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Comments: Dear Mr. Barbour

Thank you for the opportunity to comment on Docket FS-2022-003 regarding federal old-growth and mature forests. I am sharing these comments on behalf of the Wisconsin Department of Natural Resources, Division of Forestry. We have summarized our comments based on three questions.

1.What criteria are needed for a universal definition framework that motivates mature and old-growth forest conservation and can be used for planning and adaptive management?
Defining old-growth and mature forests has been a challenge for both scientists and organizations for a long time. Singular, universal definitions have not been satisfying because forest types, ages, attributes, disturbance regimes, and human values vary greatly. Ultimately the purpose of defining old-growth and old forests is to identify these stands on the ground to inform conservation and management. Because of this connection between identification and management, Wisconsin DNR has developed a framework for defining old-growth and old forests that includes both ecological and management classes. We would advise the development of a similar framework that encompasses management intent along with forest stand characteristics. We have a concern with developing a universal definition and inventory based solely on stand characteristics and that the Forest Service will then be challenged to justify any type of management activity on those lands, even if that management serves to maintain ecosystem function.

2.What are the overarching old-growth and mature forest characteristics that belong in a definition framework?
We suggest a similar framework to the Wisconsin DNR old-growth and old forest classifications:
Ecological Characteristics/Classes
*Composition and succession - stage of stand development, species composition
oAge - minimum and maximum, but age alone as a variable can misrepresent old-growth
oMean annual increment - can be calculated to get at stage of stand development or extended rotation
*Structural development - tree size and variation, CWD
*Functional variables - natural disturbance regime, human disturbance
*Landscape variables
Management Characteristics/Classes
*Future management intent or commitment
*Active management limitations - none/very limited, limited, few limits

3.How can a definition reflect changes based on disturbance and variation in forest type/composition, climate, site productivity and geographic region?
By creating a matrix of characteristics/classes, it is possible to accommodate the variety in forest types and disturbance regimes. Take for example an old oak forest that is in the later stages of stem exclusion and the management intent is to maintain this older oak dominated ecosystem using its natural disturbance regime of fire. Using the WDNR definition example, we may classify this as "Old Forest - Managed" and allow for limited management in terms of prescribed fire and limited extraction to maintain oak regeneration.

Thank you for the opportunity to comment on this issue. We would be happy to answer any additional questions or provide additional information, if requested.

Sincerely,

Carmen Hardin
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Division of Forestry, WDNR