Collaborative Forest Monitoring in the Southwestern Crown of the Continent

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Southwestern Crown of the Continent Collaborative
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www.swcrown.org

- CFLRP: 2010-2019 (2024 for monitoring)
- 3 Districts/3 Forests
- 10% of funds for multi-party monitoring
- Monitoring Committee
  - Wildlife
  - Vegetation/Fuels
  - Aquatics
  - Socioeconomics
Results at 3 Scales

1. Local communities: Citizen Science
2. SW Crown landscape: Adaptive Management
3. Putting it in context: Regional Workshops
Citizen Science: Stream Monitoring

Measure:
- Streamflow
- Temperature
- Turbidity
- Inverts and fish

Who:
- Students
- Community members
- NGOs
Citizen Science: Rapid Forest Assessment

Track changes in forest vegetation through time

Supporting Curriculum

• **Ecology**

• **Statistics**

• **Graphing**

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**Questions for reflection/discussion**

- What is the dominant tree species by number?
- What is the dominant species by basal area?
- How would you describe/illustrate this forest stand based on the plot data you have collected?
- What, if anything, can you speculate about the history of this stand based on the tree data?
- Are all the plots identical? Why or why not? Is this important?

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**Horizontal Cover on Summer-use Plots**

<table>
<thead>
<tr>
<th>Stem &amp; Leaf Plot of Variable</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>0</td>
</tr>
<tr>
<td>Lower Hinge</td>
<td>48</td>
</tr>
<tr>
<td>Median</td>
<td>68</td>
</tr>
<tr>
<td>Upper Hinge</td>
<td>85</td>
</tr>
<tr>
<td>Maximum</td>
<td>100</td>
</tr>
</tbody>
</table>

Would this area provide habitat for lynx?

Is there much variability among the plots?

Do you see any relationships between cover and tree size, density, or basal area?
Multi-party Landscape Carnivore Monitoring

- Distribution & abundance
- Repeatable, scientifically-supported methodology with management implications
- Methods: Winter snow-tracking and multi-species bait stations
Carnivore Monitoring Results 2012-2015

**Wolverine:**
- 47/76 grid cells
- 22 individuals (11m, 11f)

**Lynx:**
- 41/76 grid cells
- 26 individuals (19m, 7f)

**Fisher:** None!

**Initial Partners:**
- Swan Valley Connections
- Blackfoot Challenge
- Lolo National Forest
- Flathead National Forest
- Helena National Forest
- University of Montana
- The Wilderness Society

**New Partners:**
- BLM
- The Nature Conservancy
- Wolverine Foundation
Social and Economic Monitoring
(U of MT and USFS)

1. Fire Manager Surveys: Pre and Post CFLRP
   – Treating enough? Effective treatments? Reducing costs?

2. Contract capture: Every 3 years
   – Who is getting the work? Local?

3. Social Survey: Community perceptions
   – What is important to locals? How do they want to be involved? Are treatments effective?
Annual Adaptive Management Workshop

• Successes and challenges encountered
• What do results mean for managers?
  • How will resource specialists use info?
• Should treatments be changed?
• Should monitoring be altered?
• Presentations available at: www.swcrown.org/monitoring
Putting Work in Regional Context
Meso-Carnivore Monitoring Workshop

Supported and coordinated by:
How to ensure collaborative long-term monitoring informs future management?

- Buy-in from line officers
- FS resource specialists at table and on docs
- Personal champions: ensure value of project is passed down
- Discuss results and recommendations with staff and line officers
- Scientific rigor and publications
- Proper data storage and documentation
Collaborative Monitoring: Lessons Learned

- Check egos at door, be flexible
- Everyone on same page about goals
- Honest about time commitment and capacity
- Get collaborative work written into position descriptions and programs of work
- Volunteer for specific tasks, let other tasks go
Questions or Comments?