April 8, 2023

Testimony - Maine LD 1227

Members of the Maine Legislative Committee on Agriculture, Conservation and Forestry:

I am writing to describe my support for the amended LD 1227 – *An Act to Balance Renewable Energy Development with Natural and Working Lands Conservation*

It was my privilege to be a stakeholder/participant in the Maine Agricultural Solar Siting Stakeholder Group convened by the Governor's Energy Office and the Department of Agriculture, Conservation and Forestry in 2021. It is unfortunate that recommendations from this group brought to the previous Legislature by LD 856 were not funded. As such, two key questions from that stakeholder process remain unanswered: *what will dual use solar projects look like in Maine,* and *can Maine afford agrivoltaics?* Passage and funding for LD 1227 will begin providing answers.

An example of existing multi-use farming and solar already at scale in the United States is livestock grazing in solar sites as a strategy for managing vegetation and improving soil health. Sheep are often (not exclusively) employed due to their stature, disposition, and the fact that little modifications are required of solar infrastructure to accommodate them. It is estimated by the American Solar Grazing Association www.solargrazing.org that in 2022 more than >25,000 acres of ground-mount solar sites were grazed in 44 states. This includes only around 90 acres of solar in Maine as the practice is largely unknown and large scale sheep grazing is culturally unfamiliar.

The USDA Natural Resource Conservation Service (NRCS) uses Conservation Practice Standard (528) Prescribed Grazing to guide management of livestock grazing systems. The 2006 Targeted Grazing Handbook from the American Sheep Industry Association and University of Idaho outlines standards of practice for using livestock behavior to control invasive plant species, and fire fuel load, and the USDA Grassland Conservation Reserve Program *"helps landowners and operators protect grassland, including rangeland, and pastureland, while maintaining the areas as grazing lands… (it was) reauthorized by the 2018 Farm Bill"* www.fsa.usda.gov/programs-and-services/conservation-programs/crp-grasslands/index

The benefits of properly managed, holistic animal grazing systems are known. We simply need to discover how they will be best combined with solar energy production in Maine. However, livestock integration with solar in the state is largely at a standstill without broad, inter-agency State support for projects that propose this type of agrivoltaics, and financial incentive to encourage project collaboration amongst landowners, developers, and municipalities and with agriculture, working lands and habitat conservation communities.

The Innovative Site Preparation and Impact Reductions on the Environment (InSPIRE) project is funded by the U.S. Department of Energy Solar Energy Technologies Office (SETO) and brings together Federal, State, private and nonprofit researchers, and environmental, energy and industry groups to look at various co-locations strategies with solar such as vegetable farming, pollinator habitat, native vegetation, and animal grazing. Research sites are located across the country, yet none closer to Maine than Massachusetts and New York.

What type of agrivoltaic projects will be the most viable for Maine farms and farmers? What heritage industries and production might we pair with solar? Blueberries are a great start - what other agricultural enterprises would benefit from the shade and protection of solar? How could emerging industries in which Maine has a significant investment be enhanced by solar-agricultural production? For instance, could component materials for the University of Maine Advanced Structures and Composites Center be derived from Maine-based agrivoltaic projects?

Solar energy production and farming *can* co-exist – it does not have to be an either/or proposition. LD 1227 provides a pathway for us to define how renewable energy and agriculture can work together and benefit Maine. I encourage you to support its passage.

Respectfully,

Nick Armentrout
Spring Creek Farm
Lyman, Maine

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LD 1227

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