



United States  
Department of  
Agriculture

Economic  
Research  
Service

AS-2

September 1981

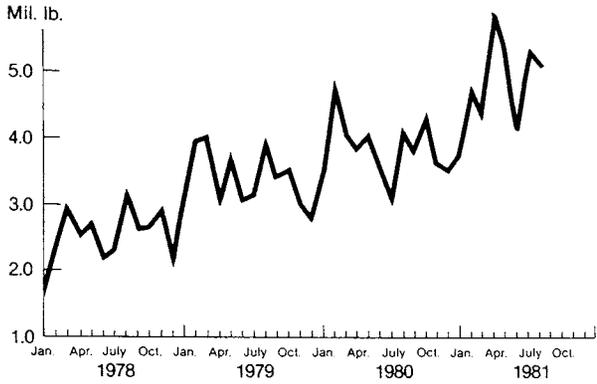
# Aquaculture

---

## OUTLOOK & SITUATION

---

### Farm Raised Catfish Production for Processors, by Months\*

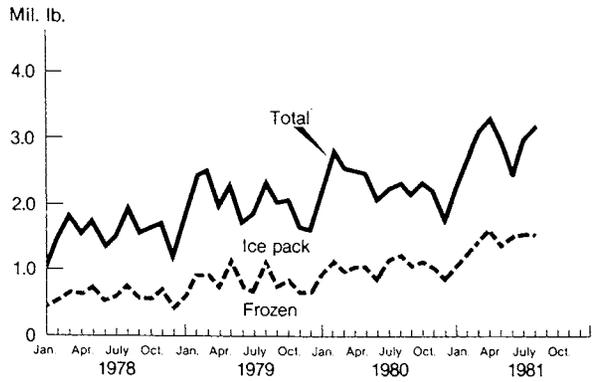


\*Round weight processed.

USDA

Neg. ESS 290-81(9)

### Catfish Sales by Processors\*

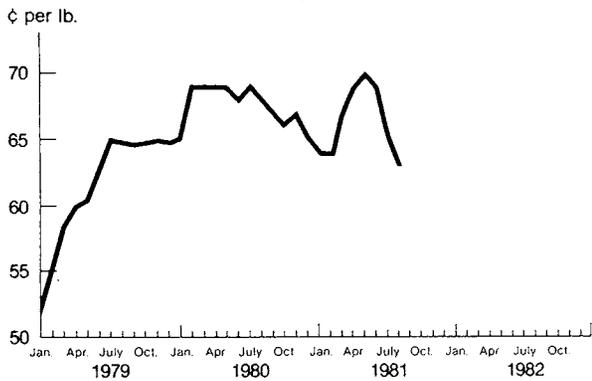


\*Dressed weight.

USDA

Neg. ESS 291-81(9)

### Prices Paid to Farmers for Catfish\*

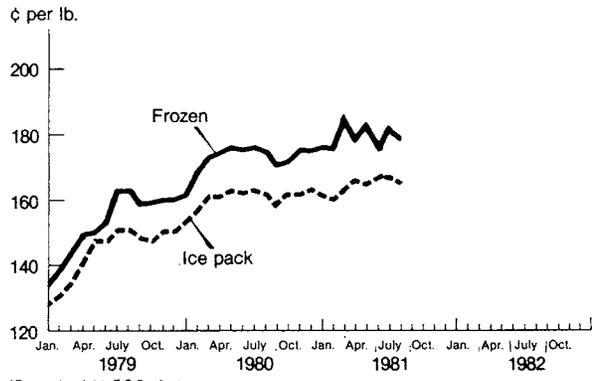


\*Harvested, at plant site.

USDA

Neg. ESS 292-81(9)

### Prices Received by Catfish Processors\*

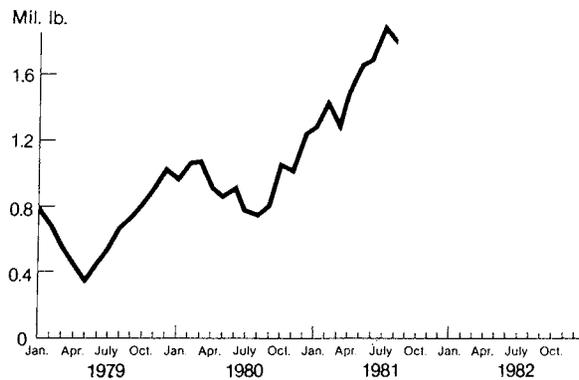


\*Dressed weight, F.O.B. plant

USDA

Neg. ESS 294-81(9)

### Processors' Catfish Inventory\*



\*Frozen, dressed weight stocks at end of the month.

USDA

Neg. ESS 293-81(9)

# In This Issue

---

	<i>Page</i>
Catfish .....	5
Current Situation .....	5
Outlook .....	9
Trout .....	11
Trout Producers: 1980 In Review .....	11
Current Situation .....	11
Crawfish .....	12
The Monthly Catfish Processors Report .....	13
History .....	13
USDA Series .....	13

Principal Contributor  
Michael Stellmacher  
(202) 447-8636

Statistical Assistant  
Evelyn Blazer  
U.S. Department of Agriculture  
Economic Research Service  
National Economics Division  
Washington, D.C. 20250

Approved by  
The World Agricultural  
    Outlook Board  
and Summary released  
September 25, 1981

The *Aquaculture Outlook and Situation* is published two times a year.

## Summary

---

Farm-raised catfish production has increased dramatically this year. However, despite a substantial rise, sales have not kept pace with output. As a result, inventories have built up, and prices have decreased since spring. Meanwhile, sales of farm-raised trout have apparently plateaued, stabilizing prices and increasing frozen stocks.

Through August, processors (with minimum daily capacity of 2,000 pounds) handled 39 million pounds (live weight) of farm-raised catfish, 25 percent more than a year earlier. New production acreage and the addition of two new processing plants explain the surge. If production increases at a similar rate for the rest of the year, 1981 output going to processors will range between 55 and 60 million pounds, compared with the record 46.5 million pounds in 1980. During the first 6 months of the year, producers in 15 surveyed States harvested 43 million pounds of foodsize fish for all sales outlets.

During 1980, catfish producers in 10 surveyed States harvested 76.7 million pounds of foodsize fish, of which Mississippi produced 56.4 million (74 percent). The primary sales outlets were processors (of any capacity), who handled 63.3 million pounds (82 percent). California producers received the highest prices last year, an average \$1.37 a pound, while Alabama farmers got the lowest, 65 cents. The value of producers' sales of broodfish, fry and fingerlings, and foodsize fish totaled \$66.7 million last year.

Through August, processors have increased total sales by 20 percent over a year earlier, with frozen catfish sales climbing by 36 percent. Greater consumer accep-

tance and a geographically larger market account for the gains. These factors, along with more competitive catfish prices relative to those of red meats and poultry, point to continued sales strength in the coming months.

Processors paid catfish producers an average 63 cents a pound (live weight) during August, down from the all-time high of 70 cents during May. Processors received \$1.72 a pound for dressed catfish during August, compared with the record \$1.75 during July. The lower prices reflect the current oversupply, as well as heightened competition among processors to maintain existing accounts and open new ones. These prices will likely prevail until supply and demand adjustments occur.

Catfish production costs in 1981 will likely average 10 to 20 percent higher than a year earlier. Abundant feed supplies and a large quantity of fingerlings (the two main expense items) should keep the 1982 cost of production at or below this year. This should help ease the cash flow problems of many newer producers. Likewise, stabilized feed prices will moderate any cost increases for trout production.

Any gain in production for processing in 1982 will be modest, in contrast with the average yearly increase of about 25 percent since 1975. Producers now hold a large quantity of market-ready fish that will not be harvested until next year. In addition, the industry had a tremendous spawn this spring, which makes available a large number of fingerlings to be raised—and potentially marketed—during 1982. The limiting factor for processing increases next year will be expansion in demand.

On July 1, there were 1,069 commercial catfish operations in surveyed States, up from 961 on August 1, 1980. Water acreage was estimated at nearly 69,000 acres on July 1, 1981, compared with 54,500 acres in August 1980. Mississippi had the most farms, 295, as well as two-thirds of the total acreage.

Trout producers in nine surveyed States sold 48 million pounds of foodsize fish during 1980. Idaho farmers produced 42.8 million pounds. Out of the U.S. total, 42.7 million went to processors. Producers received an average of 78 cents a pound, with Pennsylvania having the highest price, \$1.82, and Idaho the lowest, 68 cents.

There were 180 commercial trout operations in surveyed States on February 1, 1981, down from 197 on August 1, 1980. Pennsylvania, with 36 farms, had the most.

Crawfish farmers in Louisiana and Texas harvested an estimated 31 to 34 million pounds last season (November 1980-June 1981). Prices that processors paid averaged a record 80 to 85 cents a pound in Louisiana, up considerably from the previous season, because of the poor catch of wild crawfish. Texas farmers received about \$1.40 a pound.

# Aquaculture Situation

## CATFISH

### Current Situation

#### Processors' Output Up 25 Percent Through July

As expected, catfish production for surveyed processors (those with minimum daily capacity of 2,000 pounds) has increased substantially this year. Through August, processors handled 39 million pounds (live weight) of farm-raised catfish, 25 percent more than during January-August 1980 (table 2). The gains are primarily a result of greatly expanded acreage that is now producing market-ready fish. In addition, two new plants have begun operating since spring, adding to the industry's processing capacity.

**Table 1—Selected retail price indices**

Item	Index base	Year 1980	Aug. 1980	Aug. 1981	Change
					from year earlier
					Percent
Consumer Price Index	1967=100	246.8	249.4	276.5	10.9
All Food	1967=100	254.6	258.7	277.4	7.2
Fish and Seafood	1967=100	330.0	331.8	356.8	7.5
Canned	12/77=100	127.9	131.2	139.8	6.6
Fresh and Frozen	12/77=100	124.5	123.6	133.6	8.1
Food Away from Home	1967=100	266.9	269.5	293.7	9.0
Beef and Veal	1967=100	270.3	273.1	275.9	1.0
Pork	1967=100	209.1	212.0	235.3	11.0
Poultry	1967=100	190.8	197.5	202.0	2.3

**Table 2—Farm-raised catfish production (total live weight of fish delivered for processing)**

Month	1979	1980	1981	Change from year earlier	
				1980	1981
			Thousand pounds	percent	
January	3,032	3,530	3,772	+16.4	+6.9
February	3,929	4,892	4,737	+24.5	-3.2
March	4,010	4,060	4,390	+1.2	+8.1
April	3,025	3,829	5,973	+26.6	+56.0
May		3,716	4,045	5,393	+8.9
June		3,081	3,596	4,180	+16.7
July		3,138	3,092	5,379	-1.5
August	3,978	4,116	5,176	+3.5	+25.8
September	3,417	3,817		+11.7	
October	3,531	4,310		+22.1	
November	3,000	3,631		+21.0	
December	2,779	3,546		+27.6	
Annual	40,636	46,464	39,000	+14.3	+25.2

After handling 3 percent more farm-raised catfish during first-quarter 1981 than a year earlier, processors increased second-quarter activity by 35 percent. Production of 5.97 and 5.39 million pounds during April and May, respectively, were the largest monthly totals on record. The strong gains have continued this summer, as July-August output (10.6 million pounds) increased 46 percent from last year. However, summer 1980 production was held down by high temperatures, slackened sales, and an "off flavor" problem that plagued some producers.

#### Frozen Catfish Sales Continue to Gain

Surveyed catfish processors sold 23.1 million pounds (dressed weight) of catfish through the first 8 months of 1981, an increase of 20 percent (table 3). Sales during the first quarter, when demand is traditionally the strongest because of the Lenten season, rose by 8 percent from a year earlier. Notable, however, was a robust gain of 23 percent in sales during the second quarter. Catfish sales generally decline from the first to second quarter but this year they increased. Second-quarter sales, 8.7 million pounds, were 7 percent larger than in the first and the largest quarterly total on record. Sales during July-August increased 36 percent from a year ago.

Nearly three-fourths of the processors' trade increase this year is due to a 34-percent year-to-year expansion in sales of frozen catfish. Meanwhile, sales of ice-pack catfish have risen 9 percent. This demonstrates the increasing importance of frozen catfish sales to the industry. Through July 1981, frozen sales accounted for 49 percent of total sales, while a year earlier, they contributed 44 percent.

The increased sales are primarily the result of the industry's aggressive marketing efforts. In addition to strong demand in the Southeast United States, where catfish has long been a regional favorite, farm-raised catfish is gaining consumer acceptance in other parts of the country. Such marketing practices as advertising, exhibits, and cooking demonstrations are being used to increase public awareness of farm-raised catfish and of the industry. Farm-raised catfish is now marketed in all parts of the United States except the Northeast and Northwest, where competition from, and public familiarity with, ocean fish have inhibited market penetration.

#### Processors' Stocks More than Double A Year Ago; Imports Well Below Last Year

Catfish processors' frozen-product inventory at the end of August totaled 1.83 million pounds (dressed weight), or 2-1/2 times larger than the 0.74 million held a year earlier (table 4). Although this inventory is considered

**Table 3—Processor sales of catfish: ice pack, frozen, and total (dressed weight)**

Month	Ice pack			Frozen			Total <sup>1</sup>		
	1979	1980	1981	1979	1980	1981	1979	1980	1981
<i>Thousand pounds</i>									
January	1,223	1,265	1,213	606	933	1,055	1,829	2,198	2,269
February	1,519	1,680	1,508	924	1,134	1,230	2,443	2,814	2,738
March	1,599	1,550	1,673	931	985	1,454	2,530	2,535	3,127
April	1,191	1,424	1,710	752	1,083	1,638	1,943	2,507	3,348
May	1,216	1,398	1,583	1,104	1,089	1,372	2,319	2,487	2,955
June	993	1,234	906	739	855	1,513	1,731	2,089	2,419
July	1,140	1,110	1,462	699	1,144	1,553	1,839	2,254	3,015
August	1,269	1,101	1,693	1,051	1,223	1,517	2,320	2,324	3,209
September	1,246	1,093		784	1,090		2,030	2,183	
October	1,209	1,215		849	1,148		2,058	2,363	
November	1,038	1,206		646	1,020		1,684	2,226	
December	942	883		661	898		1,602	1,781	
Annual	14,584	15,159	11,748	9,745	12,602	11,332	24,330	27,761	23,080

<sup>1</sup>Totals may not add due to rounding.

**Table 4—Processors' frozen dressed-weight catfish stocks end of month**

Month	1980	1981	Change from year earlier	
			1980	1981
<i>Thousand pounds</i>	<i>Percent</i>			
January	969.6	1,278.7	+22.7	+31.9
February	1,065.6	1,435.5	+54.7	+34.8
March	1,070.9	1,283.3	+90.0	+19.8
April	907.3	1,501.8	+102.4	+65.5
May	858.3	1,729.9	+156.4	+101.5
June	917.2	1,774.2	+96.0	+93.4
July	766.1	1,901.7	+44.0	+148.2
August	741.4	1,830.6	+8.9	+146.9
September	800.6		+9.5	
October	1,060.1		+32.2	
November	1,020.0		+12.9	
December	1,259.9		+22.7	

**Table 5—Imports of catfish and trout**

Month	Catfish <sup>1</sup>			Trout <sup>2</sup>		
	1979	1980	1981	1979	1980	1981
<i>Thousand pounds</i>						
January	995	1,309	1,003	31	0	14
February	1,683	1,511	1,119	0	*	14
March	639	1,170	1,044	45	1	39
April	2,522	1,045	1,434	22	12	15
May	2,014	1,108	982	45	2	27
June	946	2,225	521	0	13	53
July	2,273	1,110	629	11	11	10
August	759	2,430		11	3	
September	889	1,425		12	8	
October	1,298	284		10	13	
November	1,361	863		0	13	
December	1,610	443		10	9	
Annual <sup>3</sup>	16,989	14,922	6,732	197	82	173

<sup>1</sup>Catfish: Filleted, fresh, chilled or frozen; TSUSA code 110.7024.  
<sup>2</sup>Freshwater trout, fresh or frozen whole, beheaded but not scaled; TSUSA code 110.1550. <sup>3</sup>Totals may not add due to rounding. \*Less than 500 pounds.

burdensome, trade sources indicate it is not a critical problem.

Two main reasons account for the large increase. First, an expanded sales base requires larger stocks to meet trade requirements. Second, the two new processing plants included in the survey (one in Mississippi, one in Alabama) have had to build their inventories of the assorted product forms and sizes. The stocks of these two plants, which opened this spring, must be considered when making year-to-year comparisons.

Imports of freshwater catfish through July totaled 6.7 million pounds, 29 percent below a year ago (table 5). So, it appears likely that catfish imports for all of 1981 will decline for the third consecutive year. Greater consumer acceptance of the U.S. product is probably a primary reason for reduced imports.

#### Farm Prices Lower in Wake Of Higher Production

Catfish processors paid farmers an alltime high average of 70 cents a pound during May. However, prices have since fallen to 65 cents in July and 63 cents in August. Processors in the Mississippi Delta were paying 60 cents a pound in late September. The August price was the lowest since June 1979 (table 6). Through the first 8 months of 1981, the weighted-average price paid to producers equaled 66-1/2 cents a pound, compared with 67.6 cents for all of 1980.

The increase in prices this spring resulted from strong seasonal sales. In addition, the opening of a new processing plant in the Delta may have helped bid up the price to farmers, so processors could maintain capacity utilization. Meanwhile, the drop in prices this summer resulted from the large quantity of fish available for processing. The 7-cents-a-pound drop in farm prices from May to August occurred despite this summer's strong demand for processors' dressed catfish (August sales of 3.2 million pounds were the second highest monthly total ever) and wholesale prices that were at or near a record high.

**Table 6—Prices paid to producers for farm-raised catfish (harvested, at plant site)**

Month	1979	1980	1981
<i>Dollars per pound</i>			
January	.52	.65	.64
February	.55	.69	.64
March	.59	.69	.67
April	.60	.69	.69
May	.60	.69	.70
June	.63	.68	.69
July	.65	.69	.65
August	.65	.68	.63
September	.65	.67	
October	.65	.66	
November	.65	.67	
December	.65	.65	
Annual	.613	.676	.665

Although the farm-raised catfish industry has expanded its sales, it has increased supply at a faster rate, resulting in an inventory buildup and decreased farm prices.

During 1980, California and Texas catfish producers received an average \$1.37 and \$1.31 a pound (live-weight), respectively—the highest prices among the surveyed States (table 8). In contrast, farmers in Alabama, Mississippi, and Arkansas received only 65, 68, and 72 cents a pound, respectively.

The rather wide range of prices paid to farmers results from the type of market sold to, as well as location. For example, farmers in the Mississippi Delta and Alabama (the main production area) can raise catfish profitably at a much lower per unit cost because of geographical advantages (climate, water supply, topography, soil)—which in turn allows processors, the primary sales outlets in those States, to market a competitively priced food product. On the other hand, producers in other States have higher production costs. These producers also generally sell to higher valued markets, such as live-haul, fee and recreational ponds, and direct sales to retailers and consumers. Lack of clearly organized marketing channels also reflects in the prices producers in such States as Texas and California receive.

#### Processors' Wholesale Prices Decline

The weighted-average price received by processors for all catfish (icepack and frozen) sold during August was \$1.72 a pound, compared with \$1.69 in August 1980 (table 7). The average July price of \$1.75 a pound was the highest on record. During January-August, processors received an average \$1.72 a pound, up from the average of \$1.68 for all of 1980.

Two principal factors are involved in the recent decrease. First, lower farm prices are now being passed through to wholesale buyers. Second, there has been heightened competition among the processors (due to the large supply and the new large plant in the Delta) to maintain existing accounts and to procure new ones. Prices may have dropped lower, but higher processing and distribution costs have offset them. Such costs gen-

**Table 7—Prices received by processors for catfish (f.o.b. plant)**

Month	Ice pack			Frozen		
	1979	1980	1981	1979	1980	1981
<i>Dollars per pound</i>						
January	1.28	1.53	1.61	1.34	1.61	1.76
February	1.31	1.56	1.60	1.39	1.69	1.76
March	1.34	1.61	1.63	1.44	1.73	1.85
April	1.41	1.61	1.66	1.49	1.74	1.78
May	1.47	1.63	1.65	1.50	1.76	1.83
June	1.47	1.62	1.67	1.53	1.75	1.75
July	1.51	1.63	1.67	1.63	1.76	1.82
August	1.51	1.62	1.65	1.63	1.75	1.79
September	1.48	1.58		1.59	1.71	
October	1.47	1.62		1.59	1.72	
November	1.50	1.62		1.60	1.75	
December	1.50	1.63		1.60	1.75	
Annual	1.43	1.60	1.64	1.53	1.73	1.79

erally increase at a rate similar to the rate of inflation in the whole economy. Higher energy and interest costs were probably the main contributors to the rise.

Ice-pack catfish prices averaged \$1.65 a pound during August, 3 cents more than a year ago. During the first 8 months of the year, ice-pack prices averaged \$1.64 a pound. The average price for frozen catfish during August was \$1.79, 4 cents more than a year ago, but 6 cents less than the March figure—a yearly and alltime high.

Weekly wholesale prices of catfish for the competitive Chicago market are reported by the National Marine Fisheries Service (NMFS). In mid-September, wholesale prices of ice-pack farm-raised catfish (headless and drawn) in customary wholesale quantities were quoted at \$1.55 to \$1.60 a pound, down from \$1.65 to \$1.70 during June. This compares with \$1.25 to \$1.30 a pound reported for fresh wild channel catfish. Meanwhile, dressed frozen farm-raised catfish was selling for \$1.60-\$1.65, while frozen fillets garnered \$2.75 a pound. No recent quotes were available on frozen catfish steaks from Brazil, but early June prices in Chicago were \$1.20 to \$1.25 a pound.

#### Farmers Sell 43 Million Pounds of Catfish in First-Half 1981; 1980 Sales Total 77 Million Pounds

Catfish producers in 15 surveyed States sold 43 million pounds of foodsize catfish during the first 6 months of this year, compared with sales of 40.3 million in 10 surveyed States during January-July 1980 (table 8). The larger sales result primarily from increases in Mississippi, Alabama, and Missouri, rather than from a larger number of surveyed States. The combined sales of Arkansas, California, Georgia, Louisiana, and Texas during January-June 1981 were down nearly a fifth from the comparable period of 1980.

For all of 1980, producers reported foodsize fish sales of 76.7 million pounds. Mississippi, Alabama, and Arkansas accounted for 95 percent of the total. Over 63.2 million

pounds, or four-fifths of the producers' sales, were to processors; the live-haul market took the next highest portion, 7 percent (table 9).

The value of catfish producers' sales of broodfish, fry and fingerlings, and foodsize fish totaled \$66.7 million during 1980 (table 10). Mississippi producers had the largest value of catfish sales, \$46.4 million (70 percent of the total), while farmers in Arkansas and Alabama had sales of \$7.2 million and \$7.1 million, respectively, during 1980.

### Catfish Farms, Acreage Up From a Year Ago

As of July 1, 1981, there were 1,069 commercial catfish farms in surveyed States, compared with 961 on August 1, 1980 (table 11). Increases in Alabama and

Mississippi more than accounted for the rise in operations, reflecting those States' comparative advantage in catfish production (i.e., lower cost of production and availability of sales outlets). On July 1, Alabama and Mississippi had 54 percent of the commercial operations in surveyed States, up from 48 percent on August 1, 1980. With 295 producers (up 45 percent from last year), Mississippi now tops Alabama as having the largest number of farms.

With the increase in farms, pond acreage devoted to production has likewise expanded from 54,480 acres on August 1, 1980 to 68,900 last July—a gain of 26 percent. Mississippi alone added 13,620 acres in the last year and now has 46,240 in production—two-thirds of the acreage in surveyed States. Alabama and Arkansas have a combined total of 15,830 acres, 23 percent of the total.

**Table 8—Catfish producers: Foodsize fish sales and price received, January 1 - December 31, 1980, and January 1 - June 30, 1981; Selected States**

State	Foodsize fish sales <sup>1</sup>		Percent of total		Price per pound	
	Jan. 1 - Dec. 31, 1980	Jan. 1 - June 30, 1981	Jan. 1 - Dec. 31, 1980	Jan. 1 - June 30, 1981	Jan. 1 - Dec. 31, 1980	Jan. 1 - June 30, 1981
	1,000 pounds		Percent		Dollars	
Alabama	8,459	5,635	11	13	.65	.63
Arkansas	8,273	5,007	11	12	.72	.80
California	959	336	1	1	1.37	1.44
Georgia	201	84	*	*	1.01	.99
Louisiana	490	175	1	*	.86	.96
Mississippi	56,377	30,243	74	70	.68	.68
Missouri	473	734	1	2	1.00	.86
Tennessee	N.A.	110	N.A.	*	N.A.	1.06
Texas	809	283	1	1	1.31	1.56
Other <sup>2</sup>	640	507	1	1	.83	.85
Total	76,681	43,024	100	100	.70	.71

<sup>1</sup>Live weight. <sup>2</sup>Includes Idaho and Pennsylvania for January 1 - December 31, 1980 data; includes Florida, Idaho, North Carolina, Pennsylvania, South Carolina, and Virginia for January 1 - June 30, 1981 data. N.A. = Not Available. \* = Less than .5 percent.

**Table 9—Producer sales of foodsize catfish and trout by sales outlets, United States**

Outlet	Catfish				Trout	
	Jan. 1, 1980- Dec. 31, 1981		Jan. 1, 1981- June 30, 1981		Jan. 1, 1980- Dec. 31, 1980	
	Quantity sold <sup>1</sup>	Percent of total	Quantity sold <sup>1</sup>	Percent of total	Quantity sold <sup>1</sup>	Percent of total
	1,000 pounds	Percent	1,000 pounds	Percent	1,000 pounds	Percent
Processors	63,253	82	34,679	81	42,721	89
Live Haul	5,640	7	3,872	9	507	1
Consumers	3,044	4	1,418	3	890	2
Fee and Recreational	2,106	3	975	2	1,734	4
Other Producers	1,229	2	272	1	791	2
Government Agencies	70	*	13	*	590	1
Retailers	N.A.	N.A.	1,636	4	N.A.	N.A.
Other Sources	1,340	2	159	*	806	1
Total	76,681	100	43,024	100	48,040	100

<sup>1</sup>Live weight. N.A. = Not available \* = Less than .5 percent

The average size per operation rose from 57 acres in August 1980, to 65 in July 1981. Average sizes ranged from 11 acres in Texas to 157 in Mississippi.

## Outlook

### Record Production this Year for Processing; Expansion to Slow in 1982

Gains in production of catfish for processing since spring ensure 1981 output will top last year's record. Through August, processors handled 25 percent more than a year earlier. If processed production increases at similar rates for the rest of the year, output for all of 1981 will range between 55 and 60 million pounds.

The industry now faces a situation similar to 1973-74, when production outstripped market growth. The current oversupply will probably exist well into 1982, possibly lasting up to a year or longer, until demand has

increased or production adjustments occur. Producers in Mississippi, the main processing area, reported holding 13 percent more fish (weight basis) on July 1, 1981, than on August 1, 1980 (table 12). Also, the average weight per fish on July 1 was 0.94 pounds, compared with 0.71 pounds in August 1980. Thus, unless there's a dramatic increase in processor sales, the marketing of fish that are now ready for harvest will have to be backed up into next year.

Any production gains in 1982 will be modest, in contrast with the average yearly increase of about 25 percent since 1975. The primary force to slow the industry expansion is the rise in supply relative to the gain in sales. As a result, prices paid to producers have fallen. However, processors have continued to increase their markets for farm-raised catfish, and further gains in demand would enlarge the harvest. With respect to supply, the current larger quantity of market-ready fish that won't be sold until next year will likely mean production should be above a year ago through first-quarter 1982. In addition, catfish producers had a tremendous spawn this spring, which makes a large number of fish available to be raised (and potentially marketed) during 1982 (table 12). The limiting factor for processing increases next year will be expansion in demand.

The rapid growth in production acreage that characterized the past few years will likely slow in the next year. Producers surveyed in July indicated they would expand acreage by over 15,000 acres during July 1981-June 1982, including 12,530 acres in Mississippi (table 13). However, high prices for farm real estate (the average value per acre of farmland in Mississippi has nearly doubled since 1977) and construction costs, combined with high interest rates, have made the cost of expansion (or entry into the industry) prohibitive for many farmers. With the current, lower farm prices expected to persist through at least mid-1982 and possibly longer, the

**Table 10—Catfish and trout: Value of producers sales, 1980**

Type	Catfish	Trout
<i>1,000 dollars</i>		
Broodfish	555	64
Eggs	N.A.	894
Fry/Fingerling	12,567	1,022
Foodsize	53,572	37,474
Total	66,694	39,454

N.A. = Not available.

**Table 11—Catfish: number of operations, water acreage and average size per operation, August 1, 1980; foodsize fish sales and price, January 1, - July 31, 1980; selected States**

State	Total operations		Percent of total		Water surface		Percent of total		Average size per operation	
	Aug. 1, 1980	July 1, 1981	Aug. 1, 1980	July 1, 1981	Aug. 1, 1980	July 1, 1981	Aug. 1, 1980	July 1, 1981	Aug. 1, 1980	July 1, 1981
	Number		Percent		Acres		Percent		Acres	
Alabama	1260	275	127	26	17,750	8,200	14	12	130	30
Arkansas	139	140	15	13	7,720	7,630	14	11	56	55
California	74	50	8	5	1,640	1,300	3	2	22	26
Georgia	39	30	4	3	1,170	1,070	2	2	30	36
Louisiana	31	30	3	3	750	760	1	1	24	25
Mississippi	204	295	21	28	32,620	46,240	60	67	160	157
Missouri	71	70	7	7	960	1,070	2	2	14	15
Tennessee	N.A.	16	N.A.	2	N.A.	260	N.A.	*	N.A.	16
Texas	138	130	14	12	1,480	1,400	3	2	11	11
Other <sup>2</sup>	5	33	1	3	390	970	1	1	78	29
Total	961	1,069	100	100	54,480	68,900	100	100	57	65

<sup>1</sup>Survey data different from reported number in AS-1 to exclude non-commercial producers. <sup>2</sup>Includes Idaho and Pennsylvania for August 1, 1980 data; includes Florida, Idaho, North Carolina, Pennsylvania, South Carolina, and Virginia for July 1, 1981 data. N.A. = Not available. \*Less than .5 percent.

**Table 12—Catfish: Producers' inventory of broodfish, fry/fingerlings/stockers, and foodsize fish (August 1, 1980 and July 1, 1981)**

Type	Number		Live weight		Average weight	
	Aug. 1, 1980	July 1, 1981	Aug. 1, 1980	July 1, 1981	Aug. 1, 1980	July 1, 1981
	<i>Thousands</i>		<i>1,000 pounds</i>		<i>Pounds</i>	
Broodfish						
U.S. <sup>1</sup>	883	849	N.A.	N.A.	N.A.	N.A.
Three States <sup>2</sup>	760	718	N.A.	N.A.	N.A.	N.A.
Mississippi	475	461	N.A.	N.A.	N.A.	N.A.
Fry/Fingerling/Stocker						
U.S. <sup>1</sup>	423,587	725,875	11,872	24,892	.028	.034
Three States <sup>2</sup>	383,777	680,202	7,712	23,841	.020	.035
Mississippi	262,656	524,959	5,119	20,514	.019	.039
Foodsize						
U.S. <sup>1</sup>	85,801	69,726	63,867	67,890	.75	.97
Three States <sup>2</sup>	82,719	65,207	60,545	62,272	.73	.95
Mississippi	59,990	50,966	42,479	47,994	.71	.94

<sup>1</sup>15 surveyed States. <sup>2</sup>Includes Alabama, Arkansas, and Mississippi. N.A. = Not Available.

**Table 13—Intended expansion and actual change in acreage, August 1, 1980 - June 30, 1981; intentions to expand, July 1, 1981 - June 30, 1982**

State	Intentions to expand, Aug. 1, 1980 - June 30, 1981	Actual change in acreage, Aug. 1, 1980 - June 10, 1981	Intentions to expand, July 1, 1981 - June 30, 1982
	<i>Acres</i>	<i>Acres</i>	<i>Operations</i> <i>Acres</i>
Alabama <sup>1</sup>	1,950	450	82 1,170
Arkansas	1,490	-90	18 770
California	480	-340	24 280
Georgia	40	-100	8 120
Louisiana	220	10	( <sup>2</sup> ) ( <sup>2</sup> )
Mississippi	11,480	13,620	135 12,530
Missouri	130	90	10 120
Tennessee	N.A.	N.A.	( <sup>2</sup> ) ( <sup>2</sup> )
Texas	170	-80	15 150
Other <sup>3</sup>	90	580	14 420
Total	16,050	14,420	306 15,560

<sup>1</sup>August 1, 1980 survey data revised to exclude noncommercial producers. <sup>2</sup>Louisiana and Tennessee included in other States. <sup>3</sup>Includes Florida, Idaho, North Carolina, Pennsylvania, South Carolina, and Virginia. N.A. = Not available.

present economics of the industry work against large acreage increases in the coming year.

However, there is not likely to be any reduction in acreage. Although some highly leveraged catfish producers, especially ones new to the industry, may be in financial straits due to the current oversupply situation, there have been no reports of sellouts or foreclosures. Also, many lenders, including farm credit-system banks, have given new producers as long as 3 years before any payments are due on loans. If some catfish producers get out or are forced out of the business, it is likely the pond acreage would remain in fish production.

### Sales Prospects Good

Sales of farm-raised catfish will likely decline seasonally this fall, as consumers purchase more meat items such as ham or turkey. However, several factors suggest

the industry will keep sales above a year earlier in the coming months. There is now a larger sales base due to greater consumer acceptance and a larger geographic market area. In addition, the large supply and heightened competition among processors for accounts has resulted in decreased wholesale prices, which should tend to encourage larger catfish consumption.

With respect to alternative protein sources, U.S. output of red meat and poultry during fourth-quarter 1981 are likely to be about 1 percent less than last year. Increased poultry production (about 5 percent) will not be sufficient to offset decreased output of beef (about 1 percent) and pork (down about 8 percent). As a result, retail prices of beef and pork this fall will probably average above a year ago, while poultry prices will about equal those of a year ago. Looking ahead to early 1982, red meat supplies will likely be lower than in first-

quarter 1981, while broiler production may increase modestly. Therefore, catfish may be more competitive with those protein items in the coming months.

### Price Advances Not Likely

Prices paid to producers by Delta processors have likely bottomed out at 60 cents a pound (Alabama processors generally pay 5 cents less); any further decreases would be modest. The current farm prices will prevail until the current supply-demand imbalance is corrected. In addition, high interest rates and the current large frozen inventory held by processors limit their incentive to bid up the farm price. For all of 1981, the price paid to producers by processors will average 64 to 66 cents a pound, compared with 68 cents in 1980. The average price received by farmers in surveyed States for sales to all types of buyers will average between 67 and 70 cents a pound, compared with 70 cents during 1980.

Prices received by wholesalers should be relatively stable in the coming months, reflecting lower farm prices and competition among processors to maintain and develop new accounts. Increased use of plant capacity because of larger sales would maintain some downward pressure on future price gains. Upward price pressure will come from increases in processing and distribution costs, which generally parallel price advances in the whole economy, as well as unexpected strength in sales.

### Production Costs to Ease

Per unit production costs in 1981 for Delta and Southeast farmers, earlier forecast to increase between a fifth and a third, are now estimated to average 10 to 20 percent more than last year. Lower-than-expected prices

for feed and fingerlings were the primary contributors to the downward revision.

With the expectations of bumper crops this year, prices of primary fish-feed ingredients (corn, soybean meal, and fish meal) at cash markets have moved downward this summer. Reflecting the declines in ingredient prices this summer, September prices for bulk catfish feed at Mississippi Delta feed mills have declined to about \$275 a ton, compared with about \$300 in early April. Catfish feed prices averaged around \$260 a ton during 1980. Bulk feed prices were slightly higher in Alabama but also had fallen from this summer. Alabama producers generally operate on a much smaller scale than those in the Delta and use more bagged feed, which costs \$20 to \$30 a ton more. Texas farmers, who rely solely on bagged feed and are located away from catfish feed mills, typically pay \$500 a ton for catfish feed. Meanwhile, in response to the successful spawn this spring, fingerling prices in the Delta have fallen to about 1 cent an inch, compared with 2 cents this spring. Alabama fingerling prices were reportedly in the 1-1/4 to 1-1/2 cent range.

The reduced cost estimates mean established producers should meet operating and ownership expenses this year, with the larger, more efficient operations making positive returns. Meanwhile, new farmers, who faced high feed and fingerling costs over the past year, as well as high capital costs, may come close to meeting at least their operating expenses during 1981. Abundant feed supplies and the large quantity of catfish fingerlings should cause the cost of production for 1982 to be at or below this year; feed and fingerlings account for 75 to 80 percent of operating expenses in catfish production. The reduced costs of feed and fingerlings will likely offset forecast increases in other production items. The forecast stability in production costs next year should help ease the cash flow problems of many newer producers.

## TROUT

### Trout Producers: 1980 In Review

Trout producers in nine surveyed States sold 48 million pounds of foodsize trout in 1980 (table 14). Idaho trout farmers sold the largest portion, 42.8 million pounds, or 89 percent of the total. California and Pennsylvania trailed, with 2.2 and 1.2 million, respectively.

Trout production in Idaho is almost exclusively for processors—42.2 million pounds in 1980. In all, producers sold 42.7 million to processors, or 89 percent of the foodsize fish marketed (table 9). The second largest sales outlet was fee and recreational operations, 1.7 million pounds. California and Pennsylvania were the primary contributors to that market.

Producers in surveyed States received an annual average 78 cents a pound (live weight) in 1980 for foodsize fish (table 14). Prices averaged 85 cents during January-July 1980 and 69 cents during August-December. The drop in average price from the first 7 months of the year was due primarily to a fall in the Idaho farm prices. In contrast, prices in the remaining

eight States averaged \$1.61 a pound during 1980. Generally, fish sold to markets other than processors (live-haul, fee and recreational, and direct to consumers and retailers) command higher prices. Pennsylvania and Wisconsin producers received the highest prices among the surveyed States, \$1.82 and \$1.76, respectively; the primary outlet in each of those States was fee and recreational operations.

The total value of producers' sales of broodfish, eggs, fry and fingerlings, and foodsize fish was \$39.5 million in 1980 (table 10).

### Current Situation

The farm-raised trout industry, dominated by vertically-integrated producer-processors in Idaho, currently appears to have reached a plateau stage. The industry in the past has been production-oriented, while marketing efforts have not been as aggressively pursued.

**Table 14—Trout: Number of operations, August 1, 1980; foodsize fish sales and price, January 1, 1980 - December 31, 1980; selected States**

State	Total operations		Food size fish sales <sup>2</sup>	Percent of total	Price per pound
	Aug. 1, 1980	Feb. 1, 1981			
	<i>Number</i>		<i>1,000 Pounds</i>	<i>Percent</i>	<i>Dollars</i>
California	32	23	2,208	5	1.47
Georgia	11	11	323	1	1.41
Idaho	31	24	42,787	89	.68
Missouri	6	6	389	1	1.58
Pennsylvania	39	36	1,210	3	1.82
Washington	42	34	488	1	1.70
Wisconsin	28	35	440	1	1.76
Other <sup>1</sup>	8	11	195	*	1.77
Total	197	180	48,040	100	.78

<sup>1</sup>Includes Alabama and Arkansas. <sup>2</sup>Live-weight. \*Less than .5 percent.

Trout producers in Idaho are currently receiving around 65 cents a pound from processors, compared with an average 68 cents during 1980.

As a result of the slowed marketing pace and lower prices, production adjustments seem to be occurring. During the 1970's, as production and demand expanded, many Idaho producer-processors contracted with local farmers to grow trout in farm ponds (versus the culturing medium of concrete raceways used by the producer-processors). These farm ponds are now reportedly, for the most part, to be out of production.

Frozen stocks of rainbow trout (as reported by the NMFS) totaled 3.0 million pounds at the end of July, compared with 1.9 million a year ago. This partially

reflects the oversupply situation, but not all of the Idaho processors' stocks are included in the above figure.

Chicago wholesale prices of frozen drawn (eviscerated with heads on) rainbow trout were quoted at \$1.65 to \$1.70 a pound in mid-September, up a dime from the prevailing prices last winter and spring. Meanwhile, wholesale prices of frozen boneless rainbow trout were \$1.85 to \$1.90, unchanged from earlier in the year.

Through July, imports of freshwater trout totaled 173,000 pounds, compared with 82,400 during the entire year in 1980 (table 5).

Feed prices in Idaho during September were around \$400 a ton. With feed ingredient prices to likely stabilize in the coming year, any production cost increases will be moderate.

## CRAWFISH

Although no precise production data are available, it is estimated Louisiana farmers harvested 28 to 30 million pounds of crawfish during the last season (November 1980-June 1981). The estimate is based on typical yields of 400 to 500 pounds an acre on the approximately 60,000 pond acres in crawfish production in that State. A Soil Conservation Service survey revealed there were 55,300 acres in production in Louisiana during 1980 and that there were 274 commercial crawfish ponds. Both acreage and the number of ponds and producers have increased since the survey. Meanwhile, Texas crawfish farmers harvested an estimated 3 to 4 million pounds this past season. Acreage used for crawfish production was probably between 4,000 and 5,000 acres, while average yield was probably 700 to 750 pounds an acre.

The primary reason for the significantly larger yields in Texas versus those in Louisiana is that Texas ponds are generally open water ponds used exclusively for crawfish production. In contrast, Louisiana has over 20,000 acres of wooded ponds, which typically yield only about 300 pounds an acre.

Louisiana crawfish farmers received record-high prices during the last season. Louisiana plants paid producers a weighted-season-average price of 80 to 85 cents a pound, up about 15 cents from 1979/80. Prices crawfish farmers receive will vary considerably over the course of the harvest season. They generally are highest in early winter before the wild harvest begins. It should be noted that farmers who sell directly to retail stores or restaurants receive a premium above the price processors pay, and prices exhibit less seasonal variability.

Texas producers received an average of \$1.40 a pound this past season. Almost all of the harvest is marketed directly to local consumers and restaurants.

The higher prices in Louisiana this year resulted from an almost total failure of the wild crawfish harvest in the Atchafalaya Basin, which did not rise and flood as usual during the spring. The wild crawfish harvest during 1979/80, while not as bad as 1980/81, was also a typically small.

Production of pond-raised crawfish will likely increase again during the 1981/82 season because of advances in

acreage. However, the key variable in the outlook will be the wild harvest, primarily from the Actchafalaya Basin. That harvest, directly related to water levels, is in turn related to the snow pack and water runoff in the entire Mississippi River Basin.

The poor wild harvests of the past 2 years are considered aberrations. Thus, a return to more typical water

levels this year would yield a greater wild harvest to compete with farmed crawfish. This would likely push prices downward. However, the experience of the past season indicates consumers' willingness to pay premium prices for crawfish. Exploitation of that willingness could moderate any supply-related price declines.

## THE MONTHLY CATFISH PROCESSORS REPORT

### History

Without question, the most comprehensive data available regarding commercial U.S. aquaculture is for the farm-raised catfish industry. In 1969, the Department of Interior's Bureau of Commercial Fisheries (BCF) initiated the monthly catfish processors report. The reports, based on data collected from Mississippi Delta processors with capacity of more than 2,000 pounds for an 8-hour day, originally included the quantity processed and prices paid to farmers. Through the years, the number of supply, demand, and price items included in the report expanded. Also, data were collected from processors outside of the Delta after 1969.

In October 1970, the functions of the BCF were transferred to the Department of Commerce and became part of the National Marine Fisheries Service (NMFS) within the National Oceanic and Atmospheric Administration. The NMFS retained responsibility for the catfish report through 1979, except for part of 1973 when the Catfish Farmers of America published the report. Since 1980, the U.S. Department of Agriculture (USDA), through its Crop Reporting Board, has surveyed the processors and issued the monthly reports.

The following is a list of the items included in the reports, as well as some comments regarding the items.

*Production.* During 1969-73, production was reported as the quantity of finished product, or dressed weight, defined as the weight of the fish "whole, skinned, collarbone removed, tail on, individually frozen and/or fresh." From 1974 to the present, production has been reported as "total live weight of fish delivered for processing."

*Ending inventory.* This item has been reported since late 1969 and is the quantity of finished products surveyed processors had in stock at the end of the month. Until 1981, the report also included the month-to-month change in inventory.

*Quantity sold.* Reporting of sales began in late 1969. During 1969-73, "net sales" were derived by adding production to beginning inventory and then subtracting ending inventory.

In late 1973, processors were directly surveyed for their sales. During 1974-79, the published figures were generally the sum of the individual processors' sales, as reported. However, for some months during that period, the published sales figure was actually derived by adding production to the change in inventory (as was done from 1969 to 1973).

Although processors were surveyed for both ice-pack and frozen sales since late 1973, the published reports

contained no breakdown between the two. Instead, only total sales data were published. Since 1980, though, USDA has included the ice-pack, frozen, and total sales data in the report.

*Prices paid.* The prices paid to farmers for pond-raised catfish have been included since the first report. From 1969 to the present, the monthly ranges of farm prices have been published, while reports from 1975 on have also contained a weighted-average price.

*Prices received.* From late 1969 through 1970, the monthly processors report contained a range of prices received by processors for the finished product. Even though this data was collected from 1971 to 1974, publishing of the series did not resume until 1975. The series was reported in ranges through 1978 and has been listed as a weighted average since 1979. Since 1975, prices have been reported for both ice-pack and frozen sales.

*Imports.* Starting in 1981, USDA included the quantity of monthly imports of catfish into the United States. The data is furnished by the Bureau of Census, U.S. Department of Commerce.

### USDA Series

The data as presented in the monthly catfish processors report, while relatively extensive, were not without limitations. One problem was the reporting of price data in ranges rather than as a weighted average. A second limitation is the inconsistent manner in which sales data were arrived at during 1974-79 (discussed previously). A final data problem, albeit minor, was the different bases for measuring production during 1969-73 compared with 1974 to the present—e.g., dressed vs. live weight.

Based on available data, it was possible to create a new series that ameliorated the above limitations. A discussion follows of how this USDA series was derived.

*Production.* To obtain a consistent production data series, the 1969-73 data were converted from a dressed-weight to a live-weight basis. The generally accepted conversion factor from live to the dressed weight is 0.6; therefore, the reciprocal, 1.67, is used to convert the 1969-73 data to a live-weight basis.

*Prices paid.* From 1969 to 1974, the prices paid data were reported in ranges. To derive weighted-average prices paid to farmers for that period, each processor's production was multiplied by that firm's price paid to producers, yielding the total dollar value of the firm's purchased fish. The sum of the individual processors' values was then divided by their total production to get a weighted-average price per pound.

Production of firms that processed their own fish, and thus did not report prices paid, was not included in calculating the weighted average. In addition, some firms reported a range of prices. In these instances, the midpoint of the range was assumed to be the relevant price in determining the weighted average.

Even though weighted-average prices were published during 1975-79, these were recalculated using the procedures described for 1969-74. There are a few minor differences between the previously published data and the new USDA series.

*Prices received.* Until 1979, all prices received by processors were published in ranges. Using the same procedures for deriving weighted-average farm prices, weighted-average processor prices received were computed.

During 1970-73, there was no distinction between prices received for ice-pack and frozen catfish. Therefore, it was possible only to derive an average price for all catfish sold during 1970-73. Since 1974, prices received data has been collected for both fresh and frozen catfish. From the available data, weighted-average prices were calculated for ice-pack, frozen, and all catfish sold during 1974-78.

As with the prices paid data, some processors reported their prices received in ranges. Most often, the midpoint of that range was assumed to be the relevant price.

A few firms in the early 1970's sold their products with skin and head on. These firms' prices were substantially less than what the others were receiving for their dressed products. Thus, sales of firms selling catfish with skin and head on were not included in calculating the weighted-average price.

*Quantity sold.* As stated previously, early data was inconsistent during 1974-79 with respect to deriving a monthly sales total. For most months, the published sales figure equaled the sum of the processors' sales as reported. However, for some months, sales were derived by adding production to the change in inventory, as was done during 1969-73. And in other months, other adjustments were made in deriving sales. For the period 1974-79, USDA monthly sales data were derived by adding the individual processors' sales as reported. In the USDA series, sales were broken down into ice-pack and frozen categories for 1974-79.

Table A--Catfish: Round weight processed, 1969-1981 1/ 2/

Year	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	Total <u>3/</u>
	<u>Thousand pounds</u>												
1969	169	439	434	194	23	52	104	193	273	349	421	550	3,201
1970	689	1,092	520	177	97	149	221	241	348	723	715	769	5,741
1971	926	1,154	1,386	897	487	556	716	918	1,008	1,106	1,097	1,006	11,257
1972	1,320	1,520	2,134	1,487	1,531	1,365	1,180	1,638	1,483	1,673	1,781	1,221	18,331
1973	2,128	2,257	2,244	1,388	1,259	1,324	1,646	1,773	1,642	1,690	1,249	1,129	19,731
1974	1,267	1,418	1,734	1,355	1,395	1,436	1,304	1,541	1,277	1,530	1,324	1,364	16,944
1975	1,664	1,729	1,504	1,011	790	1,481	1,426	1,369	1,339	1,402	1,100	1,325	16,140
1976	1,785	1,711	2,094	1,397	1,037	1,471	1,458	1,763	1,904	1,545	1,500	1,312	18,978
1977	1,344	2,278	1,901	1,749	1,810	1,901	1,965	2,192	1,986	1,766	1,661	1,573	22,125
1978	1,598	2,361	2,951	2,510	2,729	2,189	2,310	3,186	2,607	2,647	2,935	2,154	30,179
1979	3,032	3,929	4,010	3,025	3,716	3,081	3,138	3,978	3,417	3,531	3,000	2,779	40,636
1980	3,530	4,892	4,060	3,829	4,045	3,596	3,092	4,116	3,817	4,310	3,631	3,546	46,464
1981	3,772	4,737	4,390	5,973	5,393	4,180	5,379	5,176					

1/ Total live weight of fish delivered for processing.

2/ Data for 1969-73 originally reported as dressed weight; used a conversion factor of 1.67 to get round weight.

3/ Totals may not add due to rounding.

Table B--Catfish sold by processors, 1970-81: Total 1/ 2/

Year	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	Total <u>3/</u>
<u>Thousand pounds</u>													
1970	--	373.1	145.3	202.4	181.7	353.3	216.6	190.8	257.5	291.1	282.8	293.7	<u>4/2,788.4</u>
1971	596.3	884.4	750.3	959.7	467.8	455.9	427.2	436.6	571.4	494.8	630.2	544.9	7,219.5
1972	682.3	936.7	1,385.5	852.8	976.8	879.3	797.0	1,058.6	953.0	991.0	881.1	680.5	11,057.6
1973	1,450.5	1,446.1	1,518.8	979.3	835.1	755.8	916.7	726.4	887.4	1,012.5	806.4	609.3	11,944.1
1974	805.5	935.9	1,014.6	983.5	870.7	934.8	958.9	1,054.9	787.3	967.3	767.1	826.5	10,906.9
1975	1,060.8	1,227.1	1,209.7	840.0	553.7	794.1	793.5	771.7	796.7	800.9	700.3	768.6	10,317.2
1976	990.2	984.8	1,320.1	922.3	722.0	982.2	912.5	1,087.7	1,138.8	986.0	877.4	813.8	11,737.7
1977	966.6	1,369.1	1,290.0	1,115.6	1,081.7	1,077.9	1,098.8	1,328.3	1,150.8	1,025.8	965.2	778.0	13,247.7
1978	1,048.1	1,472.5	1,831.4	1,527.6	1,741.9	1,330.5	1,471.4	2,003.4	1,550.2	1,617.8	1,739.0	1,179.4	18,513.2
1979	1,828.8	2,443.2	2,529.8	1,943.1	2,319.2	1,731.2	1,839.1	2,320.5	2,029.8	2,058.3	1,684.4	1,602.3	24,329.7
1980	2,198	2,814	2,535	2,507	2,487	2,089	2,254	2,324	2,183	2,363	2,226	1,781	27,761
1981	2,269	2,738	3,127	3,348	2,955	2,419	3,015	3,209					

1/ Dressed weight.

2/ Data for 1970-73 are as published by the National Marine Fisheries Service (NMFS) for 1974-79, data are sum of individual processors' sales as reported to NMFS.

3/ Totals may not add due to rounding.

4/ 11-month total: January data not available.





Table E--Catfish: Processors' frozen inventory, end of month, 1969-81 1/

Year	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.
<u>Thousand pounds</u>												
1969	--	--	--	--	--	--	--	--	--	--	451.1	875.2
1970	1,268.9	1,549.8	1,715.6	1,619.3	1,495.9	1,232.0	1,147.9	1,101.6	1,052.4	1,194.1	1,339.3	1,506.0
1971	1,464.3	1,271.0	1,350.7	928.4	752.2	629.5	630.8	743.9	776.0	943.2	969.8	1,027.3
1972	1,135.3	1,109.0	1,018.1	1,055.5	995.3	933.2	842.7	765.1	699.9	710.7	896.1	946.5
1973	770.5	675.9	500.9	352.8	271.5	308.9	377.8	713.3	809.1	808.9	750.5	817.4
1974	866.9	690.4	729.7	652.7	648.8	457.8	551.0	582.2	564.8	606.9	654.9	649.4
1975	746.4	703.5	526.2	295.3	220.5	267.8	250.9	298.1	324.4	366.3	330.9	357.8
1976	407.4	415.2	350.1	283.6	236.7	215.3	231.6	226.1	370.8	373.3	450.6	499.9
1977	400.5	455.1	275.4	215.6	258.1	368.8	467.0	503.9	602.9	654.9	674.1	819.5
1978	732.6	715.5	710.0	696.9	623.8	677.2	619.9	654.4	724.2	721.7	741.7	816.1
1979	790.4	691.4	563.6	448.3	334.7	468.0	532.1	681.0	731.3	801.8	903.2	1,026.5
1980	969.6	1,065.0	1,070.9	907.3	858.3	917.2	766.1	741.4	800.6	1,060.1	1,020.0	1,259.9
1981	1,278.7	1,435.5	1,283.8	1,501.8	1,729.9	1,774.2	1,901.7	1,830.6				

1/ Dressed weight.

Table F--Prices paid to producers for farm-raised catfish by processors, 1969-81 <sup>1/</sup>

Year	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	Average
													2/
													Cents per pound
1969 <sup>3/</sup>	37.0	37.0	37.0	37.0	37.5	37.5	40.0	40.0	40.0	35.3	35.3	35.3	<sup>6/</sup> 37.4
1970 <sup>4/</sup>	35.5	34.6	34.7	35.5	37.6	36.7	35.4	35.8	34.0	32.3	31.2	31.1	33.8
1971 <sup>4/</sup>	30.4	30.1	31.7	32.9	33.2	34.6	33.6	33.3	33.2	32.7	32.7	33.1	32.4
1972 <sup>4/</sup>	32.2	32.1	33.1	33.1	34.2	34.5	34.1	34.3	33.2	32.6	32.6	33.3	33.2
1973 <sup>4/</sup>	33.9	35.6	40.6	45.0	48.3	48.6	49.6	49.8	49.5	47.7	46.5	46.4	44.3
1974 <sup>4/</sup>	46.4	46.4	45.9	46.6	46.5	46.3	45.9	45.2	45.2	45.5	45.6	46.0	45.9
1975 <sup>4/</sup>	45.8	46.5	46.3	48.5	51.6	52.0	51.7	51.9	51.6	48.6	48.1	48.2	49.1
1976 <sup>4/</sup>	48.7	48.7	49.3	51.3	54.5	55.1	55.7	55.5	55.8	54.1	52.9	52.7	52.7
1977 <sup>4/</sup>	52.9	55.5	59.6	60.9	60.7	61.0	61.1	58.0	56.4	56.6	56.2	56.1	58.0
1978 <sup>4/</sup>	56.1	56.0	56.1	55.8	55.6	55.8	55.9	55.7	53.3	51.6	51.3	51.6	54.5
1979 <sup>4/</sup>	52.3	55.0	58.5	60.0	60.4	62.8	64.9	64.8	64.6	64.7	64.9	64.8	61.4
1980 <sup>5/</sup>	65	69	69	69	69	68	69	68	67	66	67	65	67.6
1981 <sup>5/</sup>	64	64	67	69	70	69	65	63					

<sup>1/</sup> Harvest, at plant site.

<sup>2/</sup> Weighted average.

<sup>3/</sup> January-September data are midpoint of range as reported by NMFS; October and December data are calculated weighted averages; November price assumed equal to October and December.

<sup>4/</sup> Prices are calculated weighted averages from NMFS-collected data.

<sup>5/</sup> Reported weighted average prices.

<sup>6/</sup> Simple average.

Table G--Prices received by processors for all catfish, 1969-81 1/ 2/

Year	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	Average
<u>Cents per pound</u>													
1969 <u>3/</u>	--	--	--	--	--	--	--	--	87.5	88.5	88.5	88.5	--
1970	<u>4/</u> 85.0	85.4	85.4	84.8	83.1	81.0	82.9	84.2	85.6	81.5	80.3	79.9	83.0
1971	77.2	75.9	79.0	76.1	77.3	81.2	80.0	80.0	79.4	79.3	80.3	79.9	78.5
1972	79.4	79.2	79.8	79.6	79.1	80.5	80.2	81.0	81.2	81.4	80.7	<u>5/</u> 82.5	80.3
1973	<u>6/</u> 84.3	85.1	93.9	99.2	105.0	105.6	108.6	111.8	112.5	111.5	110.1	110.9	101.3
1974	107.0	108.4	107.7	107.4	107.6	107.2	107.1	105.9	107.0	107.2	107.3	105.9	107.2
1975	106.6	107.2	109.8	111.5	116.0	117.2	117.8	119.2	116.5	113.6	117.3	116.6	113.4
1976	115.6	115.2	115.0	117.4	121.4	123.3	126.3	125.6	126.2	122.8	122.5	121.5	120.9
1977	120.6	124.5	130.4	133.9	133.3	133.9	134.3	133.5	133.3	132.1	131.8	131.5	131.1
1978	131.0	130.4	131.4	131.3	131.9	131.0	130.6	130.3	131.5	129.0	129.9	129.0	130.6
1979	129.3	133.7	137.7	144.3	148.2	151.9	155.1	156.8	152.1	152.0	153.7	154.3	147.0
1980	156.4	161.2	165.7	166.6	168.7	167.3	169.6	168.8	164.5	166.9	168.0	169.1	166.0
1981	167.9	167.2	173.2	171.9	173.4	172.0	174.7	171.1					

1/ F.O.B. plant.

2/ Weighted average prices.

3/ 1969 data are midpoint of reported range.

4/ No data available; price is arbitrarily assumed.

5/ No data available; December price is midpoint between November 1972 and January 1973 prices.

6/ January price based on quantity processed rather than quantity sold.



Table I--Prices received by processors for frozen catfish, 1974-1981 1/ 2/

Year	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	Average
	<u>Cents per pound</u>												
1974	108.8	109.3	110.2	110.2	109.7	110.4	109.9	108.2	109.8	110.1	112.2	109.6	109.8
1975	110.9	110.5	113.8	115.3	120.8	119.9	120.3	122.7	118.2	120.1	122.1	123.0	117.4
1976	119.9	119.5	117.4	120.2	124.6	127.0	130.8	129.6	129.8	129.1	128.5	127.4	125.4
1977	124.9	127.6	133.1	138.1	134.7	136.9	138.4	137.4	136.2	135.0	134.5	134.6	134.5
1978	133.9	133.8	135.5	133.9	134.9	134.1	133.8	134.0	135.5	134.1	133.8	132.6	134.2
1979	133.2	139.0	144.0	149.2	150.0	156.9	162.5	163.2	159.3	158.8	159.8	159.9	152.9
1980	161	169	173	174	176	175	176	175	171	172	175	175	172.7
1981	176	176	185	178	183	175	182	179					

1/ F.O.B. plant.

2/ Weighted average.

Table J--Imports of catfish, 1969-1981 1/

Year	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	Total <u>2/</u>
<u>Thousand pounds</u>													
1969	--	285.0	367.0	200.0	344.0	364.0	255.0	344.0	518.0	274.0	531.0	280.0	3,762.0
1970	420.0	341.0	413.0	277.0	584.0	208.0	475.0	423.0	358.0	437.0	644.0	221.0	4,801.0
1971	377.8	84.9	190.3	58.1	184.2	122.9	209.4	338.1	321.3	120.6	264.2	932.1	3,203.8
1972	231.8	743.6	289.9	349.1	216.1	256.7	357.6	677.9	361.4	502.6	449.7	369.8	4,826.2
1973	542.5	307.0	632.1	737.4	434.2	522.6	335.1	472.8	593.2	1,067.9	395.7	572.2	6,612.9
1974	947.4	289.6	453.9	669.8	560.7	1,670.6	486.2	794.8	186.6	937.3	789.3	657.2	8,443.4
1975	1,495.6	641.2	663.0	1,421.1	749.1	782.5	996.5	1,089.6	331.9	978.5	606.5	1,150.7	10,906.2
1976	661.2	398.4	1,313.0	778.1	1,168.7	595.3	270.8	1,137.1	935.6	812.4	1,092.3	1,048.7	10,261.5
1977	796.6	2,626.0	1,318.8	1,750.8	1,715.7	1,380.3	1,205.7	1,471.6	1,253.7	1,594.2	1,193.8	1,676.2	17,983.3
1978	1,845.0	752.1	1,936.0	2,188.1	2,533.7	1,045.5	862.9	968.1	1,524.2	814.8	2,728.4	1,173.1	18,371.9
1979	995.3	1,683.4	638.6	2,521.9	2,013.7	945.7	2,272.6	759.3	889.2	1,298.2	1,3610.0	1,610.4	16,988.9
1980	1,308.5	1,511.1	1,170.0	1,045.3	1,108.4	2,224.7	1,109.9	2,429.6	1,424.5	283.7	863.2	443.4	14,922.3
1981	1,003.3	1,119.4	1,044.1	1,433.7	981.8	521.3	629.5						

1/ Catfish: filleted, fresh, chilled, or frozen; TSUSA code 110.7024.

2/ Totals may not add due to rounding.

UNITED STATES DEPARTMENT OF AGRICULTURE  
WASHINGTON, D.C. 20250

OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID  
U.S. DEPARTMENT OF  
AGRICULTURE  
AGR 101  
FIRST CLASS



To stop mailing  or to change your  
address  send this sheet with label  
intact, showing new address, to Informa-  
tion, Staff, ERS, U.S. Dept. of Agricul-  
ture, Rm. 0054 South Building, 14th &  
Independence Ave. S.W., Wash., D.C.  
20250.

## OUTLOOK '82 SET FOR NOVEMBER 2-5

Watch for OUTLOOK '82...for the most up-to-date fore-  
casts of what will happen in food and agriculture next  
year. Issues to be explored at the 58th annual Agricul-  
tural Outlook Conference, to be held in Washington, D.C.,  
include the likely directions of agricultural markets and  
policies as the Administration's program for economic  
recovery is put in place.

The Conference also will focus on the challenges facing  
American agriculture, U.S. agricultural and general  
economies, world trade, nutrition, and the outlook for  
major U.S. commodities. No sessions will be devoted to  
Aquaculture.

For a preliminary program or other information, call  
(202) 447-3050, or write:

OUTLOOK '82  
WAOB, 3510-South  
U.S. Department of Agriculture  
Washington, D.C. 20250

Registered participants at last year's outlook confer-  
ence will automatically receive a preliminary program  
and other conference information.