Planning for Pollinators and People

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Introduction:
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Presentation:
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Planning for Pollinators and People
Pollinators are critical to the Nation’s economy, food security, and environmental health.

Honey bee pollination alone adds more than $15 billion in value to agricultural crops each year, and helps ensure that our diets include ample fruits, nuts, and vegetables. This tremendously valuable service is provided to society by honey bees, native bees and other insect pollinators, birds, and bats.

But pollinators are struggling. Last year, beekeepers reported losing about 40% of honey bee colonies, threatening the viability of their livelihoods and the essential pollination services their bees provide to agriculture.

Monarch butterflies, too, are in jeopardy. The number of overwintering Monarchs in Mexico’s forests has declined by 90% or more over the past two decades, placing the iconic annual North American Monarch migration at risk.

Source: “Announcing New Steps to Promote Pollinator Health”
https://www.whitehouse.gov/blog/2015/05/19/announcing-new-steps-promote-pollinator-health
History

The Heikes family has been farmers and livestock feeders in the southeast corner of South Dakota since the 1800's.

The **Heikes Family Farm**, located on the northeast corner of Vermillion, has been in the family since 1946. The farm sits on rich, nutrient-dense soil, the soul of the farm. Vermillion is the home to the University of South Dakota, and boasts a population of approximately 10,000 people.

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The mission statement of the farm is: "To produce healthy, fresh, organically-grown produce that really tastes good!"

They support the "Buy Fresh Buy Local" marketing concept and believe that Community Supported Agriculture is one way to build the family business based on our consumer’s needs and tastes. Therefore, the consumer’s feedback guides the crop selection, with the produce ranging throughout the season from fruits and vegetables, to herbs and flowers.
After 35 years as a **Production Agronomist**, Sam Heikes and family returned home to the Heikes family farm in the spring of 2010 to start the "Heikes Family Farm Market", **the region’s only Community Supported Agriculture operation**.

Sam’s Agriculture degree is from South Dakota State University with an agronomy major and an animal science minor. Sam’s daughter Heidi is an integral part of the operation, helping out with all aspects of the operation, but focusing on marketing and social media.
Planning: Science, Creativity and Holism through Design

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Planning: Hands on and Feet on the Ground Work

“original flower children”

“Pollinator Partnership”

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T.S. Eliot once said, "Mankind will never cease from exploring and the end of all our exploring will be to arrive where we started... and to know the place for the 1st time".
Policy: Strategy to Promote Health of Honey Bees and Other Pollinators

Presidential Memorandum - Creating a Federal Strategy to Promote the Health of Honey Bees and Other Pollinators

Policy: Pollinator Health Strategy 2015

Pollinator Health Task Force (Interagency) Goals:

1. Reduce honey bee colony losses to economically sustainable levels;
2. Increase monarch butterfly numbers to protect the annual migration; and
3. Restore or enhance millions of acres of land for pollinators through combined public and private action.

https://www.whitehouse.gov/sites/default/files/microsites/ostp/Pollinator%20Health%20Strategy%202015.pdf
Contributions

The theme that runs consistent throughout the season for pollinators in the region is a dedicated commitment of diversity. The high tunnels, which begin production long before the normal growing season and again in fall, provide early sources of crops available to pollinators. The conventionally grown acreage then serves to provide crops during the height of the season, ranging from tomatoes and beans, to melons and berries. The range of blooming species that are in production are constantly changing on the farm, all of them showing dramatically productive yields directly relating to the activity of the pollinators. Finally, the 12 acres in production for the CSA share program are organically grown, because of the concern that conventional chemicals can impact humans and beneficial species such as pollinators.
Contributions

There are an additional 11 acres enlisted in the Natural Resource Conservation Service Conservation Reserve Program (CRP), areas recognized for their crucial habitat value on the landscape. Within this CRP, 3 acres are maintained as a food plot for pollinators and game birds, and a seed mix was established containing sorghum, millet, buckwheat, clovers, and sanfoin. The area is a place of constant pollinator activity, with a wide range of species including bees, butterflies, moths, and hummingbirds finding habitat in the tall mix of grasses and forbs.
Contributions

There are also 2 delineated prairie pothole wetlands protected in a 10 year easement program, which provide a seasonal source of water for many species on the farm. During the dry periods of the summer and fall when the wetland no longer supports surface water, large watering tanks are provided daily nearer to the crops, to specifically encourage the activity and survival of pollinators.
The Heikes Farm leases access to the farmland to a local beekeeper running a small private operation in the area. Located on the Heikes Farm, the 50-60 hives are recognized as producing some of the finest honey produced in the region, allowing a local business to produce a unique and high quality product. Sam has also facilitated new locations for the beekeeper to place hives, based on Sam’s relationships with other like-minded farmers in the region.
Contributions

A section of the shelterbelt surrounding the farmstead was previously chemically controlled to reduce the presence of undesired species, particularly milkweed. Upon taking over management of the farm, Sam deemed this area “butterfly alley” and allows the milkweed to populate the area freely. Multiple species of butterflies are known to use the area, with very high numbers of individuals frequenting the area during the fall migration period of every year.
Recognition and Validation

• 2014 Farmer-Rancher Pollinator Conservation Award

• Contributed significantly to pollinator protection, conservation, and issue outreach resulting in increased awareness of the importance of pollinators and pollination.

Planning for Pollinators and People
Recognition and Validation

“Pollinator Conservation award means a lot to me personally, and to my family.

The healthy pollinators of the Heikes Family Farm will testify to what I’ve learned and have put into practice in my food production system.

At this stage of my life this National award is a timely reminder to me of the real importance of my life’s agronomy work over the last 40 years! Pollinator protection has proven to be positive for our farm’s CSA.”

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Recognition and Validation

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Recognization and Validation

“Our shareholders support our CSA because they want to know who’s growing their food and how it’s being grown. They want fresh local healthy food with no GMO’S. I guess that’s the way I grew up, the way I started in the 60’s and 70’s on my family’s small farm.”
Partnerships, Awareness, Community, Conservation

As shareholders, all CSA members receive two 1 lb containers of honey harvested from the hives kept on the farm property. Members are made aware of the benefits afforded by local pollinators, not only in the fruits and vegetables that regularly come in their shares, but also in the allergy reducing quality of the honey produced on the farm.

Tours on the farm are done on a regular basis, allowing participants to view all of production acreage, the butterfly alley, the wetlands, the CRP acres, and the constantly buzzing hives. An annual public event is hosted in the spring, where the general public can view all of the conservation benefits of the property, a significant emphasis being placed on the efforts to promote pollinators in the area.

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Shareholders support the operation not only because of the valued produce that they receive in their share, but also because of efforts that benefit the region as a whole. In an area traditionally known for agricultural operations that focus on a soybean and corn rotation almost exclusively, small production areas such as the Heikes Family Farm provide islands of crucial habitat with diverse plants available for a range of pollinators. Many school groups have also visited the farm, learning about the elements that go into growing locally produced food, including the role of pollinators for plants and honey.
Partnerships, Awareness, Community, Conservation

While the focus of the operation is on the production of produce for the shareholders in the membership, the Heikes Family Farm recognizes that the direct efforts to support pollinators is a win-win-win for the business, the consumers, and the region as a whole.

Over the last 40 years of my Agronomy career, I’ve learned, in exploring the entomology of flower fields of Dakotas the critical importance of the “Pollinator Partnership” to all of us. I’ve learned balancing problem insect control with the addition of custom pollinators later is the key to profitable production of many of our crops. Today I know that pollinators are in trouble, big trouble, primarily because of the growing use of chemicals insecticides, and fungicides by large scale production agriculture, with too little regard for beneficial pollinators like honeybees.
Other Policy/ Resources:


Bring back the Pollinators Annual Report
Xerces Society www.xerces.org/

Million Pollinator Garden Challenge
http://millionpollinatorgardens.org/

Pollinator Friendly Best Management Practices for Federal Lands
http://www.fs.fed.us/wildflowers/pollinators/BMPs/
Other Policy/Resources:

Plant Materials Centers (USDA, NRCS); Flower Mixes, etc. Seed Mixes, other Valuable Data

Planning for Pollinators and People
Future/ Plans/Promotion

http://www.siouxlandnews.com/story/29724403/hometown-farmer-heikes-family-farm

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