

Laura Foell



United Soybean Board United States

Laura Foell serves on the United Soybean Board and is a member of the Iowa Soybean Association.

USB administers checkoff activities focused on soybean research and market development.

Foell and her husband have been recognized by the Iowa Governor's office, Department of Agriculture and Land Stewardship and Department of Natural Resources as local leaders in environmental stewardship for utilizing best management practices at their corn and soybean farm in Iowa, USA.



Conservation & Soy Production *A Sustainable Solution*

Laura Foell
United Soybean Board
and U.S. Soybean Farmer



CONSERVATION & SOY PRODUCTION

A SUSTAINABLE SOLUTION

Laura Foell, United Soybean Board and U.S. Soybean Farmer

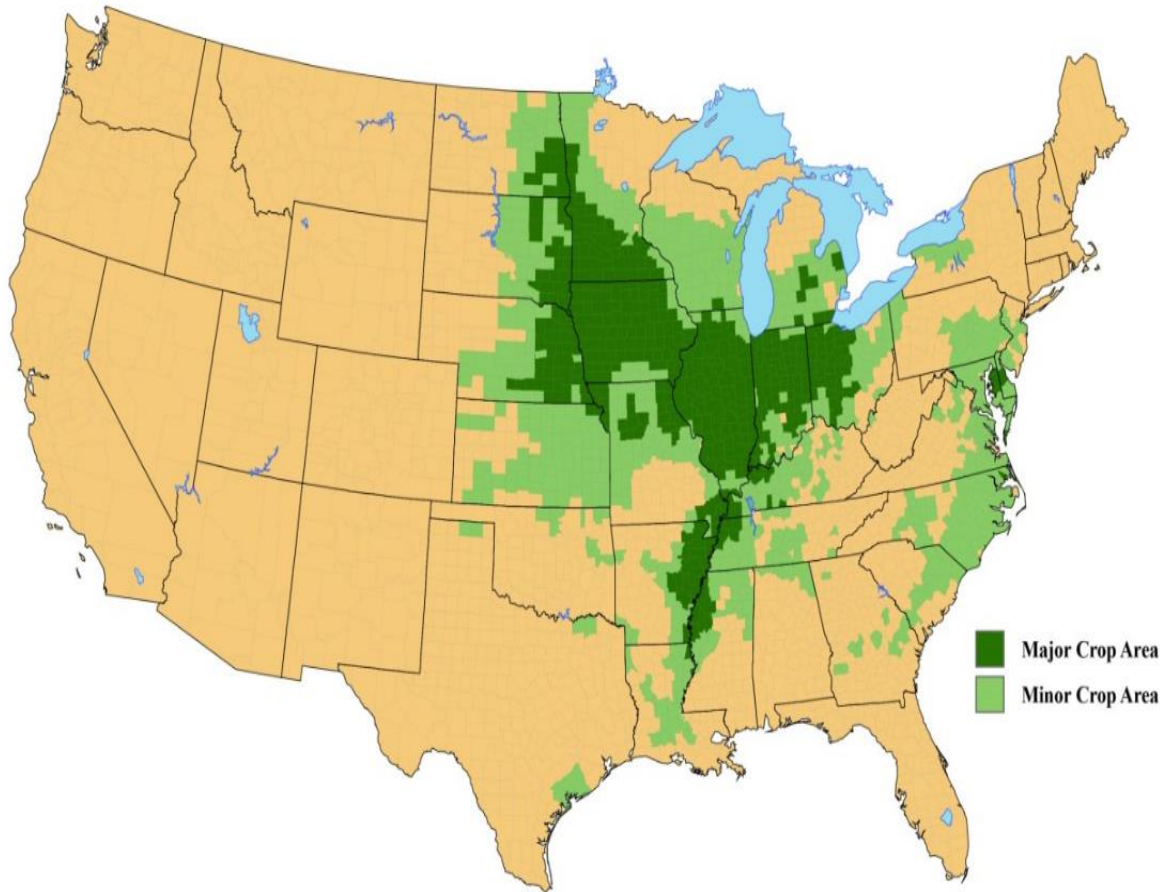


- In 1880 my husband's great grandfather started our farm
- Today it is 365 ha – a mid-sized U.S. crop farm
- We always use conservation farming practices

U.S. SOY for a growing world

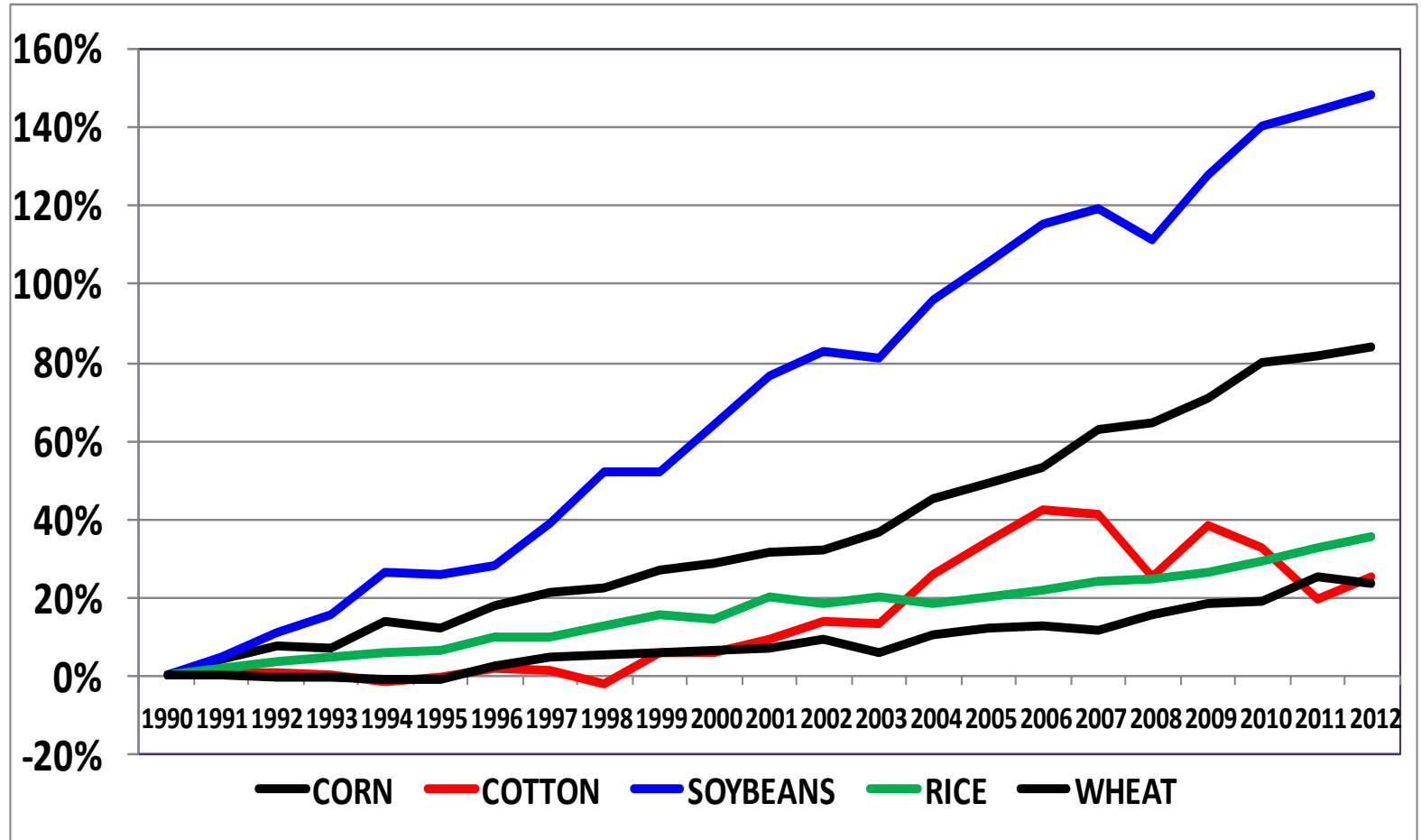
U.S. SOYBEAN PRODUCTION

United States: Soybeans



- Soybeans grown mainly in 29 states
- Approximately 55% of U.S. soy production is exported

SOY DEMAND INCREASED FOCUS ON SUSTAINABILITY



Soybean demand up 148%

WHY DO U.S. FARMERS CHOOSE SUSTAINABLE FARMING?



- Sustainable farming is a way of life - We care about the future
- Family owned businesses
 - 84% of farmland is family owned
- Crop rotation improves diversity and reduces inputs
 - Soy is 23% of U.S. cropland
- Meeting customer demands
- Improved profitability!

NO TILL SOY PRODUCTION ON OUR FARM

More Profitable And More Sustainable

- No-tillage planting
 - Fuel savings on our farm
 - *approximately 9000 litres a season*
 - Herbicide savings
 - Smaller tractors
 - Narrow row planting
 - *increased soy productivity*
 - Labor savings



U.S. SOY for a growing world

65% OF U.S. FARMERS PRACTICE CONSERVATION TILLAGE

Conservation at a National Scale

- **66% decrease in soil erosion**
- **70% reduction in herbicide/pesticide run-off**
- **326 million pound reduction in CO2 emissions**
- **80% reduction phosphorus seepage into surface waters**
- **Annual soil moisture evaporation loss reduction of 18 centimeters, serves to make soybean fields more drought tolerant**
- **Greater than 50% reductions in fuel use**



PRECISION AGRICULTURE

Satellite technology allows precise application of seed and fertilizer, down to the centimeter, resulting in less waste, higher yields and reduced use of crop protection products.

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and so
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SEAGRAM

One of the most important aspects of the application of crop protection products is the precise application of the product to the target area. This is achieved by using satellite technology to map the field and apply the product only to the areas that need it. This results in higher yields and reduced use of crop protection products.



WATER MANAGEMENT

I protect water resources by reducing surface water runoff.
Buffer filter strips create a natural barrier to soil erosion
and provide habitat for wildlife.

Photo: Steve Delaney



BIODIVERSITY

U.S. laws limit crop production on wetlands, peatlands and grasslands. Additional laws protect endangered animals and plants along with their habitat.



U.S. SOYBEAN SUSTAINABILITY ASSURANCE PROTOCOL (SSAP)

- Based on U.S. national system of conservation laws
- Includes Best Production Practices by 275,000+ U.S. soybean producers
- Aggregate approach
- Quantifiable results
- Third party audit
- Certification
- Benchmark with RTRS

U.S. SOYBEAN SUSTAINABILITY ASSURANCE PROTOCOL

A Sustainability System That Delivers
MARCH 2013





U.S. SOY SUSTAINABILITY PROTOCOL

Four Directives with Control Measures & Regulations



- **Biodiversity and High Carbon Stock**
 - Wetland, grassland, forest, biodiversity
- **Production Practices**
 - Conservation tillage, crop rotation, precision farming
- **Public and Labor Health and Welfare**
 - EPA, EEO, OSHA
- **Continuous Improvement**
 - CRP, Conservation programs, training and info sharing

U.S. SOY SUSTAINABILITY PROTOCOL



Measurement, Audit, Certification

- **Annual measurement system of environmental impacts**
 - Life Cycle Analysis
 - Field To Market reports
- **Audits includes producer self-audit and independent third party audit by USDA-FSA of 8-11% of producers participating in Farm Program**
- **Certification done on mass balance system by Soy Export Sustainability (SES)**

Certification



**SOY EXPORT
SUSTAINABILITY** LLC

U.S. Soy
sustainability
certification



CERTIFICATE of SUSTAINABILITY

According to **U.S. SOYBEAN SUSTAINABILITY ASSURANCE PROTOCOL**

*This is to certify that soybeans
or soy products described herein
were produced in compliance
with U.S. laws, regulations,
production practices, and
audit process as listed in the
U.S. Soybean Sustainability
Assurance Protocol.*

NAME OF EXPORTING COMPANY	VESSEL/CARRIER NAME/SHIPMENT IDENTIFIER
DATE OF SHIPMENT	PRODUCT
PRODUCTION YEAR	METRIC TONS
CERTIFICATE NUMBER	
DATE OF CERTIFICATION	<i>Seller/Exporter</i>  SES

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ALL SOY SOURCED IN THE U.S.A.

The U.S. Soy Sustainability Assurance ProtocolA Sustainability System That Delivers



