## Ag Plastics Recycling in Wisconsin

Melissa Kono, Associate Professor, University of Wisconsin-Extension





Sustainable Agriculture Research & Education

## Introduction

- Melissa Kono, Associate Professor with University of Wisconsin-Madison and Community Development Educator for Clark and Trempealeau Counties
- I travelled to the Dominican Republic to work with banana farmers on recycling their plastic
- I organize Ag Plastics collection events in Wisconsin
- Received a Sustainable Ag Research (SARE grant) in 2020 to conduct collection events and an in-person professional development meeting—thank you for being here!



• Poll





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Sustainable Agriculture Research & Education FUNDACIÓN QUISQUEYA POR LAS AMÉRICAS, INC.

#### PROGRAMA FARMER *to* FARMER



## The plastics problem

- Plastics used in Agriculture tend to be dirty, light weight and undesirable to recyclers
- While illegal, burning plastics typically goes unenforced due to costs
- In the past, collection events were successful in collecting plastics, but it was difficult to find a recycler
- Poll



## Ag Plastics Recycling in Wisconsin

- According to the Wisconsin Department of Natural Resources, 15-20 pounds of agricultural plastics are generated per cow every year
- 1.2 million cows in Wisconsin
- 2/3rds of farms surveyed are using bunker covers
- 2015 survey:

https://dnr.wisconsin.gov/topic/Recycling/agplastics.html



## Evaluating Plastics Collection Efforts Methodology

- A Qualtrics survey was emailed to approximately 2,000 Revolution Plastics customers and others regarding their agricultural plastics recycling practices, there were 392 responses to the survey.
- Not all survey respondents were currently using an agricultural plastics recycling dumpster provided by Revolution Plastics and were on a waiting list.
- > The survey was approved by the Human Subjects Protection Administrator.
- The purpose of the survey was to examine the need for educational opportunities when it comes to agricultural plastics recycling.



# What are your greatest challenges in recycling agricultural plastics?



- Keeping access clear
- Too frequent pickup
- Too infrequent pickup
- Too much volume
- Not enough volume
- Unsure of what can be recycled
- Removing debris
- Prohibited items being placed in dumpster
- Note enough time to recycle
- Getting employees to properly recycle

### How have your waste management practices changed as a result of having a plastics recycling dumpster or bag available on your farm



# What is your estimated annual cost savings?



• \$0-500 • \$501-\$1,500 • \$1,501-\$3,000 • \$3,001-\$5,000 • Greater than \$5,000 • No cost savings

## Findings and other considerations

- Half of survey respondents said it provides an alternative to burning.
- ▶ 56% said there is less excess plastic litter on the farm.
- Respondents indicated they used more ag plastics products because they were able to recycle it
- Farms seemed to underestimate their annual cost savings
- Perception vs. Reality
- POLL



## **Cross Sector Partnership**



- Revolution Plastics provides ag plastics recycling dumpsters and regular pick up service to farms at no cost to the farmer.
- The plastic is processed in the United States and recycled into products



University of Wisconsin-Extension

- Through University of Wisconsin-Extension, people of Wisconsin and beyond can access university resources and engage in learning, wherever they live and work.
- Historically agricultural-based programming and services

## Types of Recycling

#### Dumpster



- Must be within service area
- Must produce a minimum amount of plastic
- Dumpsters no longer being widely distributed
- No cost for dumpster or plastics pickup

## Types of Recycling

#### **Recapture Bags**



- Case of 5 bags is about \$30
- Available from a few suppliers, can be
- Once 5 bags are filled, farmer calls for on-farm pick up. There is no charge for the pickup
- Must be within service area

Revolution Plastics believes in preserving our farmland. We have now launched a program to help clean up used ag plastic and recycle the material in our facilities located here in the USA.

(1)

(3)





Recapture Bags are available for purchase at the following distributors:

Blue Lake Plastics, LLC Sauk Centre, MN 56378 320.333.9255

KSI Supply Sheboygan Falls, WI 53085 800.472.6422

> Jordan Ag Supply Monroe, WI 53566 800.726.0401

#### Recapture Bags: How To Help Preserve Our Farmland



Stake down opening of bag using two plastic stakes



(2)

Stuff bag with approved materials listed on the front of this postcard

Once you have <u>5</u> full bags contact us at:



- . (844) 490-7873
- Collections@RevolutionPlastics.com
- revolutionplastics.com
- · Android or iOS app: Ag Plastic Pickup

Recapture bags measure 96" x 120" and each holds 200 pounds of ag plastic. The bags are sold in packages of 5. Pickup is available when content of 5 reaches 1,000 pounds. Please do not include trash, wood, rocks, tires, twine or net plastic.

## Types of Recycling

#### **Collection Events**

Bayfield County Agricultural Plastics Clean Sweep

> Tuesday, August 11<sup>th</sup> 2:00p.m.-7:00p.m. Bayfield County Fair Grounds 7080 North Main St, Iron River



Aq Plastic Accepted: Bale Wrap, Grain Bags, Bunker Cover, Drip Tape, Greenhouse Film, Boat Wrap

Plastics can be brought to the site in a Revolution Recapture Bag that can hold ~ 200 #. Request free recapture bags to be mailed to you upon registration. The material can be baled and brought to the collection site. No strings or binders allowed. Plastic does not need to be clean, but please shake off loose debris.

Pre-register IS REQUIRED by Monday, August 3rd by filling a survey out at: <u>https://forms.gle/vnkU3fWu2jcgPw1E7</u> Or by calling Clark County Extension at: 715-743-5121

- Must meet minimum collection requirements
- Can be in conjunction with other events i.e. Clean Sweeps, County/Municipal Recycling
- Recapture bags are helpful

## **Revolution Plastics Coverage Area**

All counties South of the red line have full ag plastic recycling services – Dumpsters, Recapture Bags, Etc.

All counties North of the red line have the following ag plastic recycling services:

- 40,000 lb. single point Recapture Bag pickup and 40,000 lb baled plastic pickup.
- Smaller quantities can be picked up for a fee. (Case by case basis. \$500 minimum charge will apply)

#### Approved Ag Plastics:

Silage Bags/Grain Bags •Bunker Cover (no reinforced material) •Greenhouse Film •Boat Wrap (ropes, vent, zippers, etc. removed) •Drip Tape



## **Potential Partnerships**



## Take Aways

- Potential for education in the areas of farm financial management, proper recycling techniques
- Efficient communication around pick-up schedules
- Increased partnerships with government entities and private sector
- Poll



Please complete a brief survey: https://uwmadison.co1.qualtrics.com/jfe/form/SV\_5yFH xZo3pe9wBIW

Recording of this session and handout can be found:

## https://fyi.extension.wisc.edu/sustag/resources/inservice-training/

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Melissa Kono, Associate Professor University of Wisconsin Madison-Extension Department of Community Resource Development Clark & Trempealeau Counties, Wisconsin Melissa.kono@wisc.edu



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