Bees in the Supply Chain

General Mills Commitment to Pollinator Protection

Beth Robertson-Martin, General Mills Global Sourcing

Agenda

- *Introduction*
- *Why we care*
- *The case for conservation*
- *Our commitment*

Responsible practices guide our work

one GLOBAL SOURCING

Health & Wellness

We provide people with convenient, nutritious food that – when combined with exercise and activity – can help them live healthier lives. We believe that a variety of foods made with quality ingredients play an important role in people's diets, providing nutrition, taste and convenience at a reasonable cost. Improving the health and wellness profile of our products over time and promoting healthy lifestyles that balance nutrition and activity are fundamental to our mission of *Nourishing Lives*.

Sourcing

Our goal is to sustainably source the raw materials we use in our products. We are committed to sustainably sourcing 100 percent of our 10 priority ingredients by 2020 – representing more than 50 percent of our annual raw material purchases. At the same time, we are improving water stewardship and reinforcing socially responsible practices across our extended supply chain.

Environment

Our goal is to continually reduce our environmental footprint. We concentrate on areas where we can have the greatest positive impact, with a focus on agriculture. Among our suppliers, we work to sustainably source the ingredients we use in our products. Across our global operations and beyond, we focus on reducing our GHG emissions and natural resource consumption.

Workplace

We foster a safe, ethical, diverse and inclusive workplace where our more than 42,000 employees can thrive. We respect, develop and invest in our employees and continue to improve workplace safety through our efforts to prevent injuries and illnesses. We support our employees in being active, eating healthy and staying well.

Community

Our goal is to build strong communities. Our philanthropic work ties closely to our core business and reflects our mission of *Nourishing Lives*. We work in innovative ways with partners locally and around the world to harness our collective impact in key target areas, while engaging employees through volunteerism.

The Importance of Pollinators

We depend on bees:

- *One in three bites of food[1] requires pollination:*

  Coffee, chocolate, tomatoes, cherries, squash, cotton and more.

- *In the United States alone, over one hundred crops need or benefit from bees, which translates to $3 billion of our economy.*

- *Bees are vital to clover and alfalfa crops that feed cattle and other grazing animals.*

[1] Mader, E., Shephard, M., Vaughan, M., Black, S., LeBuhn, G. (2011). Attracting Native Pollinators: Protecting North America's Bees and Butterflies. North Adams, MA: Storey Publishing

Habitat Is the Answer

"The best way to really help bees is to provide them really good nutrition and places where they can forage and nesting sites where they can live," **says Dr. Marla Spivak, professor and entomology and bee researcher at the University of Minnesota.**

General Mills' Commitment to Pollinators

Pollinators matter:

- The vast majority of the 4000+ native bee species in North America rely on native plant species
- Billons of dollars in free pollination annually
- Wild bees increase pollination significantly in *all* crops
- Honey bees also need habitat
- Diverse wildflower diets enhance honey bee disease resistance

Our Commitment

- Habitat on 120,000 acres of farms that support Cascadian Farm & Muir Glen planted & managed by Xerces
- Habitat on 60,000 acres of Oat Farms for Honey Nut Cheerios – includes pesticide risk assessment and IPM recommendation to ensure plantings are protected from insecticides, planted & managed by Xerces
- Private/Public 5 year commitment - $750,000 Annie's, $1,250,000 GMI charitable contribution + $2,000,000 USDA match to fund 6 field biologists through Xerces/NRCS
- Over 5 trillion wild flower seeds will be planted on 100,000 acres of habitat

General Mills' Commitment to Pollinators

Commitment

"By focusing specifically on pollinator conservation within the supply chain, General Mills is going above and beyond any other food company in terms of supporting pollinators," says Eric Lee-Mäder, pollinator program co-director, The Xerces Society for Invertebrate Conservation. ***"This approach is so significant because it is directly changing farm conditions for pollinators with high quality wildflower habitat and better protection from pesticides."***

Designing and Restoring Habitat

Example: Organic tomato farm hedgerow for pollinators, California

Restoring habitat for bumble bees, monarch butterflies, hummingbirds, and more

Photo: Jessa Cruz

Designing and Restoring Habitat – Muir Glen

Project launch - November 2012

Photos: Jessa Cruz

Designing and Restoring Habitat – Muir Glen

Installation progress

November 2012

June 2013

Photos: Jessa Cruz

Designing and Restoring Habitat – Muir Glen

Hedgerow species diversity

California Fuschia

Silver Lupine

California Gumplant

Elderberry

Showy Milkweed

Purple Salvia

Photos: Jessa Cruz

Designing and Restoring Habitat – Muir Glen

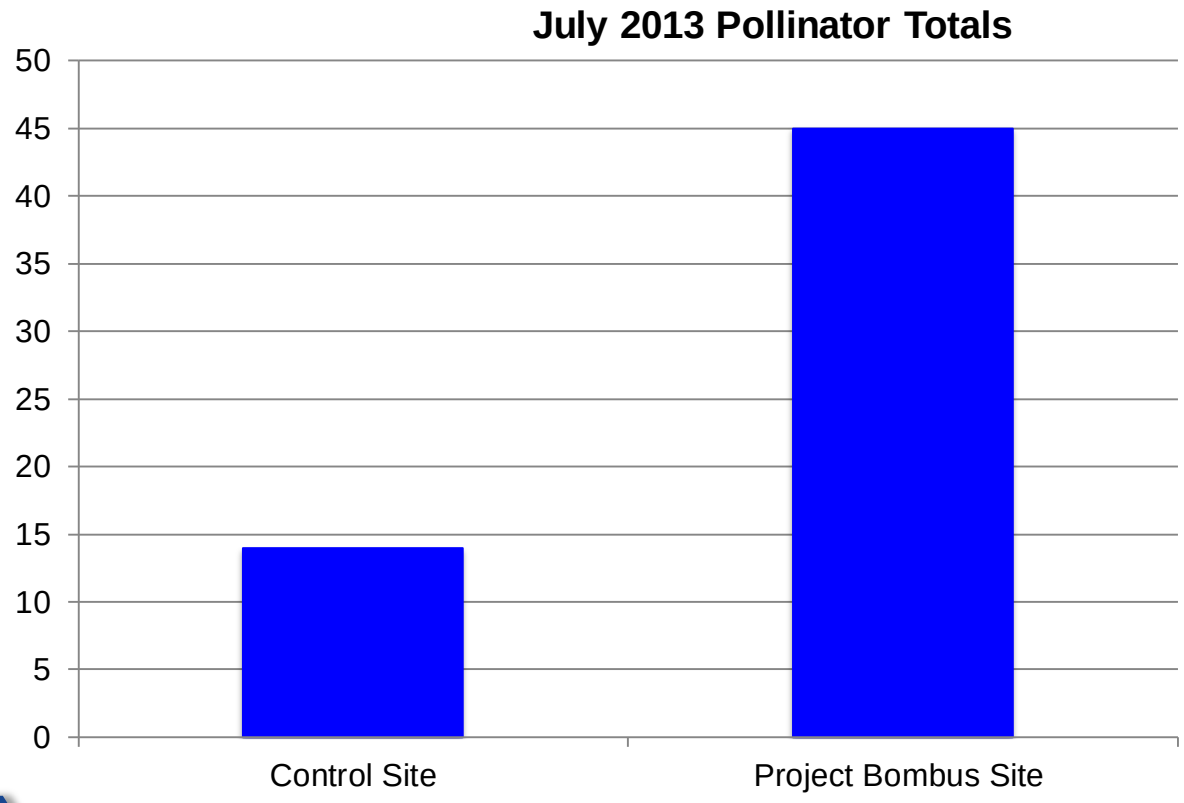
Maturing hedgerow - Summer 2014

Photos: Jessa Cruz

one GLOBAL SOURCING

Hedgerow Project Results

Less than one year after installation, nearly twice as many bees were observed at the hedgerow than the control site.



Dr. N. Williams and K. Ward (UC Davis)

Designing and Restoring Habitat – Larabar Almonds

Designing and Restoring Habitat – Larabar Almonds

Designing and Restoring Habitat – Larabar Almonds

Solarizing and planting wildflower area: summer and fall, 2014

GENERAL MILLS

Designing and Restoring Habitat – Larabar Almonds

Designing and Restoring Habitat – Larabar Almonds

Designing and Restoring Habitat – Larabar Almonds

Planting hedgerow : Fall, 2014

GENERAL MILLS

Designing and Restoring Habitat – Larabar Almonds

Hedgerow: Spring, 2016

Designing and Restoring Habitat – Larabar Almonds

Cover crop (purple): Spring 2016

Cheerios Initiative: Expanding Pollinator Habitat on Farms

Photo credit: Jennifer Hopwood

"The Xerces Society partnered with General Mills Cheerios to plant habitat for pollinators on farms that grow oats, a major ingredient of Cheerios. Xerces staff have been recruiting farmers to join this effort across South Dakota, North Dakota and Manitoba. This year alone 10 farmer outreach events were hosted in this region focusing on the value of pollinators and practical ways to integrate habitat back into farms. This included presentations for farmers at the Northern Plains Sustainable Ag Winter Conference, Paterson grain elevators, and Canadian conservation district offices. For example, Xerces Plant Ecologist/Agronomist Jim Eckberg is pictured presenting to farmers in Morris, Manitoba where Paterson Grain, a General Mills and Xerces Society partner, operates an elevator that supports oat growers in the region (see last slide). Several of these farmers are now apart of the Cheerios pollinator initiative.

Summary:

35+ farms participating in program
350+ acres planted to date
On track to plant 1650 acres by spring 2018, 3300 acres by 2020

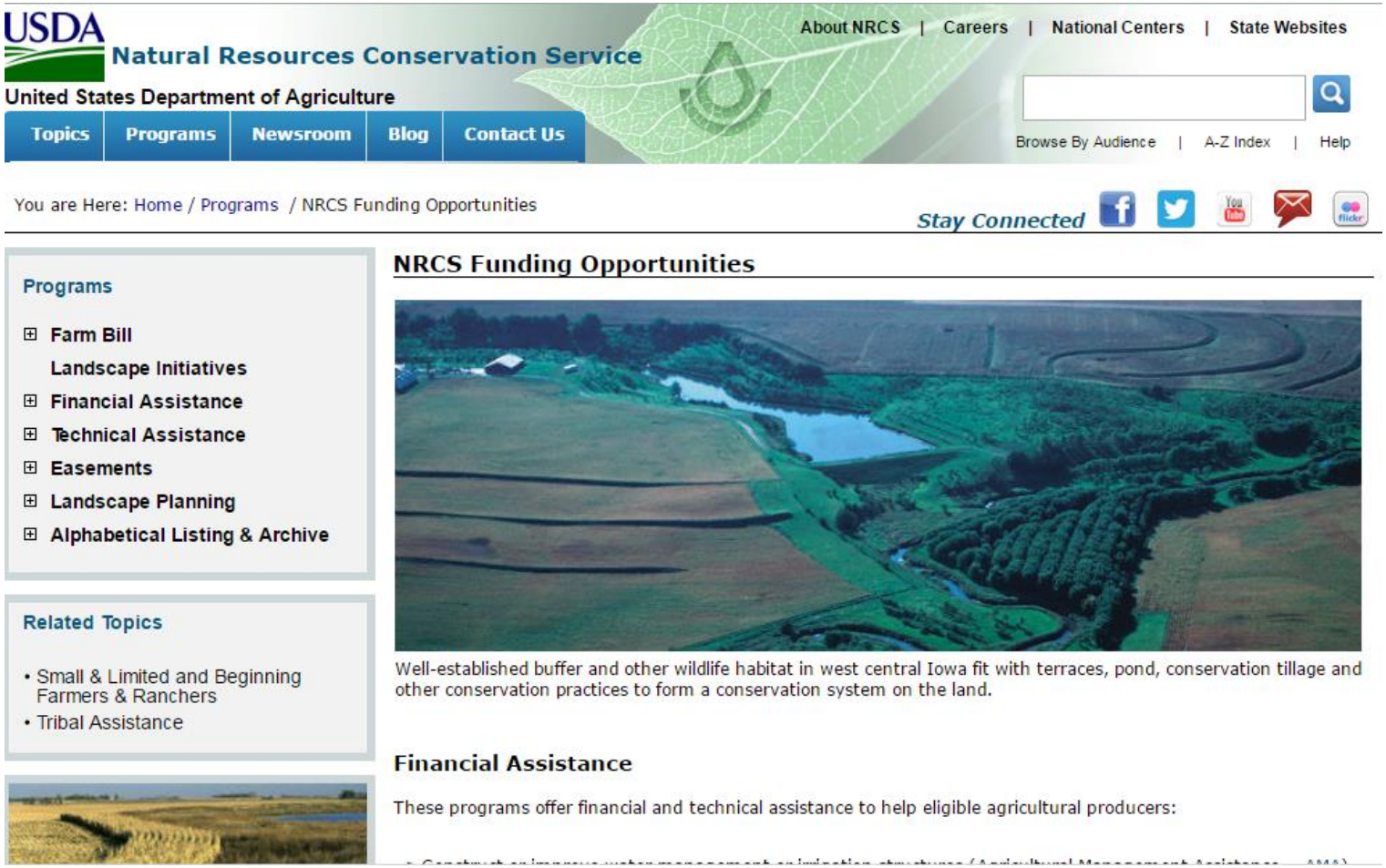
35+ farms recruited

Farms participating across Manitoba, North Dakota, South Dakota and Minnesota

Partnering with NRCS- North Dakota

Xerces- NRCS meeting April 13th in Minot, ND

NRCS recruiting farmers in oat growing regions



Canada: Partnering with Conservation Districts, Ag Canada, Paterson Grain

Recruitment meetings across Manitoba Conservation Districts and Paterson Grain elevator sites in North Dakota and Manitoba

Planning pollinator plantings with participating farms

350+ acres planted to date

940 acres confirmed for spring 2018

1650 acres in total to be planted by spring 2018,

3300 acres by 2020

For example, 10 acre field to be planted to native wildflowers (April 3rd LaMoure, ND)