

Quantitative ecologist, and a member of **Vermont's Scientific Advisory Group on Birds**, and a proud resident of White River Junction Vermont.

Past work with several Federal T&E species (sea otters (T), Red-cockaded Woodpeckers (E), and several Hawaiian birds). I have the unfortunate distinction of being one of the few people who has seen extinction firsthand. In 2002, I was part of an effort to bring the 3 known surviving, critically endangered Po'ouli into captivity on Maui...and we failed, and that species has been declared extinct.

I now conduct research with grassland bird species (4 of which are on VT's T&E list) and high-elevation montane bird species, and the future of those two groups of birds is bleak. By the end of this century, our climate change and species' distribution models suggest that most of our high-elevation species (BITH, WTSP, crossbills, Canada Jay, grosbeaks, Blackpoll Warbler) will no longer occur in Vermont, or indeed, in the lower 48. Grassland bird trends are equally concerning, especially here in New England where (for example) we have lost 95% of our Eastern Meadowlark population over the last 50 years.

I have seen extinction happen firsthand, there's no coming back. Each species' loss makes Vermont a less rich, less diverse, and less ecologically-stable place. Complacency and maintaining the status quo is a strategy to losing even more species, which is why I'm heartened to read some of these proposed bills now before the committee. All of us, legislators, state agencies and researchers can and should do more, and more quickly, to preserve Vermont's flora and fauna for future generations.

Regarding H.812, I support a timeframe for renewing our T&E species list, but humbly suggest revising the timeframe to every 5 years, from the proposed every 3 years. Right now, states are required to submit a State Wildlife Action Plan to the Federal Government every 5 years (next one is due in 2025). These State Wildlife Action Plans already do much of the work that would be needed to renew the T&E list. Much of this work is conducted by volunteer members of the SAGS, like myself. So aligning the renewing of the T&E species list to co-occur with the 5-year State Wildlife Action Plan would be consistent with the intent of H.812. but would streamline the process and **reduce the HUMAN AND ADMINISTRATIVE cost.**

Also, regarding H.812, I think critical habitat is an under-utilized tool and desperately needed for some species. With critical habitat designation, and T&E species management in general, comes the need for greater transparency to not only serve the public, but to also allow outside experts like myself to help inform and bolster the process and ultimately, to make the process and outcomes more scientifically defensible.

I can give a number of examples of where this process has, in my opinion, broken down and occurred in a way that is not in the best interests of our T&E wildlife. Probably the easiest example to point to is what's happening at Franklin County Airport—the most important parcel of Grasshopper Sparrow habitat in Vermont, that provides habitat for perhaps as much as 50% of our Grasshopper Sparrows—a Threatened (perhaps, soon-to-be Endangered) Species in VT.

Last spring, VTrans, without a permit began bulldozing and paving over Grasshopper Sparrow habitat at Frankling County Airport to expand and widen the runways. VTrans was subsequently given a permit by ANR to retroactively approve that work, which caused an outcry in the Vermont birding community, and a lot of backlash by NPOs and conservation biologists like myself. One year later, and there hasn't been any penalty action against VTrans for the permanent destruction of that Grasshopper Sparrow habitat. To me, those actions and the lack of transparency, sends a very clear message about the value of T&E species compared to economic development.

Enforcement and adherence to existing rules and regulations is an obvious first step, but additional economic tools could be useful for the State for T&E species management as well. As an example, right now if a solar firm develops a field where Grasshopper Sparrows are known to breed, then the developer pays a fee to ANR based on the amount of lost Grasshopper Sparrow breeding habitat. But incredibly to me, those fees are not required to be spent directly towards the management of the remaining Grasshopper Sparrows in the state, and F&W biologists have told me that they can't hold onto that money. If mitigation banks were created, then those developer fees could be deposited into those financial instruments. These monies would accumulate until there was an opportunity to directly manage GRSP.