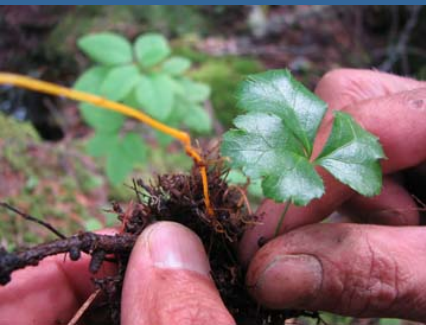


# Forests, Fire, and Culture: Silvicultural & Fire Treatments to Enhance Nontimber Forest Products

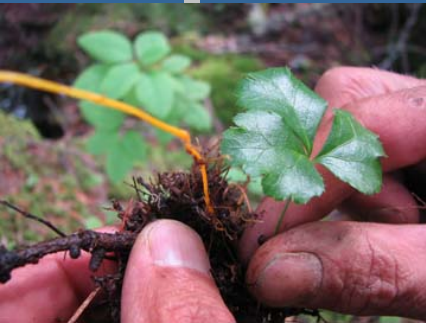
Marla R. Emery, Ph.D.  
USFS Northern Research Station



# NTFPs = Cultural resources

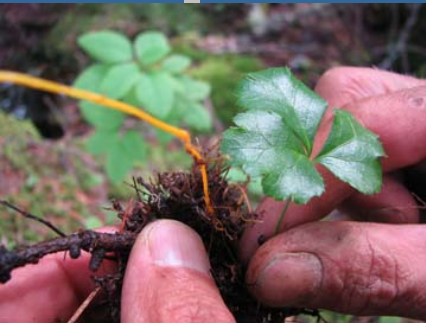
“not much less necessary to the existence of the Indians than the atmosphere they breathe(d).”

*U.S. vs. Winans* (198 U.S. 371, 381; 1905)



# Culture/Economy

- Significant economic resources
  - Broader definition of economic
  - Economic scales
- **Essential cultural resources**
  - **Identity**
  - **Practices**





# Sensitive resources

- Food
- Artisanal & utilitarian

---

- Medicinal
- Spiritual & ceremonial

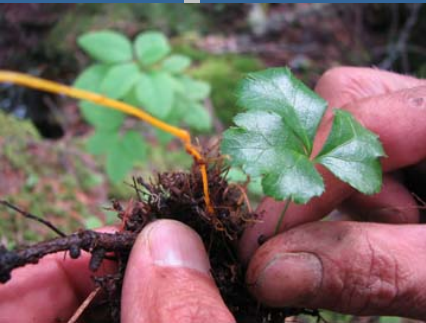
**Public  
Culture**

**Sacred &  
Proprietary  
Culture**



# NTFPs @ every phase

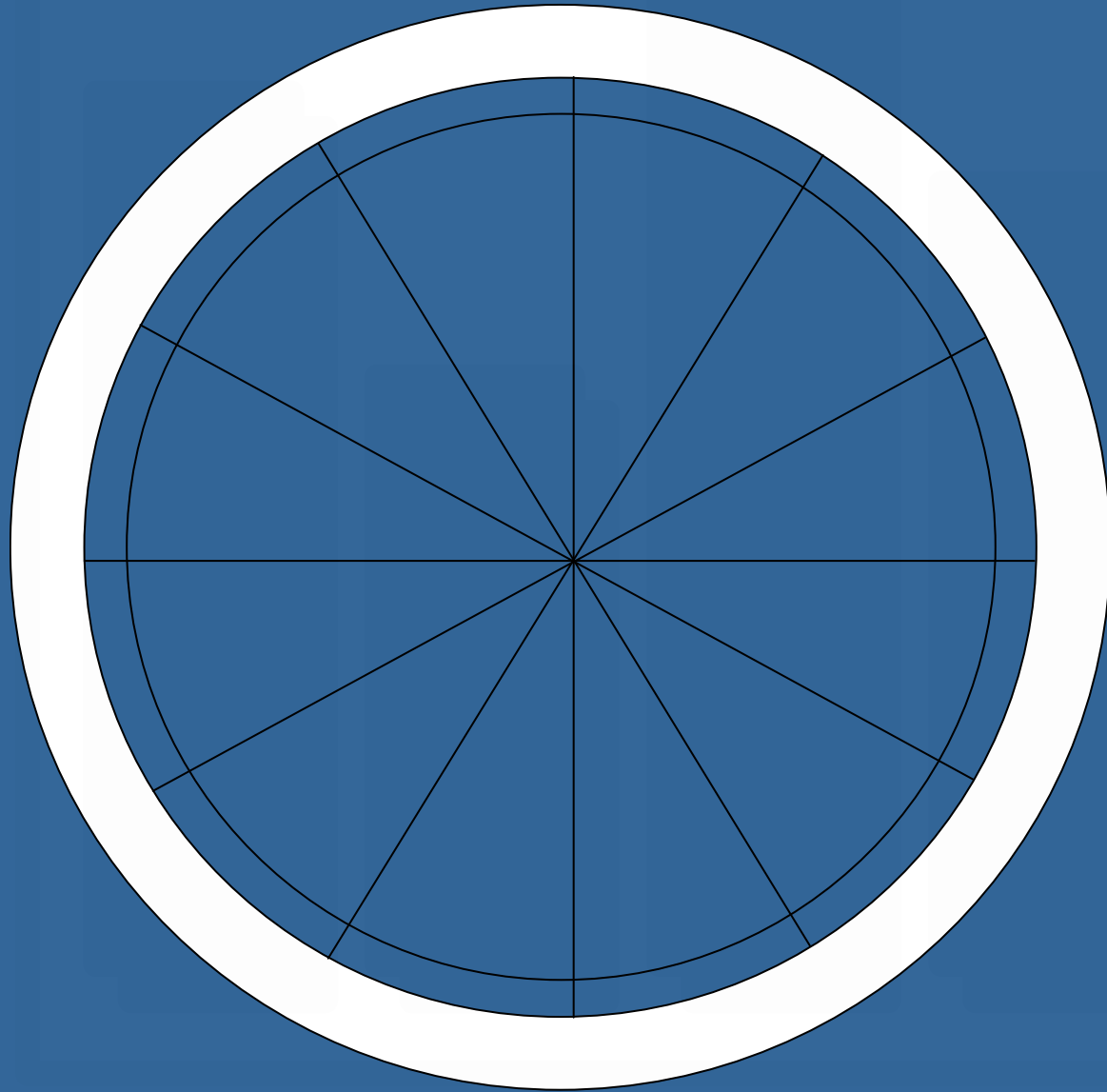
- Who
- What
- When
- Where
- Why
- How (Not necessarily in that order)



# What

- Species
- Parts
- Characteristics



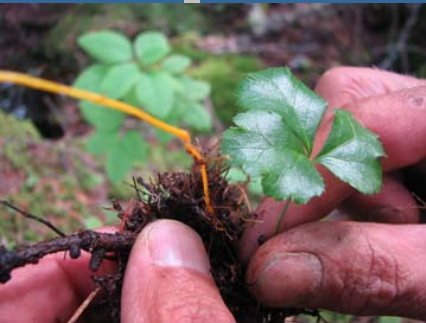






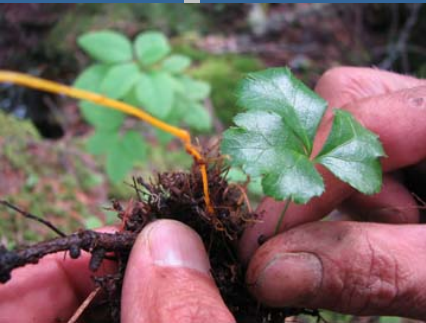
# Where

- Your expertise & observations
- Traditional ecological knowledge
- Scientific & amateur literature
- Amazing what's on the internet!

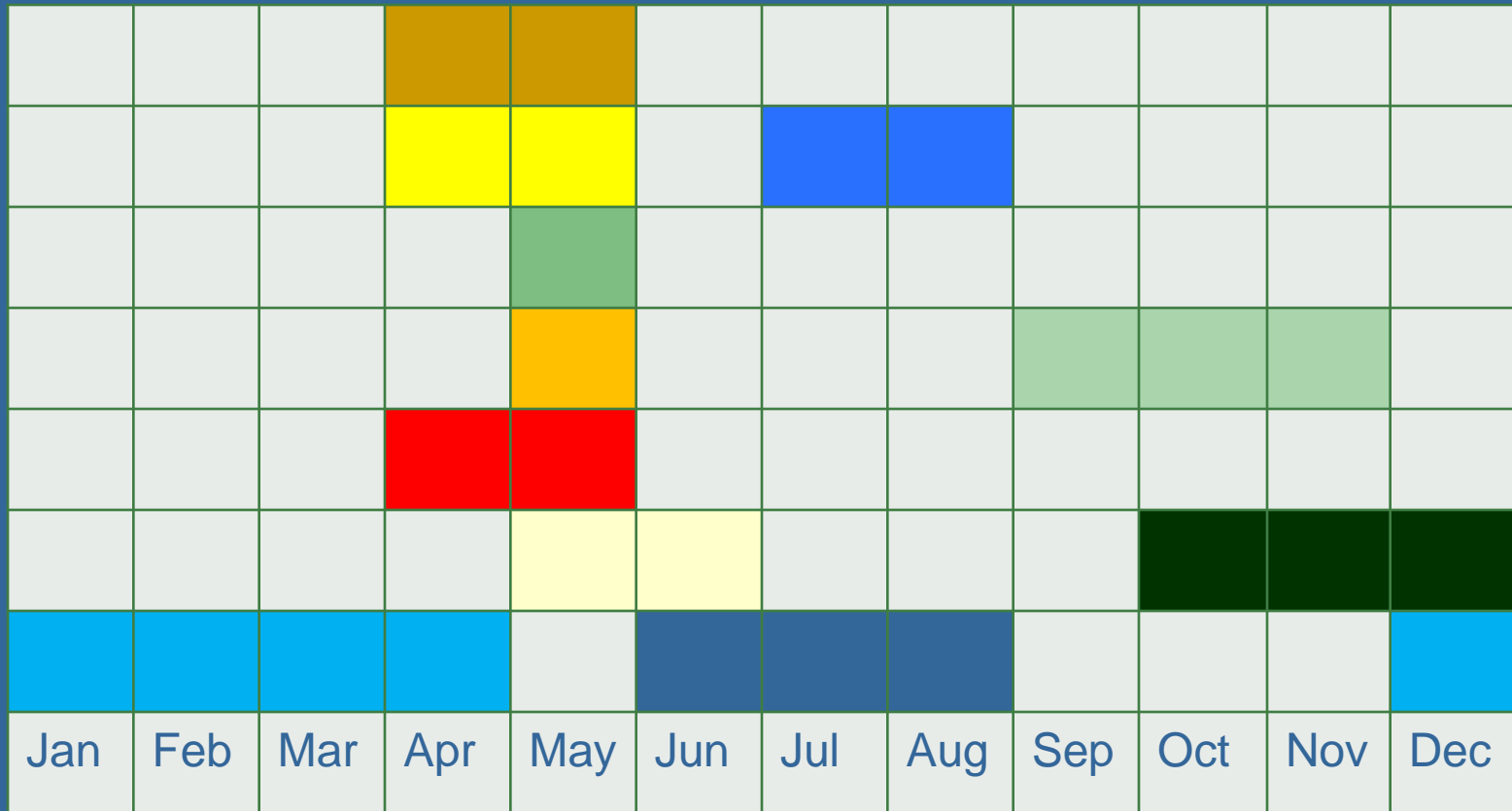


# When

- Annually
- Stand development & management phase



# Annually



Basswood bark

Birch bark

Blueberries

Boughs

Cedar greens

Fiddleheads

Goldthread

Morels

Princess Pine

Red willow bark

# Stage of Stand Development

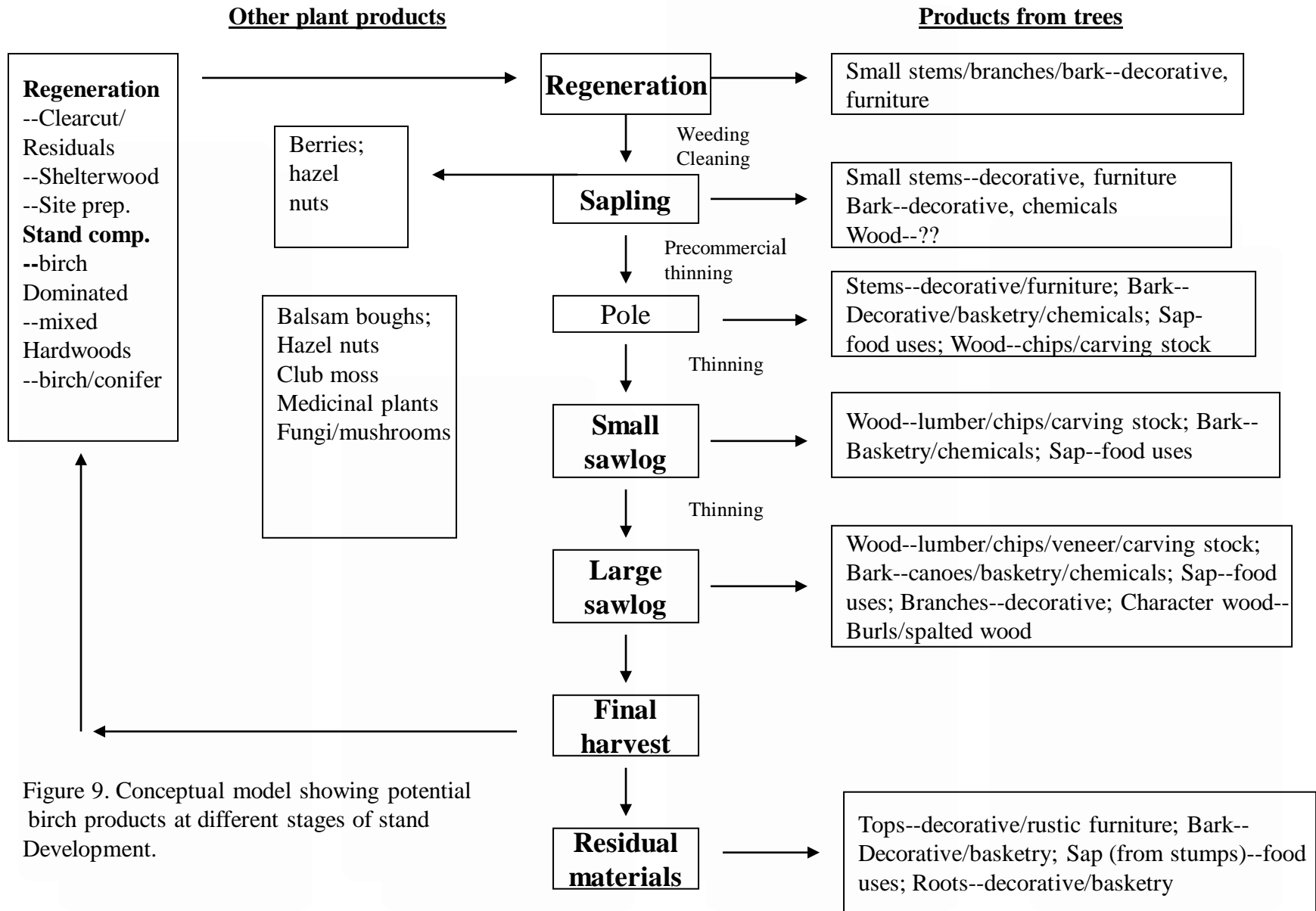


Figure 9. Conceptual model showing potential birch products at different stages of stand Development.



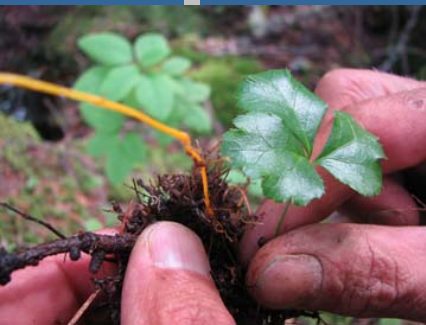
# How

- Salvage

- What's on the site?
- When should it be harvested?
- Who uses it?
- How do you let them know?

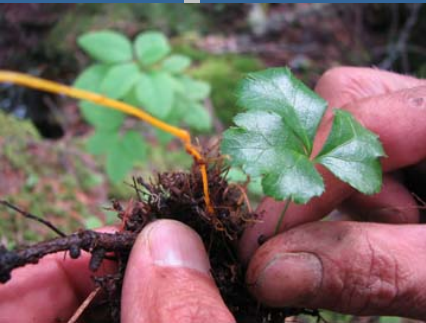
*"No birch tree should leave the forest unpeeled."*

John Zasada



# How

- Proactive management (short list)
  - Your expertise
  - Traditional ecological knowledge
  - Literature
  - Experimentation





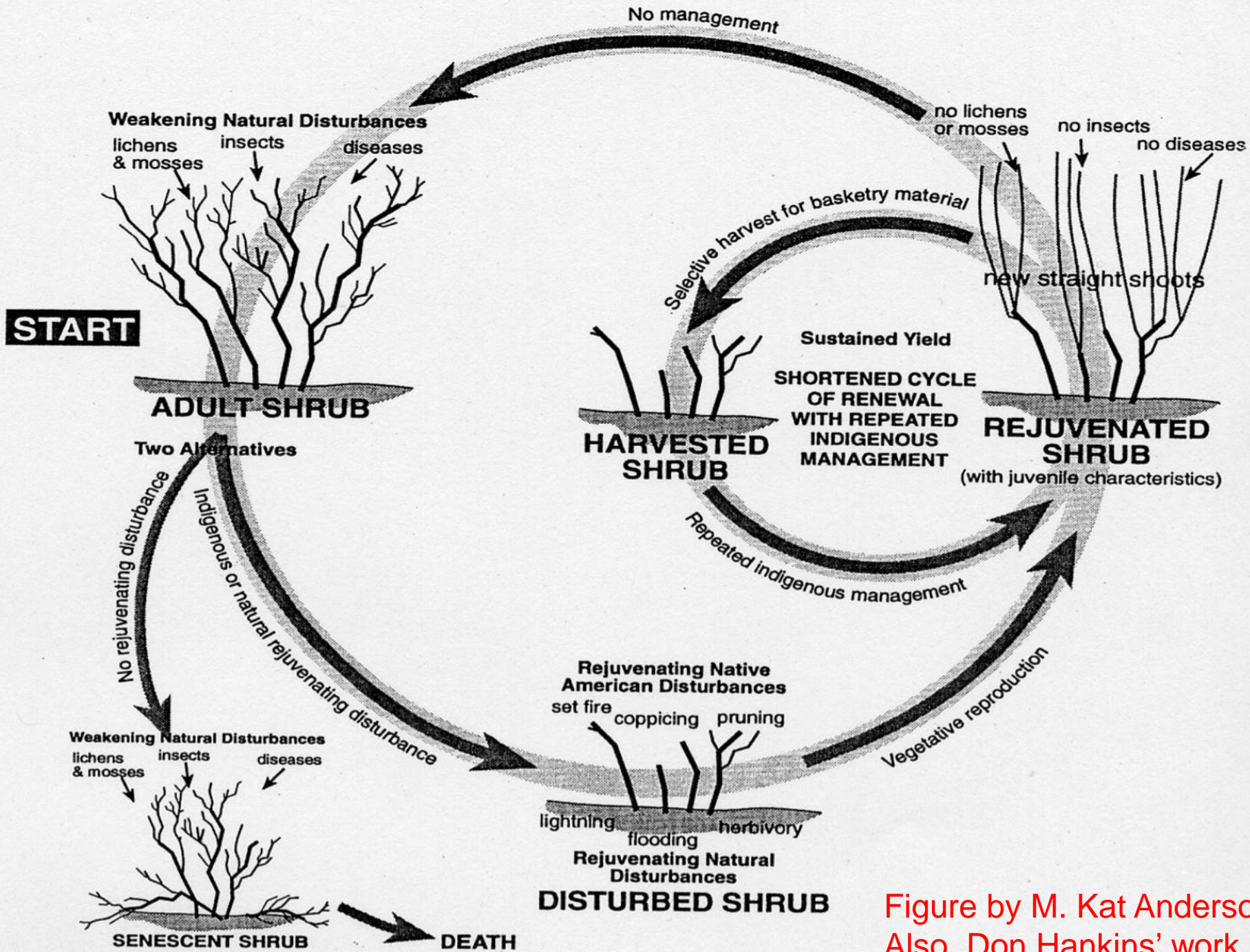


Figure by M. Kat Anderson  
Also, Don Hankins' work

Topic for tomorrow

Sustainability  
Access  
Equity











Guess who?





# Thank You!

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