

# *US Agricultural Policy and the Outlook for Additional Oat Acreage*

Prepared for:

**The North American Millers' Association**

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## **I. Introduction**

### **Study Objectives**

The objective of this study is to provide information and conclusions that can define the best Farm Bill policy approach with respect to the production of oats in the United States. With that debate well underway, the timing is right to examine policy initiatives that can affect oat production. To do this, the project team has examined the past history of oat production and oat production economics as well as the critical reasons for the decline in oat acreage in the United States. From this evaluation, the project team has defined a specific policy direction that the North American Millers' Association could consider.

### **Industry Overview**

Oats is an essential grain, both for human consumption and for animal feed. It is planted on about 4 million acres in the United States and offers nutritional properties that long have made it an important grain in both food and feed markets.

The same properties that make oats important for food also make them important for feed, especially for horses but also for pets and other livestock. The grain offers properties that are unique (high protein and low carbohydrate) especially as maintenance rations for young livestock. However, in our modern crop production system, other commodities have become more efficient providers of energy – while protein supplements from vegetable oil meals are more efficient sources of protein. In 1975 the United States grew all the oats it needed, and 85 percent went to animal feed. Now, it imports one-half of its needs and feed use is 60 percent.

The declining use of oats in feed rations, while initially due to competition from other feed sources, more recently has been exacerbated by declining availability. As oat acreage and production has fallen, supplies have fallen too, and prices have risen. By contrast, supplies of competing grains and oilseeds have grown rapidly. Today, oats are used for food, for specialty feed uses (roughly 25% to 35% goes to the specialty horse feed market for which there are no other alternatives), for pet food and other specialty uses. The balance goes primarily to hogs and dairy cows.

While oats compete at an advantage for food uses and for specialty animal feeds, they are at a competitive disadvantage for animal feeds for fattening or for the production of animal products.

### **Benefits of Oat-Based Products to Consumers**

While oats are a traditional food source, their health benefits have become much more widely appreciated in recent years. Whole oats are a heart healthy, low fat, high fiber source of important nutrients that can help reduce the risk of heart disease and some forms of cancer. The health community has long recognized that fiber-rich foods such as whole oats are important for proper digestion. More recent research has documented

their unique properties in reducing heart disease and fighting colon, breast and prostate cancer.<sup>1</sup>

In addition, the substitution of other grains for oats will not achieve the same health benefits.<sup>2</sup> For example, a number of the heart-healthy properties attributed to oats have not been documented in other widely consumed grains such as wheat and corn.

However, while oats continues to be a valuable food source, its declining animal feed use has severely reduced overall demand (Figure 1).

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<sup>1</sup> A large-scale study of the importance of dietary fiber in preventing and controlling Type II diabetes reported the results of a dietary survey of 65,000 female nurses over a six-year period. Women with both a low fiber intake and high glycemic load (consumption of foods with carbohydrate that can be easily converted into blood glucose) were 2.5 times more likely to develop diabetes than those with high fiber intake and low glycemic load.

See Journal of American Medical Association, 2/12/97: *“Dietary Fiber, Glycemic Load, and Risk for Non-insulin-dependent Diabetes Mellitus in Women*

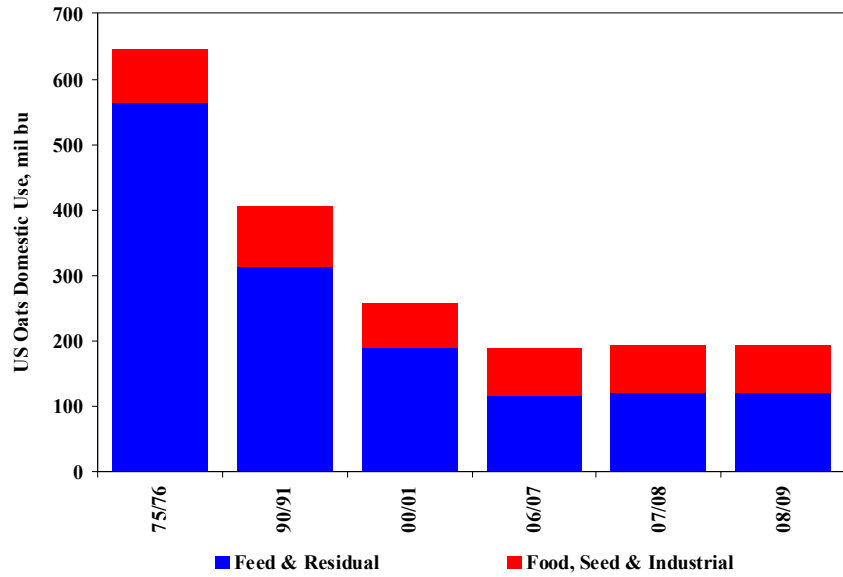
<sup>2</sup> Oats are frequently mentioned in response to consumer surveys related to nutritional and health benefits, including:

- Levels of protein in foods
- $\beta$ -glucan, dietary fiber
- Micro-nutrients
- Antioxidants
- diets to help deal with, or avoid obesity
- diets to reduce cholesterol and prevent diabetes.
- diets to improve lipids metabolism, reduce cholesterol, reduce heart disease
- diets to improve the function of the gastro-intestinal track;
- diets to help control of blood glucose level
- diets to avoid allergies, mainly coeliac disease
- diets to prevent cancer, such as colon cancer
- diets to reduce blood pressure
- diets to help deal with lactose intolerance

The US Food and Drug Administration allows for limited health claims for oat products including:



Figure 1: Domestic Use of Oats From All Origins, 1975-2006, Selected Years

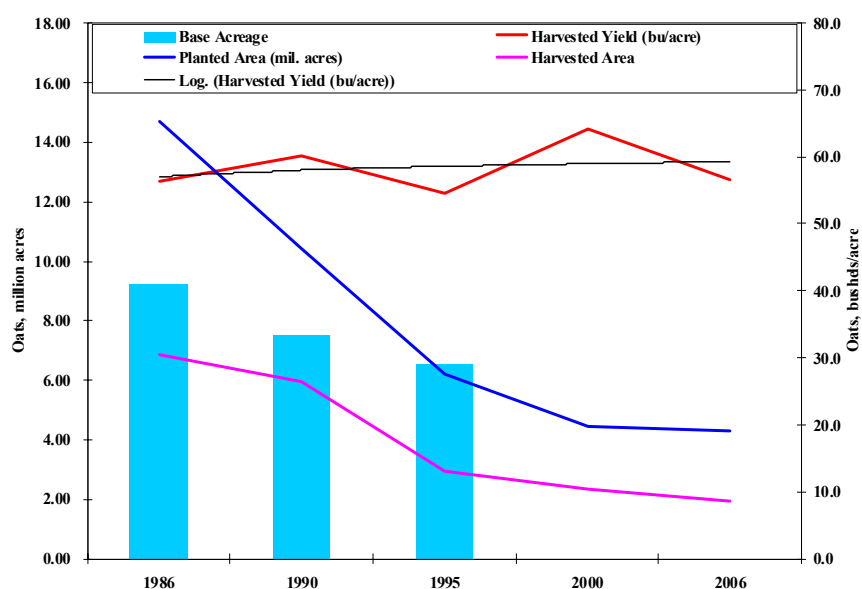


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**Oats Production—A Declining Competitor for Production Resources**

In recent years, oats production has declined until today it serves primarily specialty purposes. A traditional feed grain planted on 16.4 million acres in 1976, it has declined to plantings of slightly more than 4 million acres in 2006, and harvested area of 1.8 million acres (Figure 2). About 192 million bushels of oats will be used in the United States in 2006/07, but less than 94 million bushels will be produced domestically while an additional 105 million bushels will be imported (Table 1). The imported oats are produced principally in just three Canadian provinces—a relatively small geographic area that puts that supply at considerable risk from adverse weather.

**Figure 2: Oats Acreage and Yields, 1996-2006**



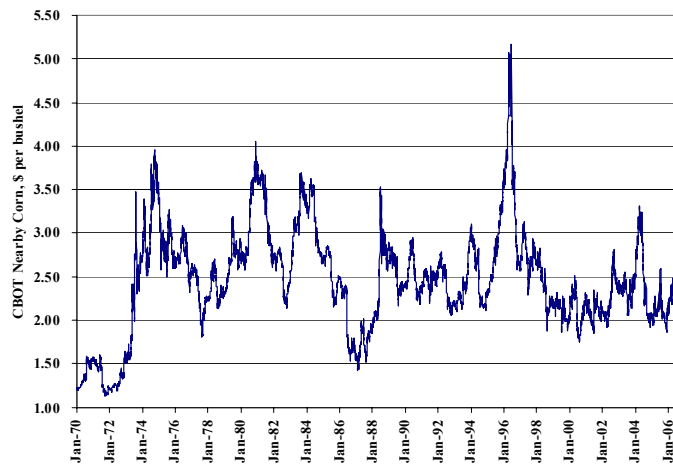
**Table 1: Oats Supply and Use**

Million Bushels	75/76	90/91	00/01	06/07
<b>Supply</b>				
Seeded Acres, 000's	16,434	10,423	4,473	4,168
Harvested Acres, 000's	13,038	5,947	2,325	1,576
Yield (bu/ac)	49.0	60.1	64.2	59.5
Carryin (Jun 1)	224.0	156.9	76.0	52.6
Production	639.0	357.7	149.2	93.8
Imports	0.5	63.4	106.0	105.0
<b>Total Supply</b>	863.5	578.0	331.2	251.36
<b>Disposition</b>				
Feed & Residual	562.1	311.8	188.7	115.0
Food/Seed/Ind	84.3	94.3	68.0	74.0
Total Domestic	646.4	406.1	256.7	189.0
Exports	12.3	0.6	1.7	3.0
<b>Total Disappearance</b>	658.7	406.7	258.4	192.00
<b>Ending Stocks (Aug 31)</b>	204.8	171.2	72.7	59.359
<b>Stocks/Use</b>	31%	42%	28%	31%

As oats have become less competitive in feed markets for finishing rations, the combination of higher specifications for specialty markets and dwindling supplies have altered its traditional price relationships somewhat. These are examined in some detail in the following section (Figure 3).

**Oats Price Overview**

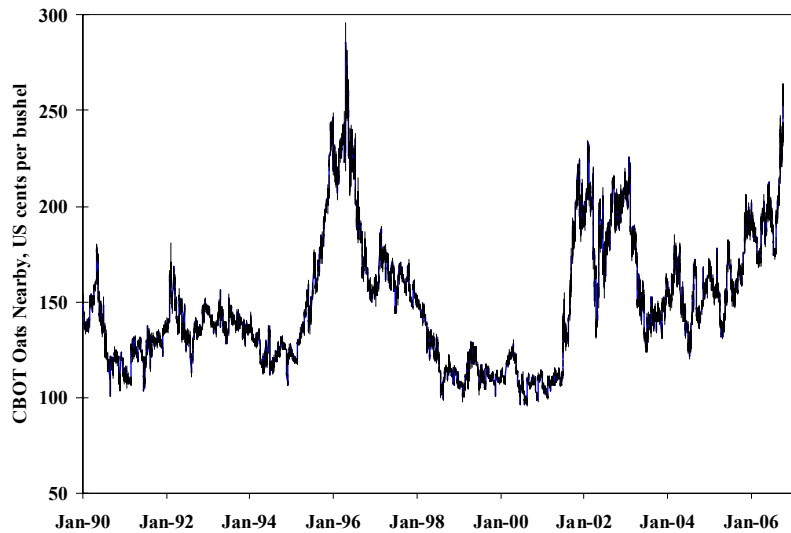
**Figure 3: Chicago Corn, Nearby**



Corn futures have spent most of the last ten years near the bottom of the long-term trading range, but have been somewhat less volatile in recent years. More recently, nearby futures have rallied to the high end of the trading range based largely on surging demand for ethanol production that has reduced competitive pressure from corn. This market influence will continue for the foreseeable future and will support increases to corn acreage in 2007 and likely beyond.

Oat futures have been trading in the high end of the historical trading range for a number of years, due largely to weather-related issues in Canada (Figure 4). Starting in 2001, oat yields in the Canadian Prairie Provinces began to decline, especially in 2002 when yields in Saskatchewan and Alberta declined further. In 2003, yields recovered somewhat but remained below average. Oat yields in 2004 and 2005 were much improved but poor harvest conditions downgraded much of the crop to feed quality, which in turn supported milling oat values. In 2006, both yields and quality were favorable, however strong demand for Canadian oats from the United States, as well as from less-traditional buyers supported the market. It should also be noted that noncommercial (speculative) buyers have exerted a strong influence over the oat market in the past year or two.

Figure 4: Chicago Oats Nearby, 1990-2006



US cash values have mirrored the futures, and the cash basis has remained relatively constant at 20-30 cents per bushel over the nearby futures (Figure 5). In addition, the Minneapolis-Saskatoon basis has been declining recently (with Minneapolis the premium market), suggesting improved returns for Canadian producers (Figure 6). Suggestions from traders regarding the reasons for this trend include the possibility that Canadian farmers are producing more intensively because they expect to harvest oats as a cash crop while many US farmers continue to cut it as silage. In addition, Canadian yields may be higher and quality better at least some of the time, especially in the more northerly (and wetter) Canadian regions. The yields close to the US border would likely be lower, because it is a drier area. Oat production in Canada is more concentrated in the northerly part of the grain belt where oats perform better agronomically.

Figure 5: US Oats Minneapolis, Cash and Futures

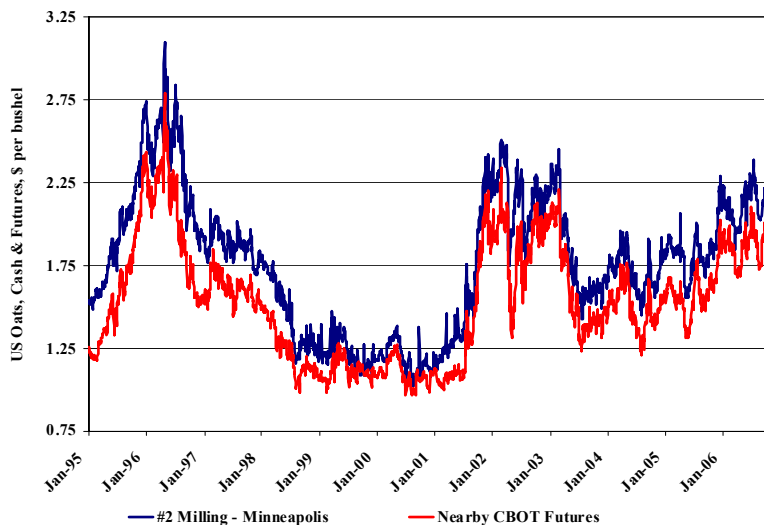
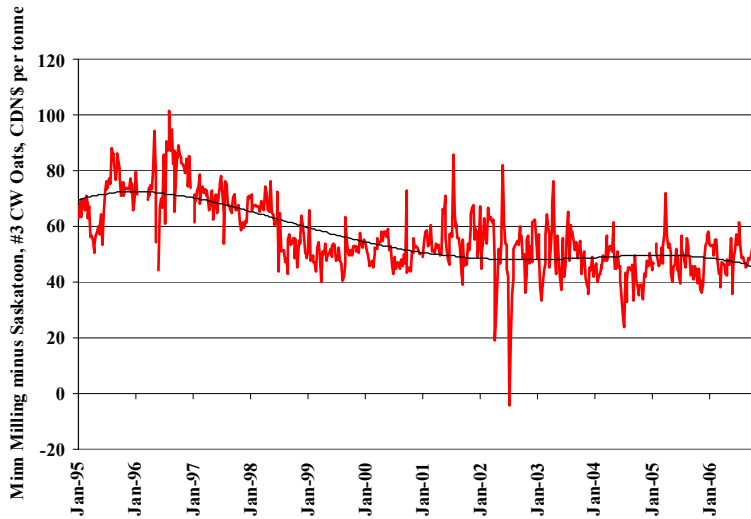


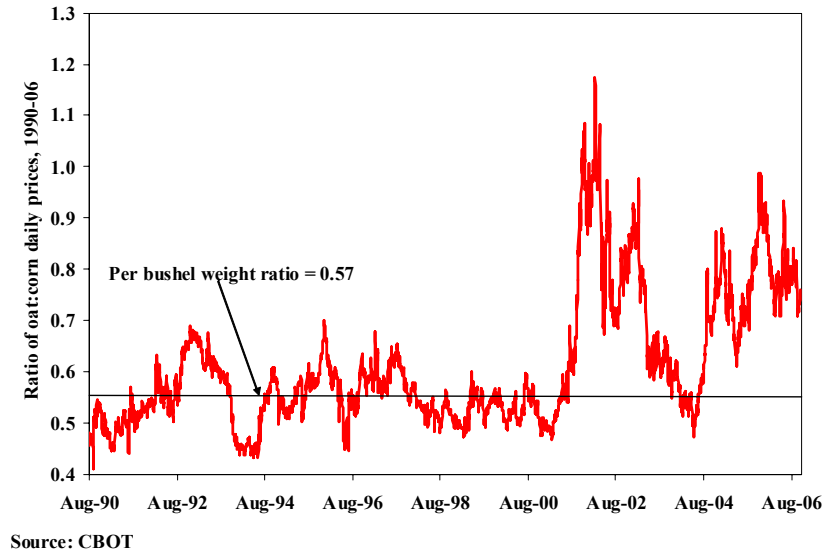
Figure 6: Minneapolis-Saskatoon Milling Oats Spread



The declining freight differential the Minneapolis milling oat market holds over cash values in Saskatchewan suggests that millers have had to become more aggressive to attract Canadian supplies. In addition, increased processing capacity in Canada has supported Canadian values and heightened competitive pressures.

A second important longer-term trend is the increasing oats-corn price ratio (Figure 7). Canada experienced three poor crops in a row from 2001 to 2003, followed by poor quality crops in 2004 and 2005. These weather events tightened up the supply picture for milling quality oats relative to a more plentiful feed grain market. Thus, it appears that oat futures have been increasingly trading based on milling oat fundamentals versus the feed market.

Figure 7: Daily Ratio of Corn/Oats Prices, CBOT



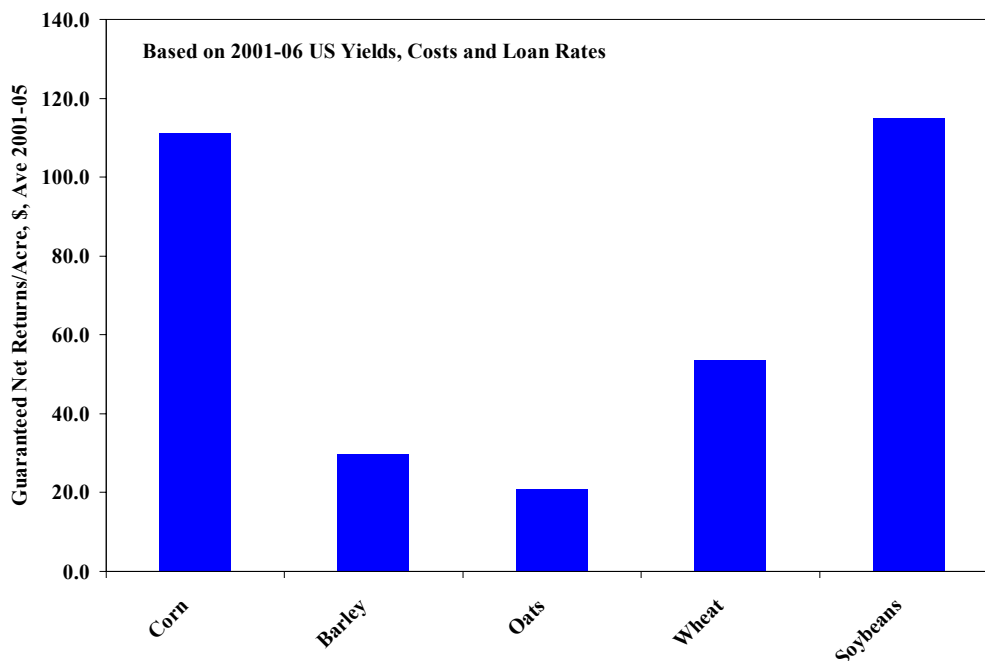
## II. Causes of Declining Production

The long-standing decline in oat production appears to reflect a number of factors—including the fundamental change in the nature of US agriculture.<sup>3</sup> A key factor has been the continuing shift of focus to other grains for animal finishing. However, as the farm-based market for oats was declining, government programs magnified those trends by providing support to other competing crops at levels above those for oats which sharply stimulated their production area at the expense of oats.<sup>4</sup>

For example, price support was extended to minor oilseeds in the 1990 farm bill—crops that had not been eligible for price support previously—and, then to pulses somewhat later in the 2002 farm bill. Not only has the government provided support to crops that compete with oats, but the support provided is at levels well above those for oats.

One useful comparison of the level of support received by a commodity is an estimate of the “net guaranteed returns per acre,” that is the price support loan rate multiplied by the average yield minus the variable cost of production (Figure 8, Table 3). Considering national averages over the 2001-06 period, the net guaranteed return for corn and soybeans was \$112 and \$115 per acre, respectively. For wheat, it was \$54 per acre, for barley \$30 and for oats \$21 (Table 2, Figure 7).

**Figure 8: US Policy Impacts--Guaranteed Returns Compared**



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<sup>3</sup>As it became possible to do so after World War I, farms shifted from animal power to machines and a major component of the demand for oats disappeared—a trend that was largely complete by the late 1940s.

<sup>4</sup> Price support was extended to minor oilseeds in the 1990 farm bill, and to pulse crops in 2002.

**Table 2: US Price Supports, Yields, Costs and Guaranteed Net Returns/Acre**

*Selected Crops, 2001-06*

	2001	2002	2003	2004	2005	2006
	<i>Loan Rates, \$/bu</i>					
Corn	1.89	1.98	1.98	1.95	1.95	1.95
Barley	1.62	1.88	1.88	1.95	1.95	1.95
Oats	1.16	1.35	1.35	1.33	1.33	1.33
Wheat	2.58	2.8	2.8	2.75	2.75	2.75
Soybeans	5.26	5.00	5.00	5.00	5.00	5.00
	<i>Yield, bu/acre</i>					
Corn	138.2	129.3	142.2	160.4	147.9	152.2
Barley	58.1	55	58.9	69.6	64.8	61.2
Oats	61.5	56.4	65	64.7	63	56.3
Wheat	48.5	15.8	53.1	50	50.1	47.1
Soybeans	39.6	38	33.9	42.2	43.3	39.6
	<i>Implied Production Guarantee, \$ per Acre</i>					
Corn	261.20	256.01	281.56	312.78	288.41	296.79
Barley	94.12	103.40	110.73	135.72	126.36	119.34
Oats	71.34	76.14	87.75	86.05	83.79	74.88
Wheat	125.13	44.24	148.68	137.50	137.78	129.53
Soybeans	208.30	190.00	169.50	211.00	216.50	198.00
	<i>Variable Cost of Production</i>					
Corn	162.06	143.77	159.67	172.67	191.08	200.5
Barley	88.49	57.45	89.95	84.69	92.94	97.31
Oats	54.42	53.95	55.39	58.31	64.71	67.95
Wheat	67.39	59.6	70.45	71.52	49.29	83.19
Soybeans	82.72	75.34	79.56	83.17	89.75	93.34
	<i>Implied Guaranteed Net Return Per Acre</i>					
Corn	99.14	112.24	121.89	140.11	97.33	96.29
Barley	5.63	45.95	20.78	51.03	33.42	22.03
Oats	16.92	22.19	32.36	27.74	19.08	6.93
Wheat	57.74	-15.36	78.23	65.98	88.49	46.34
Soybeans	125.58	114.66	89.94	127.83	126.75	104.66

Data are not available to permit the same comparisons for minor oilseeds and pulses, but they are available at the state level, and the differences are dramatic (Table 3). For example, for 2007, guaranteed net returns for dry peas are more than ten-fold those for oats, and for canola are more than six-fold as high. Price supports for barley or spring wheat are not new, but both are significantly higher than for oats, as well.

**Table 3: Guaranteed Returns and Production Costs, Burke County, N.D.**

*Current Year Estimates, April 2007*

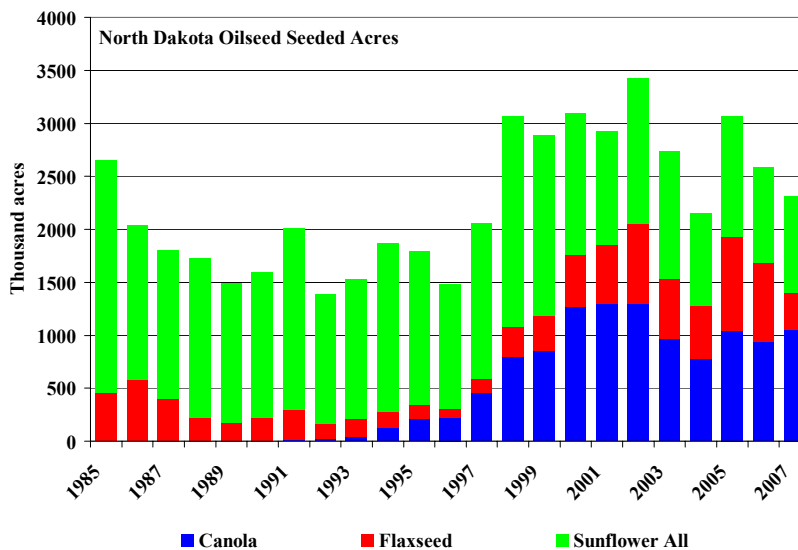
	Dry Peas	Canola	Barley	Oats	Spring Wheat
Avg Yield, bu/acre <sup>1/</sup>	31.13	28.20	54.17	54.50	34.60
Loan Rate, \$/Bu	\$3.67	\$4.68	\$1.70	\$1.24	\$2.48
Guaranteed Revenue/Acre	\$114.25	\$131.98	\$92.09	\$67.58	\$85.81
Avg Cost of Production/Acre <sup>2/</sup>	\$78.87	\$110.47	\$75.11	\$64.21	\$78.56
<b>Net Return/Acre</b>	<b>\$35.38</b>	<b>\$21.51</b>	<b>\$16.98</b>	<b>\$3.37</b>	<b>\$7.25</b>

<sup>1</sup> FSA, CY 2001-2006

<sup>2</sup> NDSU Crop Cost Budget, Direct Costs

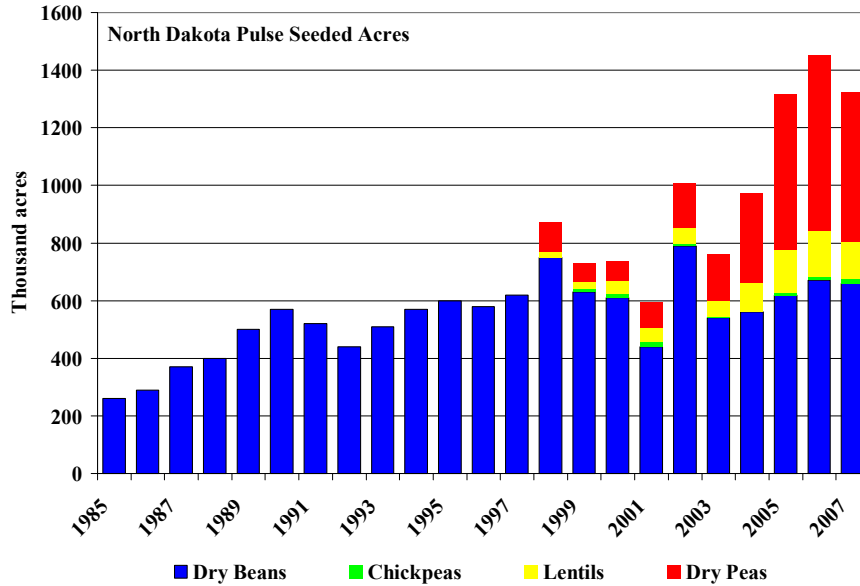
Plantings of both minor oilseeds and pulses expanded significantly and rapidly following the two policy shifts—trends that can be seen clearly in North Dakota (Figure 9).

**Figure 9: Minor Oilseeds Planted Acreage, North Dakota, 1985-07**



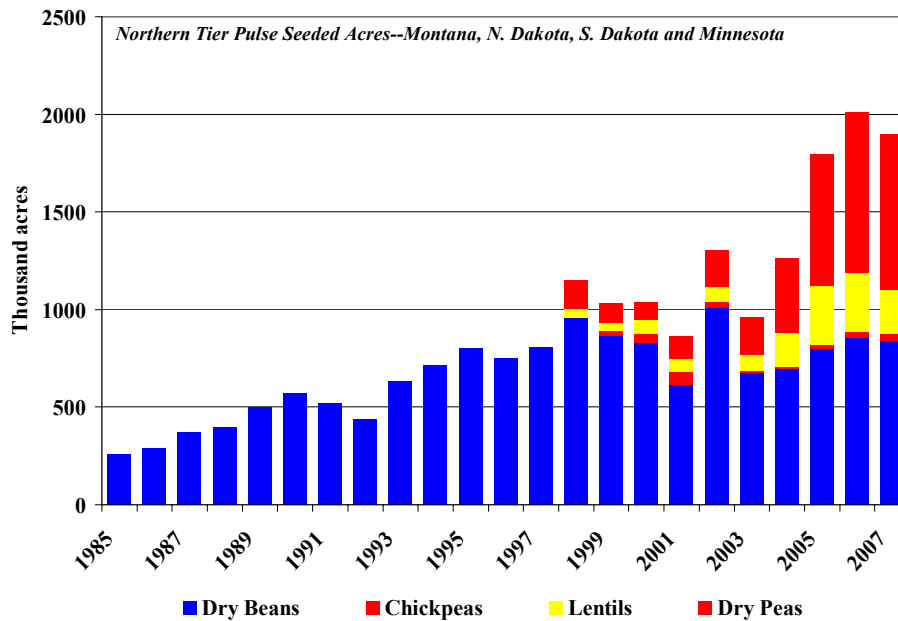
A similar response pattern can be seen for pulses. Plantings expanded significantly and rapidly once relatively high levels of price support were provided—a trend that can be clearly seen in North Dakota (Figure 10).

**Figure 10: Pulse Planted Acreage, North Dakota, 1985-07**



The shift toward additional production following the provision of price support to pulses occurred at least partly at the expense of oats. Trends for the four Northern Tier states (in the heart of the US oat-production area) was similar to that observed in North Dakota—with a rapid and significant shift to the newly-supported pulse crops, especially dry peas (Figure 11).

**Figure 11: Northern Tier States, Acreage Planted to Pulses, 1985-07**



**Biofuels—New Competitor for Production Resources**

Biofuel market growth has been rapid and important in recent years, and promises to dominate the grain and oilseed sector's economic outlook for the intermediate term. The emergence of this new market, in which agriculture is an important player facing huge demands, means fundamental changes for the sector, including stronger future prices and greater volatility—very different conditions than those that led to the design of the current commodity programs.

Initially driven by federal policies aimed at reducing air and water pollution, biofuels are now being promoted to reduce dependence on foreign oil and reduce greenhouse gas emissions. Policies with the clear intent of stimulating ethanol and biodiesel production are being implemented, and are rapidly expanding corn and soybean production. Investment in research and development is attempting to create efficient processes to produce ethanol from materials other than grain, but those also can be expected to require the use of land resources, including those now used for food and fiber crops.

Key drivers of ethanol production are government subsidies and support, the price of ethanol, the price of competing petroleum products, and the prices of ethanol production inputs and by-products. Extremely attractive ethanol margins mean that the 7.5 billion gallon production mandate is likely to be surpassed in 2007, five years in advance of the target date specified in the Energy Policy Act.

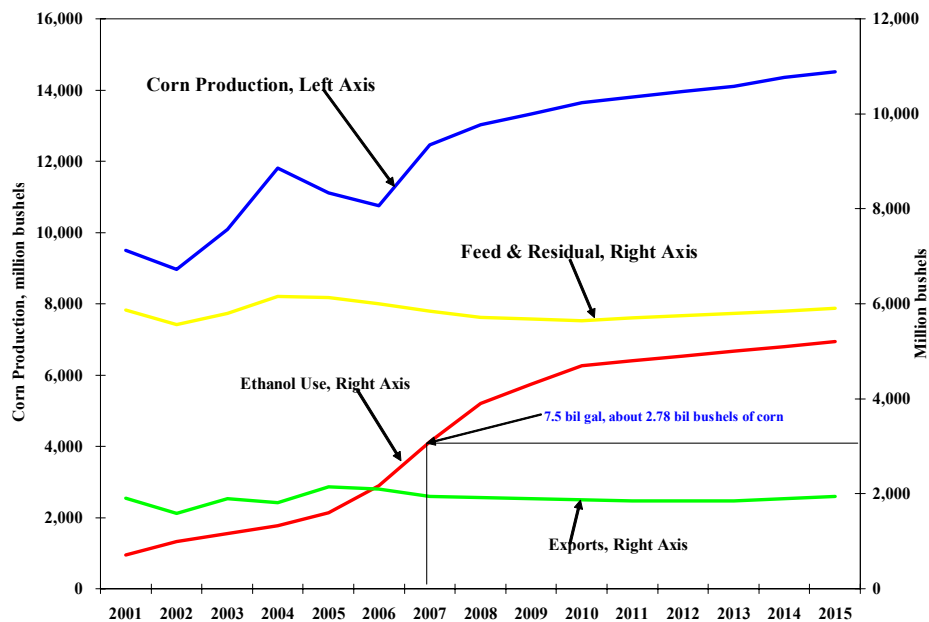
In fact, current investment trends suggest that at least 15 billion gallons of renewable fuels will be produced annually by 2015, largely ethanol from corn. This would imply corn production of 14.5 billion bushels on 87 million acres (with a yield of 181.5 bushels per acre), much greater amounts than are produced today (Figure 12).<sup>5</sup>

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<sup>5</sup> Long-term projections depend necessarily on a number of assumptions regarding petroleum prices, world commodity prices, investment in renewable fuels plants, and production costs among other things. At this time, there are not yet any official estimates of US planted acreage for 2007 crops. However, USDA has surveyed producers' planting intentions as of March first and concludes that they intend to shift huge amounts of acreage to corn (up almost 16%) and away from soybeans (down nearly 11%) and cotton (down nearly 20%), among others. Current expectations for oats are for a nearly 3% reduction in acreage from 2006.

**Figure 12: Corn Requirements for Renewable Fuels**

*15 Billion Gallon Renewable Fuel Production Levels*



Source: Informa Economics projections, December 2006.

Increases in corn production of the magnitude now expected are requiring significant shifts for the sector. For example, it likely will mean an additional 8.4 million acres cultivated for corn by 2015, primarily shifted from land previously used for soybeans (3.6 million acres) and wheat (3.3 million acres), but also from other crops. Because the growth of corn productivity has been extraordinarily great, shifts of this magnitude appear possible without severe price shocks or market disruptions, assuming no adverse weather conditions and a continuation of productivity growth.

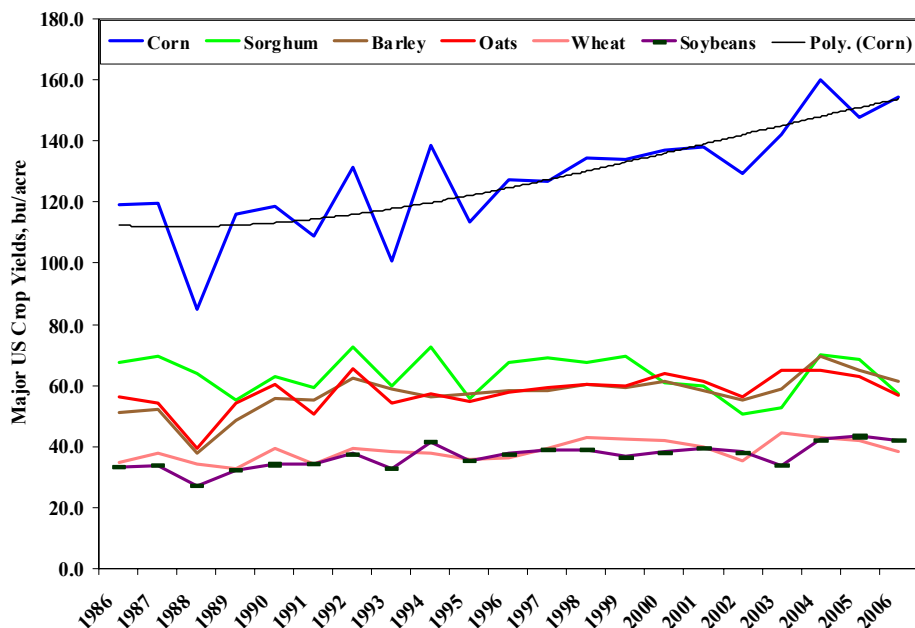
**Observation.** In addition to the changes in price support policies that have stimulated production of crops competing with oats for production acreage, national policies supporting renewable fuels production are exacerbating the competition for resources by sharply stimulating demand for, and returns from production of corn and soybeans. The primary federal incentive for ethanol production is a \$0.51 per gallon subsidy. By 2015, this subsidy will cost \$7.1 billion per year (based on production of 15 billion gallons of renewable fuels, including 14.2 billion gallons of ethanol). By contrast, Congressional Budget Office estimates indicate that direct government support for other crops (under current policies) is projected to decline sharply and steadily in the future over the life of the 2007 Farm Act.

**Research Focus**

A long-standing problem for oats in their competition for production resources is low yields--well toward the bottom of the crop yield hierarchy for soybeans and major grains (Figure 13). Corn is substantially above other crops while the other grains—especially

barley and wheat—are clustered well below with only modest growth trends. However, even further below those crops are oats and soybeans, again with only modest growth in recent years.

Figure 13: US Yield Trends, Major Crops



One reason for the lag is the tendency for agricultural research institutions—public and private—to focus more heavily on improved varieties of corn, soybeans, and wheat rather than oats. Whether this is the result of the genetic structure of the crops or simply a series of research allocation decisions, it is clear that the crops with higher returns—and, therefore larger and more robust seed markets have attracted far more research attention than has oats. As a result, oats has benefited the least among major crops from the “genetic revolution” of recent years. Corn yields in 2006 were more than six times as high as they were in 1930, and have grown at a compound average rate of 2.66 % per year while oat yields have grown at only about 0.8% annually over that period (Table 4).

**Table 4: Crop Yield Growth Compared, 1930-06**

Year	Oats	Corn	Wheat	Soybeans
1930	32.0	20.5	14.2	13.0
1940	35.2	28.9	15.3	16.2
1950	34.8	38.2	16.5	21.7
1960	43.4	54.7	26.1	23.5
1970	49.2	72.4	31.0	26.7
1980	53.0	91.0	33.5	36.5
1990	60.1	118.5	39.5	34.1
2000	64.2	136.9	42.0	38.1
2006	59.5	151.2	38.7	43.0
<b>Percent Increase Over 76 Years, %</b>	<b>85.9</b>	<b>637.6</b>	<b>172.5</b>	<b>230.8</b>
<b>Annual Increase, %</b>	<b>0.82</b>	<b>2.66</b>	<b>1.33</b>	<b>1.59</b>

Another negative factor for oat yields has been the shift in regional concentration. As acreage has declined, production has gravitated to northern regions where competition with other crops is less intense, but where land is less productive. Figure 14 and Figure 15 show the relatively modest growth in oat yields, and the northward shift in oat production in the last three decades.

**Figure 14: North American Oats Acreage, 1975**

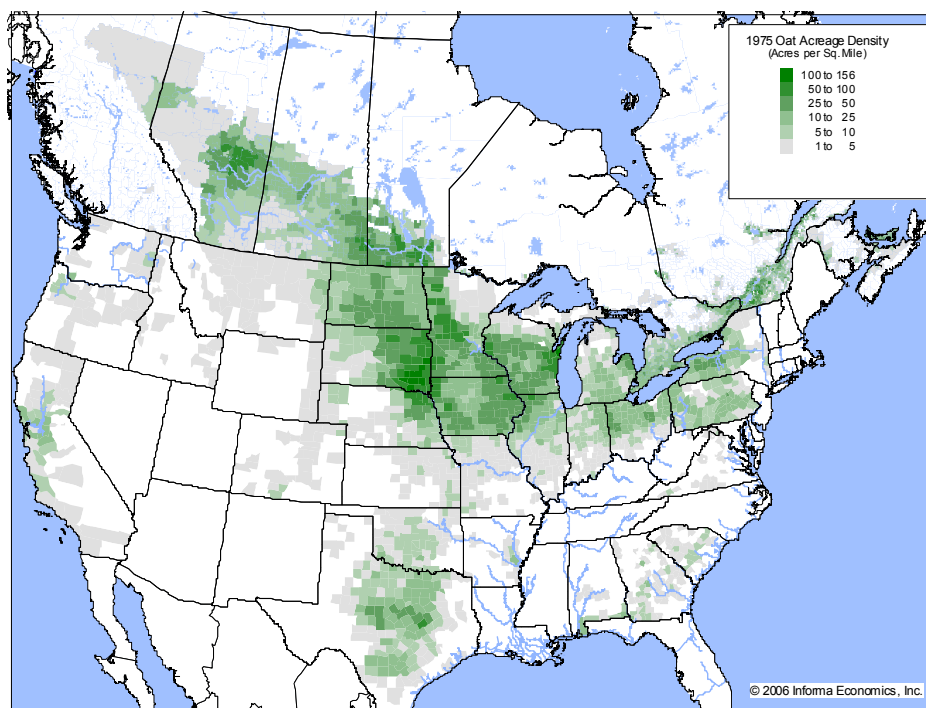
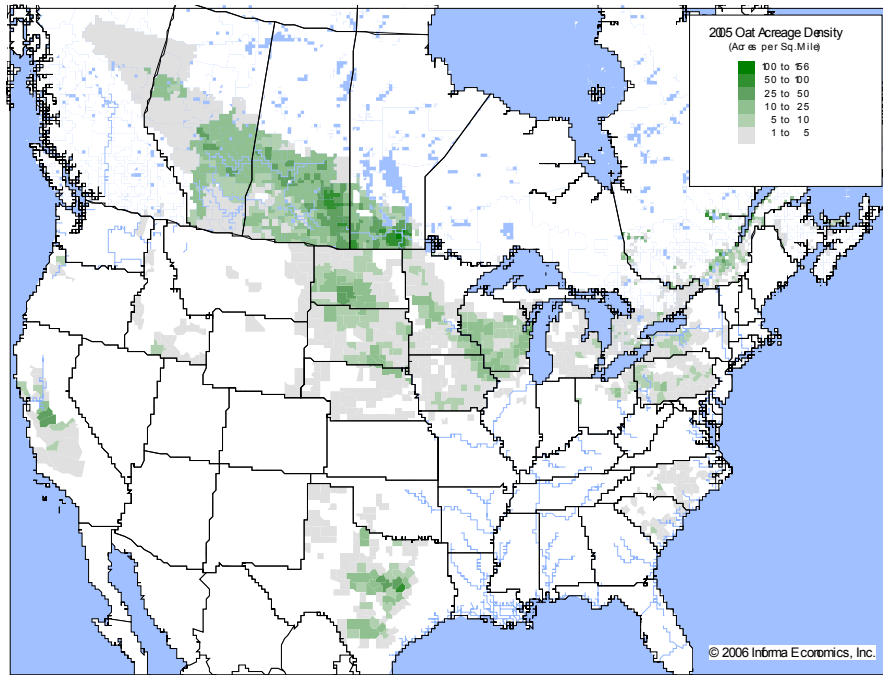


Figure 15: North American Oats Acreage, 2006



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### **III. Changing the Competitive Environment**

The foregoing analysis concludes that oats acreage in the United States has declined in large part because returns to producers are too low to compete with those from other crops, especially corn, wheat and soybeans—but, also including several crops that have been offered strong price support benefits by government programs relatively recently.

Intuitively, there would appear to be two options that could be used to make oats more competitive. The first would be some combination of price premiums/government payments and improved yields. The second would be the admission of oats to a special position in a USDA program, especially one oriented to conservation such as the Conservation Reserve.

#### **Price/Yield Improvement**

Prospects for better yields appear to be longer-term and uncertain—in part because seed companies and universities tend to focus research on crops with the highest yield and potential per-acre returns to producers. At the same time, it appears likely that increased funding for oat research could stimulate the development of higher yielding varieties.

In addition, prospects for higher oat prices also appear uncertain, especially for higher relative prices considering the emerging outlook for corn and soybean market growth. Nevertheless, in areas where corn and soybeans are not part of usual crop rotations, oats likely could compete advantageously if producer planting decisions were unfettered by government-caused distortions.

Potential modifications in the government safety-net programs may seem unlikely to succeed in stimulating oat production to any significant degree since the expectation is for continued strong commodity prices. However, modification of government programs to more equitable treatment of all crop options could help oats in the event of a return to low commodity prices in the future.

#### **The Conservation Option**

One additional option that would appear to have significant potential to boost production would be an effort to establish oats as a special cover crop on specific conservation acreage—with the provision that the grain would be partially harvested, and partly left for wildlife feed.

This option, too, would be expected to face significant opposition. A major objective of the CRP program has been to remove fragile land from production, and commit it to cover crops that cannot be harvested except in the case of emergencies, and then under special decrees from the Secretary of Agriculture.

However, a national debate is now underway on the future of the CRP. The question is whether some CRP land can and should be returned to commercial production to help meet renewable fuel production goals.

For example, House Agriculture Committee Chairman Collin Peterson, D, Minnesota has suggested frequently that special provisions need to be made for production of switch grass as the raw material for ethanol, and he is likely to promote it in the farm bill. Clearly, Congressman Peterson is thinking of attracting new land into subsidized switch grass production, a new concept. At the same time, USDA is continuing its review of the quality and location of land now in the CRP—although Secretary Johanns has rejected, at least temporarily, earlier proposals to allow land suitable for sustained production of grain and oilseeds to be converted without penalty. Any such shift, of course, would be strongly opposed by CRP supporters; especially those interested in non-agricultural benefits of the program including recreation—hunting and fishing—and water quality.

At this time, USDA is continuing its large-scale review of the CRP and the likely effects that increased ethanol production will have cropping requirements. One part of that review will be an update of an earlier USDA evaluation concerning how much land now in the CRP could be planted to corn and soybeans without environmental damage. Management, genetics and tillage practices have advanced since the CRP was begun in the mid-1980s, and at least some of the current CRP land could safely be cropped (In its Farm Bill Proposal, USDA observes that more than 27 million acres of CRP contracts are on Farmland Capability Classes 1-4, that is suited to growing crops). Furthermore, higher grain and oilseed prices would make it attractive to cultivate even some lower-productivity land.

USDA says it has been tightening its environmental standards for CRP contracts for some time, and will continue to do so. For example, contracts covering large amounts of land are maturing this year and next and USDA earlier offered landowners whose contracts mature next September the chance to either re-enroll or extend their contracts depending on how their land scored on the department's environmental benefits index.

USDA's Farm Service Agency routinely evaluates land proposed for the CRP on the basis of its “environmental benefits index” to the land, giving additional credit for contracts within national CRP conservation priority areas. FSA categorizes proposed parcels into one of five tiers based on environmental benefits, and parcels ranking in the first tier (between 81-100 percent) are allowed to re-enroll their land in new contracts.

Before approving re-enrolled or extended contracts, FSA will review future proposals to ensure that required cover is maintained and there is compliance with other contract provisions, in addition to other eligibility requirements.

However, the management objectives of the CRP are highly political as well as environmental, and hunting and fishing groups as well as environmentalists have very important positions on these issues that are closely considered by the Congress.

### **New Roles for CRP Land**

Senator Tom Harkin, D, Iowa and chairman of the Senate Agriculture Committee, observed earlier this spring that corn alone will not be enough to produce ethanol if the country wants to develop viable energy alternatives and gain self-sufficiency. He suggested that multiple-purpose crops such as switchgrass could play a role, and also could serve as nesting grounds for wildlife.

Harkin said he proposes to pay farmers to convert land protected under the last farm bill's CRP to grow "energy crops that are by their very nature conserving crops." However, this concept suggests potentially very significant future changes for the CRP since current rules generally prevent harvesting CRP land.

Representative Peterson has suggested publicly that he also recognized the growing pressure on current land resources, and observed to the press, "Tapping into that land (CRP) must be approached with caution. What I'd like to do is add acres on top of the CRP to do some experimentation with switchgrass and mixes of switchgrass and other crops ... to see how they work," Peterson said.

These observations suggest that, if a change in the management objectives of the CRP is to be seriously considered, this is a near-ideal time since questions about future pressure on US agricultural resources already are forcing reconsideration of the management objectives of the CRP.

### **Special Support for Wildlife**

If some of the land in the CRP is to be returned to commercial production of corn, oilseeds or special energy crops the use of oats as a special cover crop that could also increase the amount of grain available on CRP land for wildlife might have some appeal to wildlife groups.

The concepts would be the designation of a "mixed use" of CRP lands. Rules governing CRP use could be designed so that it would both increase harvested area and production in oats and achieve or maintain conservation objectives, especially with regard to wildlife. At the same time, such a program could increase returns to CRP land and reduce the cost to the government of operating the CRP program by allowing "partial harvests of oats."

Such an approach is not completely new, and has faced strong opposition in the past. However, the conservation and potential wildlife benefits of the use of oats on limited amounts of CRP land could be discussed on the basis of the current outlook for land resources and the potential advantages of allowing a beneficial commercial use for CRP land, at the same time providing special cover and significant amounts of grain as feed for wildlife. Of course, support or opposition for such an approach would depend heavily on program details and it is too early at this time to suggest those in any detail.

**CRP objectives.** The CRP has always been managed to achieve multiple purposes—protect fragile land and boost water quality among others. Wildlife habitat and recreation were added later in the program’s life. Now as special programs to promote the production of biomass on fragile lands are under active discussion, it is only a small step from the discussion of a subsidized hybrid program to stimulate biomass production to discussion of an intermediate program to promote joint conservation—wildlife programs through use of oats as a cover crop that could yield either valuable forage or grain or both. The crop could be made especially beneficial to wildlife if it were to be harvested for grain, with a share “set aside” for wildlife.

**Oats and conservation.** Oats have traditionally been used as a cover crop and harvested both for grain and forage. For example, oats requires less nutrients to produce than other cereal or oilseed field crops—including barley, wheat, canola and rye. It produces more dry-matter at lower cost per acre than competing cover crops and helps break disease cycles. And, with zero tillage, soil disturbance is minimal and soil protections high because of the extensive root system it develops and the effectiveness of direct seeding. In addition, oats grain is extremely valuable as an animal feed and could be used to support the development of wildlife habitat, at the same time part of the harvest is used for grain.

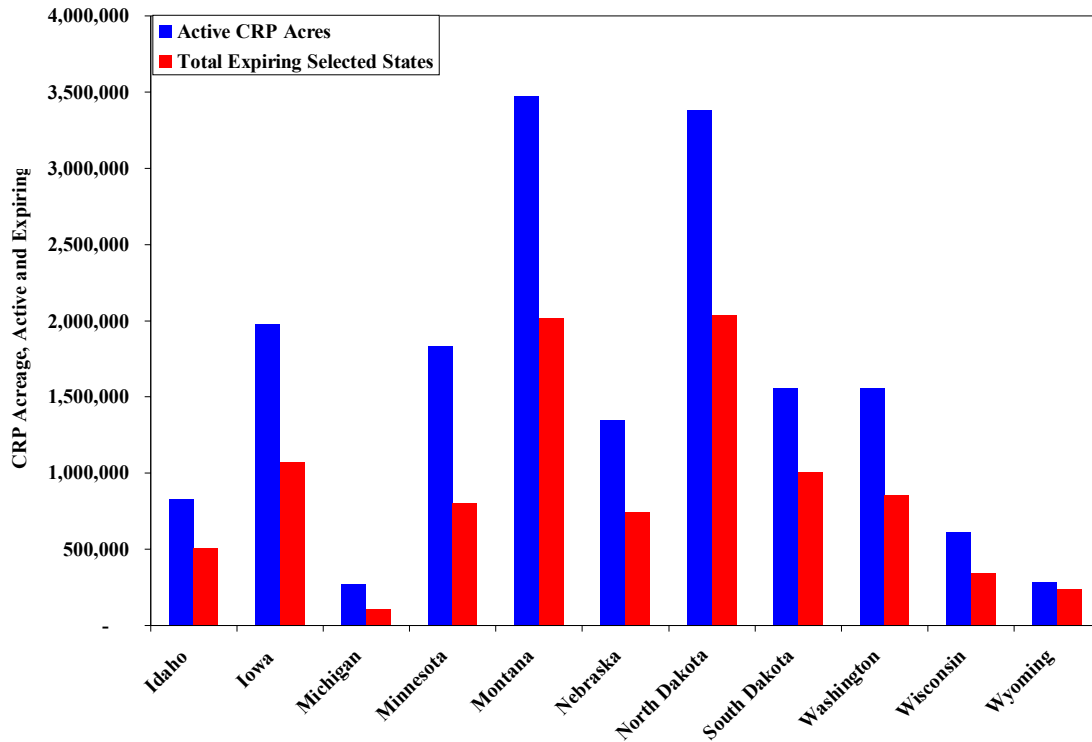
**Potential impact.** Considering current acreage in the CRP in northern areas of the United States indicates that large amounts of CRP land are found in eleven selected states—and, over the next five years 9.7 million acres now under CRP contracts will expire and be considered for extension or renewal (Table 5, Figure 16). These observations suggest that there is a very large amount of area that could be considered for inclusion in a mixed-use conservation approach. The fact that the 2002 Farm Act will need to be reauthorized next year amidst deep uncertainty about the availability of land resources for both food and fuel suggests that this is an appropriate time to discuss such an option.

**Table 5: Expiring CRP Acreage, Next Five Years, Selected Northern States**

State	Active CRP Acres	9/30/2007	9/30/2008	9/30/2009	9/30/2010	9/30/2011	Total Expiring Selected States
Idaho	828,641	137,557	26,557	70,269	160,100	115,976	510,459
Iowa	1,978,292	362,209	259,583	202,206	173,936	72,611	1,070,545
Michigan	276,015	30,465	32,427	18,058	18,343	10,636	109,929
Minnesota	1,834,427	140,294	274,485	175,505	81,039	128,441	799,764
Montana	3,476,169	618,584	190,483	307,486	408,079	493,170	2,017,802
Nebraska	1,348,241	162,631	63,897	177,763	186,910	151,488	742,689
North Dakota	3,385,612	977,704	163,752	252,785	258,425	385,313	2,037,979
South Dakota	1,558,196	356,985	130,183	244,270	153,269	126,244	1,010,951
Washington	1,558,553	38,637	288,852	212,150	251,889	69,891	861,419
Wisconsin	610,370	111,306	85,475	45,059	58,868	43,936	344,644
Wyoming	285,473	13,947	6,010	98,119	73,474	49,472	241,022
Selected Expiring	17,139,989	2,950,319	1,521,704	1,803,670	1,824,332	1,647,178	9,747,203

Source: USDA, as of April, 2007

Figure 16: Active and Expiring CRP Acreage 2007-2011, Selected Northern States



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## **IV. Summary**

The study concludes that oats acreage and production trends over the past several decades reflect a sharply declining market for oats as a feed grain and modest growth in the food oats market. Per-unit prices tend to be relatively high, but returns to producers are among the lowest of commercial crops, largely because oat yields have grown more slowly than have those of other crops in recent years. As the demand for corn and soy oil to produce renewable fuels grows, oats are expected to continue to compete at a significant disadvantage for acreage. As a result, if this trend is not reversed, consumers of oats will be forced to rely increasingly on imports produced in the Prairie Provinces of Canada, a significantly drought-prone region.

The trends in oat plantings and production have been of particular concern to producers because of the impact of government programs on their competitive position. In areas where oats do not face direct competition from corn and soybeans, it has been disadvantaged by relatively new government price support programs that provide high levels of support to minor oilseed and pulse crops that compete directly with oats for acreage. These programs have provided significant incentives to shift acreage away from oats—trends that are clearly observed in the study. Rebalancing these government supports would level the playing field and would be expected to lead to expanded oat acreage in those areas.

Today, the market trends working against oats appear to be growing in importance. The focus on biofuels has made production of fuel feed stock a priority, and very large amounts of acreage are being shifted into the production of corn and soybeans at the expense of other crops—a trend likely to continue for the foreseeable future. And, while these policies are strengthening all crop prices by limiting supplies, they can be expected to respond most to the emerging demands for corn and soybeans—rather than for food grains, or for other feed grains.

Furthermore, the prospect of implementing a special safety net, or other special incentive programs by the federal government that would have a reasonable prospect of overcoming oats' competitive disadvantage and of increasing harvested acreage appear unlikely because of potential opposition from other producer groups, from the administration and from trading partners in the WTO. Such programs would appear to be especially vulnerable to WTO litigation. The findings of Brazil's WTO case against US cotton subsidies suggest that domestic support programs that effectively maintain domestic production at the expense of imports likely would be litigated successfully—a development likely to constrain the use of price support programs for such a purpose in the future for all US commodities, in addition to cotton.

Oats are especially valuable in environmentally sustainable crop rotation systems, where they help to ensure sound cropping and soil conservation practices. The most promising area in which oats could support an approach aligned with an especially high priority national objective would appear to be conservation. Given the likelihood that efforts will be made to reduce the size of the Conservation Reserve Program and increase the

intensity of use of land enrolled in that program, it might be possible to develop an effective program that would award oats a special position as a favored cover crop, one that could increase the CRP's wildlife carrying capacity, perhaps reduce the cost of the program to the federal government—and, at the same time, significantly increase the production of oats. And, by changing the scale of oats production in the United States, such a program might reduce the cost to processors and increase sales and use in competition with other cereals.

At this point, given the highly political nature of the management objectives of the CRP, it is beyond the scope of this study to determine the possibility of “special use” status for oats under the CRP, or of the potential market impacts if additional production were stimulated. As a result, the study team recommends that the client consider the overall approach described briefly above, initiate early discussions with potential supporters (and, opponents), and consider alternative approaches to USDA and the Congress. Informa would stand ready to assist in this process as appropriate.

## V. Appendix

**Table 6: Production Costs for Oats, US Regions**

Item	United States		Northeast		North Central		Northern Plains	
	2004	2005	2004	2005	2004	2005	2004	2005
	<i>dollars per planted acre</i>							
<b>Gross value of production</b>								
Oats	91.65	105.44	90.86	97.89	94.43	104.71	89.65	101.19
Oats straw	36.14	36.59	47.52	48.10	49.89	50.50	10.07	10.19
Total, gross value of production	127.79	142.03	138.38	145.99	144.32	155.21	99.72	111.38
<b>Cash expenses:</b>								
Seed	8.86	8.51	15.31	14.41	9.96	10.14	5.64	4.93
Fertilizer, lime, and gypsum	18.74	22.79	33.18	40.75	22.09	27.42	11.44	13.31
Chemicals	1.84	1.95	2.92	3.10	1.28	1.35	2.33	2.47
Custom operations	4.36	4.58	4.91	5.16	5.83	6.11	2.42	2.54
Fuel, lube, and electricity	9.52	9.82	14.78	14.78	7.30	7.30	10.26	10.26
Repairs	10.88	11.08	12.59	12.82	7.38	7.52	14.43	14.69
Hired labor	2.78	2.90	4.49	4.68	2.49	2.59	0.50	0.52
Other variable cash expenses <sup>2/</sup>	1.34	1.36	1.65	1.67	1.84	1.86	0.46	0.46
Total, variable cash expenses	58.32	62.99	89.83	97.37	58.17	64.29	47.48	49.18
<b>General farm overhead</b>	6.73	7.07	10.03	10.54	5.76	6.05	4.08	4.29
<b>Taxes and insurance</b>	16.20	17.40	24.11	24.87	21.98	22.92	8.45	8.98
<b>Interest</b>	5.33	5.64	5.12	5.42	5.96	6.31	4.95	5.24
Total, fixed cash expenses	28.26	30.11	39.26	40.83	33.70	34.34	17.48	18.51
<b>Total, cash expenses</b>	86.58	93.10	129.09	138.20	91.87	98.63	64.96	67.69

**Table 7: Comparative Costs and Returns, Canada and North Dakota, 2006**

*US \$ per acre*

	Saskatchewan	North Dakota
<b>REVENUE PER ACRE</b>		
10-Yr Avg Yield (bu/ac)	62.2	54.5
Est. Farm Market Price per Bushel	1.58	1.40
<b>Estimated Gross Revenue per Acre</b>	98.46	76.30
<b>VARIABLE EXPENSES PER ACRE</b>		
Seed	10.48	6.50
Fertilizer	19.98	24.77
Chemical	9.23	1.88
Machinery Operating - Fuel	11.32	12.74
- Repair	6.84	10.98
Crop Insurance Premium	4.48	3.80
Interest on Variable Expenses	1.75	2.39
<b>Total Variable Expenses</b>	64.08	63.06
<b>Return over Variable Expenses</b>	34.38	13.24

**Table 8: Structure of Returns, Share of Government Supports by Major Crop 2004**

	Corn	Soybeans	Wheat	Barley	Oats	Sorghum
	<i>bil \$</i>					
Market Revenue	24.35	17.93	7.33	0.69	0.17	0.82
Dir & CCP	4.48	0.82	1.2	0.11	0.01	0.38
LDP/MLG	2.93	0.3	0.08	0.08	0	0.13
Prod Exp	13.97	6.26	4.27	0.38	0.24	0.82
Net	13.31	11.98	3.14	0.39	0.07	0.13
	<i>percent of Net Revenue</i>					
Dir & CCP	34	7	38	28	14	292
LDP/MLG	22	3	3	21	0	100
Net	100	100	100	100	100	100