

## Recycling Agricultural (AG) Plastics

By Eliza Buck, Agricultural Resources Committee Coordinator

Last month we examined opportunities for extending the growing seasons. AG plastics for high and low tunnel hoop houses are definitely useful for getting crops earlier and later in the year as well as a number of other agricultural uses. In fact, Washington State University has a whole webpage dedicated to “plasticulture” or the broad and general use of plastics in agriculture (<http://www.hortla.wsu.edu/links/plasticulture.html>).

There are a multitude of plastic derived products used for agriculture including: mulch film, drip irrigation tape, row covers, tunnel film, box liners, greenhouse film, peat moss bags, haylage bale stretch-wraps, “Super Sacks”, plastic twine, silage bags, bunker covers, buckets, barrels, drums, nursery pots and trays, and irrigation pipe. Though these products have helped farmers around the world, they also are adding to the ever-increasing problem of plastics disposal.

Two common practices for AG plastics disposal are burning or sending to landfills. Both create problems. Burning plastic (especially at smoldering temperatures) releases highly toxic vinyl chloride and other potentially cancer-causing chemicals (i.e., dioxins and furans) into the air; this pollution also aggravates asthma and emphysema and can increase the risk of heart disease in susceptible people. Residue from burning contaminates the soil and groundwater and can enter the human and livestock food chain by settling on crops and in waterways. Sending AG plastics to landfills is costly and adds further to the escalating problem of solid waste management. It is estimated that plastics take 100 to 400 years to break down in landfills. The “Great Pacific Garbage Patch” in the Pacific Ocean between northern California and Hawaii, is an oceanic gyre twice the size of Texas filled with plastic trash; it is a constant reminder that we need to reduce our use and disposal of plastic!

For the past two years, San Juan County Public Works Solid Waste Division, WSU Extension – Ag Program, the San Juan Islands Conservation District and the Agricultural Resources Committee of San Juan County have worked with RE-Sources of Bellingham to collect and recycle Ag plastics. This year fall Ag plastics collection events will again take place on San Juan, Lopez and Orcas islands, respectively on September 19<sup>th</sup>, 21<sup>st</sup> and 22<sup>nd</sup>, 2009 (look for posters, press releases or [www.sjcarc.org](http://www.sjcarc.org) for time and locations).

Here’s how to prep Ag plastics for recycling:

- **Keep like items together** film and rigid plastics are recycled separately.
- Roll drip irrigation tape and tie with drip tape only.
- Mulch film, tunnel film, peat moss bags and similar agricultural plastics should be rolled and tied with a piece of the same type of film that’s in the roll. Do not use non-plastic twine or wire.
- Twine should be stored loose in a clean "Super Sack" or large plastic bag.

### **Keep materials as dry as possible**

- Moisture adds weight and increases the cost of recycling.

### **Keep materials as clean as possible**

- Shake plastics to remove a majority of the contaminants (dirt, haylage, water, etc.). Overly contaminated material might be rejected at the collection site or could raise recycling costs.

### **Keep plastics out of the sunlight**

- Sunlight can decay the material, resulting in smaller and smaller pieces.

Recycled AG plastics become feedstock in the manufacture of lumber for benches, posts for signs and highway guard rails, pilings for piers and bridges, black plastic garbage bags, automotive components, wall-covering, tool handles, flooring and pallets.

Plastic nursery pots and flats will be made available for re-use at each collection event.

To find out more about recycling AG plastics in San Juan County contact Helen Venada at San Juan County Solid Waste – 360-370-0503 or [helenv@sjcpublishworks.org](mailto:helenv@sjcpublishworks.org).

Let's work toward the motto – “reduce, recycle, reuse.”