

# Recycling Ag Plastics Project

## Life Cycle Stewardship of Agricultural Plastics

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Developing infrastructure and markets for waste film and rigid plastics from dairy, livestock and horticulture.

RAPP is a collaboration of Cornell University with agriculture producers and agricultural, environmental, economic development and solid waste/recycling agencies, organizations and businesses.

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### WHAT CAN FARMERS DO WITH ALL THAT PLASTIC?

#### What are Agricultural Plastics?

Plastics have taken the place of the longer lasting and/or natural materials that used to be widely used on farms. Many of these substitutions make good sense: Plastics are often safer to use, improve production efficiency, cost less, and permit more flexibility in management than the concrete silos, glass greenhouses, sisal twine and other products and packaging they replace.

**AG PLASTICS INCLUDE:** dairy bags, bunker silo covers, bale wrap & netting, polytwine, feed bags, irrigation tubing & drip tape, greenhouse & hoophouse covers, nursery trays & pots, mulch & fumigation films, tarps, bird netting, pesticide & veterinary containers, seed & fertilizer bags, bee hives

#### How Do Farmers Get Rid of Ag Plastics?

Getting rid of these short-lived products after their useful life on-the-farm has been a problem.

Some are hauled to a solid waste transfer station (a landfill or "dump"). Much of the rest is either left in the fields, plowed into the ground, or burned in an open fire.

Burning "ag plastics" in an open fire generates high levels of dangerous, polluting emissions (including particulates that settle in the lungs) and extremely toxic dioxins that can deposit on food and feed and enter the food chain. Stashing waste plastic on the farm can clog water channels, be a choking hazard for livestock and wildlife, and create mosquito breeding habitat. And it is not pretty.

#### Prospects for Recycling

Recycling is the goal of the Recycling Ag Plastics Project (RAPP). It's not an easy goal to achieve because ag plastics are typically dirtier than other used plastics. They are also bulky and widely dispersed across the rural landscape, adding complexity and cost to the collection process.

To jump these hurdles, RAPP is (i) promoting adoption of Best Management Practices (BMPs) to keep ag plastics in condition to be recycled, (ii) acquiring special baling equipment to compact used plastic for cost-efficient transport from farms to recyclers,\* and (iii) cultivating appropriate markets to process used plastic and make it into new products ( e.g., plastic lumber or garbage bags).\*\*

In 2008 RAPP is implementing recycling projects in three regions of New York, with plans to expand into three other areas in early 2009. To find out how to be involved, contact regional project leaders:

**Capital District.** David Cox, Schoharie Co CCE ([dgc23@cornell](mailto:dgc23@cornell), 518-234-4303)

**Lake Champlain Watershed District.** Steve Mahoney, SWCD Clinton Co (518-561-4616, [steve.mahoney@ny.nacdn.net](mailto:steve.mahoney@ny.nacdn.net)) or Anne Barlow, CCE Clinton Co ([alb326@cornell.edu](mailto:alb326@cornell.edu), 518-561-7450)

**North Country West** (St. Lawrence, Jefferson, Lewis Counties). Chanda Lindsay, St Lawrence/Black River RC&D ([Chanda.Lindsay@ny.usda.gov](mailto:Chanda.Lindsay@ny.usda.gov), 315-782-7289 x129)

**Western NY** (Cattaraugus, Chautauqua). Wendy Sanfillippo, CCE Chautauqua ([wes33@cornell.edu](mailto:wes33@cornell.edu), 716-450-8309)

**RAPP Statewide Staff.** Lois Levitan, Project Leader ([lcl3@cornell.edu](mailto:lcl3@cornell.edu), 607-255-4765) and Blake Putman, Field Coordinator ([blp26@cornell.edu](mailto:blp26@cornell.edu), 315-528-7050)

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\* RAPP is providing a "Big Foot" Mobile Baler for each project area. The "Big Foot" operates much like a vertical compactor used to compress cardboard, but has been modified to be mobile and "ag-friendly." It weighs 2500 lb, compacts the plastic with a hydraulic plunger, and—in about half an hour—can produce a pallet-sized bale tied with wire. Bales are stackable, can be handled with a fork lift, weigh about 1500 lb, and—measuring 40" on a side—pack efficiently into a tractor-trailer.

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