

Potato sustainability in Wisconsin

Determining the sustainability of practices used by potato growers in 2013

The Wisconsin potato industry is being proactive in documenting the sustainability of their growers while ensuring grower engagement in the process. Working through the Wisconsin Potato and Vegetable Growers Association (WPVGA), in partnership with the National Initiative for Sustainable Agriculture (NISA), the industry has assessed the sustainability of the practices currently used on potato farms throughout the state. The assessment used an entry-level NISA approach to generate maximum grower engagement in the sustainability arena. Seventy-one growers returned assessments representing 56,785 acres of potatoes (90% of the total Wisconsin acreage). Growers from the fresh (20,400 acres), chip (17,900 acres), frozen (10,400 acres), and seed markets (7,400 acres) participated in the assessment to provide an accurate representation of the industry as a whole. This assessment represented over 200,000 total farmland acres, with the farms being active for an average of over 53 years. All results were received from family owned farms, with an average of 2-3 generations actively working and involved in the farming operations.

Results: The data shown (see other side) demonstrates the percentage of growers using practices that encourage sustainable agricultural advancements.

Ensuring Grower Involvement: The current industry-wide assessment expands grower engagement in sustainability to all segments of potato production in Wisconsin by providing a base-tier assessment that involves a broad spectrum of growers. This base-tier assessment compliments Wisconsin's existing Healthy Grown[®] assessment which is a mid-tier, market-based standard. The advancements highlighted on the following page clearly demonstrate how Wisconsin potato growers are pushing the envelope in sustainability, and will continue to improve!

Wisconsin potato growers are committed to advancements along the sustainability continuum. Each year, they allocate a portion of their potato sales to support short- and long-term research at the University of Wisconsin and beyond.

What's Next: The WPVGA and NISA will re-assess the industry every few years to show continued advancements and implementation of new and cutting edge practices.





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Highlights of assessment results

ECONOMIC

- 100% of farms are multi-generational family farms ensuring economic stability.
- 88% grow multiple crops to maintain economic diversity.
- 70% have risk management plans.
- 64% have succession plans in place.

ENVIRONMENTAL

- Soil conservation. To preserve structure, 81% employ a 3 year rotation and 81% use practices to avoid compaction; to prevent erosion, 59% use conservation tillage, 70% plant winter cover crops and 87% use living windbreaks.
- Water use. 57% use computerbased irrigation scheduling, 90% retain water use records.

ENVIRONMENTAL

- Biodiversity. Over 30% work with an ecologist to identify native habitat types and implement practices to enhance biodiversity, 52% use pest-specific insecticides to preserve natural enemies.
- Energy. Over 70% use at least 4 different approaches to conserve energy and 80% recycle.
- Improving production efficiency. 100% calibrate planters and 86% use auto-steer to improve land use efficiency. 94% attend annual educational meetings and 61% conduct on-farm research with scientists.
- Using nutrients efficiently. 97% sample soil to determine crop need, 82% split nitrogen applications or use slow release formulations and 67% use leaf petiole sampling to determine need for supplemental nitrogen.
- Pest management. 96% scout fields to determine pest levels and treat only at thresholds to reduce environmental impact.

90% rotate mode of action to manage resistance.

73% use at least 4 non-chemical approaches to manage weeds.

60% use at least 4 non-chemical approaches to manage insects.

74% use at least 8 non-chemical approaches to manage diseases.

Wisconsin Healthy Grown® Potato Program

SOCIAL

- 70% purchase inputs and supplies locally.
- 77% have employee benefits and 52% provide educational opportunities.
- 45% are actively involved in community service organizations.
- 93% have the ability to trace product from field to consumer.
- 78% conduct GAP and other food safety assessments annually.
- 90% use field practices to reduce contamination during handling and packaging.
- 83% use storage practices to reduce contamination and to ensure quality and food safety.



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HEATHY GROWN POTATOES

The Wisconsin potato industry has long worked to improve their production while advancing sustainable practices. This is illustrated by the award winning and nationally recognized Wisconsin Healthy Grown® Potato Program—involving 15% of the state's fresh potato production. Healthy Grown®, a mid-tier sustainability assessment, has been at the forefront of environmental potato production in the US for more than a dozen years and has documented impressive improvements while continuing to push the sustainability envelope.