UMaine Extension receives grant to recycle agricultural greenhouse plastic

University of Maine Cooperative Extension has been awarded $38,764 by a one-year State of Maine Department of Environmental Protection Waste Diversion Grant to develop a statewide pilot program to recycle agricultural greenhouse plastic.

The grant proposes that a voluntary recycling program can achieve a high percentage of grower participation, and affordably divert and recycle a significant percentage of waste greenhouse plastic.

The target material for recycling, low-density polyethylene (LDPE #4), is a clear film used to cover greenhouses, high tunnels, hoop houses and other agricultural structures. It is estimated that Maine annually disposes of 30.1 tons of this waste greenhouse plastic, primarily destined for landfills, with expectations for an increase in volume due to Maine's interest in season extension technologies, USDA NRCS funding for new high tunnel construction, and the production of hemp and cannabis.

The program's goal is to collect at least one-third of Maine's annual waste greenhouse plastic, and partner with an end-user who can convert the collected plastic into resin feedstock used in the manufacture of new plastic products.

Collection of the waste plastic will run from May through September 2020. Participation will be free of charge and open to all growers who register for the project.

Affiliated partners donating additional time and resources include Maine Organic Farmers and Gardeners Association; USDA Natural Resources Conservation Service, Maine; and the Maine Resource Recovery Association in Newport.

Co-investigators for the research include Extension professor Richard Kersbergen; Extension ornamental horticulture specialist and assistant professor of horticulture Matthew Wallhead; MOFGA organic crop and conservation specialist Caleb Goossen; and program manager David McDaniel.

For more information, contact program manager David McDaniel at agplasticrecycling@maine.edu or 207.342.5971 (UMaine Extension Waldo County office).