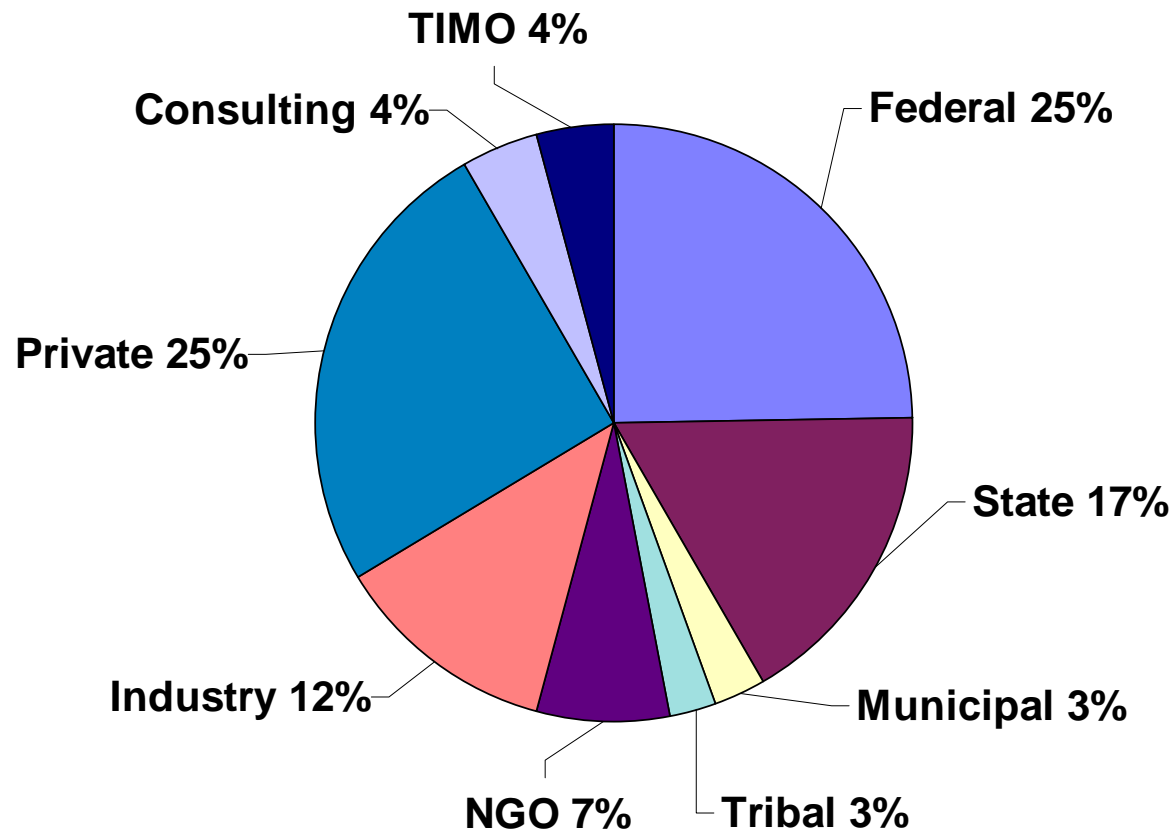
National Forest Biodiversity Survey Results

Responses by Region



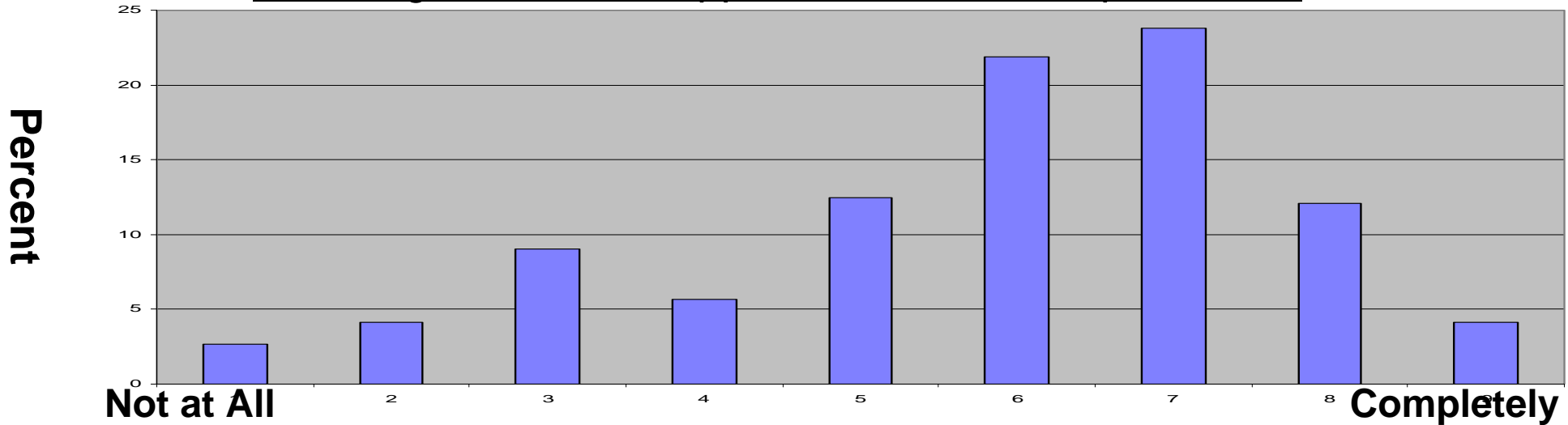
National Forest Biodiversity Survey Results

Landowner-type Responses

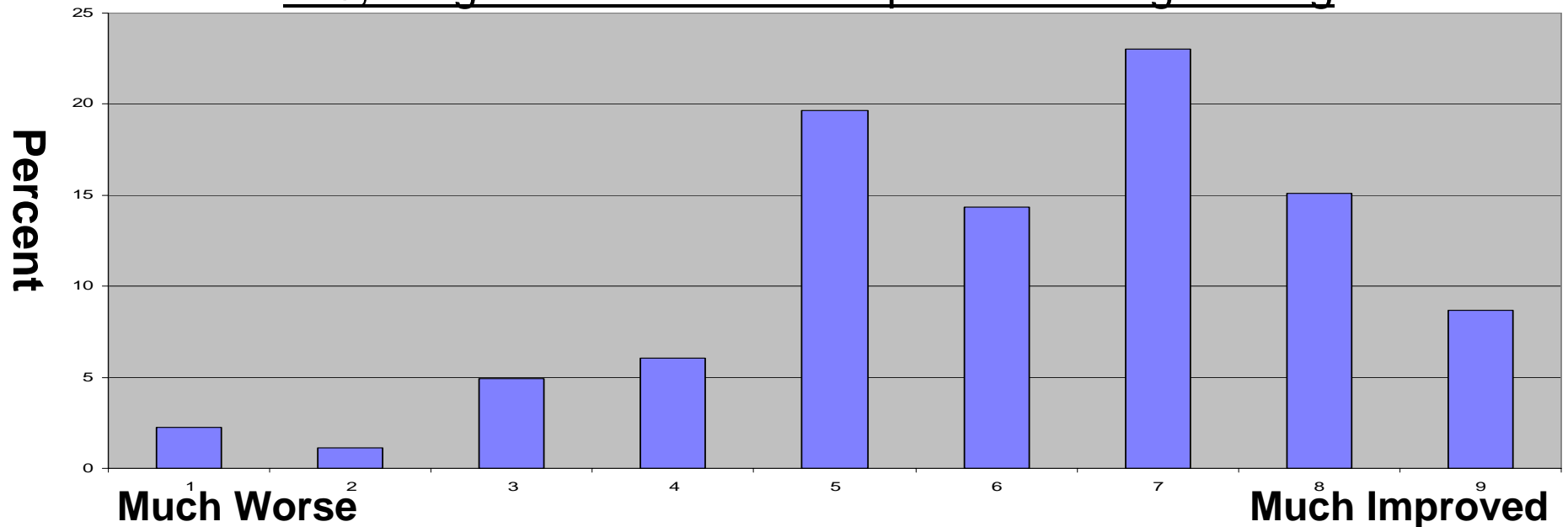


Degree of Implementation and Success in Addressing Forest Biodiversity Issues (all ownership classes and regions)

#14, Degree to which approach has been implemented



#15, Program success as compared to doing nothing



Example--question 8a: The most important indicator now being used or that will be used is... (21 choices)

Federal; top 3 choices

	Indicator	Montreal C&I
1	c) All species richness	9) Population levels of representative species from diverse habitats
2	s) Stream protection & water quality	4) Area protected as defined by age class or other features
3	t) Habitat representation	2) Forest area extent by age class or stage of succession

NIPF; top 3 choices

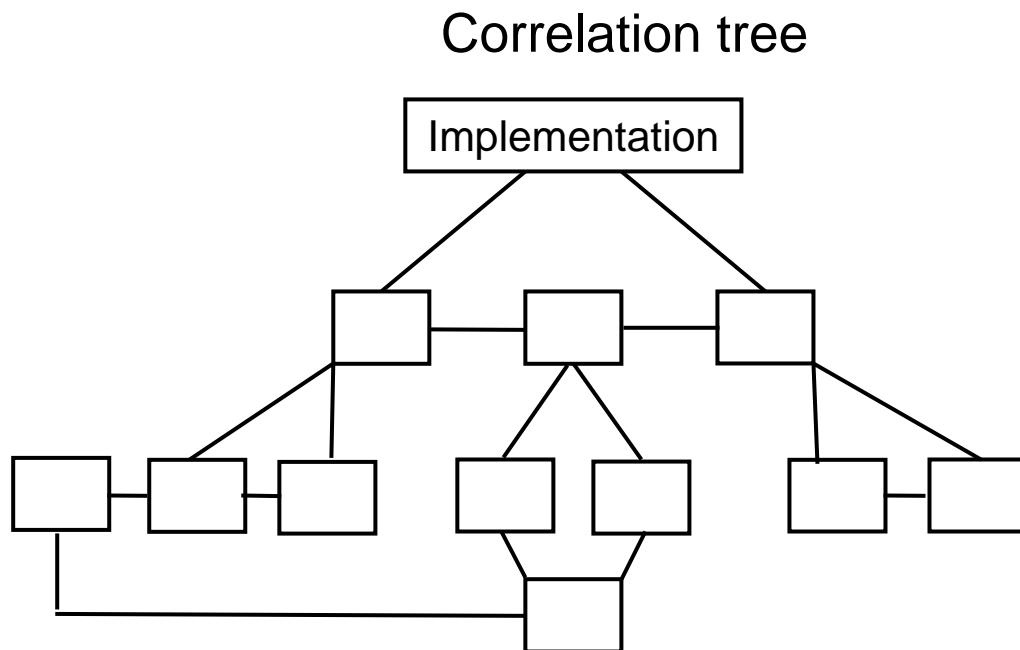
	Indicator	Montreal C&I
1	a) Forest tree species composition	2) Forest area extent by age class or stage of succession
2	i) Tree growth	1) Extent of area by forest type relative to total forest area.
3	c) All species richness	9) Population levels of representative species from diverse habitats

Survey Question 8b: The most important indicator now being used or that will be used

WEST Region	Indicator	Montreal C&I
<u>State agencies</u>	g. Forest age class distribution	2, Habitat diversity
<u>Industry:</u>	a. Composition of tree species	2
<u>NIPF :</u>	a. Composition of tree species	2
NORTH Region		
<u>State agencies:</u>	a. Composition of tree species	2
<u>Industry :</u>	a. Composition of tree species	2
<u>NIPF :</u>	a. Composition of tree species	2
SOUTH Region		
<u>State agencies :</u>	g. Forest age class distribution	2
<u>Industry :</u>	a. Composition of tree species	2
<u>NIPF:</u>	d. Presence of threatened/ endangered species	7

Correlating survey questions and responses with biodiversity management approaches/strategies

Question Group (11)	
	Economic / Timber Production
	Public / Social Input
	Current Regulations
	Fragmentation
	Habitat
	Protected Areas / Riparian
	Forest Structure
	Certification and Indicators
	Multiple Use
	Organizational Mission / Plans
	Species Counts

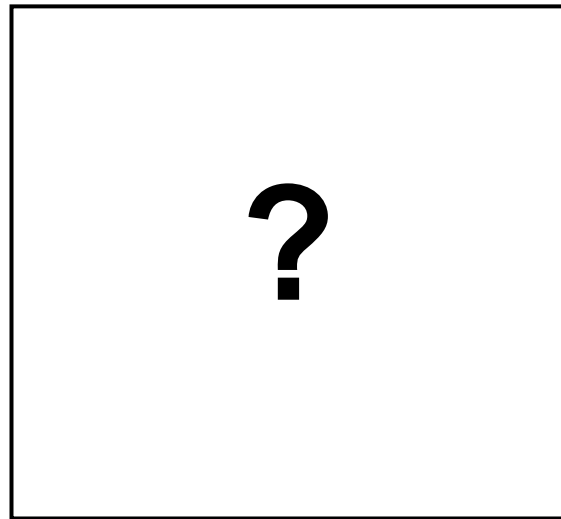


4a	a. Maintaining economic viability
4a	b. Maintaining public image
4a	d. Producing timber for wood products
4a	e. Responding to community input
4a	f. Complying with forest practice laws
4a	j. Providing aesthetic values

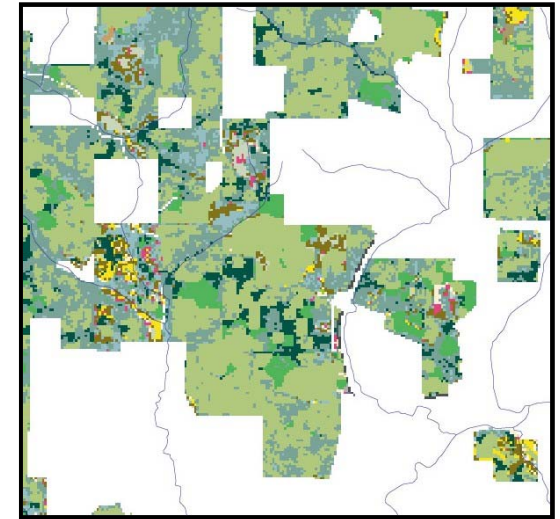
Phase III—Assess changes in forest habitats and vertebrate species under three management scenarios



Certification

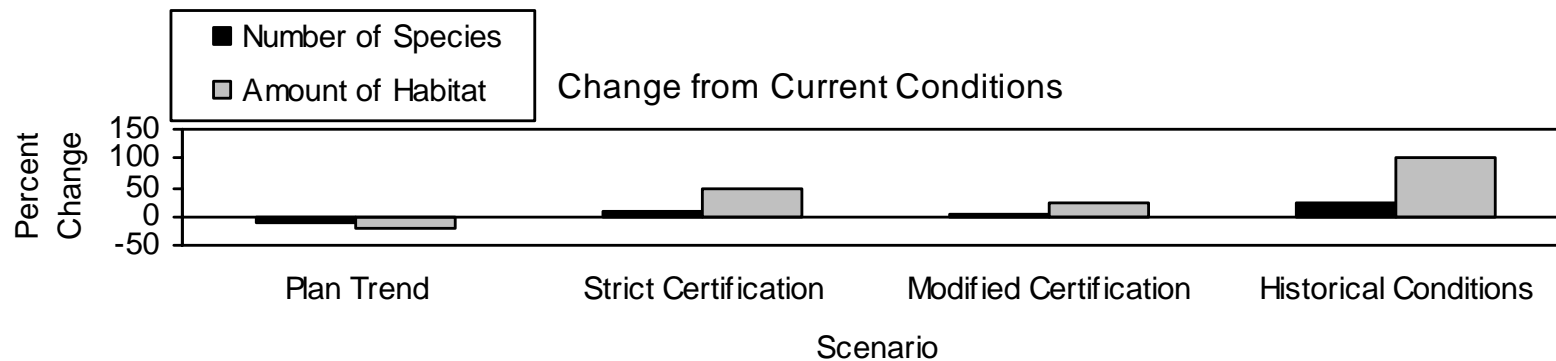


Certification modified
by survey results



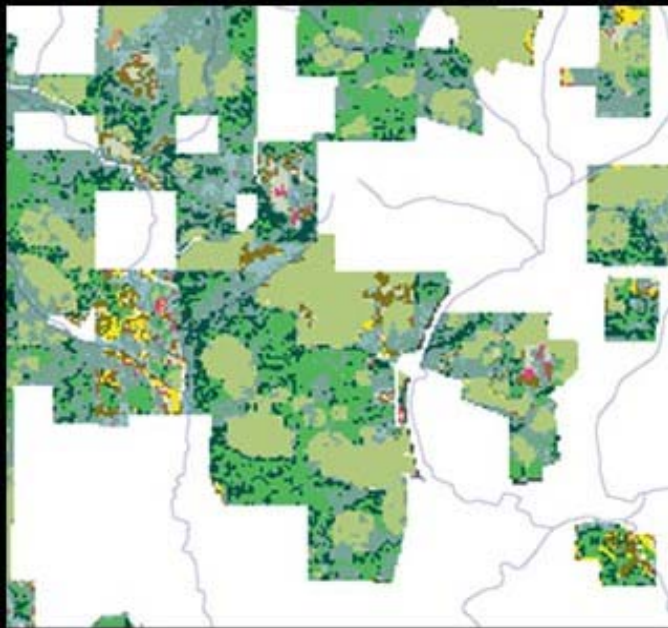
Plan Trend

Differences in vertebrate species by forest management scenarios.

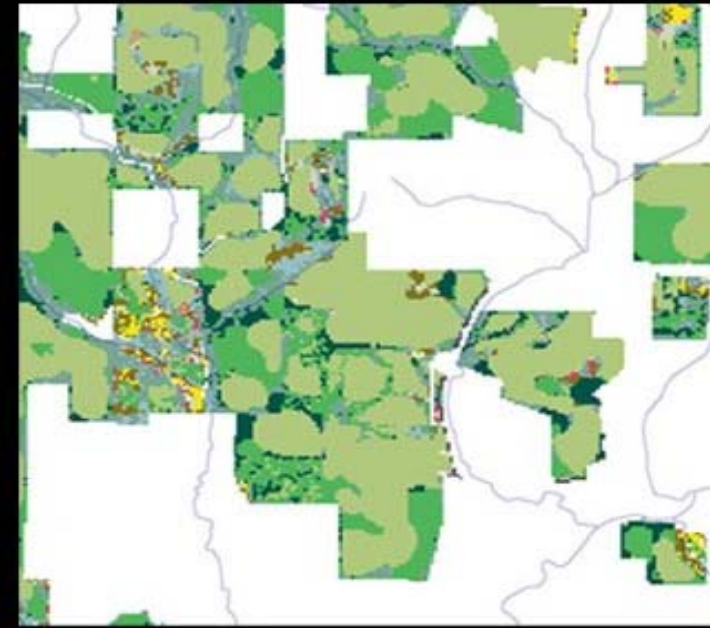


Comparison of Plan Trend and Full Certification; Industrial Ownership

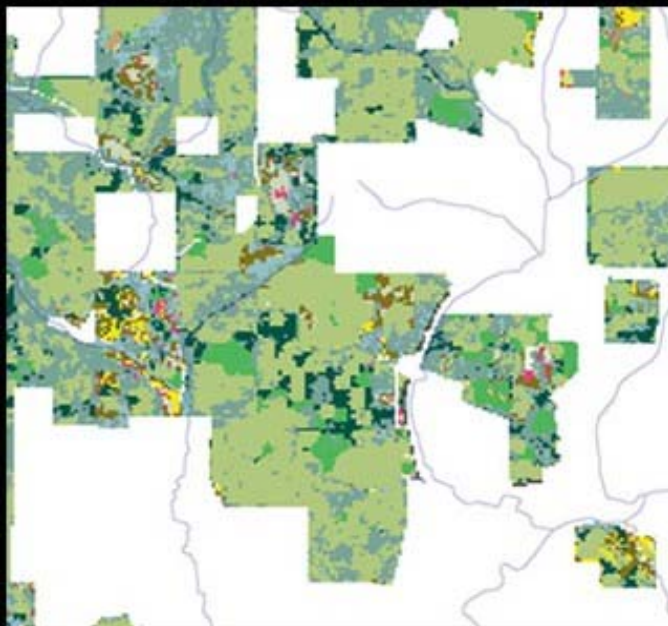
Plan Trend Scenario 2000



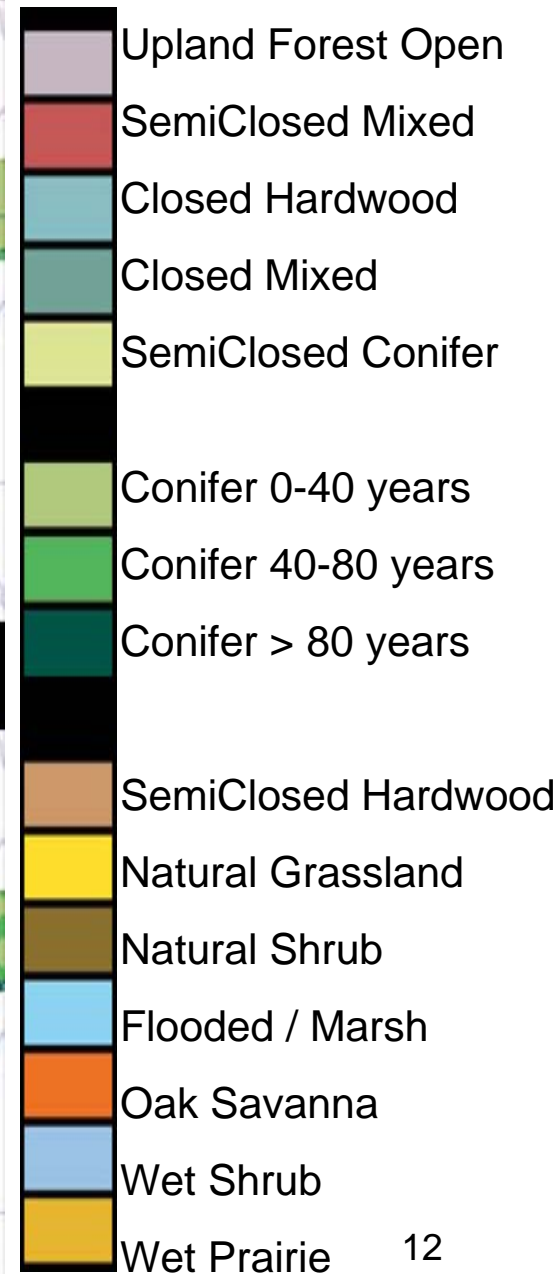
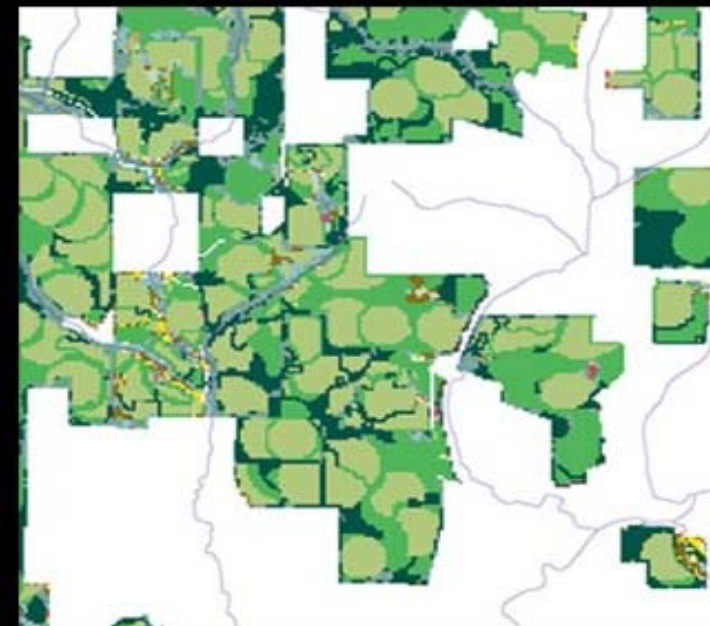
Full Certification Scenario 2000



Plan Trend Scenario 2050



Full Certification Scenario 2050



Phase IV—Present survey database findings to diverse users, including the general public

- Oct/Nov 2003 regional meetings with users/experts
 - Share overall NCSSF-A3 project results
 - Stakeholder input: Do results “match” what they know about forest management and biodiversity?
- Post project findings on the national Sustainable Forestry Partnership (SFP) website
- Develop technical and non-technical publications
- Share results at national and regional professional meetings
- Final report and database for the NCSSF

Questions for You

1. Respondents do not seem aware of the Montreal Criteria and Indicators but they appear to incorporate them into their management strategies. Is this an important finding? What does it imply?
2. Are lessons learned from projections of forest biodiversity management in the Willamette Basin (Phase III) transferable to other regions in the USA?
3. What is the most useful way that data can be presented to your organization or clients?
4. Should data on the SFP website have summary information or also include interactive (Query) formats?
5. Should publications be technical as well as non-technical?