

A forest manager wearing a red hard hat and a grey jacket is standing in a lush green forest, looking at a clipboard. The forest is filled with tall trees and dense undergrowth, including many ferns. The scene is captured in a natural, slightly overcast light.

McDonald & Dunn Forest Management Planning Process

Spring 2022 – End of 2023

OSU College of Forestry
McDonald-Dunn Research Forest Faculty Planning Committee Meeting #15
316 Peavy Forest Science Center or Zoom ([Join Zoom Meeting](#))
17 October 2023, noon-2pm

Agenda

Meeting Purpose:

- Share information on recent and ongoing writing and modeling efforts
- Make decisions on future writing efforts

Start Time	Activity
noon	Review where we've been and where we're going
12:15pm	Recap the biodiversity modeling process
12:20pm	Discuss evaluation of metrics to be used to assess tradeoffs among land allocation scenarios
12:45pm	Discuss the writing of various sections of the new plan Recap work previously done by technical workgroups Decide what work might be tackled by same/different workgroups
1:45pm	Next steps
2:00pm	Adjourn



MCDONALD-DUNN RESEARCH FOREST PLANNING PROCESS



MCDONALD-DUNN RESEARCH FOREST PLANNING PROCESS



The OSU College of Forestry is developing a new management plan for the McDonald and Dunn Research Forests, which is anticipated to be ready for implementation in 2024. This new plan will determine how the forests provide opportunities for teaching, research and outreach efforts of the College of Forestry. The new research forest plan will reflect the college's diverse values, and will position the McDonald-Dunn Research Forest to be a model example of multiple value forest management. Management decisions and activities on the McDonald-Dunn Research Forest will be driven by College of Forestry research agendas, education and demonstration opportunities, and considerations of an inclusive balance of forest uses and values.

The process of developing the new management plan will involve opportunities for public input, and two committees working in tandem from spring 2022 through fall 2023.

- Public input opportunities include three Community Listening Sessions, a [webform](#) through which written comments can be provided, and an [email](#) to which written questions can be sent.
- Two committees will assist in the development of the new plan: an external Stakeholder Advisory Committee (SAC) and College of Forestry Faculty Planning Committee (FPC). Comments submitted through the webform will be forwarded to these committees.

Upcoming Meetings & Events:

- October 17, 12:00 - 2:00 - FPC meeting ([agenda](#))
Zoom link: <https://oregonstate.zoom.us/j/96772313273?pwd=TzJGT3FpYlZORm1ac2FzMjMrMGNrdz09>
- October 31, 12:00 - 2:00 - FPC meeting
Zoom link: <https://oregonstate.zoom.us/j/96772313273?pwd=TzJGT3FpYlZORm1ac2FzMjMrMGNrdz09>
- November 14, 12:00 - 2:00 - FPC meeting
Zoom link: <https://oregonstate.zoom.us/j/96772313273?pwd=TzJGT3FpYlZORm1ac2FzMjMrMGNrdz09>
- November 28, 12:00 - 2:00 - FPC meeting
Zoom link: <https://oregonstate.zoom.us/j/96772313273?pwd=TzJGT3FpYlZORm1ac2FzMjMrMGNrdz09>
- December 12, 12:00 - 2:00 - FPC meeting
Zoom link: <https://oregonstate.zoom.us/j/96772313273?pwd=TzJGT3FpYlZORm1ac2FzMjMrMGNrdz09>

Past Meetings & Events:

- June 14, 2022, SAC and FPC Joint Kickoff Meeting ([agenda](#), [video](#), [meeting summary](#))
- Aug 30, 2022, SAC Meeting ([agenda](#), [presentation](#), [meeting summary](#))
- Aug. 31, 2022, Community Listening Session ([agenda](#), [presentation](#), [meeting summary](#))
- Sept. 16, 2022, Faculty Planning Committee Meeting ([agenda](#), [presentation](#), [meeting summary](#))
- Sept. 20, 2022, Stakeholder Advisory Committee Meeting ([agenda](#), [presentation](#), [video recording](#), [meeting summary](#))
- Oct. 11, 2022, Faculty Planning Committee Meeting ([agenda](#), [presentation](#), [video recording](#), [meeting summary](#))
- Oct. 25, 2022, Faculty Planning Committee Meeting ([agenda](#), [presentation](#), [video recording](#), [meeting summary](#))
- Nov. 7, 2022, Community Listening Session ([agenda](#), [presentation](#), [video recording](#), [meeting summary](#))
- Nov. 22, 2022, Faculty Planning Committee Meeting ([agenda](#), [presentation](#), [video recording](#), [meeting summary](#))
- Dec. 5, 2022, Stakeholder Advisory Committee ([agenda](#), [presentation](#), [video recording](#), [meeting summary](#))
- Dec. 6, 2022, Faculty Planning Committee Meeting ([agenda](#), [presentation](#), [video recording](#), [meeting summary](#))- Remarks made by an individual during the Dec 6 Faculty Planning Committee meeting do not reflect the values of the university or the College of Forestry, or our shared commitment to respectful discussion and engagement. The College appreciates all input being provided in planning the future of the McDonald-Dunn Research Forests and is committed to listening to and considering all perspectives with respect. An apology for these remarks was made during the Stakeholder Advisory Committee meeting on Dec 13.
- Dec. 13, 2022, Stakeholder Advisory Committee Meeting ([agenda](#), [video recording](#), [meeting summary](#))
- Dec. 20, 2022, Faculty Planning Committee Meeting ([agenda](#), [presentation](#), [video recording](#), [meeting summary](#))
- Jan. 18, 2023, Stakeholder Advisory Committee ([agenda](#), [presentation](#), [video recording](#), [meeting summary](#))
- Jan. 23, 2023, Faculty Planning Committee Meeting ([agenda](#), [presentation](#), [video recording](#), [meeting summary](#))
- Feb. 6, 2023, Faculty Planning Committee Meeting ([agenda](#), [presentation](#), [video recording](#), [meeting summary](#))
- Feb. 20, 2023, Faculty Planning Committee Meeting ([agenda](#), [presentation](#), [video recording](#), [meeting summary](#))
- Feb. 25, 2023, SAC and FPC Joint Field Tour
- Mar. 1, 2023, Stakeholder Advisory Committee Meeting ([agenda](#), [presentation](#), [video recording](#), [meeting summary](#))
- Mar. 6, 2023, Faculty Planning Committee Meeting ([agenda](#), [presentation](#), [video recording](#), [meeting summary](#))
- Mar. 20, 2023, Faculty Planning Committee Meeting ([agenda](#), [presentation](#), [video recording](#), [meeting summary](#))
- Mar. 21 & 22, 2023, Academic User Listening Sessions (open forums)
- Mar. 27, 2023, SAC and FPC Joint Field Tour
- Apr. 13, 2023, Stakeholder Advisory Committee Meeting ([agenda](#), [presentation 1](#), [presentation 2](#), [video recording](#), [meeting summary](#))
- Apr.17, 2023, Faculty Planning Committee Meeting ([agenda](#), [presentation](#), [video recording](#), [meeting summary](#))
- May 1, 2023, Faculty Planning Committee Meeting ([agenda](#), [presentation](#), [video recording](#), [meeting summary](#))
- June 12, 2023, Faculty Planning Committee Meeting ([agenda](#), [presentation](#), [video recording](#))

SUBMIT YOUR COMMENTS

SUBMIT YOUR QUESTIONS

STAY CONNECTED

READ PUBLIC COMMENTS

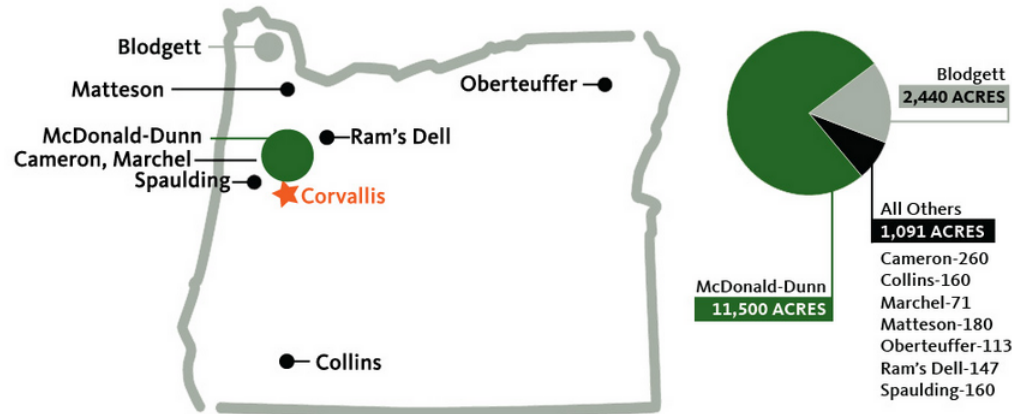
HISTORIC DOCUMENTS - MCDONALD-DUNN RESEARCH FOREST PLANNING
2004-PRESENT



LOCATIONS AND ACREAGE



The College of Forestry stewards 10 research and demonstration forests across the state, comprising 15,000 combined acres of living laboratories. These outdoor classrooms are where students, faculty and staff learn, study and work, and where Extension faculty teach forest owners and managers. The McDonald and Dunn are the largest forest tracts managed by the College of Forestry and are where the majority of active management, education and research take place.



Oregon State University in Corvallis, Oregon, is located within the traditional homelands of the Marys River or Ampinefu Band of Kalapuya. Following the Willamette Valley Treaty of 1855, Kalapuya people were forcibly removed to reservations in Western Oregon. Today, living descendants of these people are part of the Confederated Tribes of the Grand Ronde Community of Oregon and the Confederated Tribes of the Siletz Indians. Indigenous people are valued and respected contributing members of the Oregon State community and represent multiple Sovereign Tribes among students, faculty, staff and alumni. Oregon State University accepts its responsibility for understanding the continuing impact of that history on these communities.

OSU acknowledges that these forests are located on the traditional homelands of a diversity of Indigenous Peoples who were forcibly removed from their lands. As such, we not only strive to protect and maintain the cultural heritage sites that are present on the research forests, but are actively engaged with Tribal Nations to better understand their interests in how these forests are managed moving forward. The College of Forestry is committed to taking people and the institutions with whom it works [beyond the land acknowledgement](#) to find ways to support and empower Native Americans and their communities. The college honors and respects Tribal Sovereignty and Self Determination Rights as it works to partner with, support and build capacity within Tribal Nations in Oregon and beyond.

McDonald-Dunn Research Forest Management Planning Process

Phase I: Information gathering, Discussions, Assessment of former FMP (Spring-Summer 2022)

Initial Interviews

Inventory of COF
Academic Use

Community Listening
Session I

Stakeholder Advisory
Committee Meetings

Faculty Planning
Committee Meetings

Comment / Question
Submission

Phase II: Synthesizing, Modeling, Writing Refining (Fall 2022-Fall 2023)

Stakeholder Advisory
Committee Meetings

Faculty Planning
Committee Meetings

Community Listening
Session II

Academic User
Listening Session

Community Input
Sessions I & II

Comment / Question
Submission

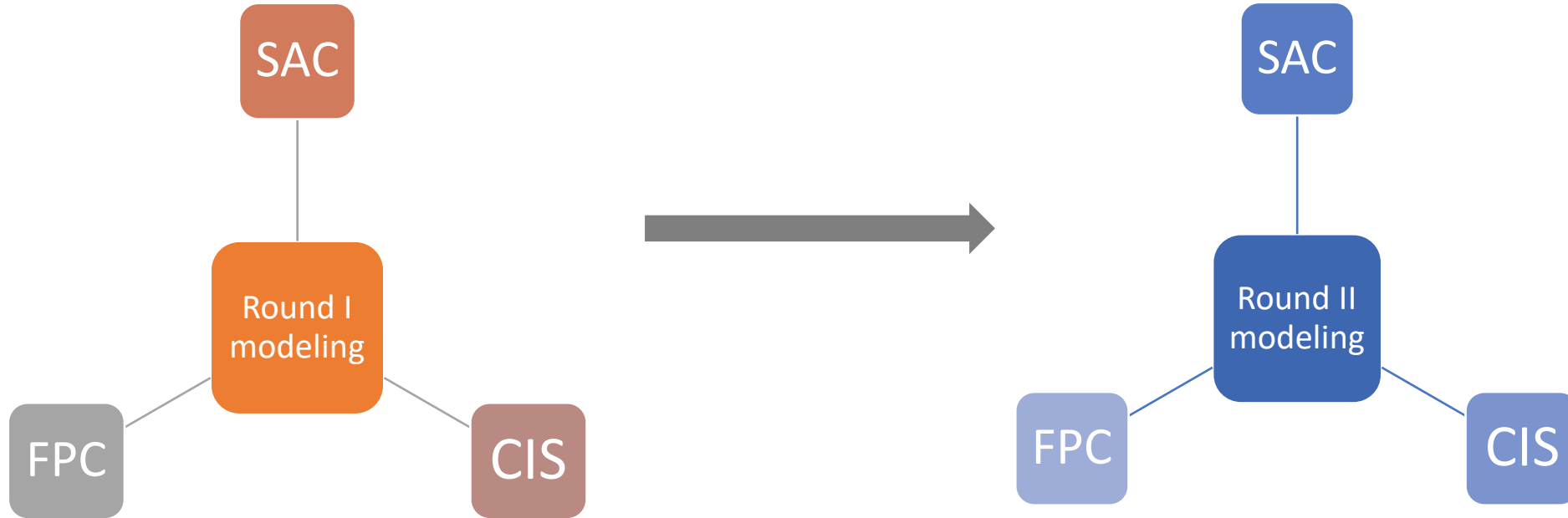
Phase III: Finalizing (End of 2023/Early 2024)

Presentation of draft plan to the Dean &
Forestry Executive Committee for review

Forest management plan refinement

Forest management plan approval by Dean

McDonald-Dunn Research Forest Management Planning Process



Recap: 5 new 'Forest Management Strategies'

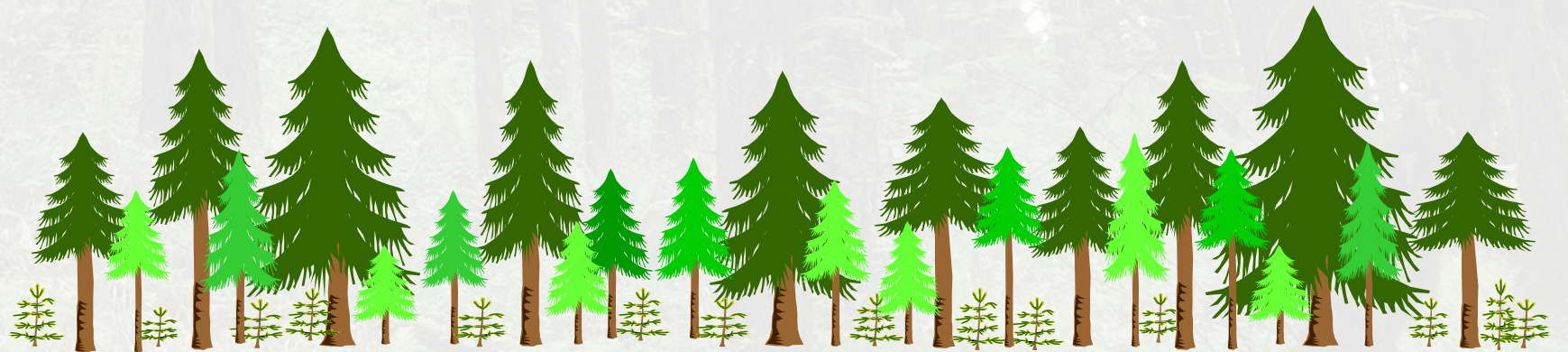
A. Even-aged, short rotation

B. Even-aged, long rotation

C. Multi-aged, multi-species

D. Managed reserves

E. Ecosystems of concern (meadows, oak woodlands, riparian)

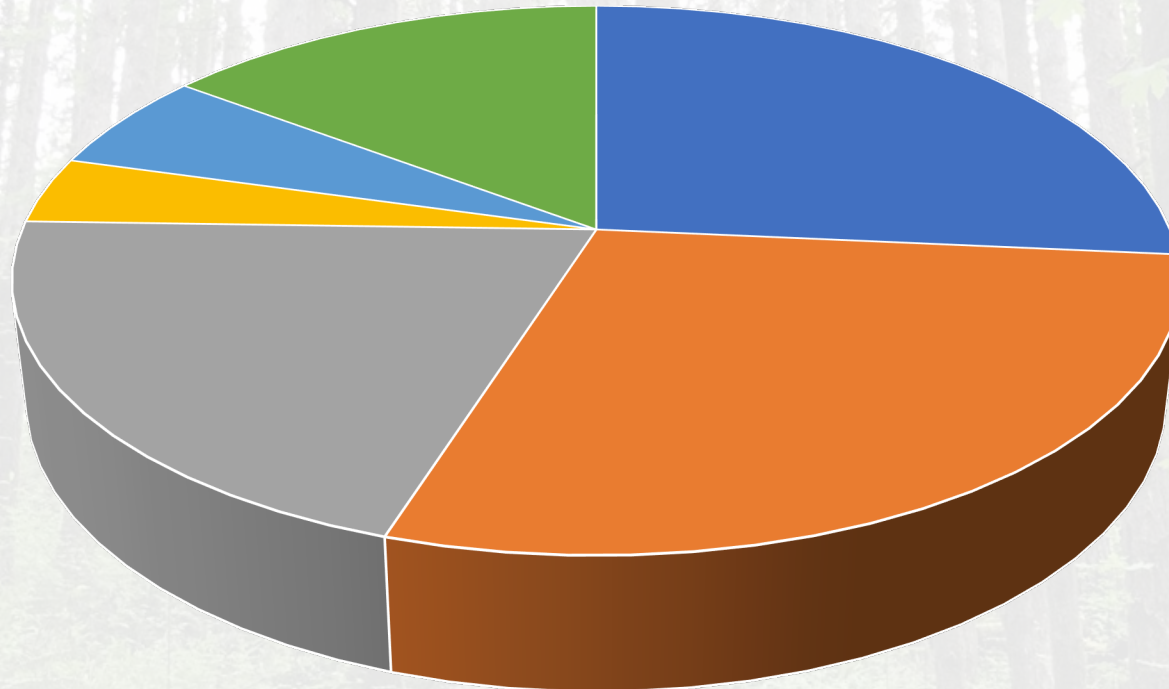


Overview of each new 'Management Strategy'

	Even-aged short rotation	Even-aged long rotation	Multi-aged multi-species	Managed reserves	Ecosystems of concern
Overview	Even-aged plantations of Douglas-fir (or other climatic-appropriate species and genetic stock) will be established and managed to be financially competitive by maximizing yields of wood products valuable for domestic mills. Clearcut harvests will not exceed 80 acres (with limited exceptions due to large-scale disturbances).	Even-aged forests of Douglas-fir (or other climatic-appropriate species and genetic stock) will be established and managed to provide older forest conditions and produce high-quality wood for domestic mills. Clearcut harvests will not exceed 40 acres (with limited exceptions due to large-scale disturbances).	Multi-aged, mixed-species forests of primarily Douglas-fir will be established and managed using <u>shelterwood-with-residuals</u> , <u>group-selection</u> , and <u>variable retention</u> regeneration harvests to create heterogeneity in openings, regenerate new age classes of trees, and maintain structural diversity for a variety of values. Multiple native tree species will be encouraged. These harvests will not exceed 40 acres.	These areas will be held and conserved outside the management base using only a light touch when needed to promote and maintain historical older-forest structural and compositional diversity for a variety of values, and provide for public safety. Forest succession and developmental processes following natural disturbances will proceed with little human intervention. Areas added to the existing reserve base may need more active operations to promote the development of historical conditions.	Restoration and maintenance activities will be undertaken in native oak savanna/woodlands, meadows, and riparian/aquatic systems. Two strategies will be employed: <ul style="list-style-type: none"> • retain and conserve the most at-risk and highest value components of ecological and cultural diversity, and • use intensive efforts where needed to improve and restore broader ecological and/or cultural functions at specific sites.

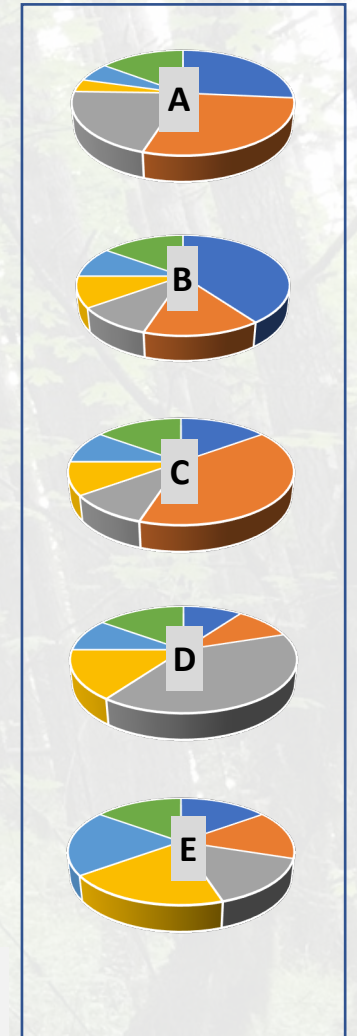
Recap: We'll be evaluating the merits of several 'scenarios'

Baseline Scenario



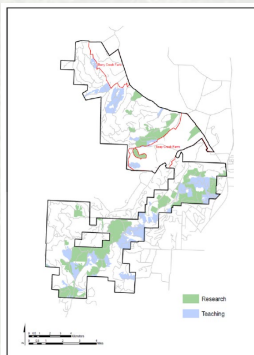
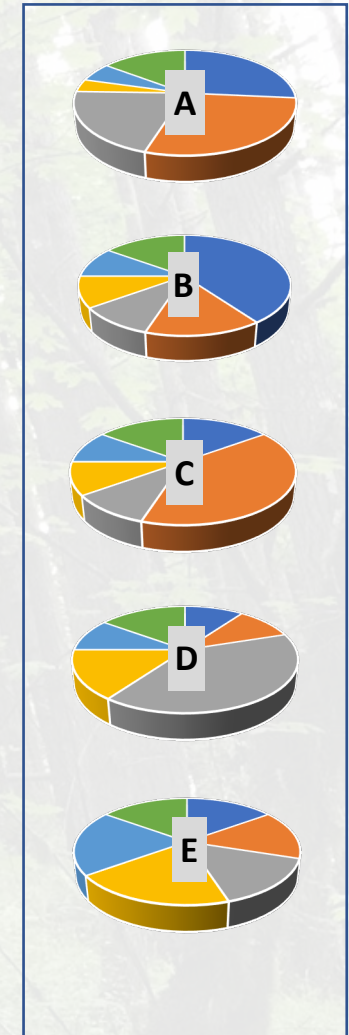
- Even-aged, short rotation
- Even-aged, long rotation
- Multi-aged/multi-species
- Managed reserve
- Ecosystems of concern
- Long term learning *

- long-term learning = acreage used for long-term research and recurring teaching and demonstrations



Recap: Modeling of Scenarios to Evaluate Tradeoffs

Proportion	Scenario A (baseline)	Scenario B (lots of EASR)	Scenario C (lots of EALR)	Scenario D (lots of MAMS)	Scenario E (lots of MR & EOC)
Even-aged, short rotation	27%	40%	15%	10%	15%
Even-aged, long rotation	29%	15%	40%	10%	15%
Multi-aged/multi-species	21%	10%	10%	40%	15%
Managed reserve	4%	10%	10%	15%	20%
Ecosystems of concern	6%	10%	10%	10%	20%
Long term learning *	15%	15%	15%	15%	15%
TOTAL	100%	100%	100%	100%	100%



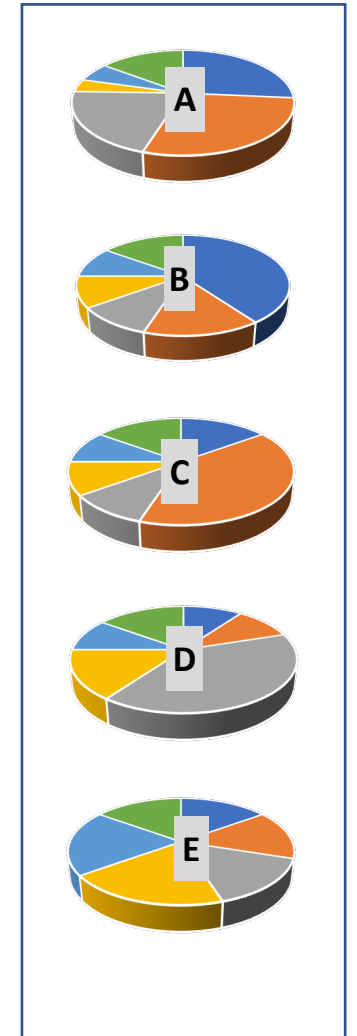
- long-term learning = acreage used for long-term research and recurring teaching and demonstrations



Evaluating the merits of several 'scenarios'

What values will we evaluate as we assess tradeoffs among *management strategies*?

Value	Relevant metrics
Biodiversity	
Carbon storage	
Cultural values	
Forest products	
Recreation suitability & aesthetics	
Resilience	
Revenue	
Wildfire risk	



Modeling Biodiversity

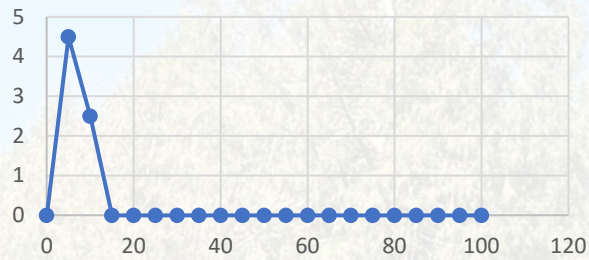
- ~~June~~ July meeting of 8 individuals knowledgeable about forest-dependent wildlife
- Published data exists on relationships for many taxa 1st 30 years following harvest; beyond this expert opinion
- Opted to follow approach used in Harris & Betts 2023
- Convened 5 groups of taxonomic experts to develop graphs describing habitat quality relationships for specific groups of animals according to stand conditions



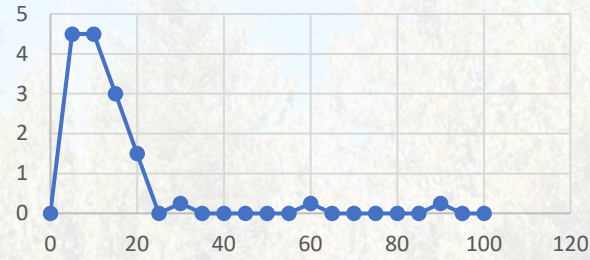
Modeling Biodiversity

- example data showing preliminary thoughts for an early-seral obligate

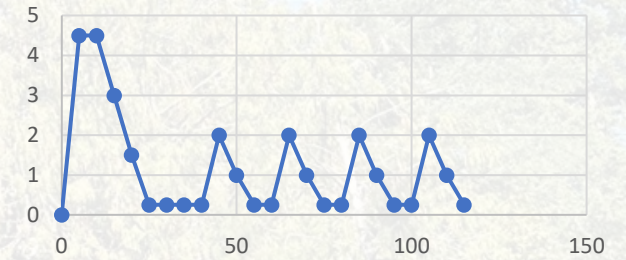
Even-aged short rotation



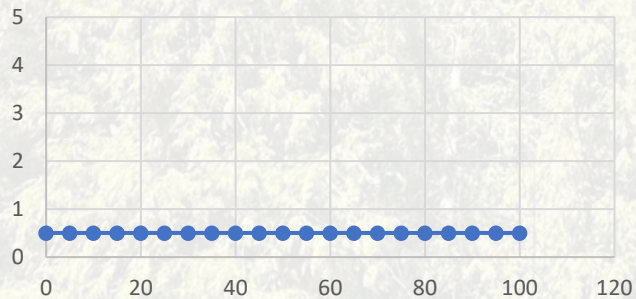
Even-aged long rotation



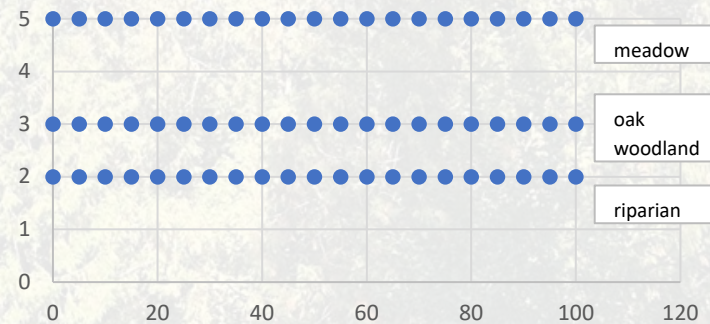
Multi-age multi-species



Managed reserve



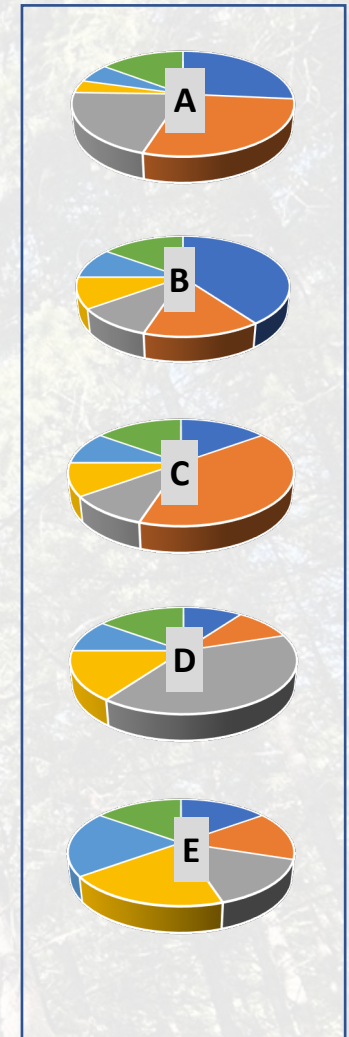
Ecosystems of concern



Evaluating the merits of several ‘scenarios’

What values will we evaluate as we assess tradeoffs among *management strategies*?

Value	Relevant metrics
Biodiversity	Taxa-specific indices (a measure of habitat quality for various taxa)
Carbon storage	Aboveground biomass (a measure of biomass of stem wood, bark, and foliage)
Cultural values	Taxa-specific indices (a measure of habitat quality for culturally important taxa)
Forest products	???
Recreation suitability & aesthetics	???
Resilience	Stand Density Index (a measure of tree density and size)
Revenue	Projected (a dollar value projected to be earned through timber harvest)
Wildfire risk	Composite index (derived from Canopy bulk density, Canopy base height, Canopy cover)



Draft Table of Contents of the New Plan – June 2023

• Executive Summary

• Introductory Context

- I. Goals of the McDonald-Dunn Forest; desired future conditions
- II. Development of Vision, Mission, Goals for College of Forestry Research Forests in 2020
- III. Development of McDonald-Dunn Research Forest Plan in 2022-2023
- IV. Overview of Recent History of the McDonald-Dunn Forest (1993 plan; 2005 plan; suspension; resumption)

• Site Description

- I. Location
- II. Biophysical Conditions
- III. History: Ownership, Morril Act, Land Use
- IV. Cultural Resources
- V. Zoning, Regulations
- VI. Harvest History and Recreation Use History
- VII. Current Forest Conditions

• New Management Paradigms

I. Incorporation of Native American Perspectives

- a. TBD

II. Prioritization of Opportunities for Research, Teaching, & Demonstration

- a. Long-term Research Projects
- b. Dedicated Teaching Areas
- c. Research, Teaching, & Demonstration Projects

III. Forest Management Regimes that Create Learning Opportunities & Ensure Financial Sustainability

- a. Five Management Regimes
- b. Timber Harvest Schedule
- c. Future Forest Condition: Growth & Yield
- d. Alternative Funding Mechanisms

IV. Maintaining Biodiversity

- a. At-risk Plants & Wildlife
- b. Management of Wildlife Habitat
- c. Management of Aquatic resources
- c. Management of Vegetation Communities of Concern
- d. Management of Legacy Trees, Snags, & Down Wood

V. Managing Threats to Forest Health

- a. Climate Change
- b. Invasive Species
- c. Wildfire
- d. Insects & Disease
- e. Development (WUI)

VI. Human Dimensions

- a. Recreation
- b. Cultural Heritage
- c. Vandalism

VII. Enhancing Community Engagement

- a. Community Science
- b. Interpretation
- c. Communication Strategies

• Plan Implementation

- I. Roles - Research Forest Staff, Forest Executive Committee, Dean
- II. Annual Reporting
- III. Adaptive Management/Continuous Improvement
- IV. Performance & Sustainability Indicators

• Literature Cited

• Glossary

• Appendices

Draft Table of Contents of the New Plan – Oct 2023

• Table of Contents

• Executive Summary

Chapter 1 - Introductory Context

- 1.1 Intent of the 2024 McDonald-Dunn Forest Plan
- 1.2 Defining the Vision, Mission, and Goals for Research and Demonstration Forests (2021)
- 1.3 Developing the 2024 McDonald-Dunn Forest Plan (2022-2023)
- 1.4 Overview of Recent History of the McDonald-Dunn Forest (past 30 years)
 - 1.4.1 The 1993 Plan
 - 1.4.2 The 2005 plan
 - 1.4.3 Suspension and Resumption of the 2005 Plan

Chapter 2 - Site Description

- 2.1 Location of the Forest
- 2.2 Biophysical Conditions
- 2.3 History of Ownership and Land Use
- 2.4 Cultural Resources
- 2.5 Zoning and Regulations
- 2.6 Harvest History and Recreation Use History
- 2.7 Current Forest Conditions

Chapter 3 - New Management Paradigms

3.1 Tribal Engagement

- 3.1.1+ Content to be decided upon in consultation with tribal members
- 3.1.x Processes to be Used ...

3.2 Fostering Learning Opportunities

- 3.2.1 Long-term Research
- 3.2.2 Dedicated Teaching Areas
- 3.2.3 Processes to be Used to Initiate Use of the Forest for Research, Teaching, or Outreach

3.3 Forest Management Strategies

- 3.3.1 The Five Management Strategies
- 3.3.2 Analyses Used to Allocate Land to each Management Strategy
- 3.3.3 Timber Harvest Schedule
- 3.3.4 Anticipated Future Forest Conditions
- 3.3.5 Alternative Funding Mechanisms

3.4 Maintaining Biodiversity

- 3.4.1 At-risk Plants & Wildlife
- 3.4.2 Management of Wildlife Habitat
- 3.4.3 Management of Aquatic resources
- 3.4.4 Management of Vegetation Communities of Concern
- 3.4.5 Management of Legacy Trees, Snags, & Down Wood

3.5 Managing Threats to Forest Health

- 3.5.1 Climate Change
- 3.5.2 Invasive Species
- 3.5.3 Wildfire
- 3.5.4 Insects & Disease
- 3.5.5 Development (WUI)

3.6 Human Dimensions

- 3.6.1 Recreation
- 3.6.2 Cultural Heritage
- 3.6.3. Vandalism

3.7 Enhancing Community Engagement

- 3.7.1 Community Science
- 3.7.2 Interpretation
- 3.7.3 Communication Strategies

Chapter 4 - Plan Implementation

- 4.1 Roles - Research Forest Staff, Forest Executive Committee, Dean
- 4.2 Annual Reporting
- 4.3 Adaptive Management/Continuous Improvement
- 4.4 Performance & Sustainability Indicators

• Literature Cited

• Glossary

• Appendices

McDonald-Dunn Research Forest draft guidelines for 'Ecosystems of Concern' Management Strategy

	Ecosystems of Concern
Overview	<p>Restoration and maintenance activities will be undertaken in native oak savanna/woodlands, meadows, and riparian/aquatic systems. Two strategies will be employed:</p> <ul style="list-style-type: none"> • retain and conserve the most at-risk and highest value components of ecological and cultural diversity, and • use intensive efforts where needed to improve and restore broader ecological and/or cultural functions at specific sites.
Guiding principles	<p><i>Manage in a way that creates learning and research opportunities about a range of restoration opportunities and intensities to improve and maintain the health and resiliency of selected ecosystems, informed by both Indigenous knowledge and Western science.</i></p>
Stand establishment	<p><u>Oak savanna/woodlands</u> - in areas designated to receive intensive restoration treatment, oaks may be purposefully established through seed or seedlings at appropriate densities along with other native and culturally significant vegetation that historically occurred in these ecosystems. Site preparation with prescribed fire and/or judicious surface herbicide use may be required.</p> <p><u>Meadows</u> - may require site preparation with prescribed fire and/or judicious surface herbicide use and seeding of other appropriate native herbaceous vegetation.</p> <p><u>Riparian systems</u> - in areas designated to receive small-scale restoration treatment, limited harvests will occur with site preparation and planting at appropriate densities along with other native vegetation that historically occurred in these ecosystems.</p>
Intermediate treatments	<p><u>Oak savanna/woodlands</u> - treatments could include prescribed burning, control of invasive plants, and/or precommercial thinning to remove young invading conifers.</p> <p><u>Meadows</u> - treatments could include repeat prescribed burning and control of invasive plants and invading conifers.</p> <p><u>Riparian systems</u> - treatments could include additional structural thinning, repeat prescribed burning, and control of invasive plants.</p> <p><u>Aquatic systems</u> - In-stream and pond treatments could include removal of invasive species, including invasive aquatic plants.</p>
Stand age	<p>NA. The age of the oldest trees in oak ecosystems will tend to increase over time. For riparian ecosystems, tree age will increase for long-lived conifers but for alders and other short-lived species, tree age may decrease as they achieve senescence and die.</p>
Legacy elements	<p><u>Oak savanna/woodlands</u> - old conifers with an open grown character dating to pre-settlement will be retained.</p> <p><u>Meadows</u> - NA</p> <p><u>Aquatic/riparian systems</u> - large old trees and big logs will be retained or enhanced both in-stream and in riparian zones.</p>

