

Janet Echeverria  
Stockton Springs  
LD 226

Greetings Senator Tepler, Representative Doudera, and ENR Committee Members, My name is Jae Echeverria, I live in Stockton Springs, ME and I am testifying in support of LD 226 "An Act to Protect the Cultural Resources and Historical Heritage of Sears Island in Searsport by Extending Conservation Easement Protections". Last summer, I recruited a mycologist from the Farlow Herbarium at Harvard University, Julian Moll-Rocek to work alongside me to investigate fungal diversity on Wahsumkik. In our survey, we collected over 160 sample specimens, identifying 93 species. Moll-Rocek preserved these species at the Farlow Herbarium to create a snap-shot of fungal diversity on Wahsumkik in 2024. Moll-Rocek and I also collaborated with Professor Pete Avis from the University of Maine Orono to collect soil samples from 17 different sites on Wahsumkik for DNA sequencing. Our research contributes both to an understanding of the fungal species present on Wahsumkik and also to the broader evolutionary question of island biogeography. As temperatures increase and the climate continues to change, the gulf of Maine is among the fastest warming bodies of water in the world.

Wahsumkik, uniquely located in these dramatically warming ocean waters, surely contains valuable information for researchers seeking to mitigate the effects of climate change on biodiversity. In the 2024 Eagle Hill Seminar: Fall Mushrooms in a Changing Climate, our mycological team advanced our knowledge on the contributions of fungal communities to ecological resilience in the face of climate change. Rare locations like Wahsumkik prove invaluable resources for understanding the impacts of climate change on fungi and, in turn, the entire ecosystem of a forest. However, because some fungi go decades without fruiting, mycological research requires continued, long-term studies. As a member of the scientific community who lives 5 minutes from the island, I request this particular climate-vulnerable spot, Wahsumkik, remain wild as a place for ethical and sustainable research and community engagement.