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Agricultural Outlook Forum
U.S. Department of Agriculture

Presented: February 21, 2008

A FIRM'S PERSPECTIVE ON BIODIESEL

Paul T. Prentice Ph.D.
Vice President
Agriculture Blue Sun Biodiesel, LLC

“Superior Diesel Fuel.
Guaranteed.”



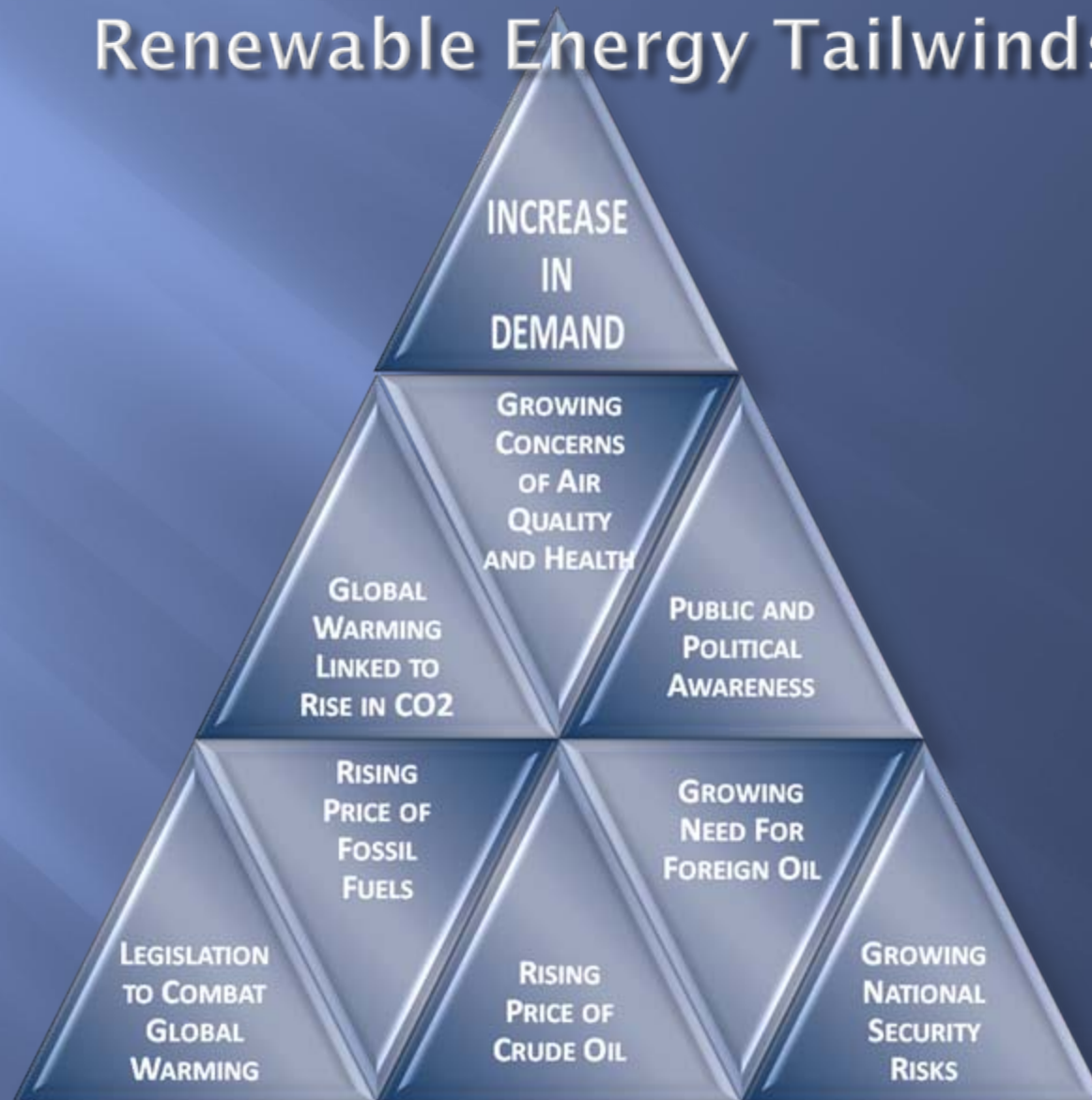
Fusion B20: Guarantee

We can offer this because we maintain superior quality throughout our entire distribution network...



If Blue Sun B20 is ever proven to be the direct cause of damage to your OEM-warranted fuel system materials, Blue Sun will repair or replace the damaged material at no cost to you.

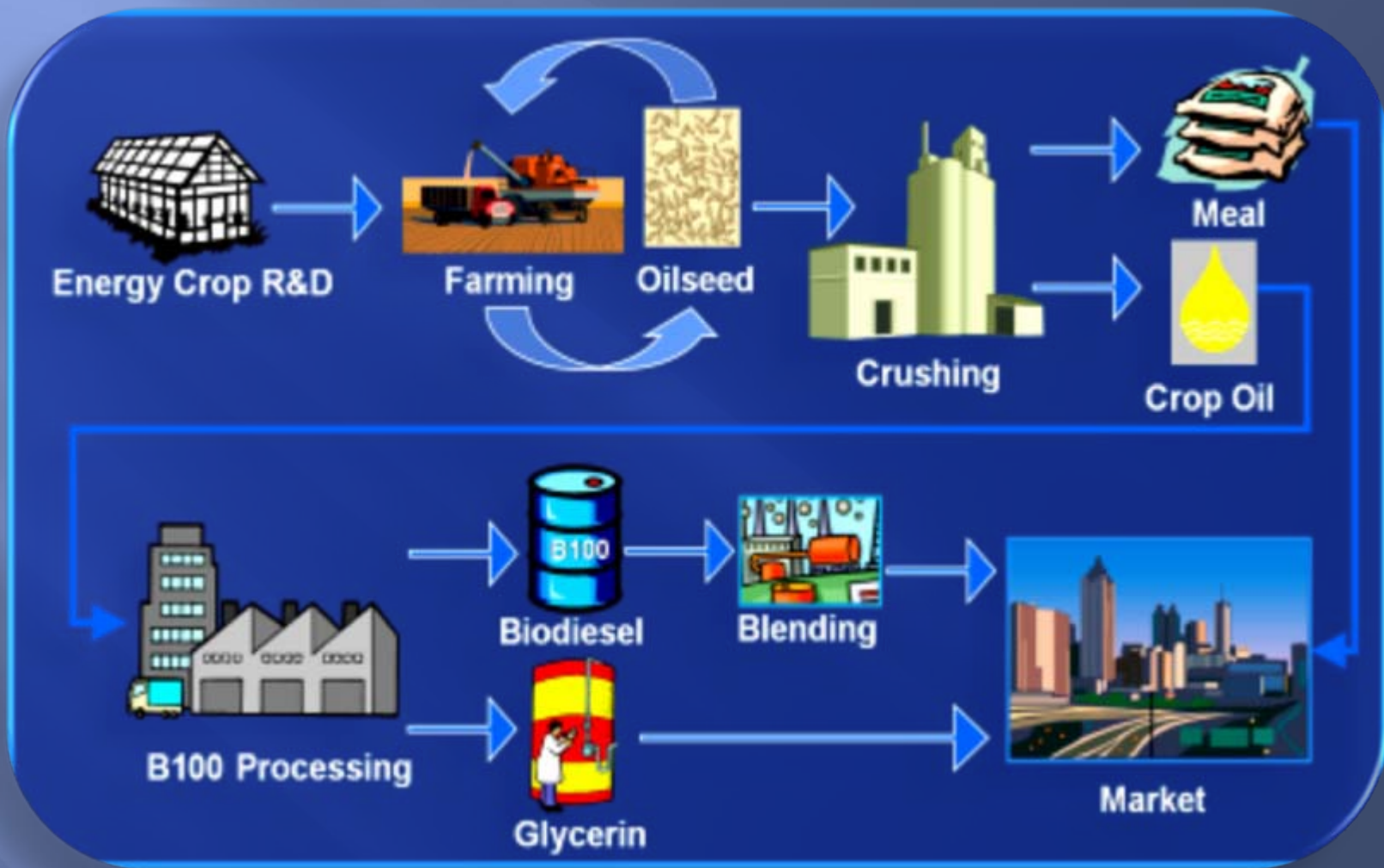
Renewable Energy Tailwinds



Renewable Energy Headwinds

- ▣ Food v. Fuel
- ▣ High feedstock cost
- ▣ Net environmental footprint
- ▣ Government mandates

The Biodiesel Process

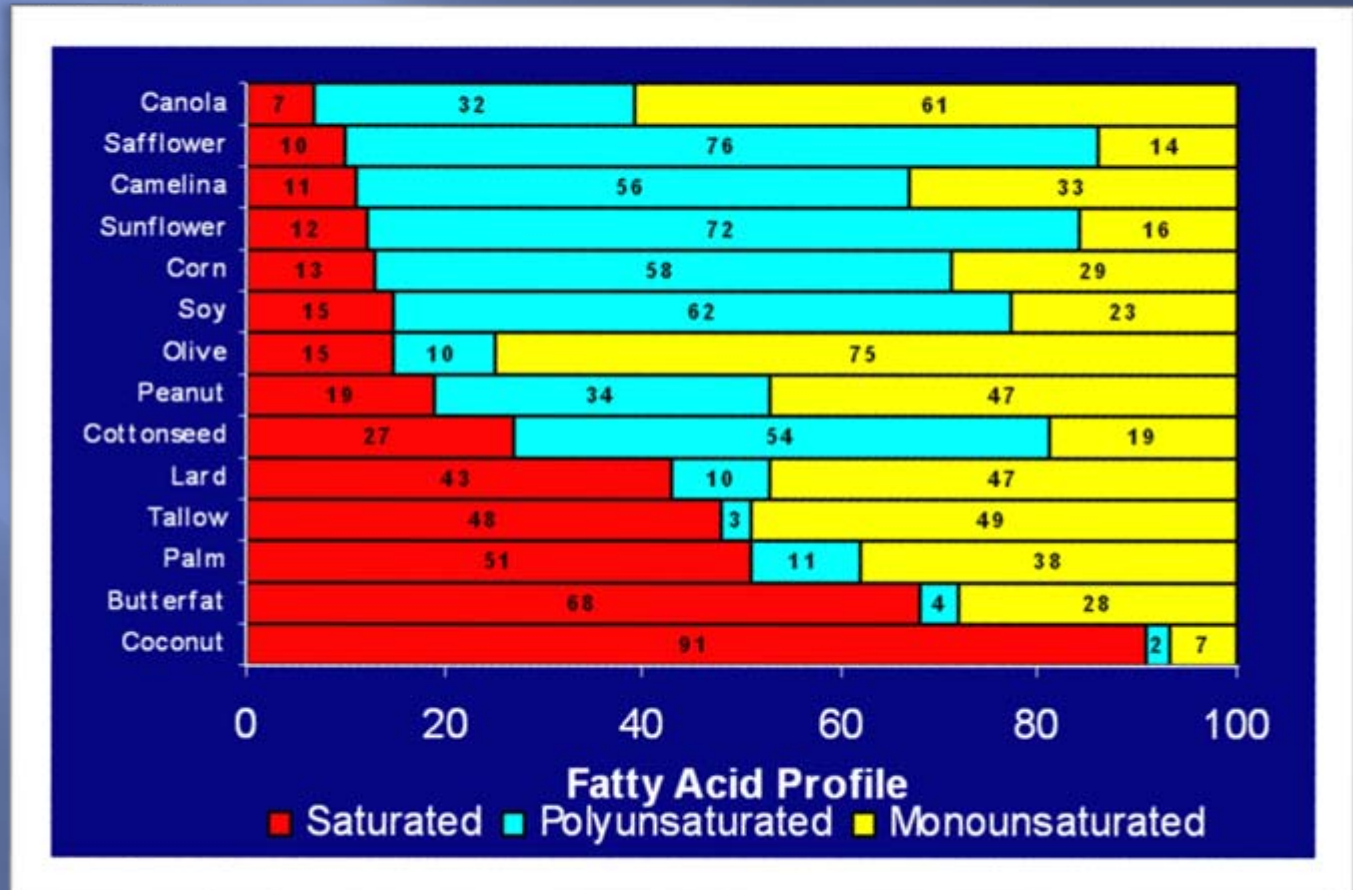


Blue Sun Seed Division

- U.S. Market Potential
- Market Drivers
- Canola – Camelina
- Blue Sun Genetics
- Paths to Market

Blue Sun Feedstock Sources

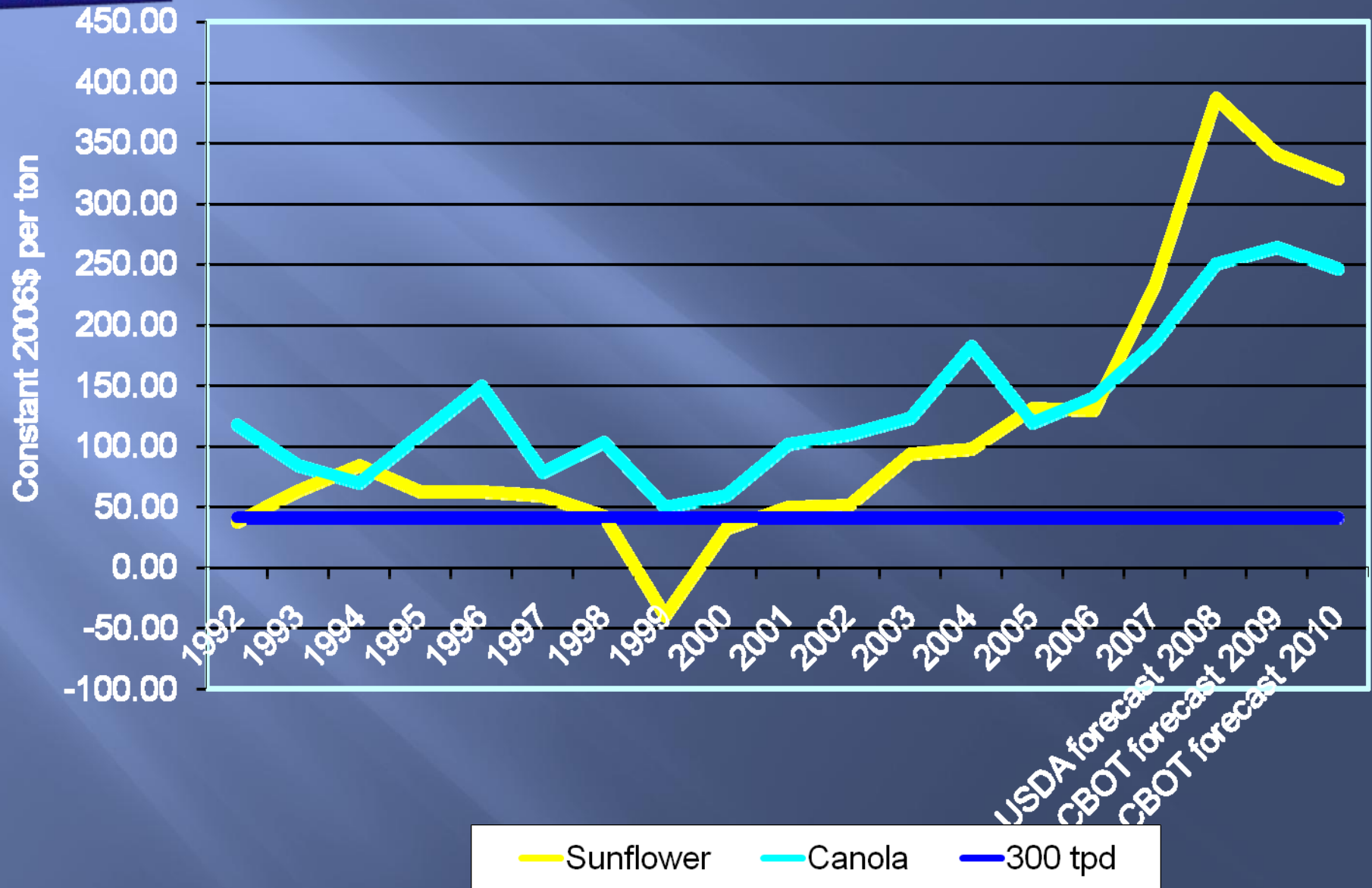
Our B100 incorporates only the best quality feedstock oils...



Potential New U.S. Oilseed Acres (total potential 35 million)

- Market signals are telling farmers to plant more non-soy oilseed acres.
- U.S. winter wheat acres of 45 million can be rotated one-third into canola-camelina for a potential of 15 million acres.
- U.S. spring wheat acres of 15 million can be rotated one-third into canola-camelina for a potential of 5 million acres.
- U.S. feedgrain-soybean acres of 175 million can be double-cropped in about 15 million acres.

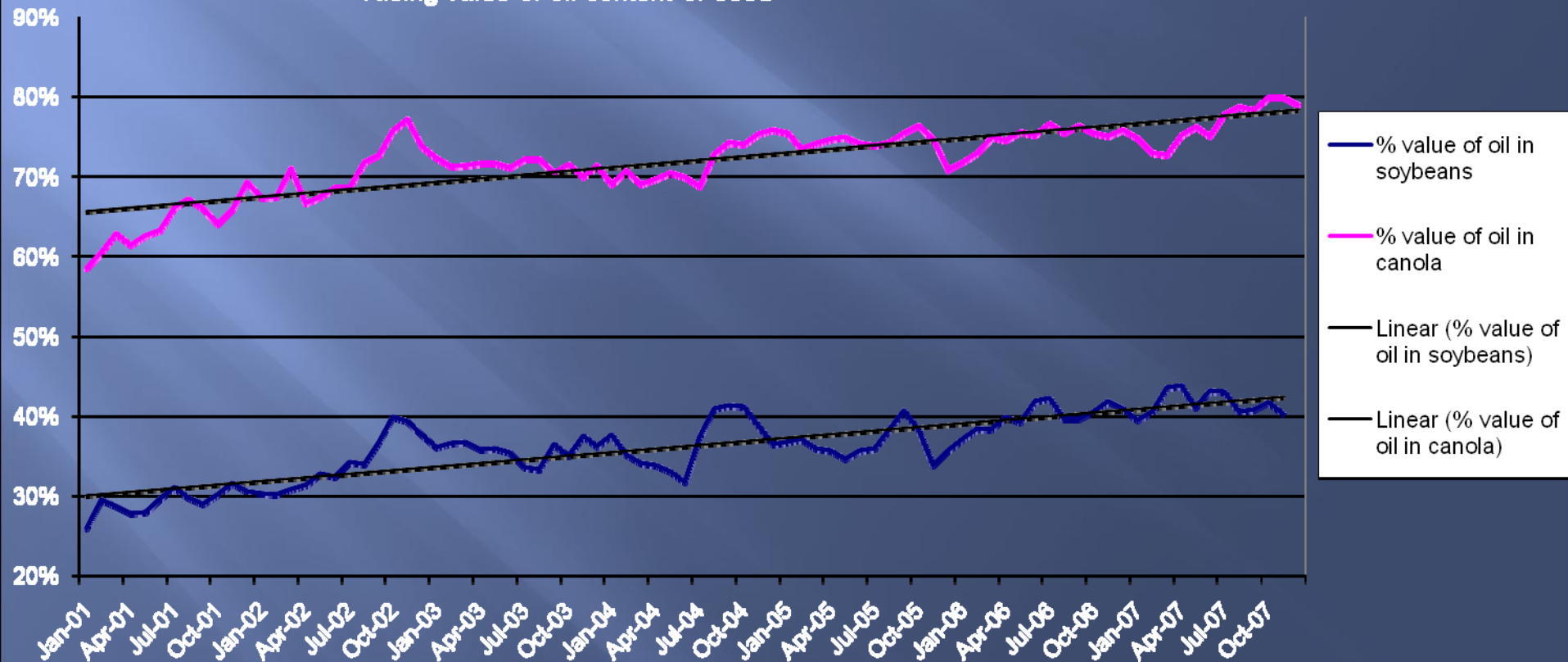
Oilseed Crush Margins v. Typical Break-Even



Long-Run Trend

Oil content of seed is increasing in value making oilseeds a better investment for farmers and for Blue Sun...

Rising value of oil content of seed



Bunge

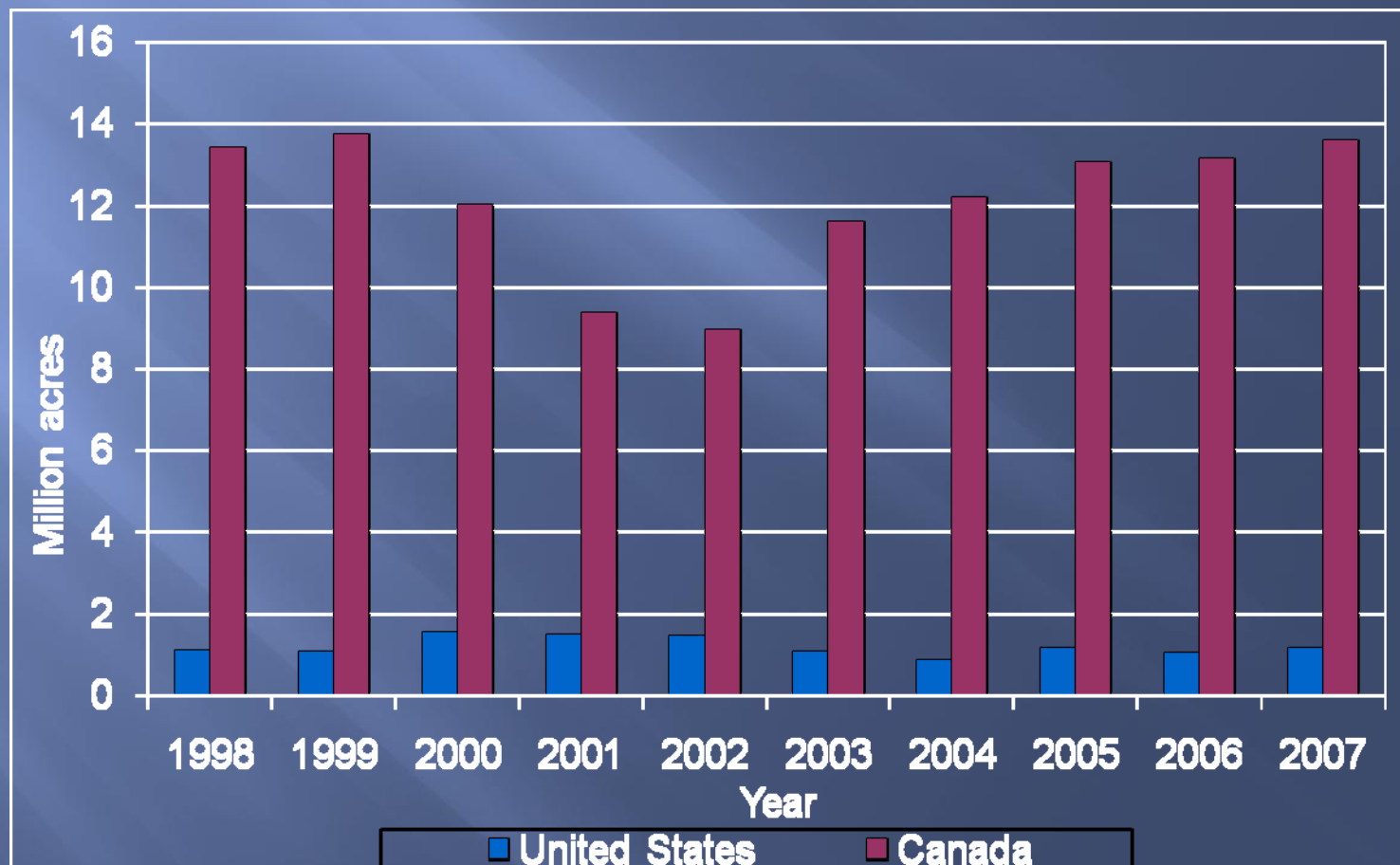
World's Largest Oilseed Processor

- Stock up five-fold in five years



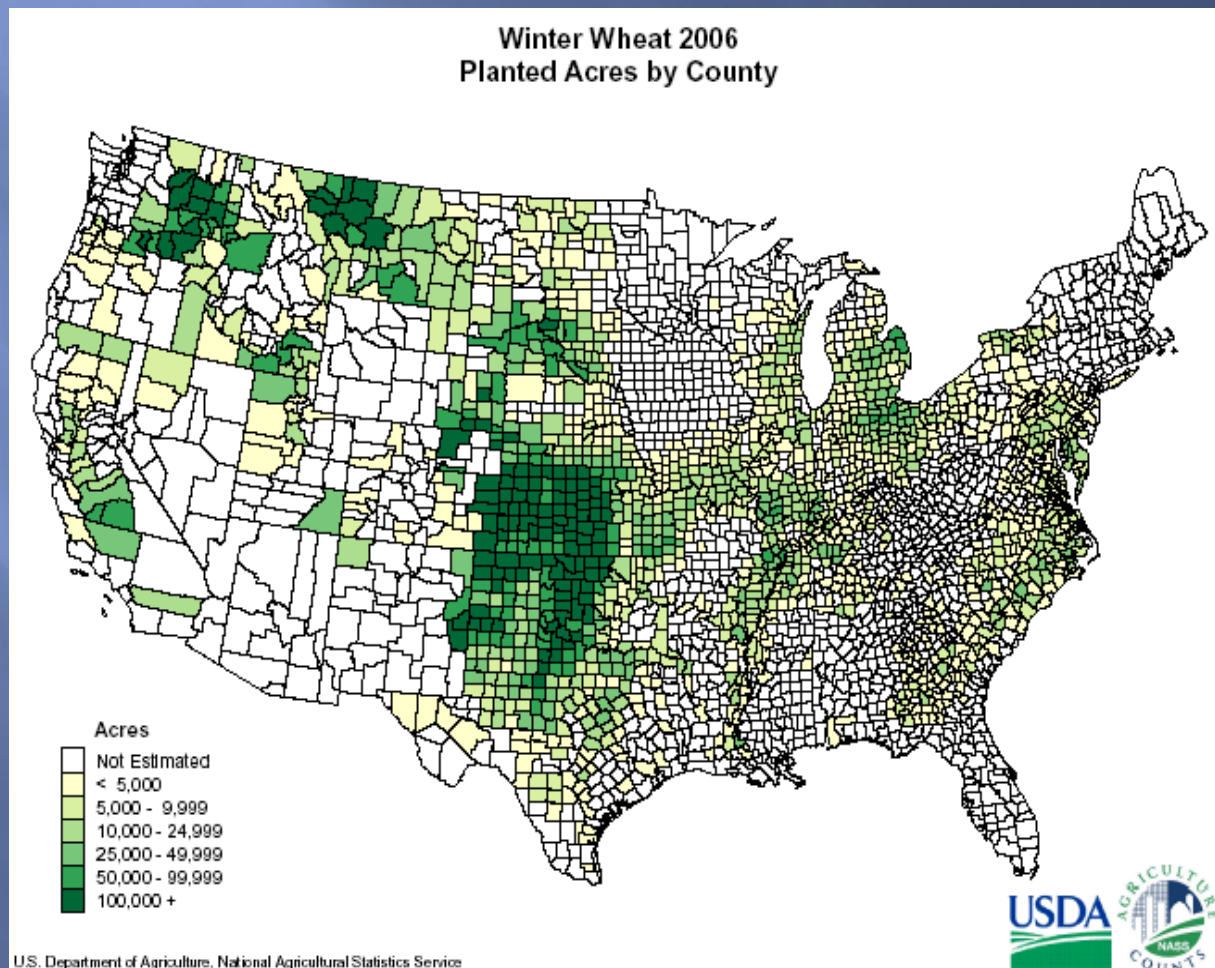
U.S. Canola Opportunity

Canola is primarily grown in Canada
14 million acres vs. 1 million acres in the U.S.



U.S. Canola-Camelina Potential is Huge

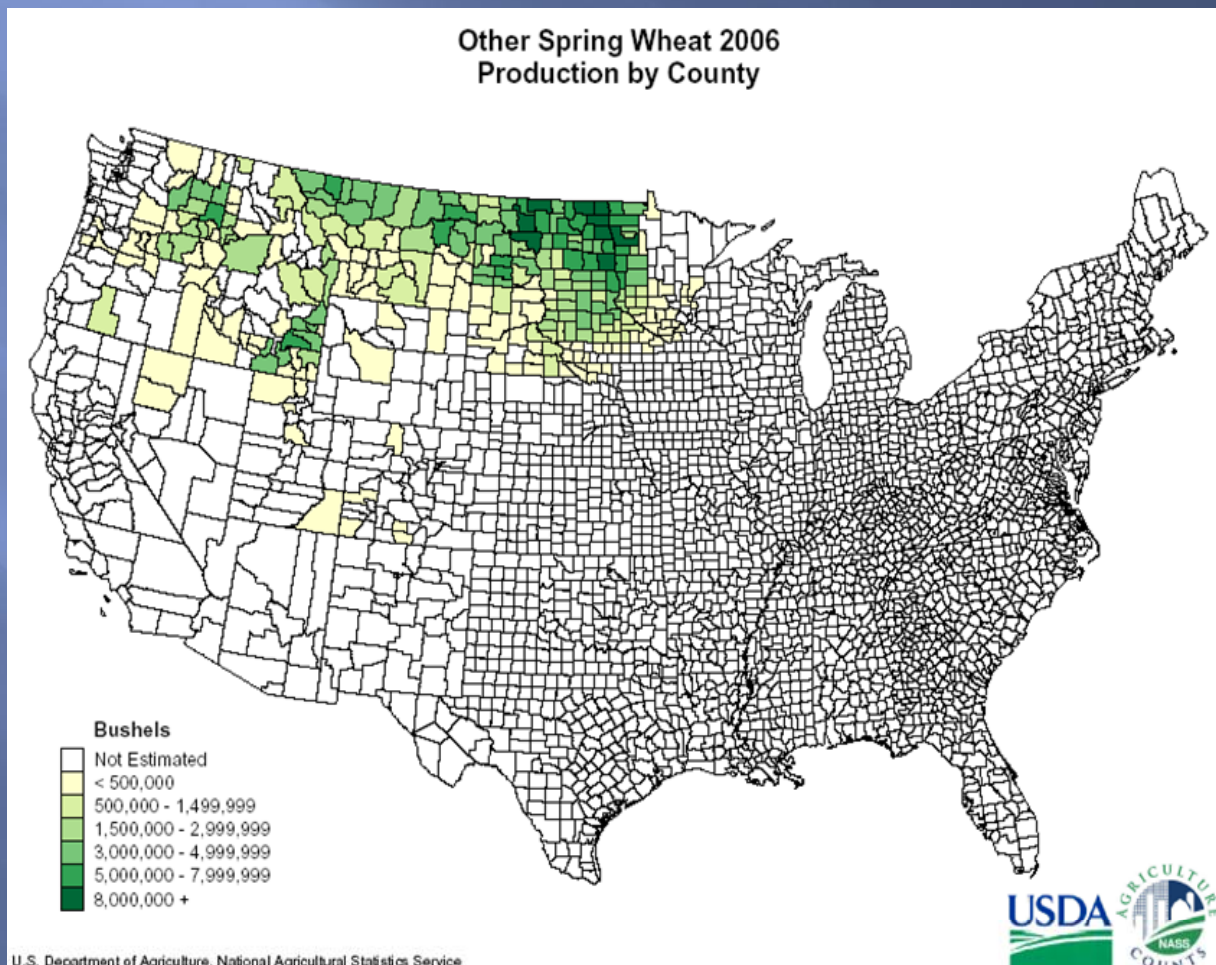
Rotation Crop for one-third of 45 million winter wheat acres (15 million)...



U.S. Department of Agriculture, National Agricultural Statistics Service

U.S. Canola-Camelina Potential is Huge

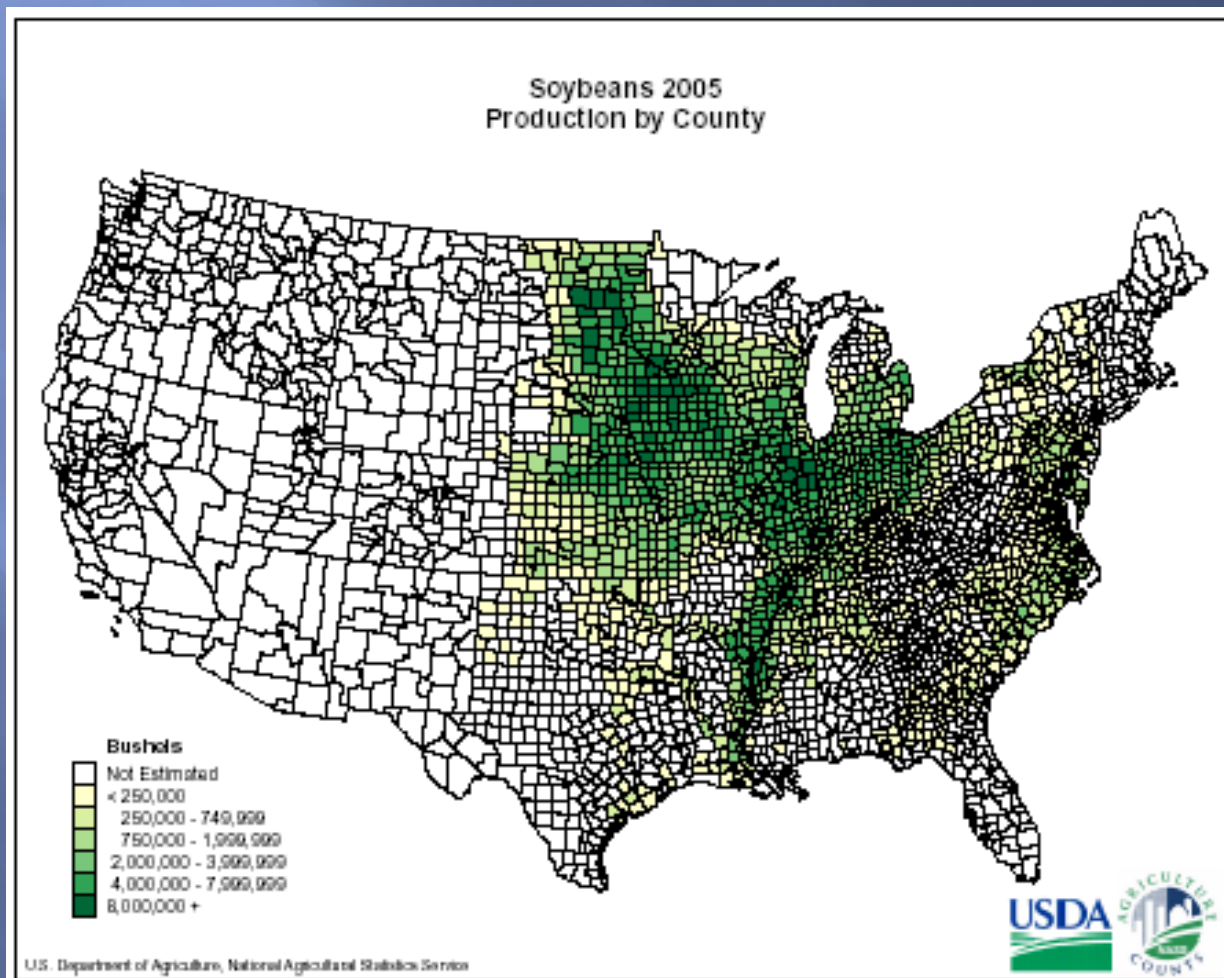
Rotation Crop for one-third of 15 million spring wheat acres (5 million)...



U.S. Department of Agriculture, National Agricultural Statistics Service

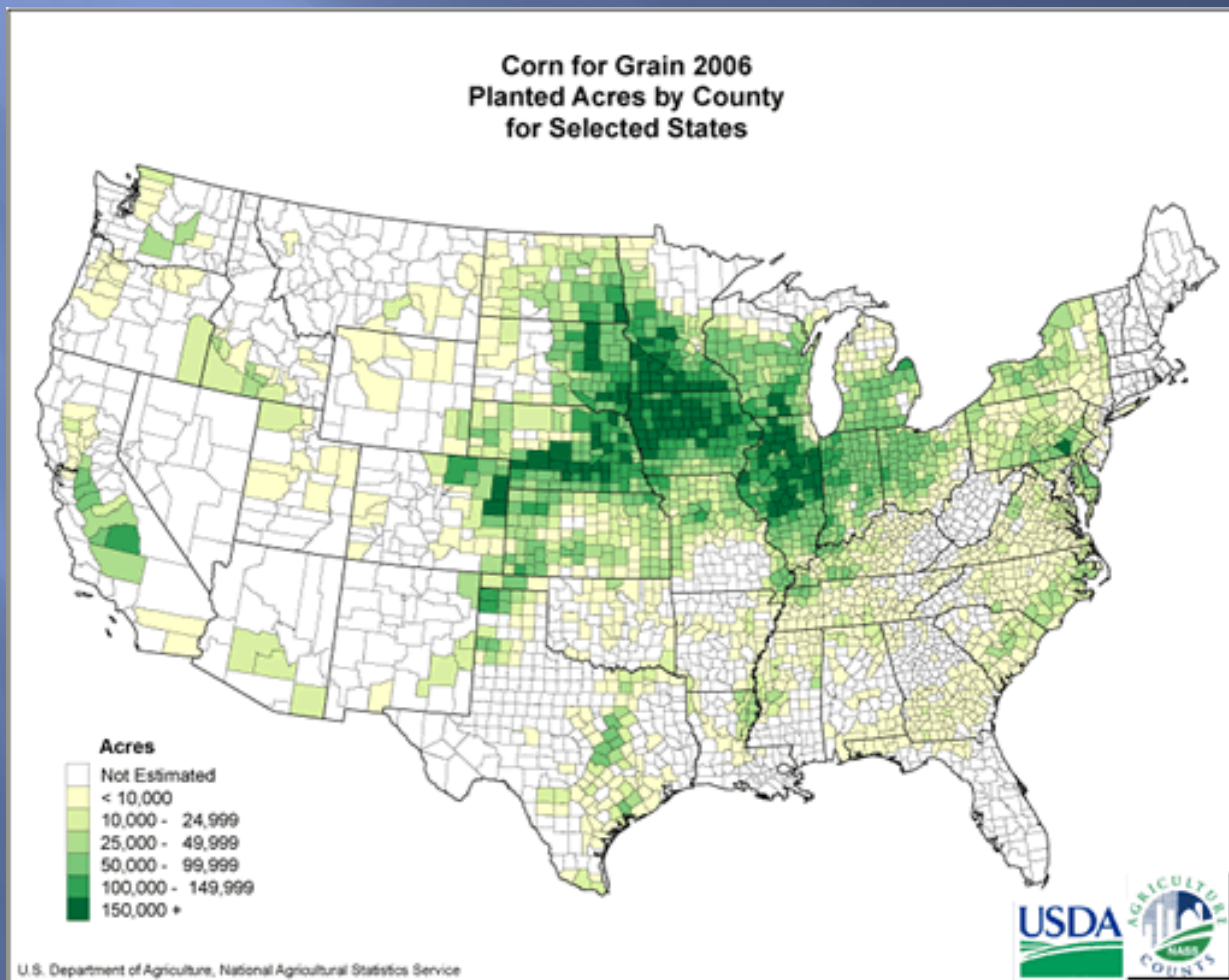
U.S. Canola-Camelina Potential is Huge

Double-crop for 10% of feedgrain-soybean acres (15 million)...



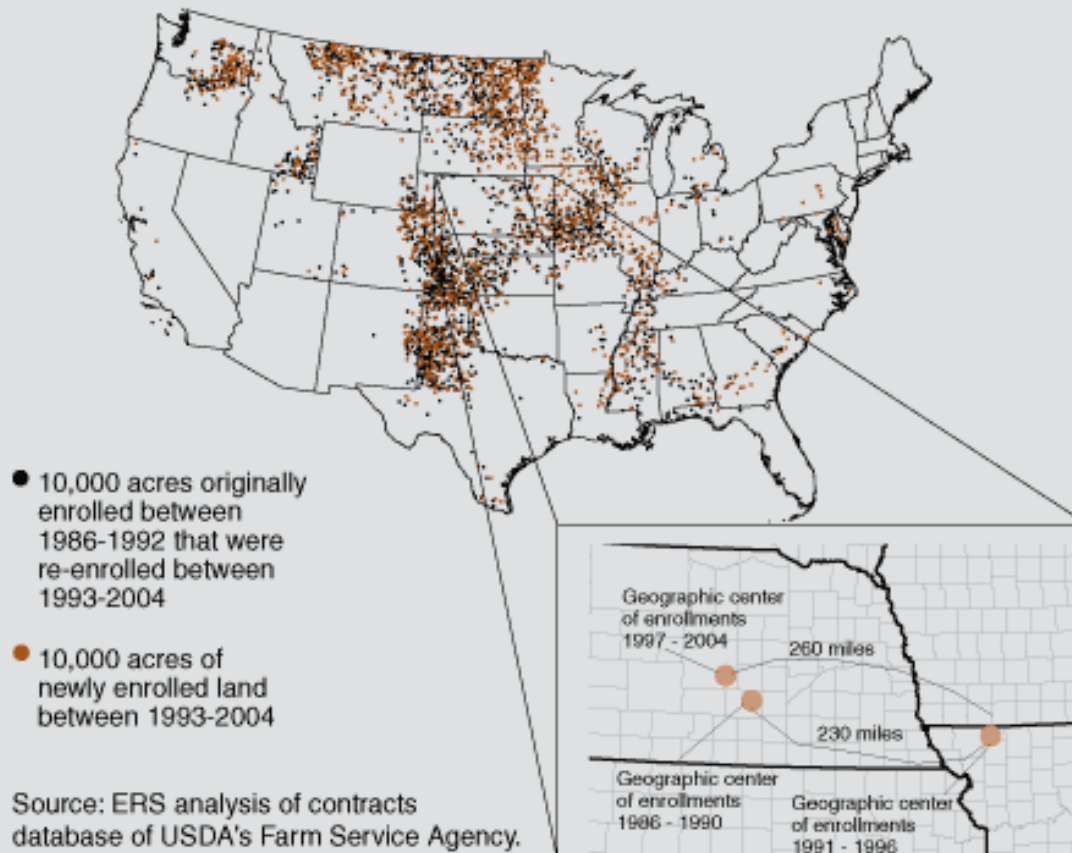
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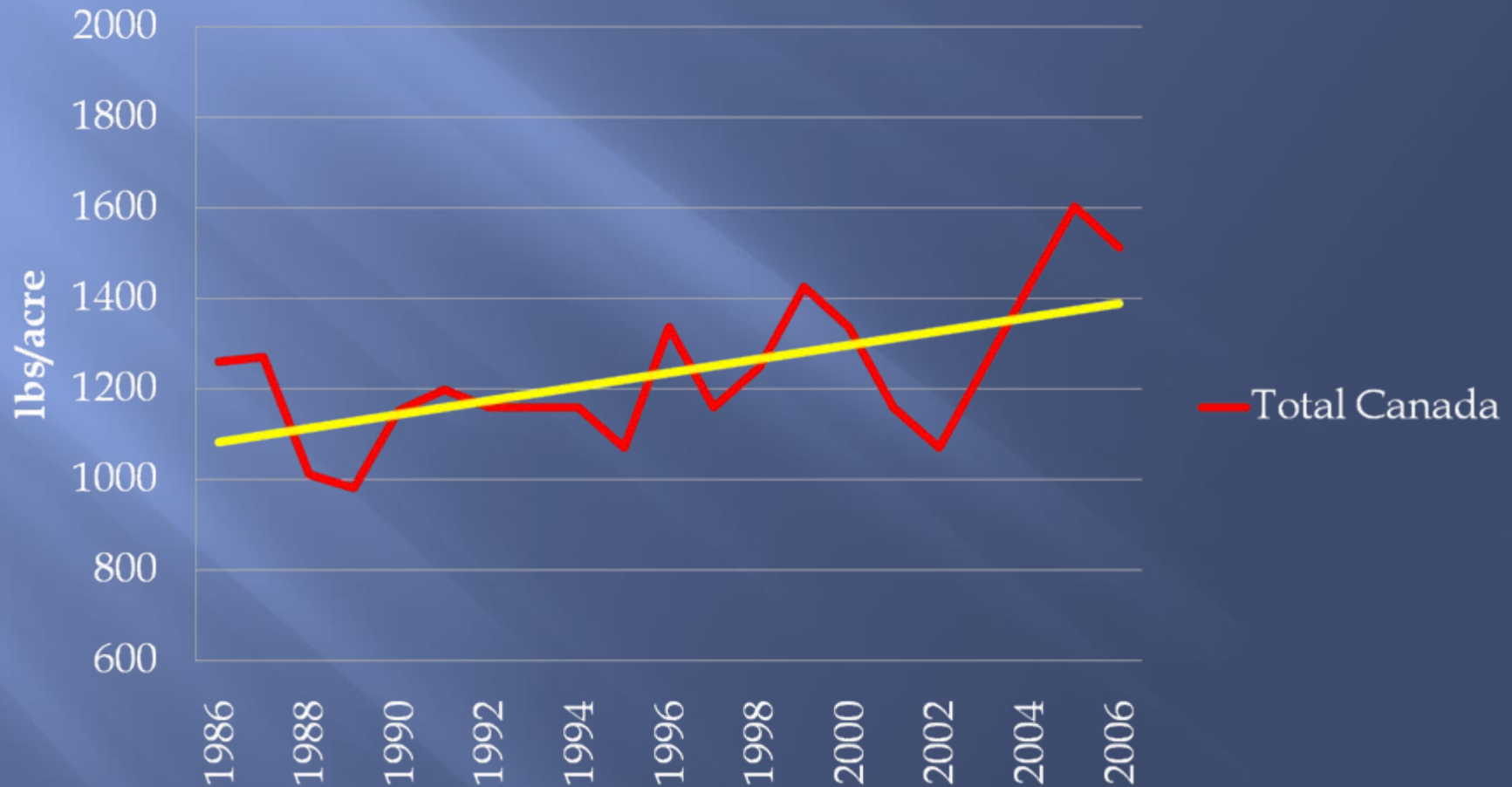


Additional Potential for a Share of 35 Million Conservation Reserve Acres (crops designed for marginal land)

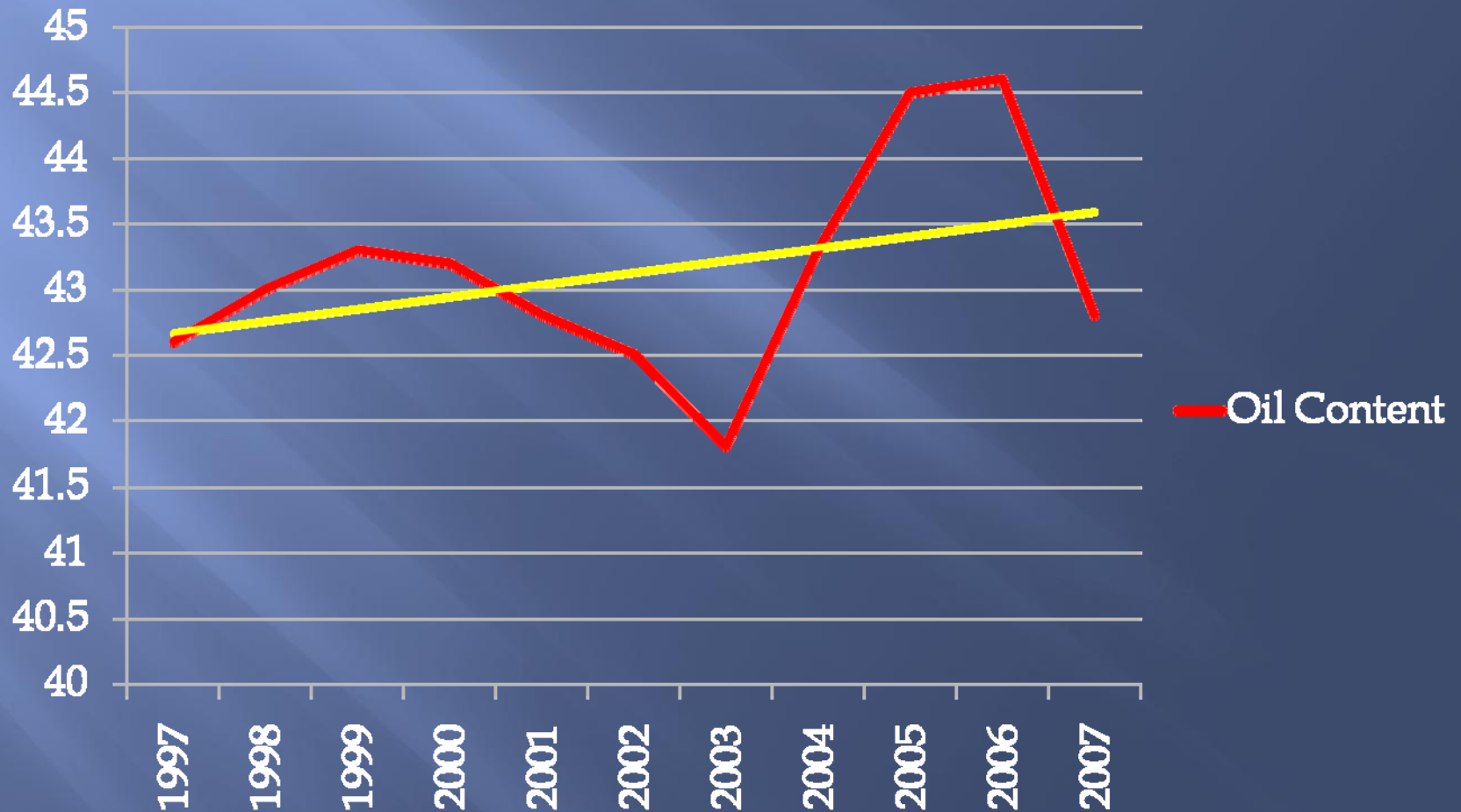
CRP Enrollment, 2004



Canadaian Canola Yeild



Oil Content



Blue Sun Genetics

Charlie Rife

5174 Road 72, Torrington, WY

2005-Present, Blue Sun Oilseed Breeder

1993-2004, Canola Breeder, Kansas State University

1993, PhD. Plant Breeding, Kansas State University

1987, MS. Plant Breeding, University of Wyoming

Blue Sun Plant Science

Improved oilseed genetics mean higher yield and lower cost for Blue Sun...

- Proprietary genetics create intellectual property for Blue Sun
- Dr. Charlie Rife has been breeding canola since 1993
- Developed the successful Wichita winter canola while at KSU
- Blue Sun has breeding headquarters in Torrington, WY
- Currently breeding canola, camelina, and other mustards exclusively for Blue Sun
- Low water-use crops for dry land farming on marginal acres

Blue Sun's breeding focus: high yield, high oil content, low input cost, high meal value oilseeds that have low saturated and polyunsaturated fatty acid levels.



Focus on Canola & Camelina

Superior Oilseed

High oil content (40% v. soy at 20%)

Low Saturated Fatty Acid Profile (7% saturated v. soy at 15%)





OP vs Hybrid

Open Pollinated

- Marketable within 2 years
- Proven technology
- Growers can plant OP back
- Nobody can sell our OP cultivars
- Released OP cultivars does not constitute our germplasm
- \$1-\$3/lb Market Price

Specialized Hybrid

- At least 3 years to market
- Unproven technology
 - Improved nutrient use efficiency
- “Only game in town”
- Growers can’t plant back seed
- \$3-\$4/lb Market price

Herbicide Technology



- ▣ Many Available
 - Clear Field
 - Roundup-Ready
 - Liberty-Linked
 - Others not yet labeled
 - ▣ Atrazine
 - ▣ Etc.

Camelina

- Fills a specific market niche (very low water use)
- Rotate as a “non-food” crop
- Very low production costs

