

# 2004

# Soybean Management Field Days

## *All presentations*

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## Characteristics of Successful Farm Business Managers

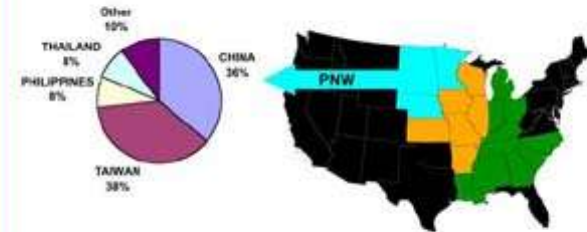
- Know their own **Abilities & Interests** and **Seek Help** with the Remainder
- Keep **Good Business Records**
- Optimize **Production, Market** at a Profitable Level, and **Control Costs**
- Keep **Capital** Structure in Balance

Nebraska

SOYBEAN MANAGEMENT FIELD DAYS

Soybeans

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SOYBEAN MANAGEMENT FIELD DAYS

Soybeans

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## SOYBEAN QUALITY COUNTS

It's time to **change** the way we think about soybeans.



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In the end, processors are buying oil and protein... and that is **EXACTLY** what they pay for!



Nebraska **SOYBEAN MANAGEMENT FIELD DAYS** Sybeans

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	Lbs/bu	Cents/lb	Component Value/bu
Meal	44	8.5	3.74
Oil	11	22	2.42
Hulls	4	3.8	.15

Total EPV \$6.31

Nebraska **SOYBEAN MANAGEMENT FIELD DAYS** Sybeans


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Nebraska **SOYBEAN MANAGEMENT FIELD DAYS** Sybeans

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Average Soybean Protein 1986-2002



States shown accounted for >1% of U.S. production in 1970 through 2002

Nebraska **SOYBEAN MANAGEMENT FIELD DAYS** Sybeans

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**You Produce**  
Bushels/Acre

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**Producers Want**  
Oil/Bushels  
Protein/Acre

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## The Magic Numbers

19% Oil  
35% Protein

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## Nebraska Farm Business Inc. Data 1998-2003 Soybean Prod. Costs

	Irrigated		Dryland	
	High 1/3	Low 1/3	High 1/3	Low 1/3
P&M Cost	\$ 31	\$ 44	\$25	\$ 41
Depreciation	\$ 27	\$ 28	\$15	\$ 26
Seed, Chem, Irr, & Crop Ins:	\$ 71	\$ 88	\$53	\$ 60
Land "Charge"	\$84	\$124	\$69	\$106
% of Land Crop Share	46%	20%	46%	36%

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## What's Up

- \$ Low Protein <35%  
North & South Dakota, Kansas & Nebraska
- \$ Moderate Protein 35-36%  
Minnesota & Arkansas, Wisconsin & Illinois
- \$ High Protein >36%  
East Central & South

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## Environmental

- \$ Geographic Location
- \$ Weather
- \$ Soil
- \$ What else?

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## Estimated Processing Value-EVP

South Dakota	96%
Illinois	100%
Louisiana	101%

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## Production Shifts

	1970	2002
High Protein	35%	25%
Moderate Protein	54%	46%
Low Protein	9%	25%
Other	3%	3%

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## **Economic Impact**

You receive 10-12¢/bushel for soybeans testing more than 35% protein



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International Customers want high protein and oil soybeans.

For Nebraska Farmers, the customers are China, Taiwan, Philippines, et al



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## **Genetics**

Seed company soy-breeders are selecting for higher oil and protein.

??Effect on Yield??



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Seed Marketers and Processors are offered incentives for Higher Quality Soybeans



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The Next Step is.....

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### Soybean Aphid *Aphis glycines*

- Arrived in the U.S. in 2000
- Arrived in Nebraska in 2002
- Caused significant yield losses in Nebraska in 2003, primarily in northeast Nebraska

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### Nebraska Farm Business Inc Data

Average Yield:	Irrigated	Dryland
6 Year Average	53.6	34.6
24 Year Average	45.6	35.7
5 year Avg.-Top 1/3	56.1	39.6
5 Year Avg.-Low 1/3	50.5	27.2
Price Received:		
Top 1/3 vs Low 1/3	+\$ .19	+\$ .02

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### Soybean Aphid life stages



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## Soybean Aphid Life Cycle

- In spring eggs hatch and 3 generations are produced on buckthorn (*Ramnus spp.*)
- The last generation is winged
- Migrants move to soybean fields

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## Soybean Aphid Life Cycle

- In summer multiple generations are produced
- Parthenogenic (all females giving birth to live young)
- Crowding produces winged forms that migrate to other fields

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## Damage Symptoms

- Curled wilted leaves
- Stunting
- Yellowing
- Shed skins
- Honeydew, gray sooty mold
- Presence of lady beetles

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## Aphid skins on plant



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## Soybean Aphid Management

- Begin scouting in July
- Estimate number of aphids per plant
- 250 aphids per plant (R4) and increasing
- Check for natural enemies
- Use high water volume and pressure

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## Management of Soybean Mosaic

- Clean seed – SMV can be highly seed transmitted.
- Resistance – sources in commercial soybean varieties are available.
- Vector Management – soybean aphid thresholds may be adjusted if SMV is present.

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## SMV Occurrence in 2002

- Aphid transmitted
- Seed-borne less than 5% in most varieties (seed transmission as high as 75%)



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## Soybean Rust

- Estimated impact on production is the first year from \$640 to \$1.3 billion on the 74 M Acres of US soybeans.
- Brazil spent over \$600 M treating 80% of their acres in 2002/03 (two applications).

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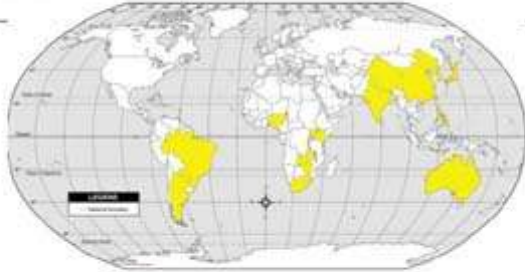
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## Soybean Rust

- Global distribution (Yellow)



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## Nebraska Farm Business Inc. Data Top 10 Mid-Sized Farms

8 Year Avg.	All Farms	Top 10
Gross Revenue	\$362,743	\$226,194
Net Farm Income	\$ 42,484	\$ 66,477
Operating Exp. Ratio	73.6%	59.4%
Mach Cost /Acre	\$ 64.30	\$ 44.67
P&M Investment/Acre	\$ 199.00	\$ 122.00
Crop Share/Total	44.1%	65.33%
Family Living Cost	\$ 35,511	\$ 31,045

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## Soybean

- Symptoms not like other rusts
- Look alike diseases are:
  - **Bacterial Blight**
  - **Bacterial Pustule**
  - **Septoria Brown Spot**



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## Soybean Rust Management

- Fungicides: Myclobutanil, Propiconazole, Azoxystrobin, Chlorothalonil
- Host Plant Resistance
- Planting Date



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**Seeds must be at the proper depth for good root development**



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### **Harvesting Tips for Soybeans**

1. Filler Plates for Pods
2. Advance Vanes for Rotor
3. Advance Vanes for Spreading

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Soybeans

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### **Residue Management with the Combine Steps to Maximum Trash Reduction**

1. Reduce the Gathering Chain Speed
2. Adjust or Replace Stalk rolls
3. Change Stripper Plates

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### **No-till Planting Equipment Must:**

1. Cut or handle the residue
2. Penetrate the soil to seeding depth
3. Establish seed-to-soil contact
4. Close the



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**MARKETING STRATEGIES TO MAKE YOU COMPETITIVE**  
FOURTEEN YEARS, BASED ON 600 ACRES, 40 BUSHELS PER ACRE APH

STRATEGY	EVERY YEAR		YEARS ABOVE LOAN		YEARS ABOVE \$6.75	
	MEAN	WORST	MEAN	WORST	MEAN	WORST
FORWARD PRICE 75% NO INSURANCE	\$147,980	\$93,809	\$149,152	\$90,002	\$151,164	\$107,679
FORWARD PRICE 75% INSURANCE	\$148,758	\$96,278	\$147,927	\$88,380	\$149,339	\$113,534
SELL AT HARVEST NO INSURANCE	\$148,917	\$113,478				
SELL AT HARVEST INSURANCE	\$144,890	\$115,972				
SELL THANKSGIVING NO INSURANCE	\$149,609	\$120,862				
SELL THANKSGIVING INSURANCE	\$148,492	\$120,725				

HIGHEST INCOME    LOWEST INCOME    LEAST RISK    GUEST PICK

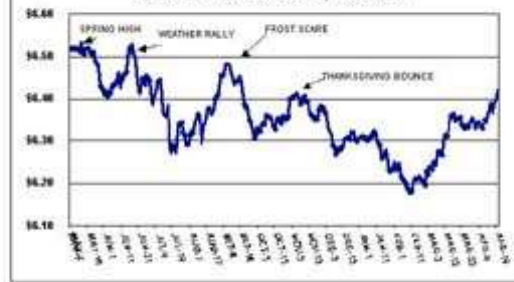


**SOYBEAN MANAGEMENT FIELD DAYS**



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**MAY SOYBEAN FUTURES, 1990-2004**



**SOYBEAN MANAGEMENT FIELD DAYS**



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**TOP 10 COUNTIES 1981**

RANK	COUNTY	PRODUCTION IN 1981	PRODUCTION IN 2001
1	SAUNDERS	5,009,500	7,405,000
2	BURT	3,917,000	5,110,000
3	RICHARDSON	3,651,100	4,398,500
4	CASS	3,617,300	5,144,000
5	PLATTE	3,254,000	5,882,500
6	DODGE	3,198,000	5,539,500
7	GAGE	3,091,700	5,254,000
8	OTCE	2,928,900	4,597,000
9	CUMING	2,880,600	5,669,200
10	WASHINGTON	2,499,400	3,730,000



**SOYBEAN MANAGEMENT FIELD DAYS**



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**TOP 10 COUNTIES 2001**

RANK	COUNTY	PRODUCTION IN 2001	PRODUCTION IN 1981
1	SAUNDERS	7,405,000	5,009,500
2	ANTELOPE	6,410,000	1,146,800
3	PHELPS	6,375,700	72,900
4	FILLMORE	5,961,300	1,436,900
5	PLATTE	5,882,600	3,254,000
6	CUMING	5,669,200	2,880,900
7	DODGE	5,539,500	3,198,000
8	HAMILTON	5,500,700	945,600
9	CEDAR	5,312,000	1,813,100
10	YORK	5,207,800	1,491,800



**SOYBEAN MANAGEMENT FIELD DAYS**



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## More Characteristics of Successful Farm Business Managers

- Maintains **Positive Attitude**
- Considers **Time Management** Important
- Adopts **Change** with Caution
- Set **Goals**, Plan Ahead
- Manages **Personal & Business Life**

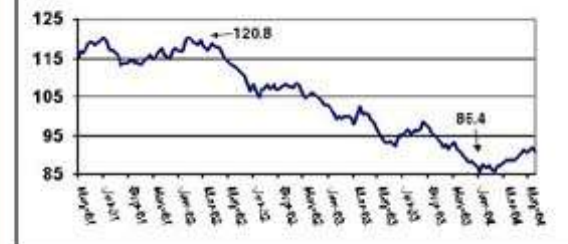
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## DOLLAR INDEX WEEKLY



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**“For every benefit you receive a tax is levied”**

-Ralph Waldo Emerson

### Tax Management Formula

Establish **Objectives** as a part of your business management plan

- Maintains Good **Records**
- Seeks **Professional Assistance**
- Be **Flexible**

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**“The hardest thing in the world to understand is the income tax”**

-Albert Einstein

### Capital Gains Tax

Rates=5% & 15%

Includes income from sale of:

- Real Estate, Stock, Raised Breeding Livestock, Mutual Funds, Speculative Regulated Commodities and Dividends

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## Why is it called a Tax Return when so little of it does?

### The Social Security Tax Strategy

Avoid Schedule F Losses

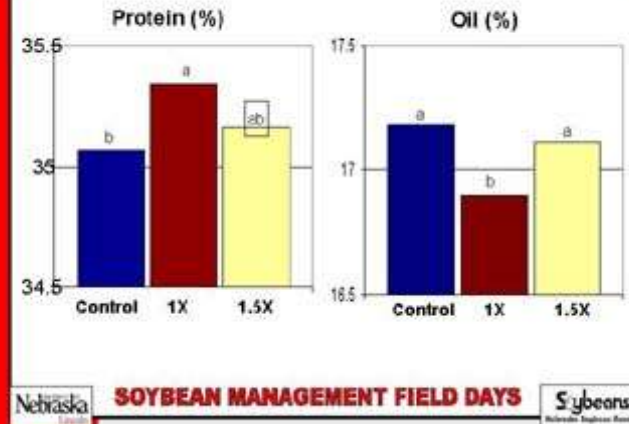
- Bifurcate income sources and separate "Unearned" income
- Pay family wages (use commodities)
- Use depreciation wisely

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1900

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