

Capturing High Sunflower Prices With Early Planting

By Rob Myers, Executive Director

Sunflower prices are currently at their highest point in recent years. Although national sunflower production has declined steadily in the last few years, demand has been significantly increasing (see inside article on NuSun), leading to the price increases. Some analysts feel continued demand for sunflower cooking oil will keep sunflowers prices high at least until the next harvest. More than 70% of the U.S. sunflower crop is grown in the Dakotas, with harvest typically occurring in September. Missouri producers have the opportunity to plant sunflowers early this year and harvest before the Northern Plains crop comes to market. Sunflowers can be planted in early to mid-April through most of Missouri. When planted in the first half of April, sunflowers will typically be ready for harvest by early August. Some farmers in southern Missouri have even been able to harvest sunflowers by the end of July!

Early planting can also help avoid dry weather that might occur later in the summer when high temperatures add to moisture stress. While sunflowers are considered more drought-tolerant than corn or soybeans, they still benefit from having adequate moisture. When planted early, their relatively short growing season allows them to finish growing before late summer droughts. (Alternatively, sunflowers can be planted up until mid-July, if unfavorable spring weather delays planting. They are also good for double cropping after wheat throughout Missouri.)

Sunflowers can be planted no-till or conventional till, and most major seed companies have a number of hybrid varieties available. Sunflower delivery points are available at several locations in Missouri. With Missouri prices hovering near 12¢ per pound, and typical spring planted yields of 2,000 pounds per acre or better, sunflowers provide a competitive rotation crop. For a complete information kit on sunflower production and marketing, call our office at 573-449-3518.

Farmer's Corner: Rennie Davis, Vandalia, MO

By Cortney Miller, Communications Specialist

Rennie Davis and family, of Vandalia, operate a diversified farm and a seed cleaning business, Davis Seed Farms. After graduating from high school in the 1970s, Rennie found an old seed cleaner and bought it to help with expenses on the family farm. Once neighbors found out about the cleaner, the business started. With the convenience of owning a seed cleaner, Rennie decided to add sunflowers to his crop rotations of wheat, soybeans, corn, barley, oats and alfalfa. Rennie has been growing sunflowers for almost ten years for the birdseed market. His acreage has varied from 40 to 200 acres depending on the year. He harvests, cleans and bags seed to sell to wholesalers and what he doesn't use he sells in bulk to George Keller & Sons in Quincy, Illinois. As for the sunflower by-product, it gets fed to his cows and feeder calves.

According to Rennie, "Sunflowers work well in my crop rotations and I really enjoy the ease of harvesting them." He also comments that neighbors also enjoy the appearance of the blooming flowers. Last year, Rennie's area received some hard winds, causing him to lose some of his 160 acres of sunflowers. Although establishing sunflower seedlings has been a challenge for him, he does say that the weed control products have progressed and are much better than they used to be. Other than sunflowers, Rennie has experimented with pearl millet, buckwheat and pinto beans.

Rennie (on right) attended the Missouri Seed Improvement Association's annual meeting in February. Rennie is an active board member.



Looking for Specialty Crop Seeds?

Check out our new seed source guide! It is often unclear on less common crops where to get either small amounts (garden quantity), or larger weights (bulk quantity), as different companies frequently handle them. We have listed this information separately for ten different crops. Covered in this guide are cover crops, wildlife seed, and the crops found in the Jefferson Institute crop guides. You may obtain a complete guide from our website (www.jeffersoninstitute.org) or by calling our office at 573-449-3518.

Spring Cover Crops

If you are interested in cover crops, but missed the chance to plant fall cover crops, consider a spring planting. Many of the same cover crops that do well when fall-planted also perform well when planted in early spring; these include hairy vetch, winter rye, crimson clover, red clover and sweet yellow clover. In addition, cover crops that don't overwinter well in Missouri, such as Austrian winter peas, can be used. This latter crop is particularly effective as a cover planted in late March or early April. It tolerates early cold snaps, and then puts on a burst of growth to reach two to three feet in height by early June. At that point, Austrian winter peas are easy to kill by mowing or tillage. They can fix over 100 pounds of nitrogen per acre, and help smother spring weeds, while adding organic matter. June planted crops, such as sorghum, millet and sunflowers, can be planted after Austrian winter peas, vetch, or selected clovers without requiring supplemental nitrogen fertilizer. For a list of cover crop seed sources, contact the Jefferson Institute.



Hairy vetch and rye (shown above) are both good options when planting spring cover crops.

A New Type of Peanut Butter

Allergies to peanuts have been an increasing concern in schools, on airlines, and in other settings where large numbers of people are fed. Recent food science research has led to a replacement product that has the consistency, taste, and appearance of peanut butter. This new product, Sunbutter™, is made from sunflower and contains no peanuts. It is safe for individuals with peanut allergies to eat, allowing them to enjoy a product comparable to peanut butter. Jefferson Institute staff found the Sunbutter™ product to be very similar to regular creamy peanut butter, with a slightly different flavor that was still pleasant.



If you would prefer to receive this newsletter and other updates electronically, please email Cortney Miller at cmiller@jeffersoninstitute.org. Thank you!

Funds Available For Farmers

If you have a new idea to test on your farm, or know a farmer who wants to try out a new farming approach, consider requesting funding from the USDA SARE program. The SARE (Sustainable Agriculture Research and Education) program provides a variety of grants, including a "producer grant" program where money is provided directly to producers. In our region, these funds are available once per year, with an application deadline of March 28, 2003. Individual farmers can request up to \$6000, or a group of three or more farmers can request up to \$18,000. These "grants" are funds that are intended to subsidize the cost of testing a new idea or project; the money is not a loan and does not have to be repaid. An example of a project that might be funded is testing an alternative crop, or implementing a cover crop system. Funds can be used for seed, fertilizer, and feed costs, or for partial costs of equipment and labor. Applications are sent to the North Central SARE office at University of Nebraska. Call them at 402-472-0266 to request an application. The application can be filled out in a few hours, and the funding is well worth pursuing. Between 1/4 and 1/3 of the applications are usually funded. Jefferson Institute staff can provide input on proposals as needed.

NuSun™ Impacts the Snack Food Market

By Alan Weber, Marketing Specialist

According to the National Center for Health Statistics almost one-third of Americans were obese in 2000. This fact has probably helped lead a growing trend toward more healthful snacks. Some of the traits sought by consumers include salt reduction, fat reduction, and building the snacks around unique base materials such as root vegetables other than potatoes. Some snack food companies are also making the move toward more healthful frying options.

NuSun™ is the trademarked name chosen by the National Sunflower Association to represent a new class of sunflower. NuSun™ oil is significantly higher in oleic acid than traditional sunflower oil and lower in saturated fats. This improvement, which was accomplished through traditional plant breeding, provides an oil that is stable without hydrogenation. Hydrogenation is the process of adding hydrogen under high pressure to a vegetable oil to make it more solid. The process raises the melting point of the oil and makes the oil more stable for frying and commercial food preparation. However, it also increases saturated fat levels and creates trans fatty acids. Several studies indicate trans fatty acids, because of their unique man-made “trans” formation, raise LDL (bad) blood cholesterol levels, decrease HDL (good) blood cholesterol levels.

“Snack food companies are looking for trans free oils in order to attract more health-conscious consumers and because of the expected trans fat labeling,” said Larry Kleingartner, NSA executive director. The Food and Drug Administration recently proposed regulations on trans fat labeling. A final rule is expected sometime in 2003.

The snack food industry has realized the benefits of NuSun™ with several companies using it as their primary oil. Procter & Gamble has used NuSun™ sunflower oil in the production of Pringles® potato crisps for about two years. In September, 2002 PepsiCo, owner of Frito-Lay, announced that it is eliminating trans fats in Doritos, Tostitos and Cheetos, some of the company’s most popular snack food brands, and introducing reduced-fat versions of Lay’s potato chips and Cheetos. According to the National Sunflower Association, Frito-Lay has also announced that it will introduce a natural line of chips that feature organic and natural ingredients. NuSun™ sunflower will be the oil used in this product line, and it may also be used in the company’s other new product changes as well.

Although the entire U.S. sunflower acreage is expected to convert to NuSun™, supply is still listed by vegetable oil users as an industry issue. While NuSun™ acres have increased since the variety was first made available in 1998, total sunflower acres have not. “The industry faces the challenge of increasing total acres to meet the needs of other segments of the industry as well as supply more NuSun sunflower oil,” Kleingartner said.

Significance for Missouri Producers: In 1995, the entire US sunflower industry made the decision to move to mid-oleic sunflower oil. In 1998, commercial volumes of seed were available and about 80,000 to 100,000 acres were planted. By the year 2001, NuSun™ hybrids were 38% of total U.S. oil sunflower acres with more growth expected each year. Production in 2002 was slightly higher, estimated at approximately 40%.

NuSun™ sunflowers have historically received a price

premium compared to conventional varieties, however the primary market for oilseed sunflowers in Missouri is for wild bird food. Therefore, Missouri producers do not receive any price benefits from growing NuSun™. Industry representatives have predicted that all oilseed sunflower varieties grown in the United States could be NuSun™ within three years. If there are

no price premiums in Missouri for NuSun™, are there any negatives of raising NuSun™? Luckily the answer is “no”. Testing at multiple locations across the U.S. has confirmed that there is no yield drag with NuSun™ varieties. In fact, NuSun™ varieties yielded higher than the average of the industry’s top five conventional varieties at seven out of eight yield trial locations.

In the future we may see processing of NuSun™ sunflowers for oil in Missouri. A group in southeastern Missouri is conducting a capital campaign for a soybean and sunflower facility in Lilbourn that could contract for NuSun™.

2003 Sunflower Outlook

Industry sources suggest several factors have combined to provide a favorable outlook for sunflowers. Tight sunflower oil and seed stocks coupled with a need for more NuSun™ sunflower oil by Frito-Lay is creating a positive outlook for sunflower in 2003. According to the National Sunflower Association (NSA), the sunflower industry was encouraged by a representative of Frito-Lay to grow more NuSun™ who said the need was immediate.

NuSun™ Advantages

An independent taste sensory panel ranks NuSun™ “significantly better” than other choices (*research conducted at USDA/ARS National Center for Ag Utilization Research, Peoria, IL by Dr. Kathy Warner*).

- Optimal frying performance
- No hydrogenation needed; eliminate trans fat concerns
- Low in saturated fat, less than 10%
- Healthy fatty acid profile, high in monounsaturated fat.
- Longer fry life
- Shelf stability advantages
- Not a transgenic product

Come Join Us For a Special Event!

The Missouri Department of Agriculture, MU Extension and the Jefferson Institute would like to invite you to two crop diversification meetings in Nevada, MO and Sikeston, MO. The meetings will provide you with opportunities to visit with growers, crop buyers and agriculture experts about specialty crop options. These workshops are for agriculture producers and other interested individuals. Topics to be discussed are: specialty grains and oilseeds, sunflowers opportunities, horticulture options, agroforestry income opportunities, and funding sources for specialty crops. Both meetings will also feature producer panel discussions. The Nevada meeting will be held Tuesday, February 11 beginning at 8:30 a.m. The meeting in Sikeston will be held Thursday, February 20 beginning at 8:00 a.m. For more information about meeting registrations, agendas or maps, please call the Jefferson Institute at 573-449-3518 or visit our website at www.jeffersoninstitute.org and click on "news and events". We hope to see you there!

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Calendar of Events

February 11, 2003

Specialty Crop Institute
Nevada, MO

February 17-18, 2003

Missouri Small Fruit & Vegetable Conference
Springfield, MO

(for more information call 417-926-4105)

February 20, 2003

Specialty Crop Institute
Sikeston, MO

February 22-24, 2003

Western Farm Show
Kansas City, MO

The Thomas Jefferson Agricultural Institute is a 501(c)3 non-profit education and research center based in Columbia, MO. For more information, contact us at (573) 449-3518 or by email at: info@jeffersoninstitute.org.



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