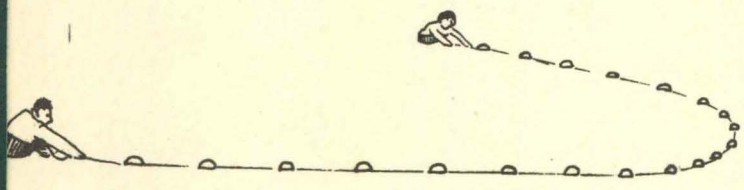
COMMERCIAL FISHERY STATISTICS FOR IOWA IN 1971

BY
GARY L. ACKERMAN
DISTRICT FISHERIES MANAGER

AND

JOHN P. SPINNER
FISHERIES BIOLOGIST



COMPLETION REPORT FM-72-1
FISHERIES SECTION
STATE CONSERVATION COMMISSION
DES MOINES, IOWA

COMMERCIAL FISHERY STATISTICS

FOR IOWA IN 1971

By

Gary L. Ackerman
District Fisheries Manager

and

John P. Spinner
Fisheries Biologist

Completion Report FM-72-1

Fisheries Section

Jerry M. Conley
Superintendent of Fisheries

James Bruce
Fish Management and Hatchery Supervisor

ABSTRACT

A 6% decline in the catch of commercial fishes occurred in 1971 as compared with catch data from 1970 for the Iowa boundary waters of the Mississippi River. The estimated value of the catch also declined 21%. Total harvest at landings were estimated at 3,019,643 lbs in the round and had an estimated value of $337,775. The commercial fishery at the Missouri River was insignificant.

TABLE OF CONTENTS

INTRODUCTION

Annually commercial fishery data for the Mississippi and Missouri Rivers are summarized by the Iowa Conservation Commission. These data are used to evaluate long range trends in harvest of commercial fishery resources, furnish vital statistics for governmental agencies and provide information for improvement of the management of commercial fishery resources.

METHODS

By authority of the State of Iowa (Code 109.116) each holder of a commercial license prepares an annual report to the Commission showing the quantity, kinds, and value of fish caught during the period of the license. The locality of fishing and types of gear used are also included in the questionnaire. These data are usually received by mid-April of the following calendar year and summarized by Commission staff. A commercial fisheries report is submitted to governmental agencies by autumn.

These procedures proved ineffective for administration, management, and control of the commercial fishery resources. The quality of these data when reported on an annual basis caused consternation among investigators. The authors questioned the reliability of data when reported once yearly from commercial fishermen who may have incompatible goals. They questioned the value and applicability of these data which were incomplete and poor in format, and pointed out certain changes could be made to furnish reliable and applicable data that would enable better management of commercial fishery resources.

The Iowa Conservation Commission adopted a monthly reporting system in 1972 (Figure 1). By comparisons with data from other sources commercial

Name_____ Certificate Number _____

Address _____ River _____

_____ Pool number(s) _____

Month _____ Year _____

Gear Fished	Slat Net	Hoop Net 1 ½" bar or less	Hoop Net 1 ½" bar or more	Fyke, Pound or Lead Net	Gill Nets	Trammel Nets	Seines	Set Line /100
Number	no:	no:	no:	no:	l.f.	l.f.	l.f.	hook
Carp								
Buffalo								
Drum								
Ch. Cat								
FH Cat								
Bullhead								
Suckers*								
Sturgeon								
Paddlefish								
Others								

Instructions: File report monthly even if you do not fish. Record the number of nets, lineal feet of gear, or set lines per 100 hooks fished each month, not the gear licensed. Record all fish weight in pounds in the round.

*Suckers to include carpsucker, quilback, bluesucker, readhorse, and spotted suckers.

Thank you for your cooperation.

CP-A45738 11/71

Figure 1. Commercial landings are reported monthly on this postcard questionnaire. Emphasis is on acquiring catch-per-unit-of-effort data.

statistics are useful tools. For example, when combined with climatological data, seasonal trends of the commercial catch will be evident. Water stage fluctuations and flood directly affect commercial harvest. These comparisons might point out the need for water stabilization by the Corps of Engineers. The environmental impact by industry upon commercial catches may be documented if thermal changes or organic pollution deplete commercial fish populations in the future. The monthly reports are based on catch-per-unit-of-effort data, which will furnish applicable and specific data on harvest rates by species and gear efficiently for both short-term and long-range trends whereas the annual report furnished only abstract data.

RESULTS

Commercial landings at Iowa boundary waters of the Mississippi River consisted of 3,019,643 lbs of commercial species. Principal species of the catch were carp, buffalo, freshwater drum, and catfish. Harvest in 1971 declined 6% from 1970 when 3,213,850 lbs were harvested (Table 1). An important decline (18%, or 77,641 lbs) in the catch of catfish was noted in 1971.

The estimated value of commercial landings in Iowa boundary waters of the Mississippi River was $337,775 in 1971. Total value of the commercial catch declined approximately 21% ($38,278) from 1970. The principal reason for the decline was attributed to 18% ($24,845) decline in the catch of catfish. The more valuable commercial species were buffalo, catfish, carp, and freshwater drum, respectively.

The commercial landings in Iowa boundary waters of the Missouri River are relatively unimportant (Table 2). No significant commercial fishery exists on the Missouri River probably due to stream channelization.

Table 1. Commercial landings in Iowa boundary waters of the Mississippi River, 1971

Species	Harvest in lbs in round	Average price per lbs	Estimated value
Carp	1,239,474	.04	$ 49,578.96
Buffalo Bigmouth Smallmouth Black	921,599	.14	129,023.86
Catfish Channel Flathead	346,462	.32	110,867.84
Freshwater drum	381,984	.08	30,558.72
Sturgeon Sand Rock	25,863	.33	8,534.79
Bullheads Yellow Brown Black	28,227	.16	4,516.32
Suckers Redhorse Spotted Quillback Carpsucker	41,482	.04	1,659.28
Paddlefish	18,049	.13	2,346.37
Gar Shortnose Longnose	1,594	.03	47.82
Bowfin	12,994	.04	519.76
American eel	59	.15	8.85
Others Mooneye Gizzard shad Goldeye	1,672	.04	66.88
Turtle	184	.25	46.00
TOTAL	3,019,643	---	$337,775.45

Table 2. Commercial landings in Iowa boundary waters of the Missouri River, 1971

Species	Harvest in lbs in round	Average price per lbs	Estimated value
Carp	19,815	.04	$ 792.60
Buffalo Bigmouth Smallmouth Black	5,050	.14	707.00
Catfish Channel Flathead	7,368	.32	2,357.76
Freshwater drum	909	.08	72.72
Sturgeon Sand	200	.33	66.00
Bullhead Black Yellow Brown	55	.16	8.80
Suckers Redhorse Spotted Quillback Carpsucker	538	.04	21.52
Paddlefish	1,719	.13	223.47
Others Mooneye Goldeye Shad	2,212	.04	88.48
TOTAL	37,866	---	$4,338.35

Commercial landings at Iowa boundary waters of the Mississippi River are reported for each pool bordering Iowa (Table 3). Some of the more productive are Pool 9, 10, and 19. These data will be combined with similar data from Wisconsin and Illinois to determine the total commercial landings for this reach of the Mississippi River.

Table 3. Commercial landings by pools at the Mississippi River, 1971 (all weights are lbs in round)

Species	#9	#10	#11	#12	#13	#14
Carp	368,064	167,902	56,696	39,448	84,671	76,521
Buffalo	129,411	128,442	139,125	106,125	80,250	106,484
Catfish	60,076	24,203	28,134	4,155	66,441	45,637
Freshwater drum	163,836	61,788	37,780	11,098	22,824	13,008
Sturgeon	2,524	976	1,818	8,832	2,377	519
Bullheads	21,456	1,564	260	------	3,588	213
Suckers	28,997	6,396	181	665	4,107	316
Paddlefish	100	748	------	1,163	761	1,469
Gar	27	336	------	672	------	------
Bowfin	3,035	3,047	------	------	200	------
American eel	34	15	------	------	------	------
Turtle	------	------	184	------	------	------
Others	------	------	------	------	------	165
TOTAL	777,560	395,417	264,287	172,158	265,219	244,332

Table 3. (Continued)

Species	#15	#16	#17	#18	#19	#20
Carp	25,822	37,167	107,806	89,922	184,655	800
Buffalo	10,161	28,490	70,995	49,720	71,042	1,245
Catfish	1,882	8,514	12,708	56,723	37,495	494
Freshwater drum	3,352	4,099	12,413	15,413	35,633	740
Sturgeon	------	217	3,612	2,744	2,244	------
Bullheads	20	140	184	481	321	------
Suckers	------	21	752	47	------	------
Paddlefish	15	5,648	3,101	------	4,923	121
Gar	90	------	------	------	469	------
Bowfin	------	------	------	6,712	------	------
American eel	4	------	------	6	------	------
Turtle	------	------	------	------	------	------
Others	------	138	1,349	------	20	------
TOTAL	41,346	84,434	212,920	221,768	336,802	3,400

Table 3. (Continued)

Species	Total
Carp	1,239,474
Buffalo	921,599
Catfish	346,462
Freshwater drum	381,984
Sturgeon	25,863
Bullheads	28,227
Suckers	41,482
Paddlefish	18,049
Gar	1,594
Bowfin	12,994
American eel	59
Turtle	184
Others	1,672
TOTAL	3,019,643

Commercial fishing gear licensed in Iowa in 1971 are listed in Table 4. Although catch-per-unit-of-effort data were unavailable it appears the principal fishing effort is exerted through the use of entanglement type gear of gill and trammel nets. Code 109.110 allows the use of one basket trap (slat net) and one troutline along with the purchase of a regular fishing license. These fishermen are classified as "noncommercial gear".

Table 4. Commercial fishing gear licensed in Iowa during 1971

Gear	Mississippi River	Missouri River	Total
COMMERCIAL			
Gill nets (lineal ft)	63,000	100	63,100
Trammel net (lineal ft)	119,100	8,700	127,800
Seine (lineal ft)	23,000	0	23,000
Hoop nets (N)	4,621	51	4,672
Slat nets (N)	4,252	58	4,310
Troutlines (100 hooks)	1,727	67	1,794
NONCOMMERCIAL			
Slat nets (N)	751	37	788
Troutlines (100 hooks)	879	27	906

In 1971 there were 464 licensed commercial fishermen who fished the Mississippi River boundary waters. Of these, 84% submitted an annual report. Commercial effort is less on the Missouri River. Only 74 licensed commercial fishermen are listed and 91% of them submitted an annual report listing the harvest.