

Market Report 2000



2000 IN REVIEW; PROSPECTS FOR 2001

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The past year was not a good one for the North American rendering industry. Prices of fats and greases sank to historic lows, the third consecutive year of lower prices, and competition in domestic and international markets was fierce. Meal prices were the one bright spot, pulled up by rising feed demand around the globe.

Rendering is a captive industry. First, it is captive to a raw material supply that comes from the slaughter and processing of livestock and livestock products, over which the industry has no control. Table 3 shows that the U.S. cattle slaughter was little changed in 2000, while hog slaughter declined and that of poultry increased. Renderers recycle the non-meat by-products into valuable ingredients for the livestock, pet food, cosmetic, and chemical industries. These by-products must be processed in a timely manner to avoid serious environmental hazards. According to the Census Bureau, U.S. renderers produced 18 billion pounds (over 8 million metric tons) of products in 2000, four percent less than in 1999.

Second, the rendering industry is captive because its returns are dictated by the prices of the commodities against which it competes in world markets. These are principally soy products, corn, and palm oil. Renderers, however, rely solely on the marketplace for their income, while American soybean and corn farmers receive massive income supplements from the federal government. During the most recent crop year, soybean farmers received \$2.7 billion while corn farmers received \$9.7 billion, a total of \$12.4 billion, in top-off payments from the government. In contrast, the value of the American rendering industry's total output in 2000 was less than \$2.5 billion.

The rendering industry is also captive to happenings elsewhere in the world, over which it has no control. This was particularly vivid during late 2000 and early 2001 when the sudden spread of bovine spongiform encephalopathy (BSE) in Europe caused the United States and others to re-examine their BSE safeguard programs. In the United States, the cattle, meat processing, feed, and rendering industries are working cooperatively with government agencies to ensure compliance with already strong surveillance and preventative feed-separation programs. Unfortunately, the lesson from other countries is that politicians frequently find it more expedient to take so called "precautionary actions" before examining the scientific facts, namely that BSE is limited to Europe.

FAT PRICES FALL TO HISTORIC LOWS

Prices of fats, such as tallow and yellow grease, were hit hard again in 2000. The root cause is that this country is producing more and more soybeans and not finding sufficient outlets, particularly for oil. Along with higher production of soybeans in South America and palm oil in Asia, this is contributing to a growing glut in world fats and oils markets. Over the past four years, the annual supply (production plus carryover) of U.S. soybeans has increased an average of five percent per year. A look at Table 1 shows that tallow and grease prices fell roughly 20 percent in 2000 and were down more than 50 percent from 1998 levels.

On a positive note, renderers and allied industries were able to defray high fuel costs to some extent by substituting tallow and yellow grease for natural gas and fuel oil, rather than selling them in a depressed marketplace. As a result, prices strengthened in the second half of 2000 although they were again under pressure in the early months of 2001.

According to the Census Bureau, U.S. renderers produced 9.2 billion pounds (4.1 million tons) of fats and greases in 2000, one percent less than in 1999 (see Table 2). Consumption of these products was off two percent in 2000. Reduced hog slaughter was responsible for lower lard consumption, which was partially offset by increased use of edible tallow. The amount of tallow going into soap

making, however, declined 37 percent as imported palm oil continued to make inroads into this market. The volume of fats and greases going into animal feeds was little changed from 1999. Feed accounts for over 60 percent of annual fats and grease consumption in the United States.

FAT EXPORTS FACE INCREASED COMPETITION

U.S. exports of fats and greases peaked in 1998 at 3.5 billion pounds (1.6 million tons). At that time, Asian palm oil production and exports were adversely impacted by El Niño and many countries turned to U.S. tallow. Over the past two years, however, Asian palm production and exports have soared beyond pre-El Niño levels, exacerbating the over-supply in world fats and oils markets. Both world trade and U.S. exports of fats and greases have suffered. Palm oil now dominates world fats and oils trade; about 14 million tons are traded annually, versus 2.5 million of animal fats and seven to eight million tons of soybean oil.

In 2000, U.S. exports of fats and greases declined eight percent, following a decline of six percent the year before. As shown in Tables 2 and 4, inedible tallow has been the hardest hit by the increased palm oil competition, mainly in soap making and other industrial uses. Exports of yellow grease, which competes well with palm oil in animal feed, were unchanged in 2000 after declining in 1999. Some fats in the category "other inedible fats and greases" replaced yellow grease in 1999 and were, in turn, replaced by yellow grease in 2000. In the category "feed fats," exports weakened last year after having a good year in 1999.

For both edible tallow and lard, Mexico is by far the major market. In 2000, exports of lard to Mexico increased while those of edible tallow declined.

Looking at Table 4 – U.S. export customers – inedible tallow exports were generally off across the board. Turkey, however, U.S. renderers' second largest market and a market where the National Renderers Association (NRA) devotes considerable resources, was a notable exception. There, soap production and exports picked up, and the U.S. market share improved. Pakistan was another exception. That country is a price buyer. U.S. exports to the European Union (EU) were encouraging, as they leveled off after several years of sharp declines.

Looking further at Table 4, yellow grease exports were higher to Mexico, Venezuela, Central America, and the Caribbean, areas where the NRA has promoted greater use of feed fats in broiler and hog feeds. Shipments to Korea and China were disappointing. In those Asian markets, competition was reported to have increased from Australian feed-grade fats.

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A CLOUDY SLAUGHTER FORECAST

According to the U.S. Department of Agriculture's Economic Research Service (ERS), federally inspected slaughter weights for cattle declined in December after having been well above year earlier levels since mid-spring 2000. Weights in February 2001 were also sharply lower and with continued poor weather conditions, prospects for performance recovery in March were more uncertain.

Currently, beef production is expected to decline two percent in the first quarter of 2001 and two to three percent in the second quarter. Although annual cow slaughter is expected to decline for the fifth consecutive year, winter quarter slaughter may not be down as much as expected and may rise above a year earlier.

For the year, steer and heifer slaughter is expected to decline about four percent, while cow slaughter declines seven percent. Slaughter patterns and weights will be uncertain until the stormy winter weather pattern breaks seasonally. Unless conditions improve, ERS is predicting this will go down as the worst feeding year since 1992/93 when feedlot conditions remained poor during this period until well into spring. ❖

Table 1. Average Annual Prices Per Pound of Selected Rendered Products, 1996-2000

Product/Location/Unit	1996	1997	1998	1999	2000	% Change
<i>Inedible Tallow and Greases</i>						
Packer Bleachable (CAF Chicago-cents/lbs.)	20.36	20.73	17.11	12.97	9.96	-23%
Renderer Bleachable (CAF Chicago-cents/lbs.)	20.53	20.70	16.98	13.17	10.50	-20%
Choice White Grease (FOB Central US-cents/lbs.)	18.86	18.46	13.69	11.40	9.45	-17%
Yellow Grease (FOB Central US-cents/lbs.)	16.00	14.65	11.41	9.38	7.70	-18%
Packer Bleachable (CAF Gulf-cents/lbs.)	19.88	20.79	17.81	13.22	9.92	-25%
<i>Edible Tallow and Lard</i>						
Edible Tallow (CAF Chicago-cents/lbs.)	22.03	23.42	19.05	15.15	11.61	-23%
Lard (CAF Chicago-cents/lbs.)	21.90	23.39	17.73	14.93	12.24	-18%
Edible Tallow (CAF Gulf-cents/lbs.)	21.38	23.13	19.16	14.83	11.51	-22%
<i>Protein Meals</i>						
Meat and Bone Meal, 50% Protein (Central US-\$/ton)	242.05	263.47	158.66	139.28	174.36	+25%
Meat and Bone Meal, 50% Protein (Panhandle-\$/ton)	244.28	263.34	161.39	145.44	173.83	+20%
Blood Meal, 85% Protein (Central US-\$/ton)	480.89	551.65	341.11	302.49	376.66	+25%

Source: U.S. Department of Agriculture (USDA)/Agriculture Marketing Service (AMS), Market News Branch

Table 2. Production, Consumption, and Export of U.S. Rendered Products for 1996-2000 (in million lbs.)

Category	1996	1997	1998	1999	2000 ¹	% Change 00/99
Production						
Inedible Tallow and Greases	6,376.1	6,249.3	6,575.0	7,075.8	7,034.8	-0.6
Inedible Tallow	3,566.3	3,504.4	3,611.6	3,859.1	3,774.1	-2.2
Greases	2,762.6	2,706.6	2,927.6	3,171.8	3,222.0	1.6
Edible Tallow	1,519.6	1,488.1	1,536.8	1,729.3	1,664.5	-3.7
Lard ²	548.6	471.2	544.3	535.9	517.9	-3.4
<i>Subtotal</i>	8,444.3	8,208.6	8,656.1	9,341.0	9,217.2	-1.3
Meat Meal and Tankage	5,744.4	5,676.9	5,535.1	6,058.7	5,528.1	-8.8
Meat and Bone Meal	4,380.7	4,252.2	4,236.0	4,713.7	4,156.5	-11.8
Dry Rendered Tankage	1,279.3	1,353.5	1,260.6	1,285.1	1,323.5	3.0
Feather Meal	707.5	684.6	807.2	836.1	811.5	-2.9
All Other Inedible Products ³	2,120.5	2,208.4	2,287.7	2,531.3	2,488.5	-1.7
<i>Subtotal</i>	8,572.4	8,569.9	8,630.0	9,426.1	8,828.1	-6.3
Total	17,016.7	16,778.5	17,286.1	18,767.1	18,045.3	-3.8
Consumption						
Inedible Tallow and Greases	3,288.7	3,398.6	3,442.2	3,727.7	3,639.1	-2.2
Soap	245.2	245.0	227.7	229.3	145.5	-36.5
Feed	2,252.8	2,400.9	2,451.8	2,750.9	2,732.7	-0.7
Inedible Tallow	910.0	822.7	748.5	960.1	910.6	-5.2
Greases	1,342.8	1,578.1	1,703.3	1,790.7	1,822.3	1.8
Lubricants	89.2	83.6	90.3	100.5	102.3	1.8
Fatty Acids	629.4	620.3	608.2	577.9	580.3	0.4
Other Inedible Products	72.1	48.8	64.2	69.0	69.7	1.0
Edible Tallow	521.0	642.7	439.0	428.5	456.1	6.4
for edible use	327.1	316.8	265.8	268.0	285.0	6.3
for inedible use	193.9	325.9	173.2	160.3	157.3	-1.9
Lard	447.9	380.8	412.8	388.5	344.0	-11.5
for edible use	309.7	284.0	299.7	260.5	248.9	-4.5
for inedible use	138.2	96.8	113.1	128.0	94.7	-26.0
Total	4,257.6	4,422.1	4,294.0	4,544.7	4,439.2	-2.3
Exports						
Inedible Tallow	1,992.9	1,684.3	2,295.8	1,930.8	1,744.7	-9.6
Yellow Grease	379.6	350.4	463.4	404.4	404.0	0.0
Other Inedible Fats and Oils	195.8	234.4	377.0	504.3	463.4	-8.1
Edible Tallow	229.2	184.9	246.6	317.0	247.6	-21.6
Lard	100.7	90.4	131.4	147.5	173.9	17.9
<i>Subtotal</i>	2,898.2	2,544.4	3,514.2	3,304.0	3,033.6	-8.2
Meat and Bone Meal	677.7	641.4	689.1	841.5	980.8	16.6
Feather Meal	30.9	78.9	67.1	46.4	55.2	19.0
<i>Subtotal</i>	708.6	720.3	756.2	887.9	1,036.0	16.7
Bone and Bone products	97.2	40.9	45.3	58.4	78.3	34.1
Total, All Rendered Products	3,704.0	3,305.6	4,315.7	4,250.3	4,147.9	-2.6

Sources: Bureau of the Census, U.S. Department of Commerce, M20K series for Fat and Oils, Production, Consumption, and Stocks. Export data from the Foreign Agricultural Service (FAS).

1. Preliminary data compiled by summing monthly data from M20K reports. Subject to change in final annual report.

2. Not included in Census report, estimated by adding reported lard consumption and exports.

3. Includes poultry fat and by-product meal, blood meal, and raw products for pet food.

MEAL PRICES STRENGTHEN

Following two years of decline, protein meal prices strengthened in 2000, reflecting stronger feed demand in domestic and international markets. See Table 1 for further details.

The Census Bureau reports (Table 2) that U.S. renderers produced 8.8 billion pounds (four million tons) of meat and bone meal (MBM) in 2000, six percent less than in 1999. On the other hand, MBM exports rose for the fourth consecutive year, representing 13 percent of total product disappearance versus just five percent in 1992. The work of the NRA's overseas staff has been instrumental in this increase. Census does not report

feed manufacturers, and feed users with the ruminant feed ban. This report was published in January at a time when media attention to BSE was already heightening by the spread of this disease in Europe. The report's findings were taken out of context, thereby fueling the media attention. Then, a feed mill in Texas reported to FDA that it may have inadvertently mixed some ruminant MBM into feed for cattle at a Texas feedlot, adding to the media frenzy. As a result, some feed manufacturers began to turn away from ruminant-origin meals to avoid possible mix-ups. Both the American Feed Manufacturers Association and the rendering industry, through the Animal Protein Producers Industry, have taken positive actions to support

largest exporter of MBM, it opened export opportunities in markets that the EU could no longer supply. In 1999, the EU exported 560,000 tons against 380,000 for the United States. On the other hand, capturing markets vacated by the EU may not be easy. Several regular EU markets immediately banned imports of MBM from all countries, regardless of their BSE status. These countries included Poland, which was the world's largest importer (up to 300,000 tons per year), and Jordan.

MEAL EXPORTS JUMP 17 PERCENT

U.S. exports of MBM have been on the rise since 1998, supported by increasing meat and fish production

Table 3. U.S. Annual Commercial Livestock Slaughter, 1996-2000 and Forecast for 2001

Specie/Unit	1996	1997	1998	1999	2000	% Change 00/99	Forecast 2001
Cattle – thousand head	36,584	36,318	35,465	36,150	36,246	+0.3	34,600
Hogs – thousand head	92,394	91,960	101,029	101,554	97,955	-3.5	99,200
Broilers and Turkeys – million head	7,840	8,026	8,109	8,377	8,527	+1.8	8,700

Source: USDA/Economic Research Service

consumption, but given increased exports, it appears that apparent consumption (i.e., production less exports) declined about nine percent in 2000 to the lowest level since 1992.

As mentioned earlier, renderers are captive to developments elsewhere in the world. In 1997, as a precautionary measure against BSE, the Food and Drug Administration (FDA) instituted a ruminant feed ban under which materials processed from cattle or sheep cannot be fed back to these or other ruminants. Renderers and feed manufacturers must label these products with the statement, "Do not feed to cattle or other ruminants." Similar regulations exist in Canada.

Several events combined in early 2001 to further differentiate the domestic market between ruminant MBM and porcine MBM. The first was an incomplete report issued by the FDA on compliance by renderers,

the FDA ruminant feed ban by developing industry certification and audit programs (see "Newslines" in this issue of *Render*).

Interest in BSE in the United States was heightened by confirmation of the disease in additional European countries. In late 2000, France, Spain, Denmark, and Italy were added to the list of countries with confirmed cases. The real shocker was the confirmation of BSE in Germany, a country that strongly denied it had BSE. In early 2001, Finland and Sweden reported suspect cases of BSE. Thus, by 2001, 14 of the EU's 15 countries plus Switzerland had confirmed or suspect cases of the disease. The EU reacted by banning the feeding, import, and export of MBM, effective January 1, 2001, for at least six months.

This has several ramifications for American renderers in world markets. First, as the EU was the world's

and aided by the efforts of the NRA overseas staff in several key markets. The increase in 2000 was 17 percent and since 1998, over 50 percent. The volume of world soybean meal trade – now over 39 million tons annually – dwarfs that of MBM, about 1.5 million tons per year.

A success story for the NRA has been China, where feed production is increasing markedly. From under 10,000 tons in 1996, exports reached almost 100,000 tons in 2000 when China became the United States' largest market. Dr. Yu Yu, the association's director for Asia, began in 1997 to actively promote MBM over fish meal, with obvious results. Egypt is another success (see Table 4). When the dioxin feed incident broke in 1998 in Europe and Egypt later became nervous about BSE, Neville

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Table 4. U.S. Export Customers by Product (in metric tons), 1996-2000

Product/Country	1996	1997	1998	1999	2000	% Change 00/99
Inedible Tallow						
Mexico	180,722	192,581	273,472	213,872	202,065	-5.5
Turkey	129,757	141,149	122,246	93,701	117,073	24.9
EU-15	173,535	115,359	101,682	66,083	67,726	2.5
Korea; Republic of	26,271	4,862	19,691	56,434	51,252	-9.2
Guatemala	26,441	28,095	46,950	54,432	42,818	-21.3
Nigeria	28,085	4,000	7,298	26,853	30,500	13.6
Japan	39,958	37,663	35,590	37,320	29,361	-21.3
El Salvador	23,207	18,229	17,879	26,150	25,372	-3.0
Dominican Republic	24,249	27,722	24,054	22,376	23,023	2.9
Colombia	55,083	37,685	57,674	53,323	20,447	-61.7
China; Peoples Republic of	3,119	30	9,499	30,726	17,093	-44.4
Honduras	15,735	14,022	21,146	21,849	18,145	-17.0
Pakistan	0	0	28,127	5,624	17,047	203.1
Russian Federation	2,500	0	4,499	26,638	16,564	-37.8
Egypt	22,837	16,950	23,263	22,457	11,938	-46.8
Canada	1,650	18,807	16,633	16,361	10,552	-35.5
Venezuela	20,010	17,769	16,593	14,987	10,055	32.9
Morocco	19,020	12,680	10,470	12,413	10,023	-19.3
<i>Total All Countries</i>	905,572	767,541	1,041,351	875,799	791,403	-9.6
Yellow Grease						
Mexico	40,724	35,535	52,195	57,797	67,717	17.2
Venezuela	37,713	42,135	41,646	33,704	36,513	8.3
EU-15	18,909	9,083	35,289	20,748	15,043	-27.5
Canada	12,217	15,862	11,317	11,742	12,026	2.4
El Salvador	13,724	12,938	13,253	10,751	10,631	-1.1
Panama	3,035	2,301	2,644	96	10,095	1,051.6
China; Peoples Republic of	2,590	993	3,502	12,959	8,208	-36.7
Korea; Republic of	23,533	19,926	27,874	21,292	7,735	-63.7
<i>Total All Countries</i>	172,172	158,953	210,188	183,421	183,253	0.0
Other Inedible Fats and Oils						
Venezuela	833	8,338	12,472	26,638	44,957	68.8
Mexico	26,827	34,471	31,518	25,196	32,715	24.8
Israel	4,184	9,469	28,853	37,407	31,231	-16.5
Canada	32,657	22,505	29,676	29,277	25,019	-14.5
Dominican Republic	900	4,330	10,410	22,552	21,760	-3.5
<i>Total All Countries</i>	88,834	106,305	170,987	228,857	210,175	-8.1
Edible Tallow						
Mexico	58,088	49,940	52,168	46,269	54,177	17.1
Canada	20,612	19,570	20,811	24,045	23,719	-1.4
Korea; Republic of	10,786	6,929	12,019	28,442	14,622	-48.6
China; Peoples Republic of	3,685	4,321	681	7,948	7,396	-6.9
<i>Total All Countries</i>	103,982	83,850	111,800	143,795	112,328	-21.9
Lard						
Mexico	36,757	31,284	30,345	31,991	45,655	42.7
China; Peoples Republic of	280	2	674	6,993	10,593	51.5
Canada	0	0	12,302	11,928	9,270	-22.2
<i>Total All Countries</i>	43,689	41,013	59,623	66,874	78,898	18.0
Meat and Bone Meal						
China; Peoples Republic of	9,371	32,813	46,144	60,005	99,048	65.1
Mexico	77,585	65,682	98,136	94,106	83,269	-11.5
Indonesia	99,577	75,157	22,017	80,481	55,267	-31.3
Canada	26,949	40,789	48,112	41,077	41,688	1.5
Egypt	768	521	3,101	15,325	38,173	149.1
Philippines	3,321	5,864	15,124	20,081	31,801	58.4
Venezuela	0	2	3,221	6,391	29,432	360.5
Thailand	39,087	24,194	17,805	22,042	23,023	4.5
Taiwan	25,917	22,045	28,545	18,471	16,103	-12.8
<i>Total All Countries</i>	307,405	290,914	312,522	381,493	444,905	16.7
Feather Meal						
Indonesia	5,039	23,527	7,189	11,254	11,666	3.7
<i>Total All Countries</i>	14,010	35,801	30,426	21,029	25,021	19.0
Grand Total	1,636,514	1,515,338	1,936,921	1,901,201	1,845,983	-2.7

Source: USDA/FAS

Note: Exports to Hong Kong included with the Peoples Republic of China

Chandler, NRA director for Europe, the Middle East, and Africa, assured government officials and buyers that the United States supplied safe products. The result has been a rise in annual shipments from 500 tons in 1997 to over 38,000 by 2000. In Latin America, Venezuela has become a showcase. Exports rose from zero three years ago to over 29,000 tons in 2000. Alberto Celis, NRA director for Latin America, has conducted seminars in Venezuela on the feed attributes and safety of MBM. The only notable loss in MBM exports in 2000 was to Indonesia. The EU had been aggressive in the Indonesian market before it banned exports.

OUTLOOK FOR 2001

The 2001 outlook for fats and greases hinges largely on the outcome of the coming soybean crops in South America and the United States and whether Asian palm oil producers reduce output. The meal outlook is more positive as a result of the EU's absence from the market for at least six months and the pull of stronger feed demand.

Unfortunately for renderers, early indications are that the Argentine and Brazilian near-term soybean crops will increase and that farmers in the United States intend to increase soybean acreage again. U.S. soybean production will once again largely depend on the weather. In Asia, where palm oil stocks have

swelled to record levels, there are indications that farmers are beginning an early cull of mature trees. This could hopefully arrest the year-on-year increases in production and exports.

The European BSE crisis could have mixed effects on U.S. exports of MBM. Because many countries find the "precautionary principle" more expeditious than the "scientific principle," in early 2001 the NRA was called to defend the safety of U.S. protein meals around the globe.

As of early March, it appeared that at least China, Mexico, Indonesia, and Egypt, U.S. renderer's largest markets, were convinced that animal protein meals from non-European countries are safe. ❖

Table 5. U.S. Exports of Rendered Products, Annual 1996-2000 (in metric tons)

Export Region	1996	1997	1998	1999	2000	% total
Latin America						
Mexico	414,325	402,319	527,931	464,489	480,267	
Central America	103,733	101,893	154,794	160,789	152,623	
Caribbean	74,451	63,206	72,485	78,872	80,590	
Andean Region	120,663	106,821	154,604	128,263	111,557	
Others	14,216	4,296	55,530	5,231	9,615	
<i>Subtotal</i>	727,388	678,535	965,344	837,644	834,652	47
Europe						
EU	197,083	128,617	151,884	98,209	84,686	
Others	3,839	2,303	11,168	28,255	18,815	
<i>Subtotal</i>	200,922	130,920	163,052	126,464	103,501	6
Middle East						
Turkey	129,757	141,149	126,118	102,593	117,177	
Others	4,093	10,815	18,801	36,041	21,465	
<i>Subtotal</i>	133,850	159,384	144,919	138,634	138,642	8
Africa						
North Africa	63,233	45,963	73,665	50,552	62,493	
Others	36,519	17,029	43,866	38,370	35,506	
<i>Subtotal</i>	99,752	62,992	117,531	88,922	97,999	6
Asia						
China; Peoples Republic of	19,546	40,077	76,273	122,917	145,517	
Korea; Republic of	66,368	36,682	63,277	113,118	77,264	
Indonesia	105,247	99,837	29,210	92,151	66,972	
Others	149,581	128,263	174,429	160,390	169,243	
<i>Subtotal</i>	340,742	304,859	343,189	488,576	458,996	26
Canada	114,432	137,226	139,951	139,216	131,302	
Total	1,644,724	1,467,485	1,878,312	1,828,799	1,764,300	
Value Total - million	\$733.6	\$691.0	\$794.9	\$654.2	\$540.3	
Average Unit Value	\$446/mt	\$471/mt	\$423/mt	\$358/mt	\$306/mt	

Source: USDA/FAS

Note: Exports to Hong Kong are included with the Peoples Republic of China