

# Establishing a Service Provider Network for Organic Grain Crops in Pennsylvania



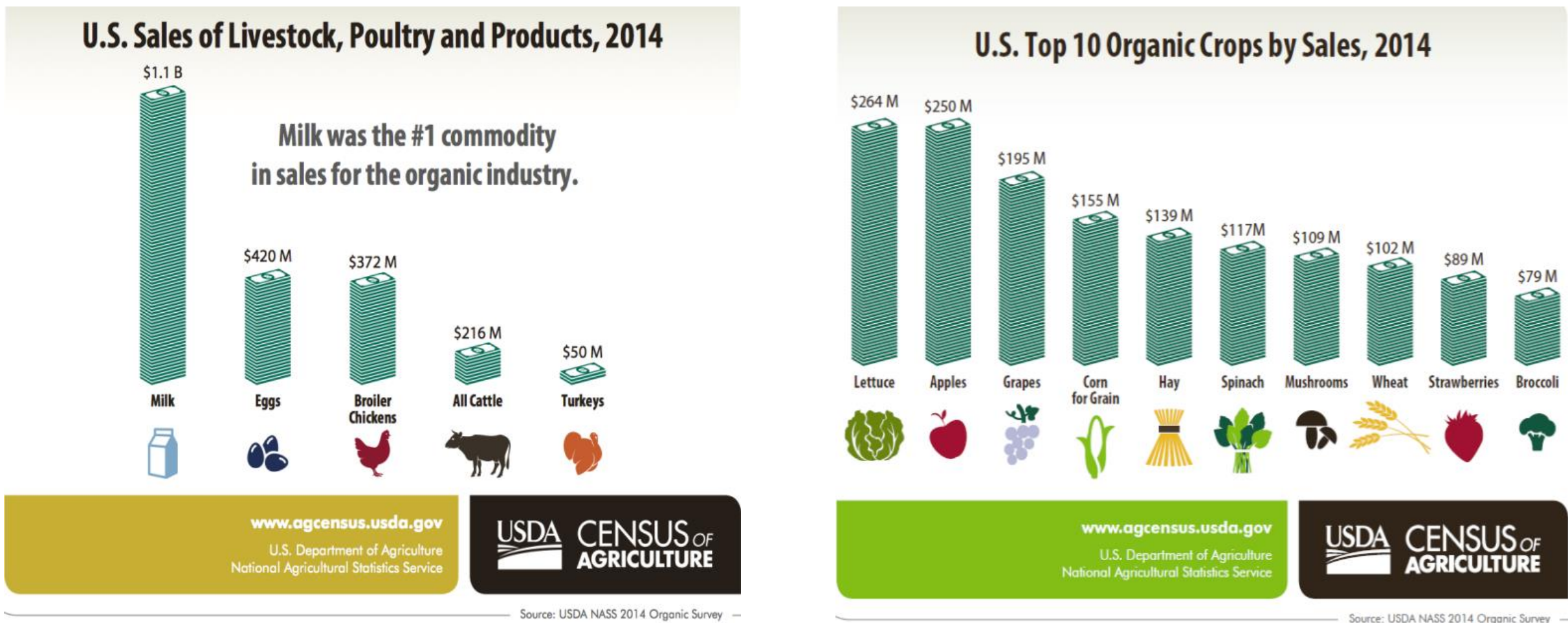
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**Overview.** The need for grain-based products as a source of animal feed for organic poultry and livestock production provides opportunities for farmers in different growing regions across Pennsylvania to supply various nationwide markets. Despite high consumer demand, information is insufficient and interdisciplinary collaboration is needed to bridge the gaps in knowledge about marketing and production potentials for these crops. Local sources of organically produced corn, soy, oats, barley, triticale, and rye have opportunity to fill this niche market, but weed, pest, fertility issues still make production difficult. Furthermore, market opportunities are challenging to understand.

**Objective.** This NE-SARE State Professional Development Program aims to address needs and opportunities associated with organic grain crop production and marketing by engaging a core group of service providers with various practitioners and farmers who are involved in production, processing, and marketing in order to to prepare a network of knowledgeable professionals.

Figure 1.



**Opportunities for U.S. Organic Grains.** Milk, eggs, and broiler chickens lead the market in sales of organic foods, bringing in higher values than many top selling vegetable and fruit crops (Figure 1). Cattle and turkeys are also important sources of organic protein for U.S. consumers. National Organic Program standards require that all livestock is fed 100% certified organic feed and is raised on certified organic land that meets organic crop production standards. Despite high demand and market prices for these products (Figure 2), challenges associated with production and marketing animal feed crops organically has limited U.S. production of these crops, and the majority of organic livestock feed is imported from international markets (Figure 3).

Figure 2.

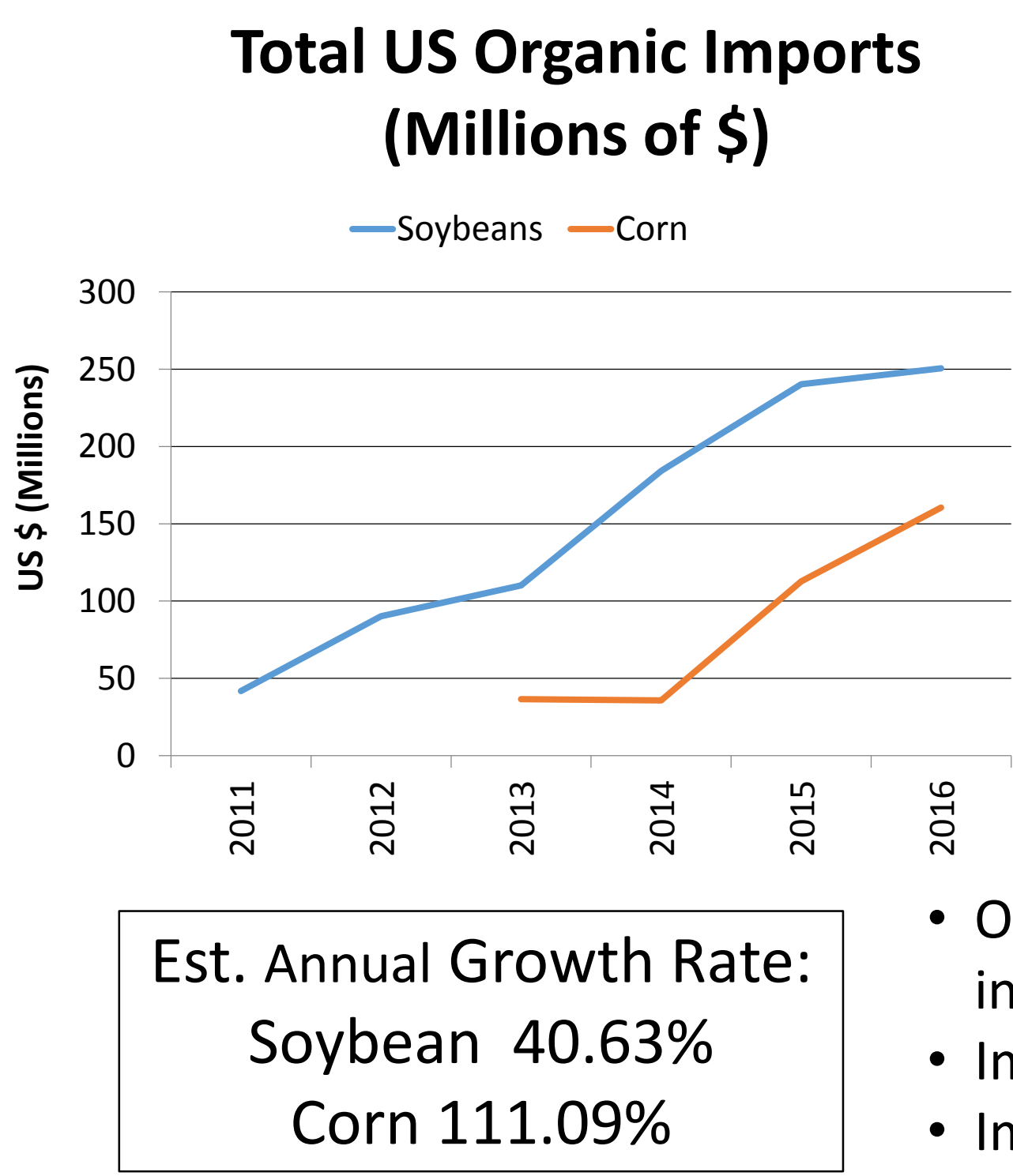


Figure 3.



- Organic corn imports quadrupled from \$36.6 million in 2013 to \$160.4 million in 2016
- Imports largely for livestock feed
- Import growth rate for feed grains show need for increased domestic organic production

**Organic Grain Prices.** Price premiums for organic corn and soy are greater than prices for conventionally produced versions of the same products (Figure 4).

Figure 4.

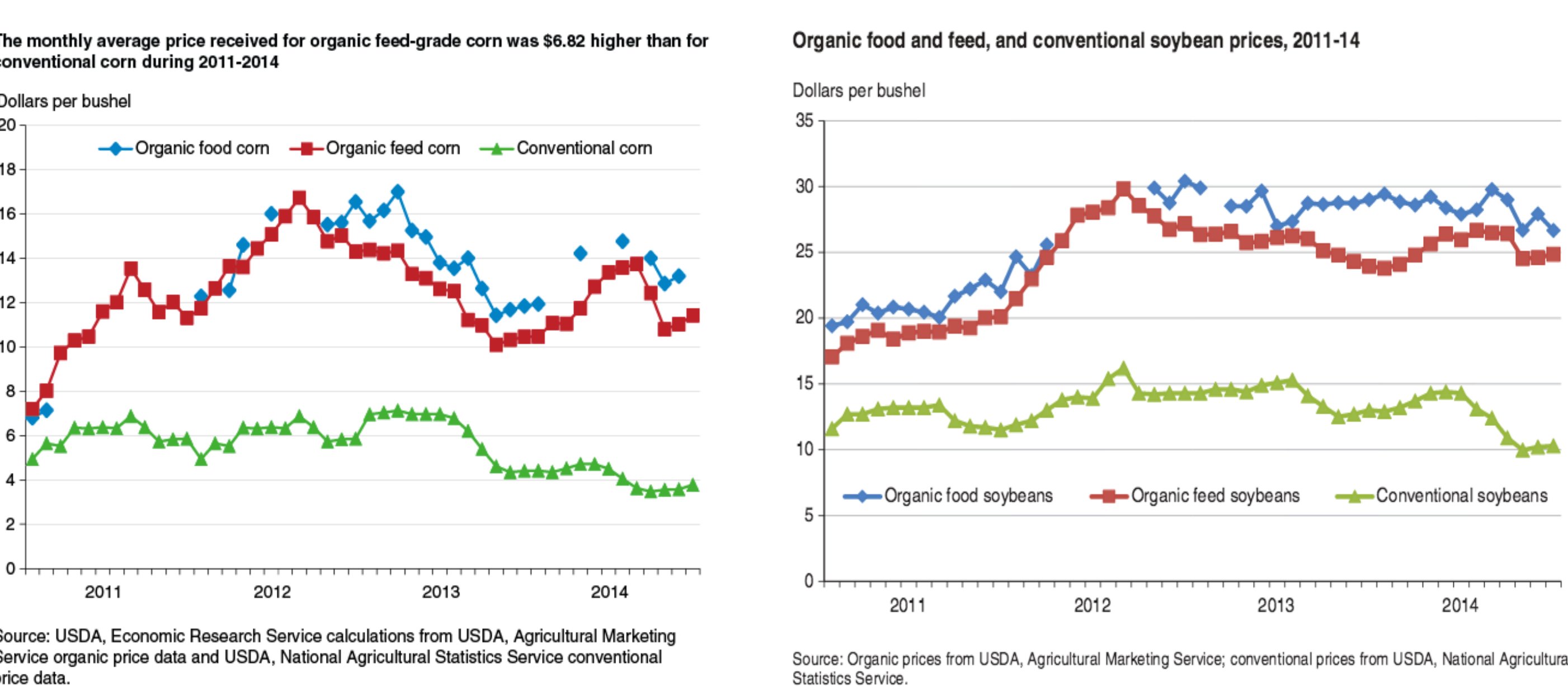


Figure 5.



**Growing Organic Grains.** Clockwise, organic corn, oats, barley, and soybeans can provide nutrient-rich sources of animal feed for various livestock (Figure 5). A more thorough understanding is necessary to improve methods of weed control, pest management, supplying fertilizer, and selecting cultivars in order to improve their potential to be produced organically.

Despite these challenges, some Pennsylvania organic farmers are successfully growing grain crops. Penn State research and Extension teams continue to explore better opportunities for reducing tillage, managing crop residues and covers, adjusting machinery, and choosing different grain types and cultivars. Better outlets for information exchange are necessary to improve engagement and outreach among farmers, agricultural service providers and grain markets.

**Project Partners.** Researchers and Extension educators in agronomy, entomology, weed science, animal science, community economics and marketing; organic grain farmers (current and future); millers, bakers, maltsters, grain suppliers and marketers; organic animal producers; organic certifiers and agencies; and others.

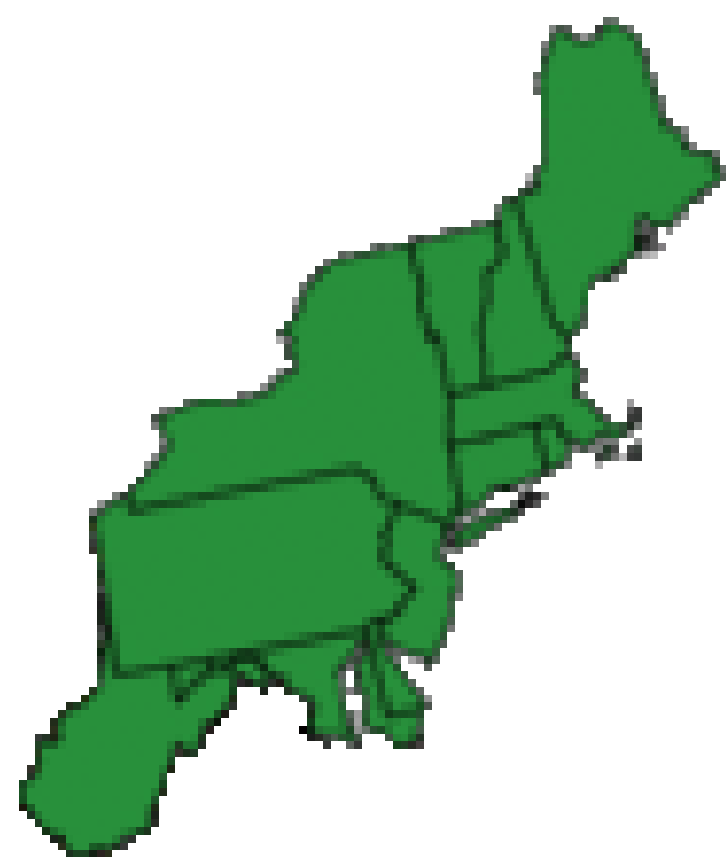
## Main Project Activities.

- 1) Interviews with stakeholders to develop market assessments about organic grain feed to develop into usable information and resources.
- 2) Regional workshops and conferences with service providers and farmers.
- 3) On-farm trials and demonstration plots and field days with farmers and service providers.
- 4) Outreach materials and Presentations at regional conferences that incorporate project findings.



## Service provider participation in this program will help Pennsylvania farmers

- 1) Recognize current potentials for producing organic grain crops and meeting regional demands for high-value, niche markets.
- 2) Select appropriate organic grain crops to produce on their farm, depending on specific growing regions and available markets.
- 3) Overcome barriers associated with alternative grain production and marketing in PA, including those associated with organic production, and begin producing organic grains.
- 4) Connect with a variety of stakeholders and service providers involved in seed sales, product distribution, milling, grain processing, associated regulations, and grain end-use quality to obtain necessary information.



## About the Northeast SARE State Program

The state program is designed to help agricultural service providers teach new ideas to farmers that lead them to adopt beneficial practices and approaches by leading sustainable agriculture education shaped by local needs. For more information about Northeast SARE please visit; <https://www.nesare.org/>