Iowa Farm Outlook

September 2008

Department of Economics Ames, Iowa

Econ. Info. 1981

Understanding Meat Exports

Exports of livestock and poultry products have allowed US producers to grow their businesses beyond what was possible if only serving the US market. The pork, poultry and even dairy sector have benefited significantly in recent months from expanded exports. Beef producers continue to rebuild exports following the December 2003 discovery of BSE in the US.

Trade is a two-way street. The US imports as well as exports meat, dairy and poultry products but in varying degrees. Through the first six months of 2008, the US exported \$7.87 billion of animal products (Table 1) and imported \$3.76 billion. Beef is the only sector that is a net importer on a volume and value basis, but that could change by the end of 2008. Through the first six months of 2008, the dollar amount of beef imports were down 15% and exports were up 38% and US exports totaled 81% of the value of imports. In 2007 it was 61%.

Table 1. Animal Product Trade Data, \$1000 of Imports and Exports

			, .	-	-		
	Imports		Ex	oorts	Net Export		
	1st 1/2 08	2007	1st 1/2 08	2007	1st 1/2 08	2007	
Beef	1,488,397	3,285,296	1,206,784	2,010,576	-281,613	-1,274,720	
Pork	523,480	1,162,103	2,022,057	2,753,730	1,498,577	1,591,627	
Poultry	220,983	473,591	2,347,530	4,091,746	2,126,547	3,618,155	
Dairy	1,501,601	2,882,606	2,134,788	3,038,862	633,187	156,256	
Eggs	<u>27,142</u>	43,273	<u>157,015</u>	317,597	129,873	274,324	
Total	3,761,603	7,846,869	7,868,174	12,212,511	4,106,571	4,365,642	

Trade is also a two-edged sword. Opportunities grow for US producers as exports grow, but there is also increased risk exposure if trade is suddenly disrupted. Consider beef trade in 2003 when Canadian imports were halted for three months then US exports stopped and then slowly rebuilt beginning in 2004. Cattle prices reached record highs of \$112 in mid-October 2003 and then were as low as \$75 the first week of January. Monthly broiler exports to Russia dropped from 224 million pounds in January 2002 to 14 million pounds in April 2002. This decline in export volume backed up export channels and added to the US supply, depressing the price of chicken and also pork, beef and turkey.

Through the first half of 2008 each of the commodities have a large market or two that takes a majority of the product (Table 2). Sixty-three percent of US beef is exported to neighboring Canada and Mexico. China is an emerging market for pork and is now equal to Japan in volume. Over half of broiler exports go to a large number of smaller markets. About half of turkey goes to Mexico and Hong Kong is the largest single market for shell eggs.

Of major concern to the current market is trade with Russia who announced August 27 that it planned to lower its import quotas for poultry and pork. That is a particular risk for broilers, but also beef, pork and turkey that have seen significant growth in Russia this year (Table 3). If imports to any of the commodities to Russia are reduced the price impact in the US may be felt in the other commodities as well.

Table 2. Share of US Export Volume to Selected Countries, First Half 2008.

	Beef	Pork	Broiler	Turkey	Shell Eggs
Japan	13%	26%	1%	NA	NA
S. Korea	0%	7%	NA	1%	NA
China*	5%	26%	2%	7%	33%
Canada	24%	8%	4%	3%	11%
Mexico	39%	11%	9%	51%	7%
Russia	1%	9%	29%	6%	NA
Other	16%	11%	55%	32%	49%

^{*} Includes Mainland, Taiwan, and Hong Kong

Table 3. Percentage Change is US Export Volume by Country, First Half 2008 v. First Half 2007

	Beef	Pork	Broiler	Turkey	Shell Eggs
Japan	50%	18%	59%	NA	NA
S. Korea	-85%	19%	NA	3%	NA
China*	36%	354%	33%	77%	-60%
Canada	38%	24%	-4%	1%	56%
Mexico	13%	28%	7%	4%	-35%
Russia	69127%	141%	20%	50%	NA
Other	80%	90%	24%	46%	-37%

^{*} Includes Mainland, Taiwan, and Hong Kong

Consumer Impact

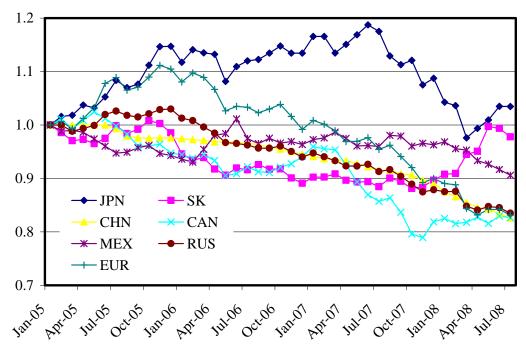
While there has been a lot of discussion about the impact of higher feed costs on food prices, the production of meat and milk has increased thus far in 2008. However, the supply of these products available to domestic consumers is a different story (Table 4). Export customers, in some cases, have outbid domestic consumers for animal products reducing the domestic supply. In all cases, the amount of imported products has declined. While production of all four commodities increased, turkey is the only meat to show an increase in retail consumption. The poultry meats also posted increases to their cold storage at the end of June.

Table 4. Percentage Change in Production, Stocks, Trade, and Per capita Consumption of Beef, Pork, Chicken and Turkey, First Half 2008 v. First Half 2007.

	Total	Beginning		Total	Ending	Retail	
	Production	Stocks	Imports	Supply	Exports	Stocks	Consumpt
Beef	3.0%	-0.3%	-21.5%	0.2%	31.2%	-0.3%	-2.1%
Pork	10.4%	9.5%	-14.7%	9.3%	68.5%	9.0%	-0.8%
Broiler	4.7%	13.4%	-30.0%	5.2%	20.1%	25.7%	0.0%
Turkey	4.8%	12.8%	-28.3%	5.3%	18.9%	24.6%	0.4%

One of the driving forces behind the change in imports and exports is the strength of the US dollar relative to trading partners. A lower priced dollar makes imports more expensive and exports cheaper relative to other goods. With the exception of Japan, the US dollar is weaker than it was in 2005 compare to selected trading partners in Figure 1. In July 2008 compared to January 2005 the US dollar was approximately 15% cheaper in Canada, Russia, China, and Europe, 10% less in Mexico and 5% lower in South Korea.

Figure 1. Index of \$US Value Relative to Selected Currencies, 1/1/05 = 1



How does currency value impact trade? Consider a box of US meat valued at \$100 in the US. In January 2005 it would have taken 827.62 Chinese Renminbi to buy it. In July 2008 currency value it would take only 683.62. Thus, with the same amount to spend Chinese consumers can by more US meat.

On the opposite side, if US consumers wanted to spend \$100 on Canadian meat imported to this country they will receive less than before. In July 2008, the \$100 US will but 101.27 Canadian dollars worth of product. If the currency were valued at January 2005 levels it would buy 122.53 Canadian dollars worth of product.

Implications for farmers

Trade has been beneficial for US livestock and poultry producers. The weaker US dollar and brokered trade agreements have helped expand US products into markets around the world. While exports have increased opportunities, it has also increased risks. First, because trade is a two way street, imports come into the country and compete with domestically produced products. Second, and more importantly, domestic prices are impacted by factors that impact trade such as policy changes in customer and competitor countries, governmental disagreements that disrupt established trade, disease concerns and rules, currency, energy prices, and other issues outside agriculture. These factors are beyond our control often change faster than farmers can adjust.

What farmers can do is recognize the new opportunities and risks that they now face. Price risk management will be key for success in agriculture that is increasingly dependent on trade.

John Lawrence

Entering the Home Stretch: Quick Crop Outlook

Weather looms large for the corn and soybean markets. With both crops still running behind average, the markets have built a weather premium into crop prices. The threat of an early or normal frost could drive prices higher. And given the tightness in stocks, a weather-induced price rise could be significant. At this point though, the forecasts from the National Weather Service show better than normal chances for warmer than average temperatures from now to the end of the year. Lack of rainfall, especially for the soybean crop, could pull yields down and prices up. Beyond harvest, crop prices will likely trek upward as the competition begins for 2009 acreage. The short stocks situation implies that the competition could be fierce.

Crop prices are also showing sensitivity to movements in the dollar. Recent strengthening in the dollar has put some downward pressure on prices. For corn, export competition may build from feed wheat as more of the European Union and Ukrainian wheat crops may be directed into feed than expected. So far, outstanding export sales for the 2008/09 marketing year are running about 1.5 million metric tons behind last year's pace for corn. For soybeans, outstanding export sales are 2 million metric tons ahead of last year. Other market factors that bear watching are crude oil prices, South American plantings, and general economic conditions both here in the U.S. and abroad.

Stocks-to-Use Ratios

One of the factors setting the tone for commodity markets is the stocks-to-use ratio, the ratio of ending stocks to the total use of a crop for a given crop year. Coming out of 2007, the stocks-to-use ratios for corn, soybeans, and wheat were all projected to be low, all were below 15%. Figure 1 shows the ratios going back to 1990. For wheat, the ratio was at its lowest point in over a decade. Only in 2003 had soybean stocks been relatively this tight. And corn was at a below-average ratio in spite of record production. USDA projected production for 2008 put the corn crop as the 2nd largest ever and the soybean crop as the 4th largest ever. Wheat production is projected to be the largest since 1998. But even with the sizable crops coming in, crop demand remains strong enough to lower the corn stocks-to-use ratio and prevent the soybean from rising. Only in wheat is the stocks-to-use ratio coming out of the 2008 crop expected to return normal levels. Stocks are important as they provide a cushion to the market if the next year's production falls short due to weather disruptions. Given the 2007 stock projections, the markets did not have as much cushion as usual when the floods hit and that added to the price run-up this summer.

The world's stock picture is somewhat different. Figure 2 shows world stocks-to-use ratios since 1980. Corn and wheat ratios have been on a downward trend for some time. Relative to use, wheat stocks started dropping in 2001. And even with the upturn in U.S. and world stocks in 2008, the world wheat stocks-to-use ratio is well below typical levels. Corn stocks-to-use started its slide in 1998, falling from nearly 30% then to below 15% for the 2008 crop. And despite the tight soybean situation in the U.S., world soybeans stocks are in fairly good shape. Based on stock levels, while corn competes mainly with soybeans for area in the U.S., corn's major competition will likely come from wheat internationally.



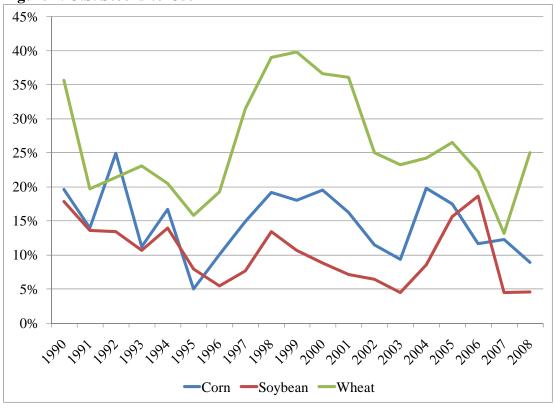
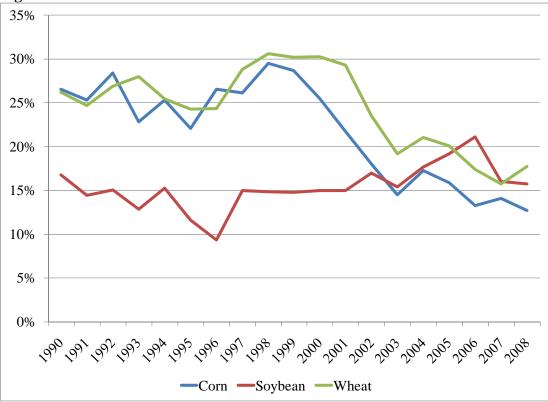


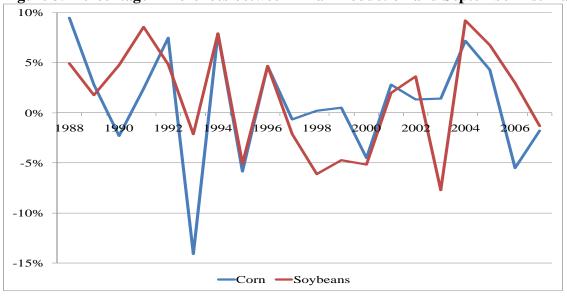
Figure 2. World Stocks-to-Use



Thinking Ahead to the September Reports

USDA will update its crop production estimates in a couple of weeks. Historically, the September reports tighten up the yield and production estimates slightly from the August estimates. For both corn and soybeans, the September reports tend to underestimate the size of the crop. Out of the last 20 years, the September estimates fell below the final production numbers in 13 years for corn and 12 years for soybeans. Figure 3 shows the percentage differences by year. On average, the corn crop gains just under one percent, while the soybean crop gains 1.4%. The bigger swings in production have been in years with unusual weather. The biggest moves for corn were in 1988 and 1993. Corn production actually turned out 9.5% better than the September projection in 1988, despite the drought. Corn production was 14.1% lower than estimated in 1993. For soybeans, the biggest production swings occurred in 2003 (down 7.7%) and 2004 (up 9.2%). In 1993, the September soybean production estimate was 2.1% higher than the actual production. Based on the 1993 and 2003 crop years, downward revisions in corn and soybean production are more likely given the late planting and flooding.

Figure 3. Percentage Differences between Final Production and September Estimates



Milk Production up 1.7%, Cheese Inventory Grows

July 2008 23 major dairy states milk production rose nearly 1.7%. Production per cow was unchanged from one year ago. Milk cow numbers were 143,000 more than July 07 and 5000 more than June 08. June milk production was revised down by 19 million pounds.

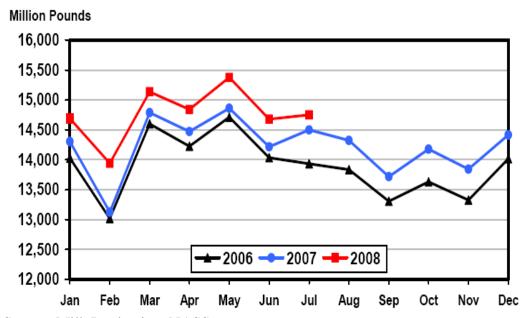
Iowa July 08 milk production was down over 1.9% compared to one year ago. Cow numbers were the same as one year ago, but milk production per cow was down by 25 pounds. This situation led to Iowa milk production down by 1.9% from one year ago. June 08 cheese production was 17.3% higher than one year ago and -6.5% more than May 08.

million nounds, million nounds

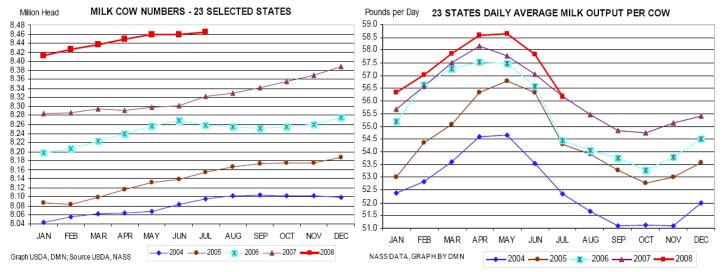
Milk Production: Selected Dairy States, July
--

							million pounds	million pounds	
	thousands	thousands		pounds	pounds		2007	2008	
	2007 cow	2008 cow	% change	2007 milk	2008 milk	% change	total milk	total milk	% change
State	numbers	numbers	cow numbers	per cow	per cow	milk/cow	production	production	total milk
Iowa	215	215	0.00%	1700	1675	-1.47%	366	359	-1.91%
MN	463	463	0.00%	1575	1590	0.95%	729	736	0.96%
WI	1248	1252	0.32%	1675	1675	0.00%	2090	2097	0.33%
IL	103	102	-0.97%	1550	1520	-1.94%	160	155	-3.13%
CA	1816	1846	1.65%	1900	1850	-2.63%	3450	3415	-1.01%
CO	119	129	8.40%	2005	1950	-2.74%	239	252	5.44%
ID	516	556	7.75%	1970	1970	0.00%	1017	1095	7.67%
NM	335	338	0.90%	1850	2000	8.11%	620	676	9.03%
PA	550	546	-0.73%	1610	1630	1.24%	886	890	0.45%
NY	626	626	0.00%	1650	1690	2.42%	1033	1058	2.42%
TX	348	383	10.06%	1720	1850	7.56%	599	709	18.36%
23-State	8322	8465	1.72%	1742	1742	0.00%	14500	14750	1.72%
US total			#DIV/0!			#DIV/0!			#DIV/0!

USDA estimated that 208,500 dairy cows were slaughtered in July 08. This is up 27,600 from June 2008 and 28,300 more than one year ago. Cooperatives Working Together (CWT) announced a fifth herd reduction. January-July 2008 dairy cull dairy cow slaughter totaled 1.468 million which was 50,000 higher than the same period during 2007. Through July 26, cow slaughter was 2.6% higher than one year ago. Some recent weeks slaughter has been up by as much as 18% than corresponding weeks in 2007.



Source: Milk Production, NASS



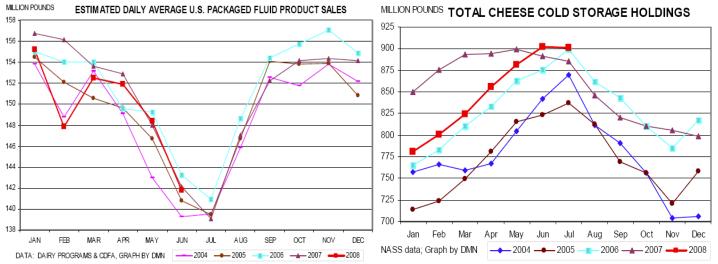
Source: Dairy Market News Source: Dairy Market News

Demand or Disappearance

Commercial disappearance has remained strong for the first half of 2008, +2.4%, During the second quarter use declined slightly in percentage increase to +2.3%. Cheese disappearance was weaker during the second quarter 2008. The Jan-June 08 American cheese use was -1.1% and other cheese off by -1.9%. April-June08 American cheese use dropped 2.5% and other cheese was down by 3.8%. June American cheese was still at -3% for commercial use.

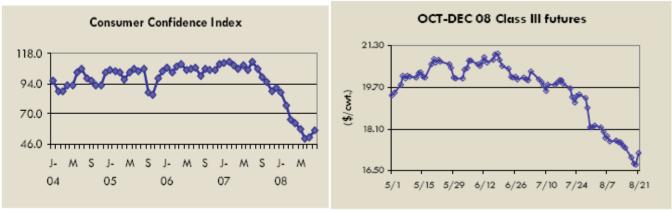
Butter demand continues to be strong compared to one year ago. June 08 butter use was up 19.2% compared to June 07 with the first half of 2008 use up 21.2%. The whey market continues to show weakness as evidenced by prices and stocks, 30% higher than the 5-year average. Prices are now near cost of production rather than adding profit to cheese operations.

A Downes-O'Neill dairy economist remarked that cheese supply is adequate but the concern is that consumer demand may not be adequate to use it. Recent GDP growth rate reports put the rate at 3.3% annually, better than the 1.9% initial estimate.



Source: Dairy Market News Source: Dairy Market News

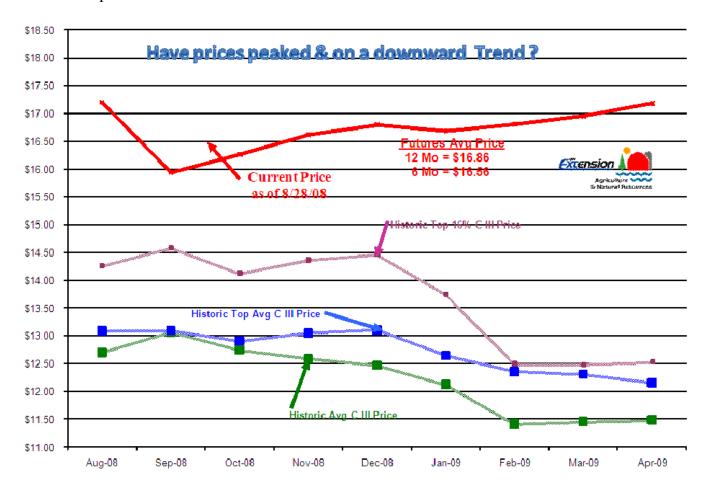
The Consumer Confidence Index for August was reported as 56.9 up 5 points from the July index. August was the second monthly gain.



Source: Daily Dairy Report Source: Daily Dairy Report

Analysis

Milk pricing opportunities continue to be available for dairy farm operators, although CME cash cheese prices have declined from their peak, \$2.28. The above chart shows this decline has been going on since mid-June. The image below presents next 12 months Class III CME closing prices as of August 28, 2008 and their relationship to historic prices. These prices have begun at least a short-term decline with the recent steep decline in cash cheese prices at the CME. The most recent milk-feed ratio was calculated at 1.89.



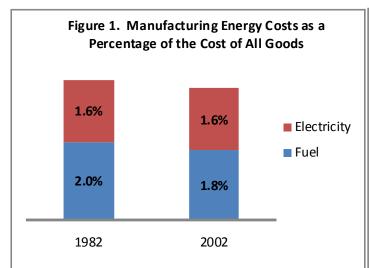
Source: Hedging Opportunity web site, UWEX

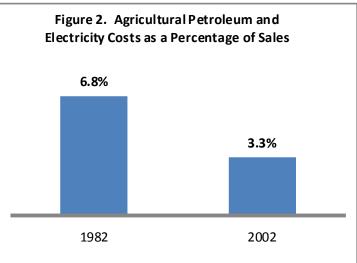
The US dairy industry must begin to reduce its dairy herd soon. The most recent CWT bid removed only 26,453 cows from the US dairy herd. However the 23-state dairy herd is still well above one-year ago, up 143,000. A significant reduction in milk cow numbers is necessary to strengthen CME futures prices, as well as cash cheese prices.

A Brief Look at Iowa's Exposure to High Energy Prices

Iowa possesses competitive industrial advantages in two important sectors of the economy. Its manufacturing base remains strong relative to the nation, and productivity in its agricultural sector continues to grow. Combined, these two sectors were \$33.85 billion of the state's \$129.03 billion in Gross Domestic Product in 2007, or 26.2 percent of the total. These two sectors, too, are major energy users, and they are vulnerable to the ebbs and flows of energy prices.

If we look at these two sectors over time, however, we see that the change in their average dependence on energy differed strongly over the years. In the first graph below, the manufacturing sector's fuel and electricity inputs have remained quite stable relative to the cost of all goods. In contrast, and perhaps surprising to many, Iowa's farm sector had strongly reduced its dependence on energy inputs as a fraction of total sales. 1982 was a period of high national energy prices, and 2002 marked the beginning of our modern rise in energy prices. Still, comparatively, agriculture had drastically reduced its energy dependence by 2002.





Sources: U.S. Census of Agriculture, 1982 and 2002. U.S. Census of Manufacturing, 1982 and 2002.

Where does this leave the state of Iowa as a whole? These are, after all, just two sectors. There are a couple of ways in which we can measure our average exposure to energy costs. We can divide our total energy usage as a state, as measured in BTUs, by the population or we can divide the total amount that we collectively pay for energy by the population.

Out of the 50 states and the District of Columbia, Iowa ranks 30th in population. The state's ranking in terms of the amount of BTUs consumed by all users per capita, as compiled by the U.S. Energy Information Administration, is 12th, a value that is 22.5 percent higher than the national average per capita. The cost of all energy per capita places Iowa 7th nationally. That amount in 2005 was \$4,157, which was 18 percent above the national norm. These two measures tell us that Iowa industry and its households, both directly and indirectly, have stronger than average exposures to high energy costs than the national average.

Dave Swenson

Dr. John D. Lawrence, Professor Extension Livestock Economist Iowa Beef Center, Director 468 Heady Hall

Phone: (515) 294-6290 Fax: (515) 294-1700 idlaw@iastate.edu

www.econ.iastate.edu/faculty/lawrence

Shane Ellis

Extension Livestock Economist

475 Heady Hall

Phone: (515) 294-8030 Fax: (515) 294-1700 shanee@iastate.edu

www.econ.iastate.edu/prosci/ellis

Dr. Chad Hart, Asst. Professor Grain Marketing Specialist 468 Heady Hall

Phone: (515)294-9911
Fax: (515) 294-1700
chart@iastate.edu

www.econ.iastate.edu/faculty/hart

Robert Tigner

Farm Management Specialist

New Hampton, IA Phone: (641) 394-2174 Fax: (641) 394-5415

rtigner@iastate.edu

http://www.extension.iastate.edu/ag/fsfm/farmmg3.html

David Swenson Economist 177 Heady Hall

Phone: (515) 294-7458 Fax: (515) 294-4545 dswenson@iastate.edu

http://www.econ.iastate.edu/prosci/swenson/swenso

npage.htm

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Many materials can be made available in alternative formats for ADA clients. To file a complaint of discrimination, write USDA, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964.