

Confronting Climate Change

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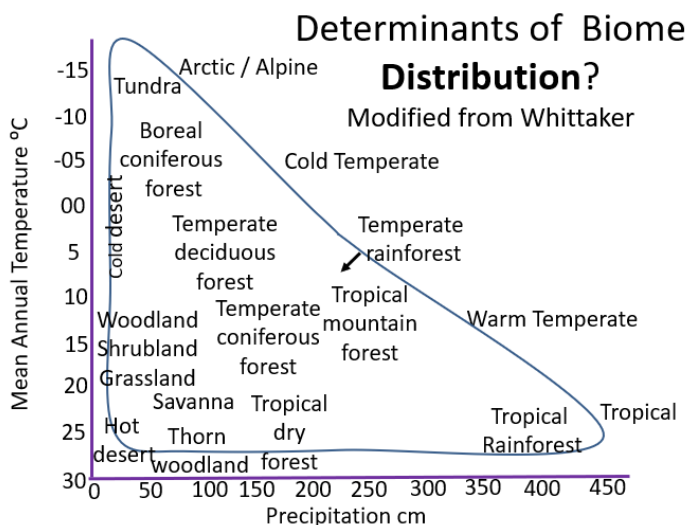
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Colleagues:

I write as cofacilitator of Southern Oregon Climate Action Now, an organization of over 2,000 rural Southern Oregonians who are concerned about the climate crisis and encourage state action to address it. As rural and coastal Southern Oregonians, we live on the frontlines of the warming, reducing snowpack, heatwaves, drought, sea level rise, and the increasing wildfire risk that these trends conspire to produce. Because of this, we pay close attention to what is happening nationwide in terms of legislation, Executive action or agency programs that impacts our nation's contribution to the climate crisis.



I also write as a retired ecologist with decades of experience teaching ecology and conservation biology and conducting ecological and conservation research in the bottomland hardwood forests of Southeast Missouri and the tropical moist forests of Northwestern Costa Rica. These experiences combined to demonstrate to me how climate projections suggested some 20 – 30 years ago would, if they come to pass, devastate our natural ecosystems and the biodiversity they support along with the agriculture, forestry and fisheries that support *Homo sapiens*. As

the adjacent chart, modified from the biome distribution chart of Robert Whittaker (1975), indicates, natural ecosystems across the planet are arrayed within limited ranges of temperature and annual precipitation. Even small shifts in temperature of just a few degrees or precipitation of just a few centimeters can have a huge negative impact on the ability of natural ecosystems across the planet to survive in their current locations. Many years ago Williams and Jackson (3007) modeled future climate in relation to the climatic requirements or natural ecosystems under future atmospheric carbon dioxide concentration scenarios based on the climatic impacts of those. They asked where on the planet future climate could be found for current ecosystems and where within 500 km of their current locations might appropriate climates be found. While the former question is interesting, the latter questions is more reasonable because natural ecosystems do not have an infinite capacity for geographic range

adjustment. Their assessment was that natural ecosystems in much of Africa and South America would be without an appropriate climate under the higher atmospheric greenhouse gas concentration that they studies – equivalent to a warming of some 9°F. This study underscored the concern I felt many years ago about the pending climate crisis. Since then, we have been following the most serious climate trajectory indicating that the devastation suggested by this chart may well befall these ecosystems by the end of this century unless we take dramatic action to divert that trajectory. Indeed, the accelerating extinction rate that we are witnessing is evidence that this concern is reasonable. The wave of Douglas fir death, sweeping the west coast is further such evidence.

If ever there were an ‘all-hands-on-deck’ moment for dealing with a major problem, this is it in relation to the existential threat of climate change.

Among the leading natural solutions to the climate crisis is protection of our mature and old growth forests. It is now well understood that forests continue sequestering carbon well into old age (e.g., Koberstein & Applegate 2019, Montaigne 2019, Birdsey et al 2023). For this reason, it is rather obvious that maintaining old growth forests and allowing mature forests to continue to age into old growth forests is a wise strategy. No doubt it was understanding this forest science reality that led the Biden Administration to propose protection of our mature and old growth forests as a mechanism for serving the nation’s goal of reducing greenhouse gas concentrations in the atmosphere.

While we applaud these efforts to protect our mature and old growth forests, we offer the following concerns:

Our experience with agencies indicates that while the best of intentions may be exhibited by management in developing policies, the reality is that forest managers are not marking and logging trees. Rather, those undertaking these activities are the same individuals who have spent years focusing on extracting and profiting from the harvest of the best quality timber. Regrettably, this often turns out to be the very mature or old growth trees this policy is designed to protect. We therefore urge that federal land management agencies recognize this reality and incorporate an explicit exclusion against harvesting old growth trees.

As stated above, we are at a critical juncture where our action or inaction can lead to a planetary future where current biodiversity, including *Homo sapiens* can thrive or become extirpated by an avoidable climate crisis. We must all, in our private lives and through our professional conduct, make decisions that reverse the trends causing the climate crisis. Explicitly protecting mature and old growth forest is exactly such a decision.

We urge that the language explicitly address termination of old growth harvest and re-evaluation of any projects already underway that would defeat that policy.

Respectfully Submitted

A handwritten signature in black ink that reads "Alan Journet". The signature is written in a cursive, flowing style.

Alan Journet

Source Cited

Birdsey R, Castanho A, Houghton R, Savage K 2023 Middle-aged forests in the Eastern U.S. have significant climate mitigation potential. *Forest Ecology and Management* 548, 121373.

[https://www.sciencedirect.com/science/article/pii/S0378112723006072#:~:text=Ecological%20theories%20and%20some%20recent,increasing%20mortality%20\(Odum%201969\).](https://www.sciencedirect.com/science/article/pii/S0378112723006072#:~:text=Ecological%20theories%20and%20some%20recent,increasing%20mortality%20(Odum%201969).)

Koberstein P & Applegate J 2019 Tall and old or dense and young: Which kind of forest is better for the climate? *Mongabay* <https://news.mongabay.com/2019/05/tall-and-old-or-dense-and-young-which-kind-of-forest-is-better-for-the-climate/>

Montaigne F 2019 Why. Keeping Mature Forests Intact Is Key to the Climate Fight. *Yale Environment* 360. <https://e360.yale.edu/features/why-keeping-mature-forests-intact-is-key-to-the-climate-fight#:~:text=We%20need%20to%20have%20a,carbon%20in%20the%20coming%20decades> .

Whittaker, R.H. (1975) *Communities and Ecosystems*. 2nd Edition, MacMillan Publishing Co., New York.

Williams J and Jackson S 2007 Novel climates, no-analog communities, and ecological surprises. *Frontiers in Ecology and the Environment* 5 (9): 457-482.

<https://esajournals.onlinelibrary.wiley.com/doi/10.1890/070037>