

Eric Sorenson, ecologist  
East Calais, Vermont

Testimony on January 20, 2022  
House Committee on Natural Resources, Fish, and Wildlife  
H. 606 - Community Resilience and Biodiversity Protection Act

### **Introduction**

Good morning. I am Eric Sorenson, an ecologist from East Calais. I appreciate the opportunity to speak with you this morning and I appreciate the ongoing good work of the House Committee on Natural Resources, Fish, and Wildlife. Since I last testified before this committee in the spring of 2021, I have retired from the Vermont Fish and Wildlife Department, so I am before you as a private citizen.

I have degrees in wildlife biology and ecology. I have worked in Vermont since 1989 with the Vermont Department of Environmental Conservation wetlands office, The Nature Conservancy of Vermont, and since 1996 I have worked as ecologist with the Vermont Fish and Wildlife Department. My primary accomplishments have been conducting statewide inventories of natural communities, co-authoring two editions of the book *Wetland, Woodland, Wildland: A Guide to the Natural Communities of Vermont*, co-authoring Vermont Conservation Design, and working on ecological revisions to Use Value Appraisal and the Vermont Wetland Rules. I have the highest level of respect for the mission and staff of the Vermont Fish and Wildlife Department, and the Agency of Natural Resources generally.

### **Purpose**

I would like to give you a brief overview of a Vermont perspective on conservation of biodiversity and the ecologically functional landscape that supports nature and people. I have five main points I want to cover: urgency and opportunity; our reliance on nature; we know what to do; conservation in all its forms; need for stability.

**First**, there is great urgency that we take action! There is ongoing degradation and there are many threats to biological diversity and to Vermont's ecologically functional landscape. These threats include climate change, habitat loss and fragmentation, and spread of nonnative invasive species. Climate change creates direct threats, but also has a compounding effects on habitat loss and spread of invasive species. Another threat I see, but one well outside my area of expertise, is the unequal distribution of wealth in our society. This creates discrepancies in housing, education, and other opportunities, but also fuels skyrocketing land values because of vacation homes and the influx of climate refugees that make Vermont unaffordable to some and, result in more habitat loss and fragmentation. On the very positive side, we are fortunate in Vermont to still have much of the landscape in good ecological condition – this gives us the opportunity to conserve important areas, but this should not be construed as time to delay conservation action.

**Second**, Vermont's and the region's ecologically functional landscape is all-important to biodiversity and our overall well-being. The ecologically functional landscape is the interconnected blocks of forests with their wetlands, lakes, streams, and cliffs; the rivers and their floodplains meandering through the landscape; the mountain tops and the valley bottoms; the rocky outcrops and the clayplains; the managed forests and the old forests. This ecologically functional landscape is our best nature-based solution to climate change adaptation, allowing species to shift their distribution as needed. And for all of us, the ecologically functional landscape provides clean water, clean air, abundant wildlife, carbon sequestration, economic benefits through forest products and tourism, recreation opportunities, and peace of mind. Our future and our legacy will be defined by how well we conserve nature in Vermont.

**Third**, we know what needs to be done! Over the past ten years, there have been excellent scientific advancements in our understanding of biodiversity conservation, landscape connectivity, and climate change adaptation. And I am proud that Vermont has been a regional leader. I want to remind you of three recent and ongoing conservation planning efforts, in particular. I will not try to address Indigenous People and their culture and knowledge – we cannot bring back the intact natural landscape they inhabited for thousands of years, but we certainly have much to learn from their culture and ways. (See attached slides for maps and explanations.)

Staying Connected Initiative

<http://stayingconnectedinitiative.org/>

The Nature Conservancy's Resilient and Connected Landscapes project:

<https://www.conservationgateway.org/ConservationByGeography/NorthAmerica/UnitedStates/edc/reportsdata/terrestrial/resilience/Pages/default.aspx>

Vermont Conservation Design

<https://vtfishandwildlife.com/conservation/vermont-conservation-design>

<https://anr.vermont.gov/maps/biofinder>

**Fourth**, conservation comes in many forms and they are all useful in maintaining an ecologically functional landscape. Approximately 80 percent of Vermont is privately owned. We need to support landowners' abilities to keep their important properties unfragmented and provide assistance in making decisions on how to manage and/or conserve their lands. In my opinion, no other program has done more in keeping forests as forests than Use Value Appraisal, and ongoing efforts to expand eligibility will only make the program more important. UVA is an excellent public investment in our future. It's only serious limitation is the lack of permanence in the conservation it provides, a limitation that may become more evident as land values continue to rise. So, we also need to greatly expand our effort and funding to permanently conserve the critical and most vulnerable parts of our ecologically functional landscape, such as key landscape connections, natural communities, and old forests. We also need to increase

efforts to permanently conserve managed forests so we can maintain a local supply of wood products that we need. Vermont Conservation Design provides the focus we need to identify these most vulnerable features needing permanent conservation and other areas where permanent conservation of managed forests is most appropriate. It is very important to note again that all forms of permanent conservation are needed in this effort. For example, permanent conservation that promotes sustainable forest management but prevents conversion of forest to developed land should work well to maintain ecological function for key forested landscape connectivity areas, while permanent conservation that prevents conversion and allows only limited ecological management is needed to meet the modest targets and maintain ecological function for old forests.

**Fifth**, we need stability in our interactions with nature in order to continue to benefit from its bounty. Continued loss and fragmentation of habitat and forests is not sustainable. We know how to conserve the ecologically functional landscape in Vermont and the region and we can do this to create stability. Conservation in all its forms can help us get there. Our economic well being need not and cannot be tied to continued habitat loss and fragmentation.

Finally, setting conservation goals like “30 by 30” are needed to move us on the way and track our success in maintaining Vermont’s ecologically functional landscape and the targets in Vermont Conservation Design. This should be a cooperative effort, I think best led by the Agency of Natural Resources, in close coordination with federal land managers, conservation organizations, private forestland managers, and always aiming to support private landowners. Additional conservation funding for maintaining the ecologically functional landscape is one of the best investments we can make in our future.

Thank you. I would be happy to answer any questions.

I have comments on the H. 606 as introduced that I can provide when and in a form that is most useful to you.