

NCSSF Project A3: Survey the Lessons Learned About Managing Forests for Biodiversity and Sustainability Based on Practical Experiences



NCSSSF Project A3: **Survey the Lessons Learned About Managing Forests for Biodiversity and Sustainability Based on Practical Experiences**

Purpose: Using the framework of biodiversity criteria, indicators, elements and strategies proposed by various sustainable forest management programs, collect and display information on the existence, scope, and methods of different Federal, state, local, and private programs in the U.S. that contribute to biodiversity. The scope includes representative Federal , state, tribal, and private organizations, nationwide.

Proposed Start Date: July 1, 2002

Actual State Date: July 24, 2002

End Date: December 31, 2003

NCSSF Project A3: Survey the Lessons Learned About Managing Forests for Biodiversity and Sustainability Based on Practical Experiences

Synthesize what people know about their successful biodiversity programs. Learn what people have already done, what worked, what didn't.

Determine what indicators are most important for successful biodiversity programs according to users.

Determine the consequences of incremental changes in biodiversity programs.

Explain these findings so that users can understand them.

Products for NCSSF Project A3 Based on Purpose Statement and Recurring Themes

- **Product I:** Key informant Interviews and Data Matrix
- **Product II:** National Survey and Flexible Database
- **Product III:** Indicators of Successful Biodiversity Programs
- **Product IV:** Futures Scenarios showing consequences of incremental changes in biodiversity programs
- **Product V:** Users Workshops

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

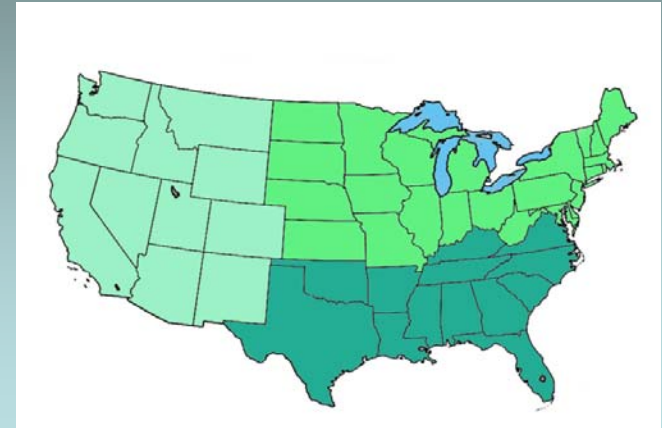
➤ Build Comparative Data Matrix

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



Key informant Interviews and Data Matrix

Procedure:

- Personal or Telephone Interviews with twenty Key Informants from across the U.S. about their working biodiversity programs
- Supporting Documentation, e.g. management plans, laws, regulations, etc
- Certification guidelines vs. indicator documentation matrix
- Creation of Case Studies (ongoing)

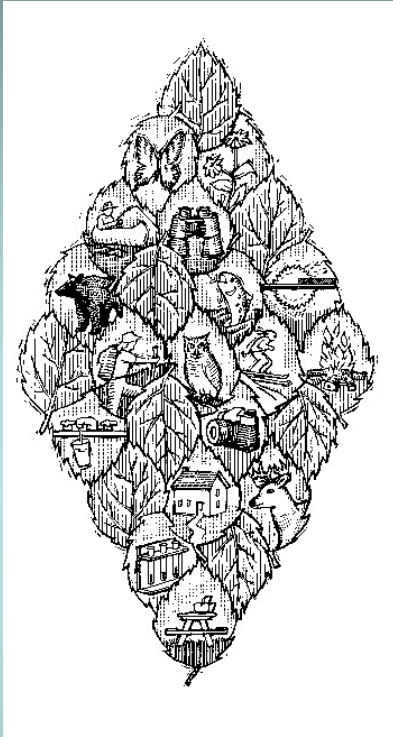
Findings from interviews:

- Most manage for species habitats;
- Many other factors indicate success
- Certification guidelines generally not used
- A “language” to describe biodiversity programs

Outcome location:

- SFP Website
- Publication (PSU leads)

The Forest Biodiversity Survey



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

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 |

The Forest Biodiversity Survey

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

653 survey subsample of 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

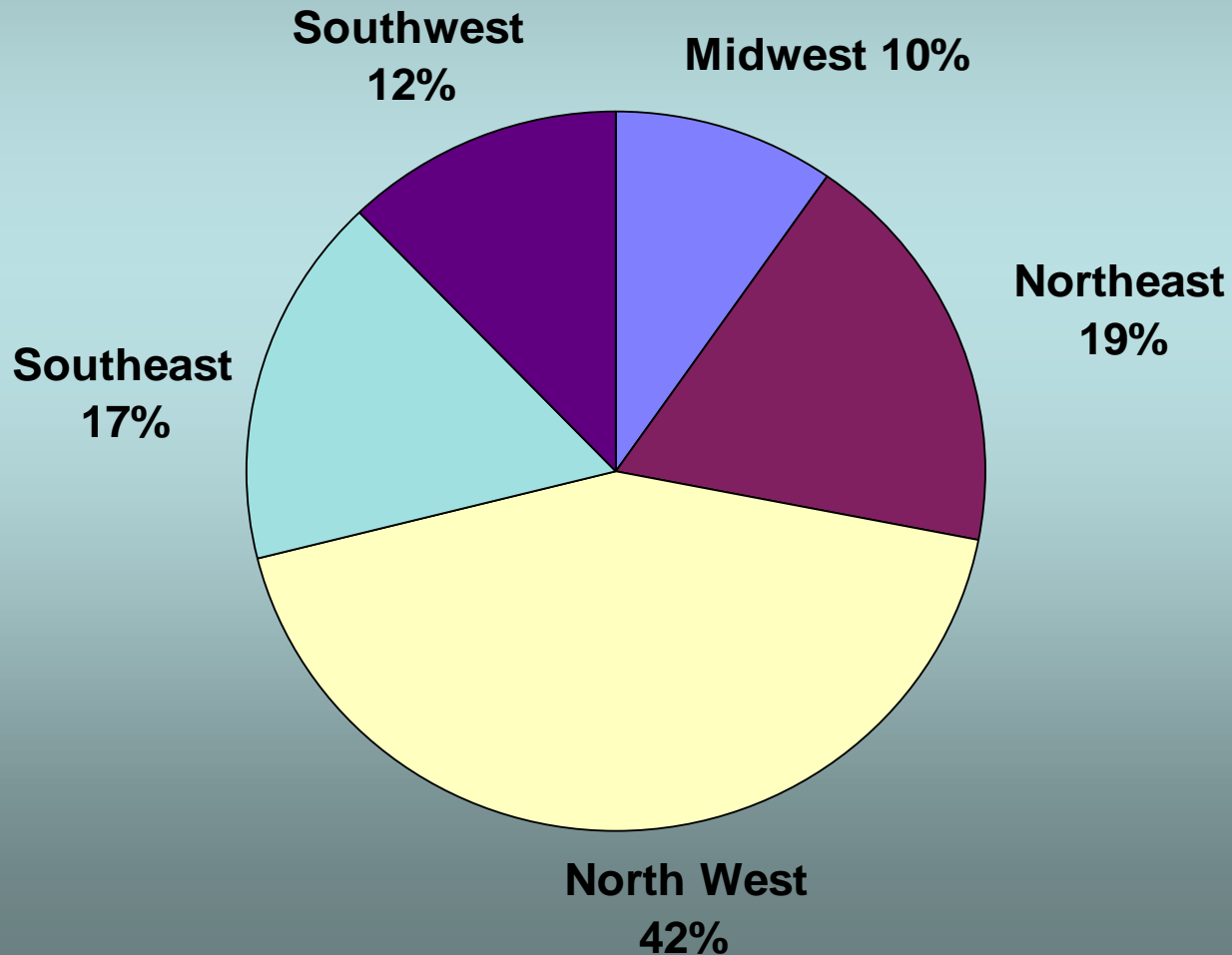
343 in-hand surveys (e-mail, FAX, hard copy, and Internet site)

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

National Findings & Results

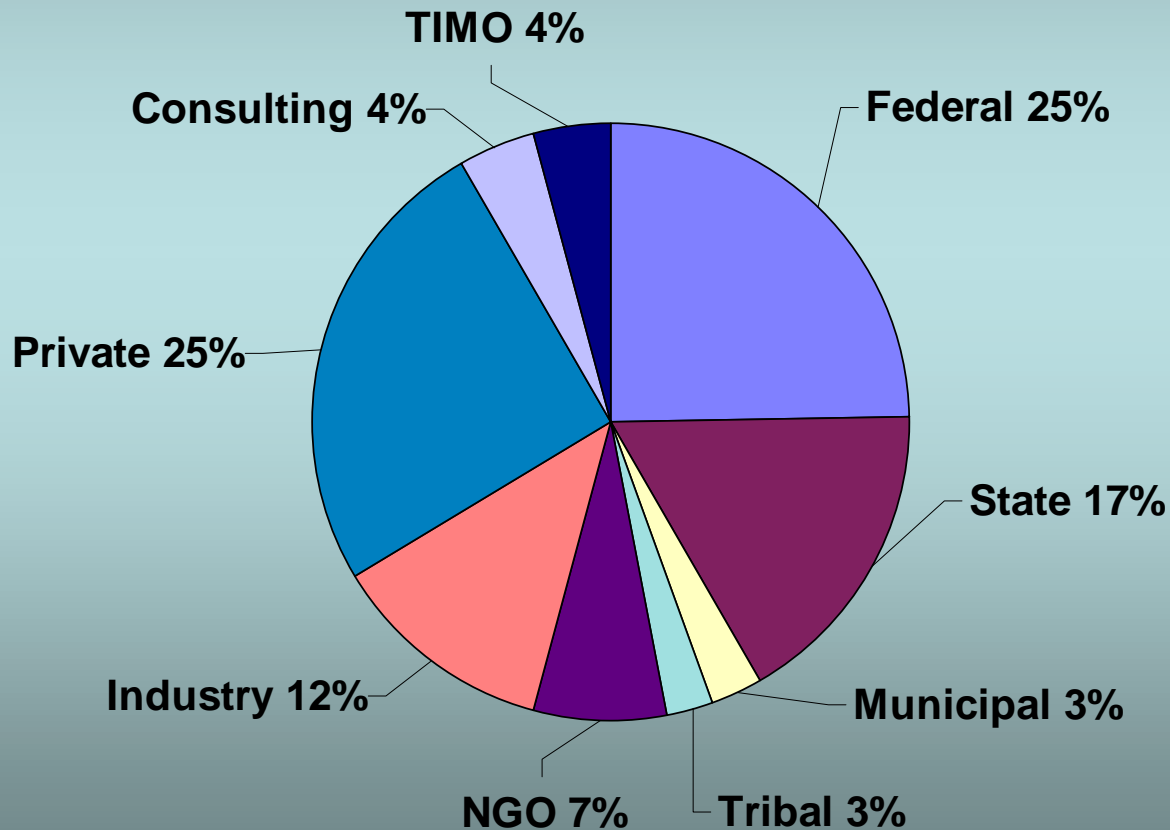
National Forest Biodiversity Survey Results

Responses by Region

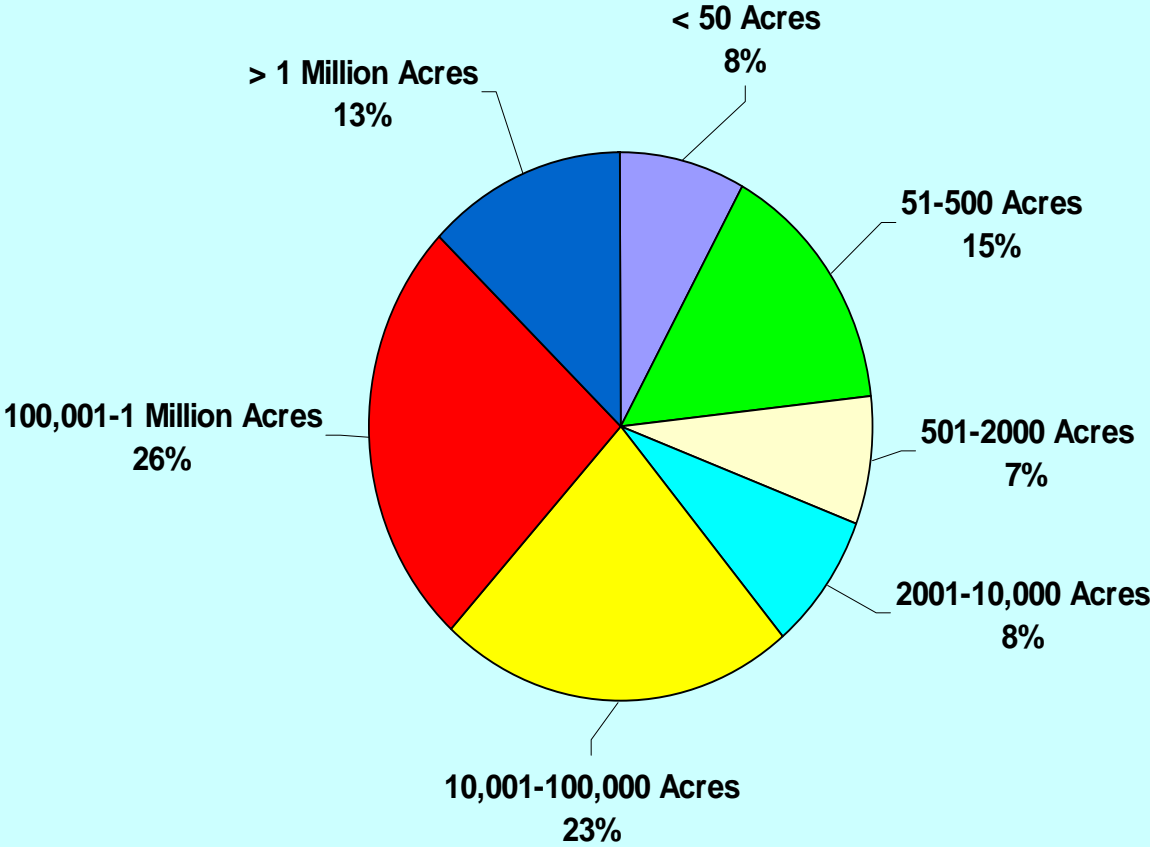


National Forest Biodiversity Survey Results

Landowner-type Responses

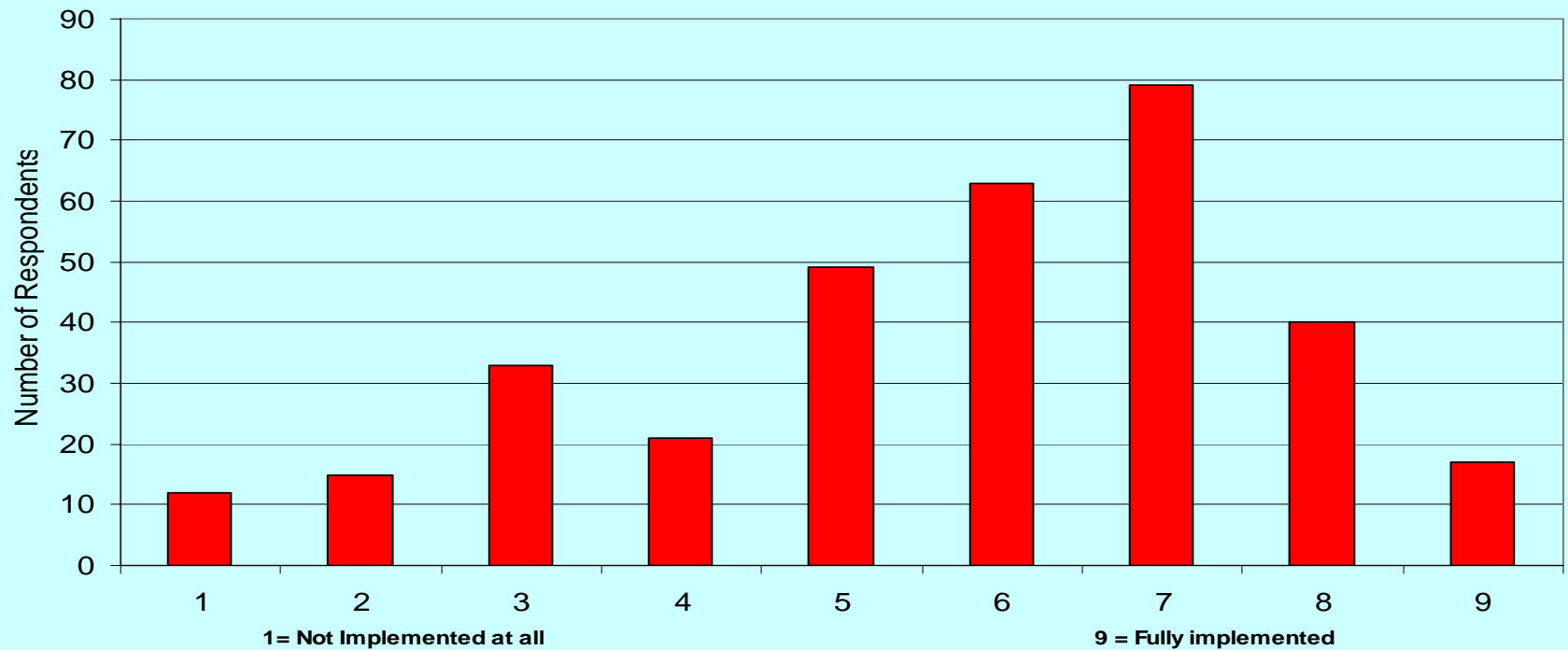


Size Distribution of Respondents



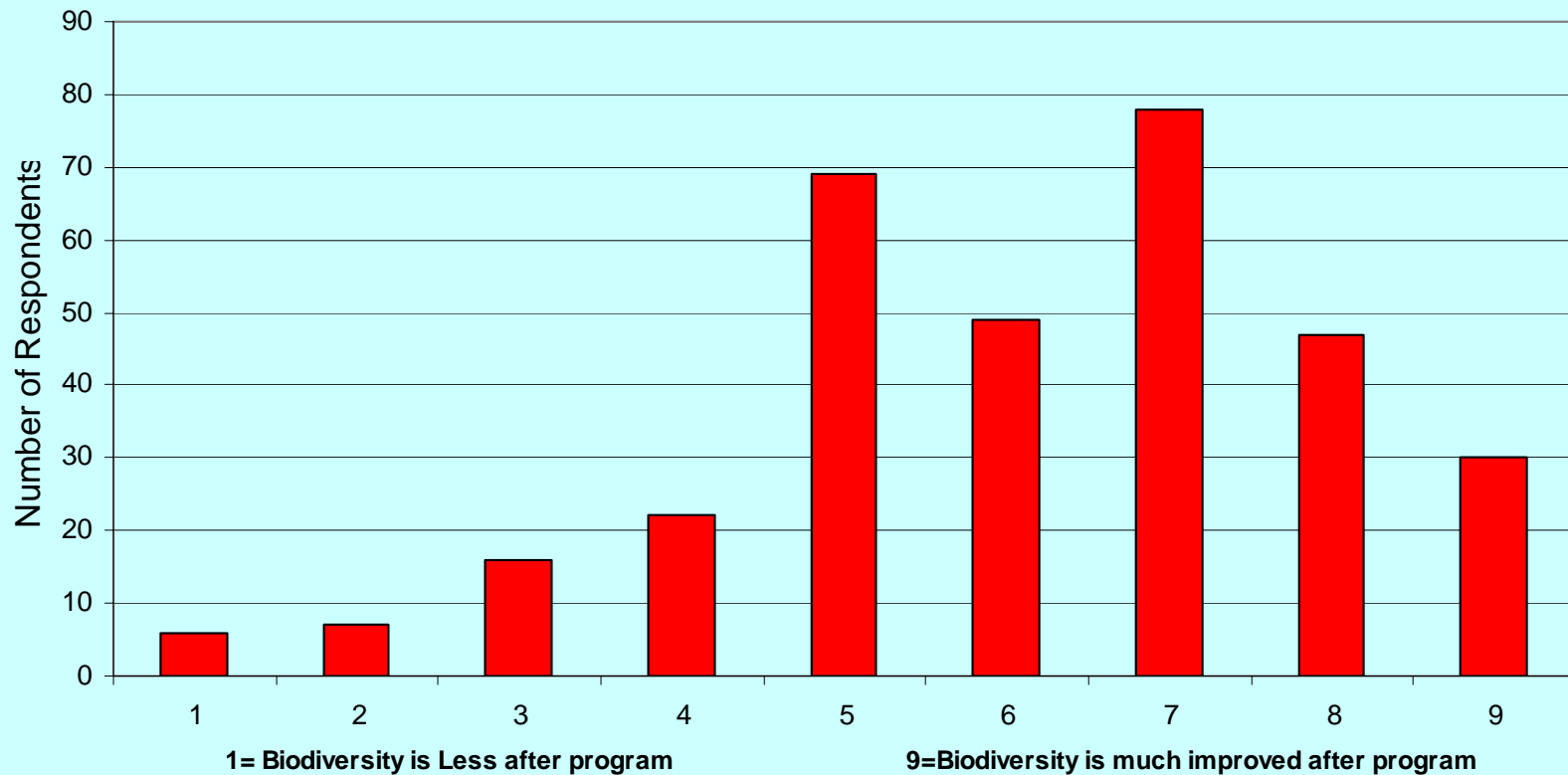
Finding: Sixty percent of respondents feel their program is mostly implemented

Q14: Degree of Biodiversity Program Implementation



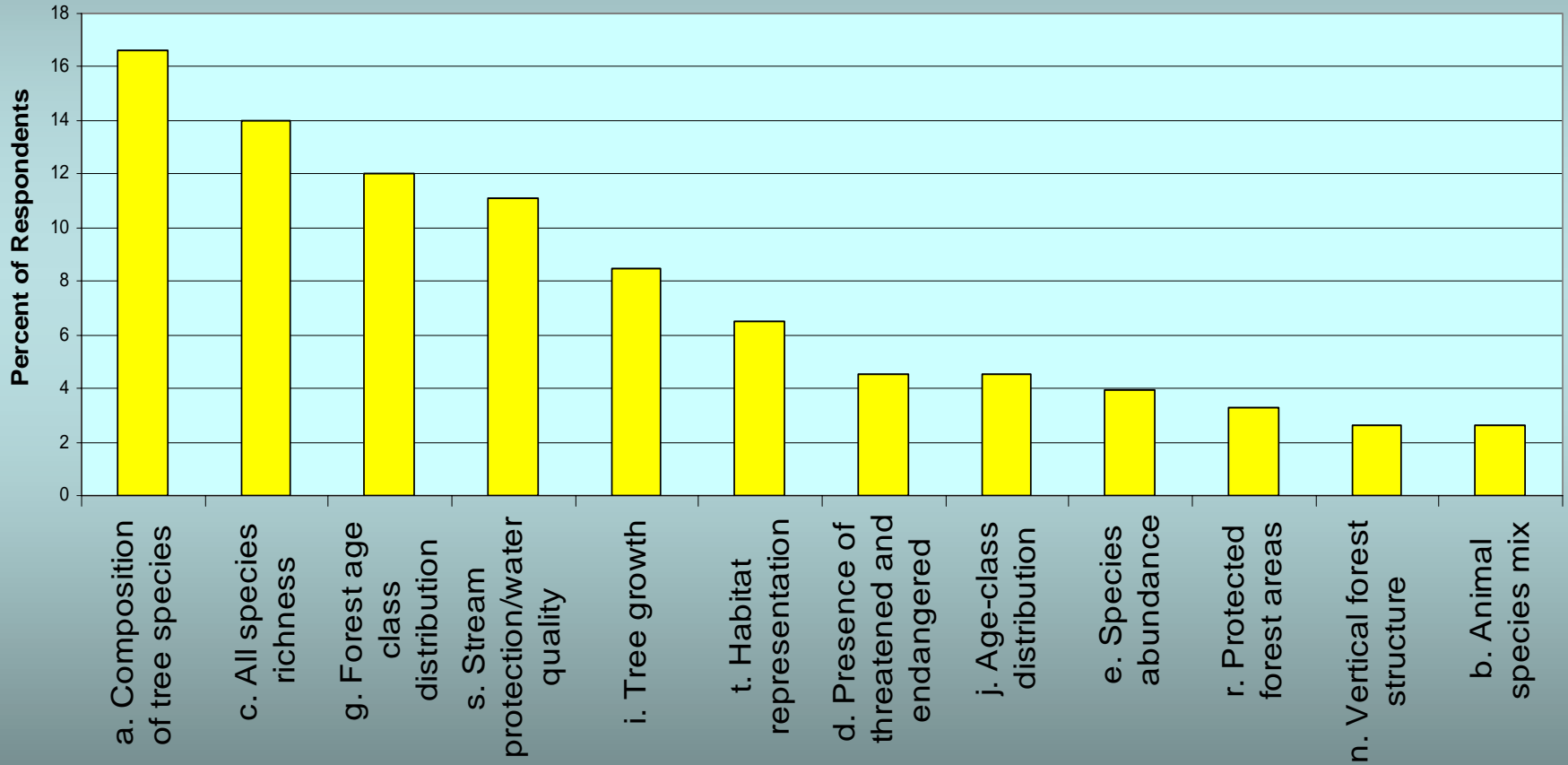
Finding: Nearly two-thirds of respondents believe their biodiversity program is successful

Q15: Perception of Success



Finding: Various indicators of habitat diversity were considered most important for successful programs

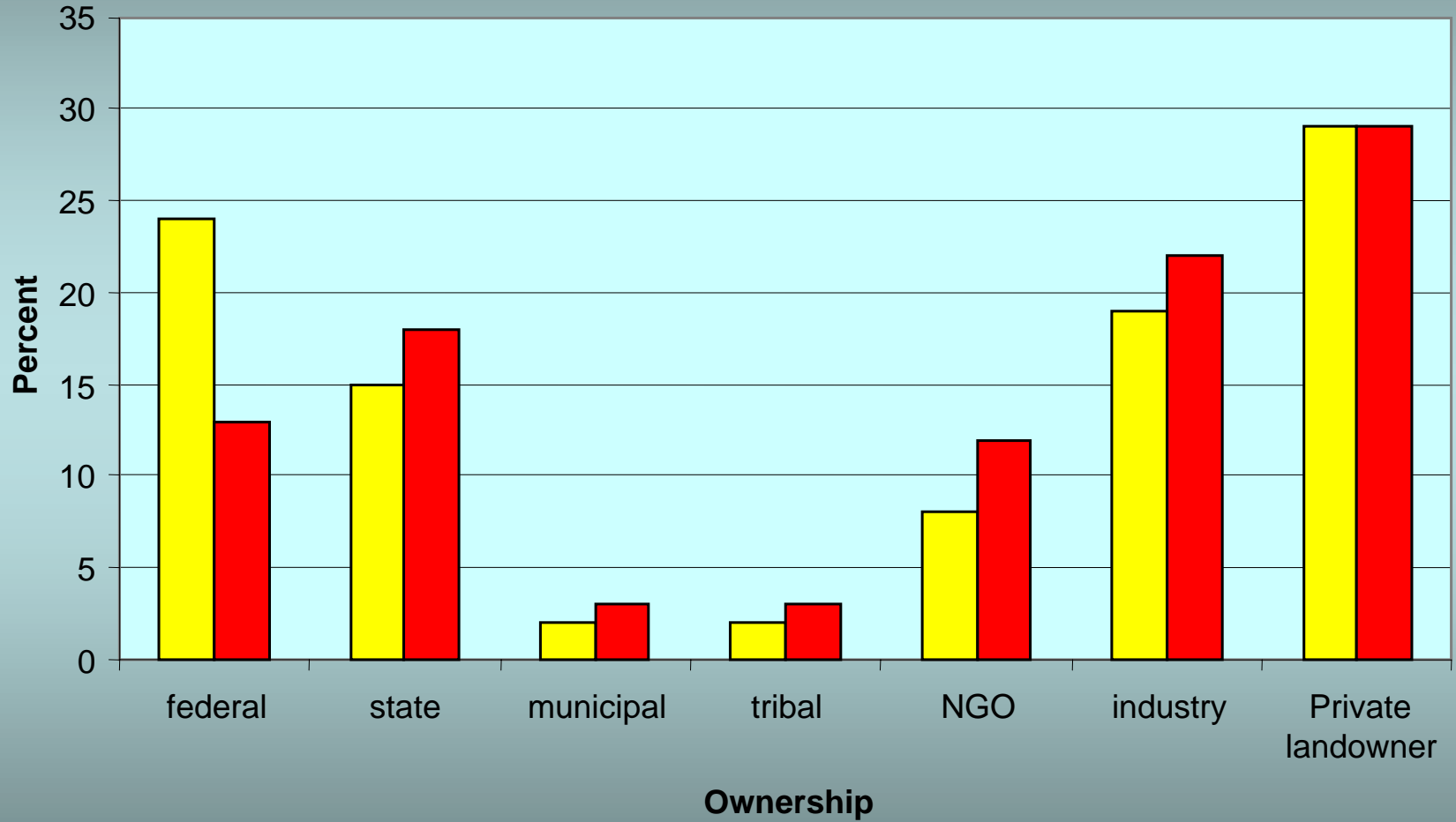
8b: Indicators Used "Most Important"



North Results

Type of ownership

All states
Northern states



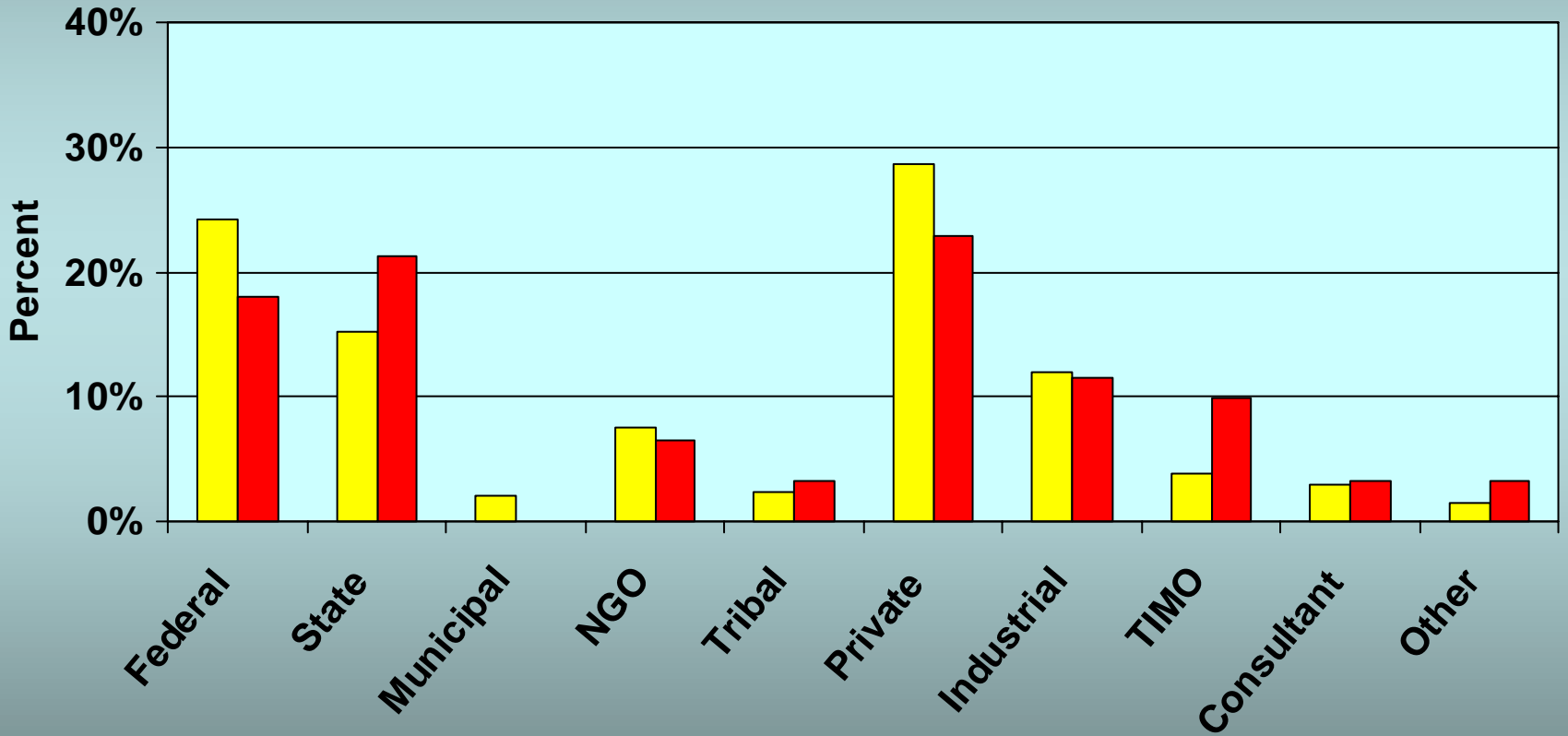
Most important BD indicators

	<u>US</u>	<u>NORTH</u>
	(%)	(%)
➤ Tree species composition	17	20
➤ All species richness	14	9
➤ Forest age-class distribution	12	11
➤ Stream protection/water quality	11	11

South Results

Types of Ownership

All states Southeast

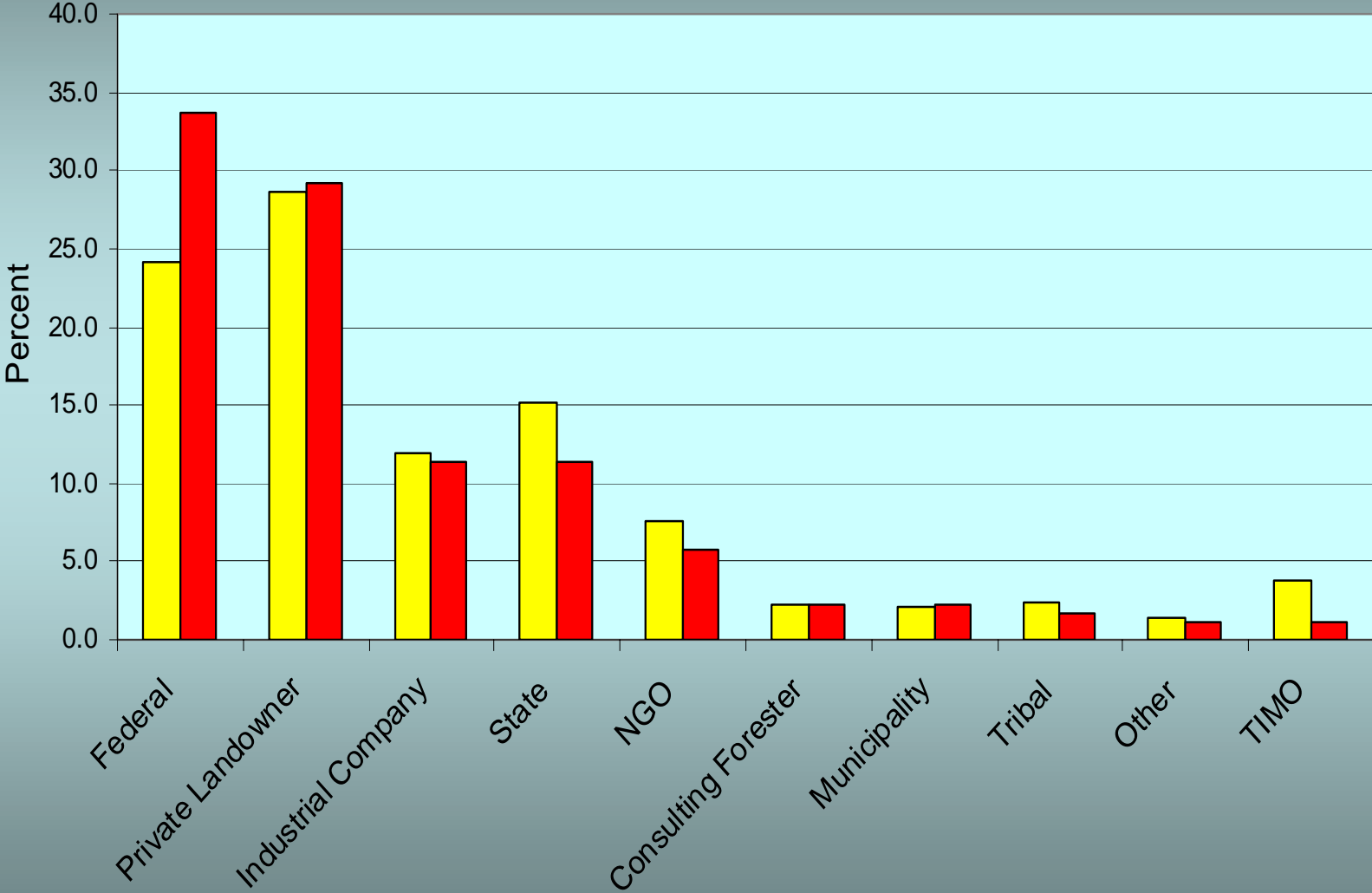


Most important BD indicators

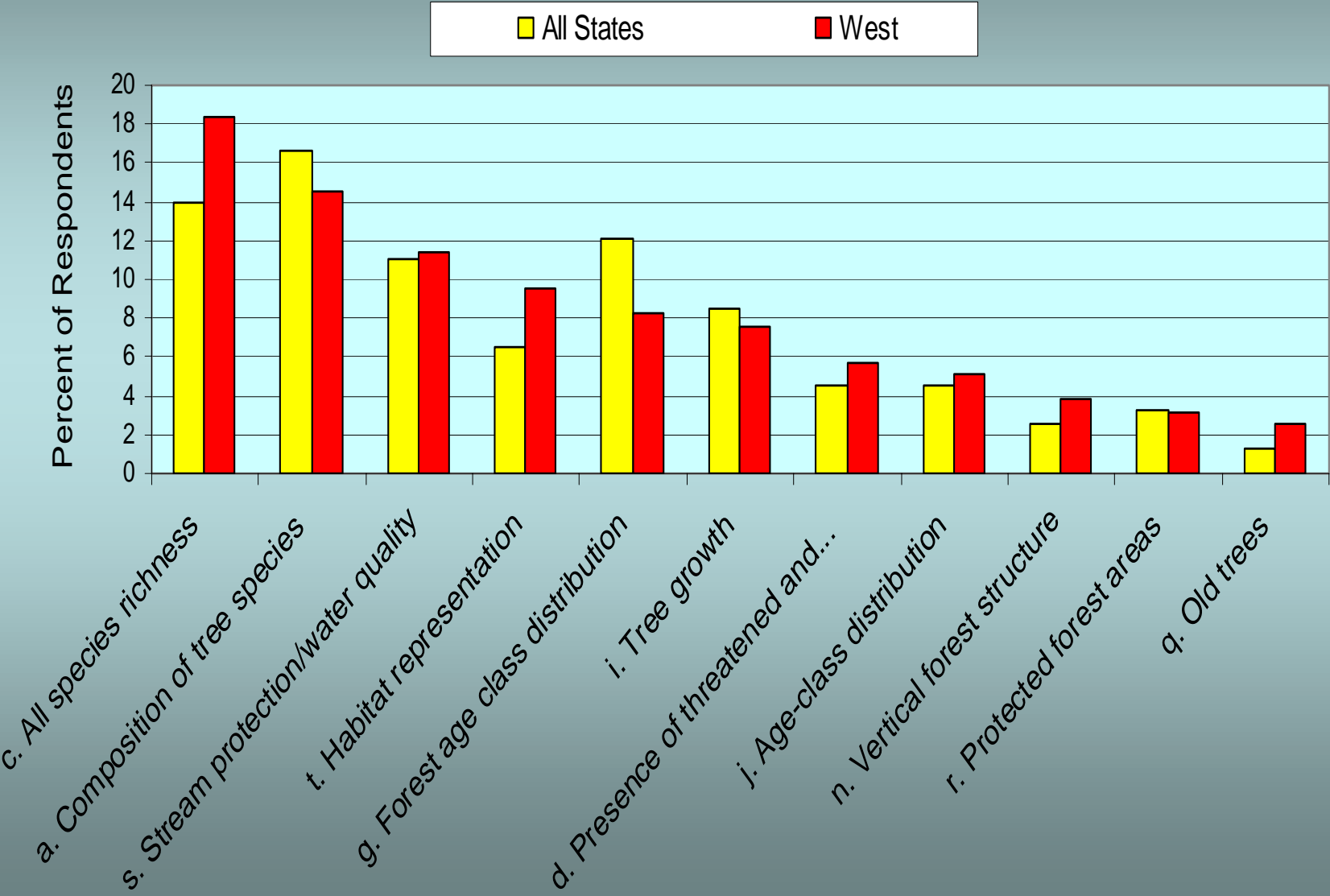
	<u>US</u>	<u>SOUTH</u>
	(%)	(%)
➤ Tree species composition	17	14
➤ All species richness	14	9
➤ Forest age-class distribution	12	25
➤ Stream protection/water quality	11	11

West Results

Types of Ownership



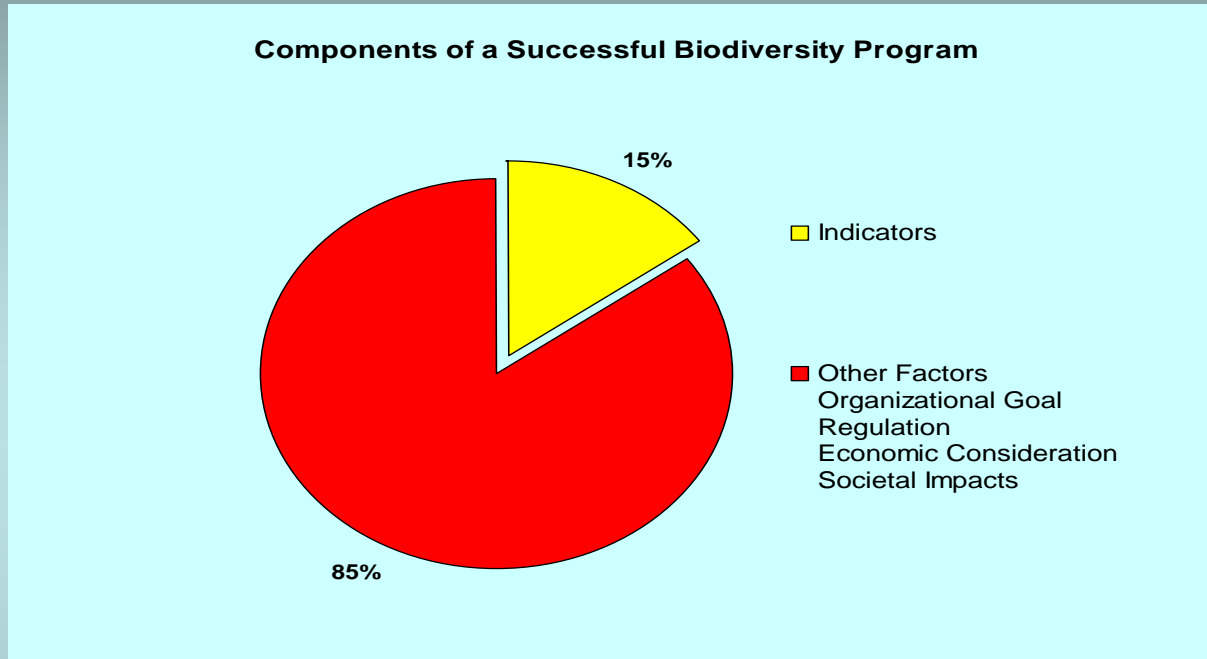
8b. What biological indicator are most important to your program



Most important BD indicators

	<u>US</u>	<u>WEST</u>
	(%)	(%)
➤ Tree species composition	17	18
➤ All species richness	14	15
➤ Forest age class distribution	12	08
➤ Stream protection/water quality	11	11
Habitat representation	06	09

Finding: Biological indicators account for a low percentage of factors that make up successful biological diversity programs. Other factors also queried in the survey account for the rest.

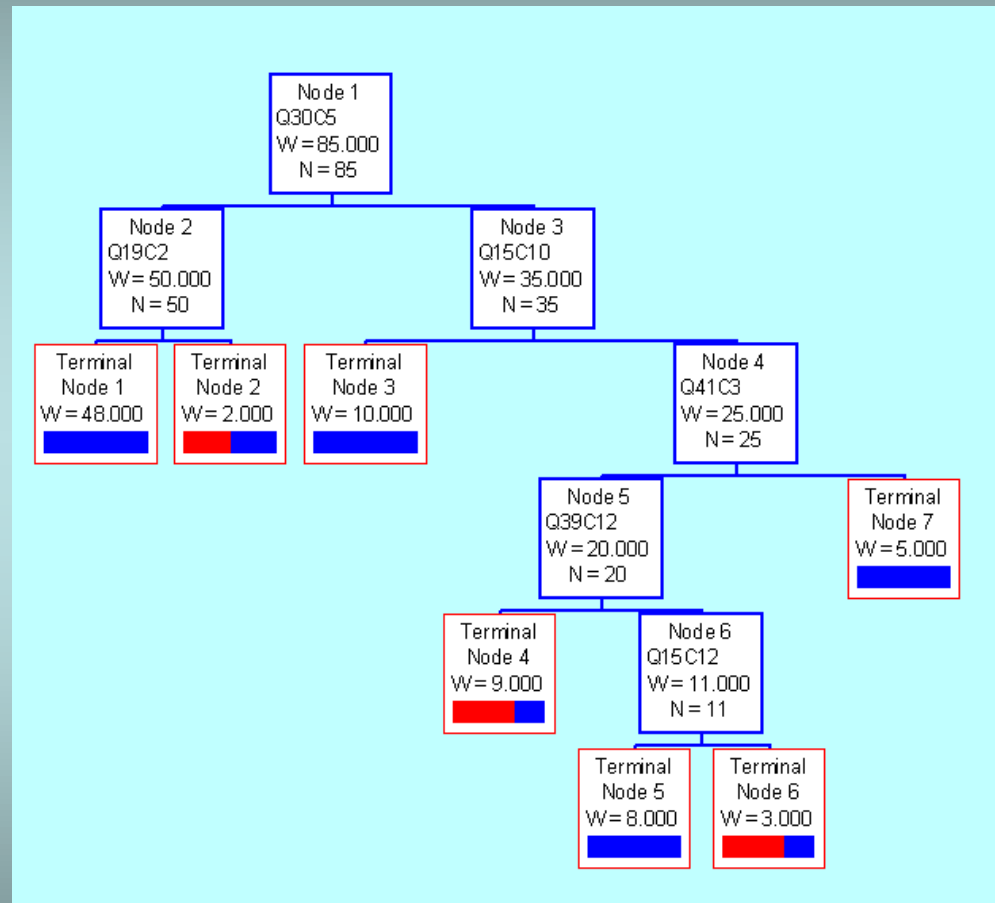


Analyses Underway: Decision tree (OSU leads)
Economic Analysis (OSU Leads)
Social Components (PSU Leads)

Outcome Location: SFP Website

Correlating survey questions and responses with biodiversity management approaches/strategies

Question Group
Economic / Timber Production
Public / Social Input
Current Regulations
Certification and Indicators
Multiple Use
Organizational Mission / Plans
Biological Indicators



What is next?

Ongoing work: Users Workshops—present survey database findings to diverse users

- Oct/Nov 03 Regional meetings with users/experts
Stakeholder input: Do results “match” what is known about forest biodiversity in each region?
- Post project findings on the national Sustainable Forestry Partnership (SFP) web site
- Final report and database for the NCSSF board of directors
- Develop technical and non-technical publications; share results at national and regional professional meetings
- Regional symposium summarizing four NCSSF projects