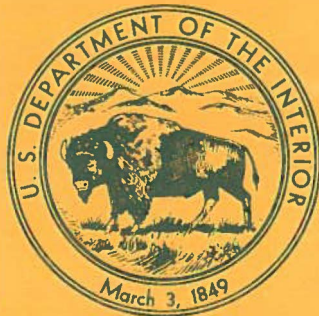


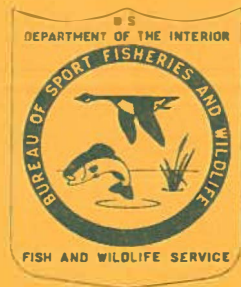
# 1970 NATIONAL SURVEY of Fishing and Hunting





As the Nation's principal conservation agency, the Department of the Interior has basic responsibilities for water, fish, wildlife, mineral, land, park, and recreational resources. Indian and Territorial affairs are other major concerns of this department of natural resources.

The Department works to assure the wisest choice in managing all our resources so that each shall make its full contribution to a better United States now and in the future.



# NATIONAL SURVEY of *Fishing* and *Hunting* **1970**

UNITED STATES DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service  
Bureau of Sport Fisheries and Wildlife





This is the report of the fourth National Survey of Fishing and Hunting, done at intervals of five years. As have the previous three surveys (1955, 1960, and 1965), it shows that fishing and hunting account for a substantial share of the leisure time of the Nation's citizens as well as significant portions of their disposable income and travel.

It shows that fishing and hunting appeal to all kinds of people: male and female, rich and poor, young and old, white collar and blue collar, urbanites and country folks.

The survey shows that millions of us get outdoors, spend billions of dollars, travel billions of miles, and enjoy hundreds of millions of days in these activities.

It shows we gain spiritual and aesthetic benefits from wildlife beyond the chase, the trophies, and the food harvested. Many of us observe, photograph, or find quiet pleasure in the knowledge that wild things still thrive. These uses also are reported here.

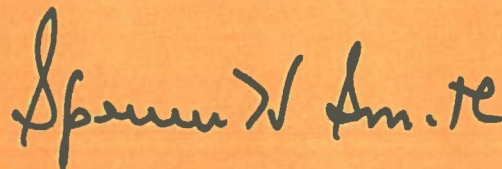
Fish and wildlife hold a very special place in our hearts, and that place is being more clearly recognized as we intensify our efforts to preserve, restore, and improve our environment. The environment of man is one with the environment of fish and wildlife—that which harms one harms the other. We need fish and wildlife—need them for our well-being, and to maintain our environment whole.

To a considerable extent, fishermen and hunters pay their own way by financing Federal and State fish and wildlife programs. As in the earlier studies, costs of this survey were paid from excise taxes on sporting arms, ammunition, and fishing tackle.

What is an angler or a hunter? For purposes of this study, these sportsmen are divided into substantial and incidental participants. A substantial angler or hunter is a person who fished or hunted during part or all of at least 3 days, or who spent \$7.50 or more on these sports during 1970. An incidental angler or hunter is a person who participated in these activities to a lesser extent during 1970. The majority of the findings in the report relate to the substantial sportsmen.

This is a report of human uses of fish and wildlife and of related efforts and moneys spent in pursuit of these valued resources.

Knowledge gained from this study will be helpful to resource planners at all levels of government and to all who are concerned with the values of Man's use of his leisure.



*Director,  
Bureau of Sport Fisheries and Wildlife,  
United States Department of the Interior.*

# foreword



# survey highlights

Most of us like to get outdoors. In 1970 some 128 million of us participated in one or more outdoor recreational activities. Fishing and hunting rank high among our pastimes.

This survey was conducted in two parts. In the first part the number of persons 9 years old or older who participated in outdoor recreation were identified. The second part covered in detail the activities of those people who participated substantially in hunting and fishing. This part maintains comparability with the previous surveys and provides the major portion of the information presented in this report.

## *All participants (screening survey)*

Altogether, among those 9 years old or older, almost 55 million fished, hunted, or both to some extent and spent 779 million recreation days; 7 million birdwatchers spent 432 million recreation days; and 5 million wildlife photographers spent 40 million recreation days. About 49 million fished on 562 million recreation days; many of these anglers also hunted. Another 21 million hunted on 217 million recreation days. Compared to 1965 the 1970 survey shows that the number of fishermen decreased by about 1 million, the number of hunters increased by about 2 million, the number of birdwatchers decreased by almost 3 million, and the number of bird and wildlife photographers increased by 2 million.

## *Substantial sportsmen (interview survey)*

The more ardent fishermen and hunters in the second part of the survey totaled over 36 million, who spent \$7.1 billion and

910 million recreation days and traveled 39 billion passenger miles. Fishermen numbered over 33 million and hunters over 14 million. These represent increases in 1970 over 1965 of over 3 million fishermen and hunters, \$3.1 billion, 201 million recreation days, 7.7 billion passenger miles, almost 3 million fishermen, and almost 1 million hunters. These data alone reveal what our fellow citizens want when they take to the out-of-doors and their importance in the socioeconomic structure of our country.

The apparent discrepancy between the number of days in the results of the first and second parts of the survey (see paragraphs 3 and 4 above) is believed due to more reliable information being obtained from personal interviews. The first part of the survey was conducted by mail. The personal interviews used in the second part apparently aided the respondents in recalling fishing and hunting trips not reported by mail.

The second part of the survey shows that fishermen and hunters are drawn from a wide range of social, economic, and demographic backgrounds. Although the first part of the survey included people not primarily interested in fishing and hunting, it showed these people choose the same kinds of activities and spend their leisure time not greatly different than fishermen and hunters.

This survey was conducted by the Bureau of the Census. It is comparable to the 1960 and 1965 studies made for the Bureau of Sport Fisheries and Wildlife except that the first part was sponsored jointly with the Bureau of Outdoor Recreation, as it was in 1965. The rest of this report covers mainly the details of the second part.



# contents

ii	Foreword	103	C. Differences Between Surveys
iii	Survey Highlights	104	D. Technique of the Survey
2	Fishing and Hunting	106	E. Statistical Reliability Analysis
3	Basis and Background		
APPENDIXES			
42	A. Statistical Tables		
96	B. Definitions		





In 1970 *36 million* Fishermen and Hunters spent *\$7.1 billion* to fish and hunt.

# fishing and hunting

## general

Fishing and hunting rank high as favorite pastimes in our country's outdoor sports. This despite worsening pollution, mercury and other heavy metal concentrations in fish, channelization of streams, dredging and filling of shallow waters, intensifying urbanization, and changing occupations and interests of young people. That about a third of our people participate in these sports in spite of these adverse conditions vividly shows their appeal as healthful, satisfying uses of leisure.

But the pleasures of outdoor recreation have moved from class to mass markets, in keeping with general trends of the economy. Certainly the seventies will witness a further proliferation of services providing leisure pursuits. Businesses seeking trained manpower will increasingly offer among their inducements locations near natural resources where recreational opportunities abound. Seashores, lakes, and mountains command increasing locational premiums. But man cannot continue to increase his fishing and hunting and at the same time use up more and more space for housing and highways, neglect the proper disposal of wastes, and continue to degrade the environment to the detriment of all living things. Man must learn to appreciate the intricate web of life and the physical environment which assures him of the enjoyment of wild things and the pleasures they provide.

## fishermen and fishing

Most people "put a worm over the side" at one time or another, with frequency ranging from occasional to often. "Good fishin'" thrills the sometime angler, but it is pure happiness to the ardent fisherman.

That happiness can be long-johns beneath chest-high waders while casting a fly, thigh-deep in cold, churning waters of a trout stream. Or it can be a lazy line in a warm, slow-moving river, or a lure in tidal surf. But all thrill to the pull of a scrappy battler, and few are unhappy with a string of pan fish. Generally the thrill lasts only a minute for each pound the prize weighs—but the memory lingers. The trophies are likely to wind up mounted on the wall of the winner's home, to recall the moments enjoyed in natural surroundings.

Some anglers prefer to fish alone but many find camaraderie more inviting—particularly sitting under a starlit sky with a fresh catch sizzling over a campfire, while stories are swapped of the big one that got away.

## hunters and hunting

To hunt is to experience oneness with the land; it recalls the pioneer and frontier America, and lets a gunner or archer exercise his cunning against that of the animal he seeks.

But the sport is not entered upon without preparation. The hunter must prepare his equipment: his gun or bow, cartridges, calls, dogs, permits, and frequently his camping gear.

Aside from the personal gratification of having good equipment and bringing game home, hunting has other rewards: the sights, and smells—the natural beauty—of the landscape. Walking through field or forest calms the nerves, heightens the spirit, and strengthens the body. The drone of insects, the songs of birds, the rustle of leaves and the wind strumming tree tops underscore the near silence of fields and woods, quieting the mind and bringing healthy fatigue to the body.



Sportsmen's interest in fishing and hunting continues to remain high. In addition to population growth, increasing incomes and leisure time contribute to higher demand. This study provides data on sport uses of fish and wildlife resources: how much money sportsmen spend and the number of recreation days, the number of trips, and the miles traveled to participate in their favorite pastimes.

Man's technological development has caused serious fish and wildlife losses. Federal and State government and various conservation organizations need data shown in this report for planning. And good planning is needed before we can restore the environment for wildlife.

Fishermen and hunters pay their own way, for the most part, to maintain resources for their activities. General taxes have not been a major source of funds to maintain fish and wildlife resources as they have for other government-provided goods and services in our economy. Sportsmen bear the costs of excise taxes on fishing tackle and on sporting arms and ammunition; they pay use and license fees to Federal and State agencies; and they contribute directly to programs of conservation organizations for protecting and increasing fish and game. In fiscal year 1970 Federal excise taxes amounted to almost \$47 million and State license fees to \$192 million. The excise taxes finance Federal Aid in Fish and Wildlife Restoration programs under the various State fish and game departments; and State license fees finance most of the remainder of the States' bills for wildlife work.

This survey, financed by Federal aid funds, provides comprehensive information needed by all conservation agencies in carrying out their restoration, management, and research programs. The International Association of Game, Fish, and Conservation Commissioners, which represent the States and Canadian Provinces, requested this survey as well as the three earlier surveys of sport fishermen and hunters.

We would point out that the figures in the various tables do not always add to the totals. This is due to independent rounding of each of the estimates at the time the data were computerized and evaluated.

# basis and background





## *In 1970, Fishermen . . .*

**numbered 33,158,000**

---

**spent \$4,958,883,000**

---

**spent 706,187,000 recreation days**

---

**spent \$7.02 on each recreation day**

---

**took 576,210,000 trips**

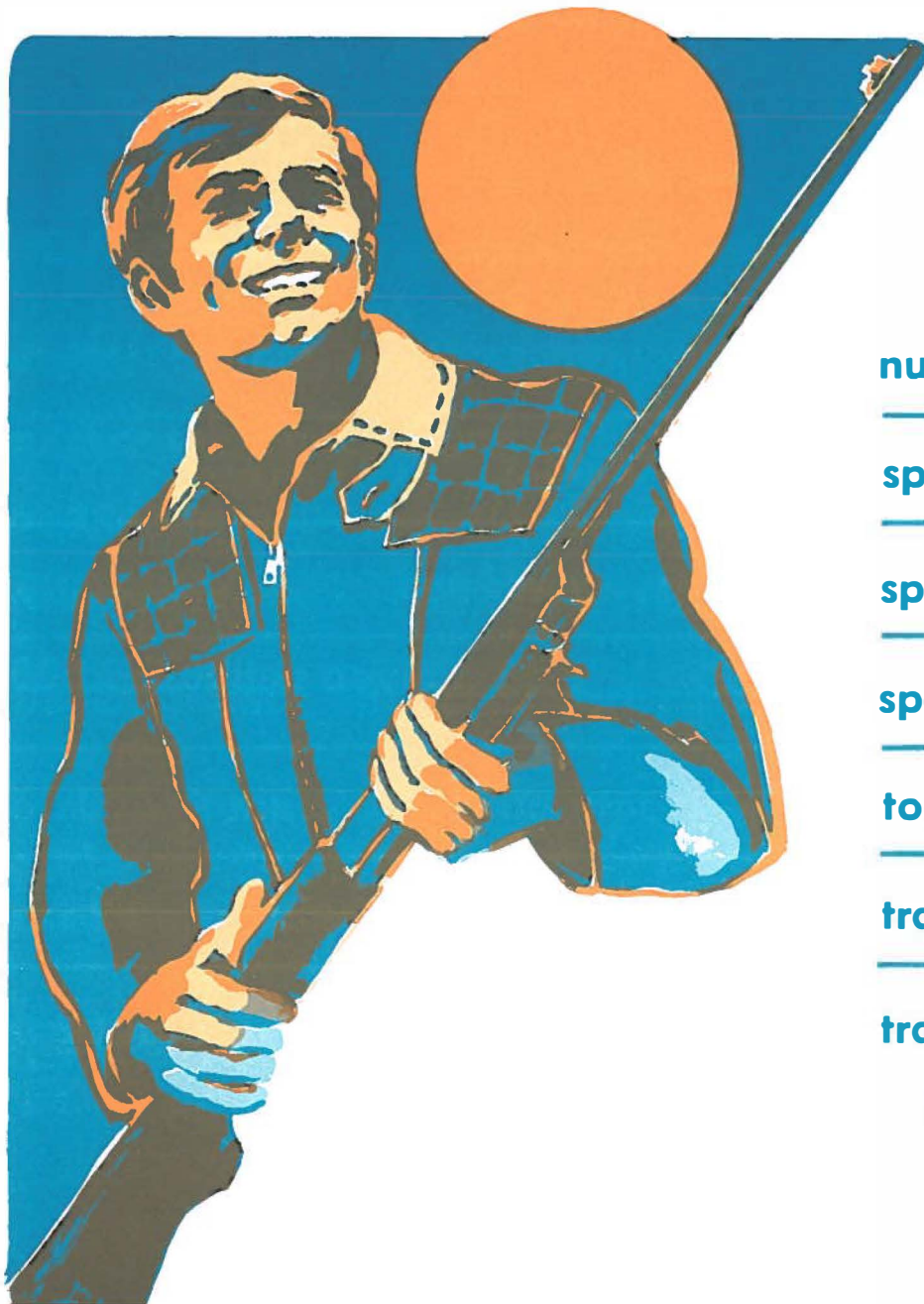
---

**traveled 29,482,799,000 passenger miles**

---

**traveled 28,722,782,000 passenger  
miles by automobile**





## *In 1970, Hunters . . .*

**numbered 14,336,000**

---

**spent \$2,142,648,000**

---

**spent 203,689,000 recreation days**

---

**spent \$10.52 on each recreation day**

---

**took 176,201,000 trips**

---

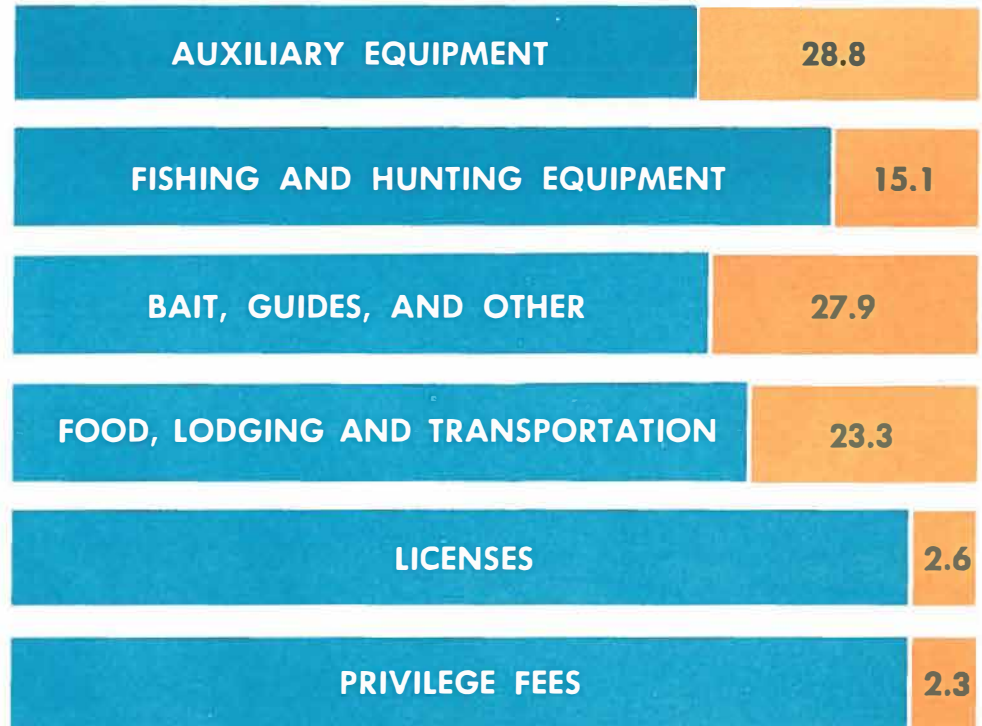
**traveled 9,284,953,000 passenger miles**

---

**traveled 9,106,734,000 passenger  
miles by automobile**

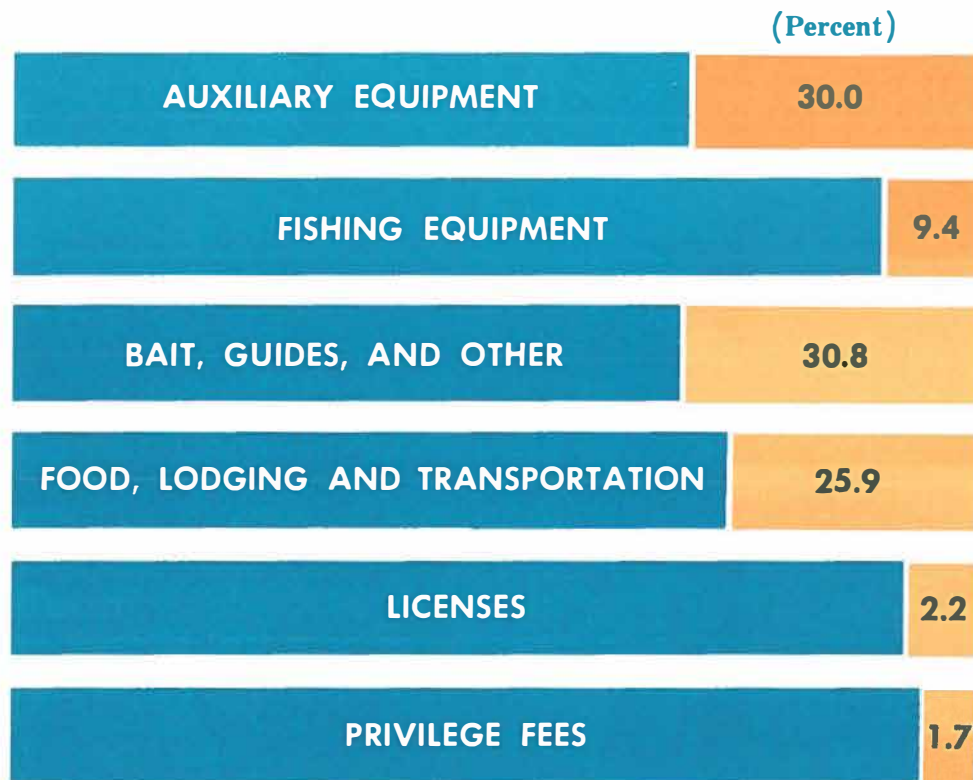
# How Fishermen and Hunters spent \$7.1 billion in 1970

(Percent)

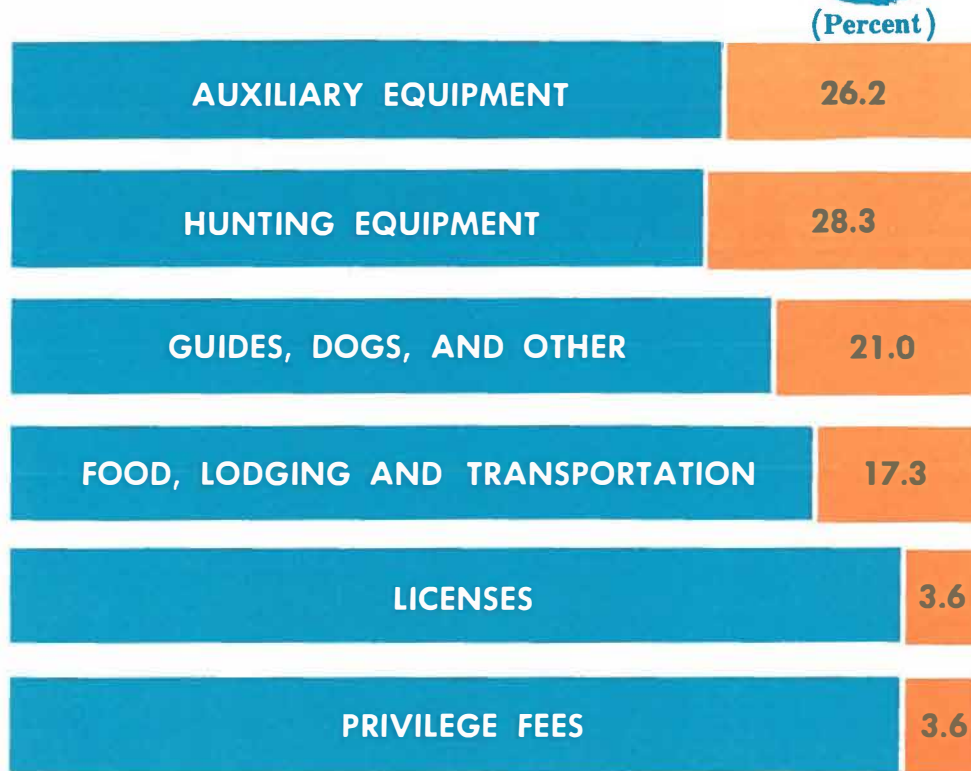
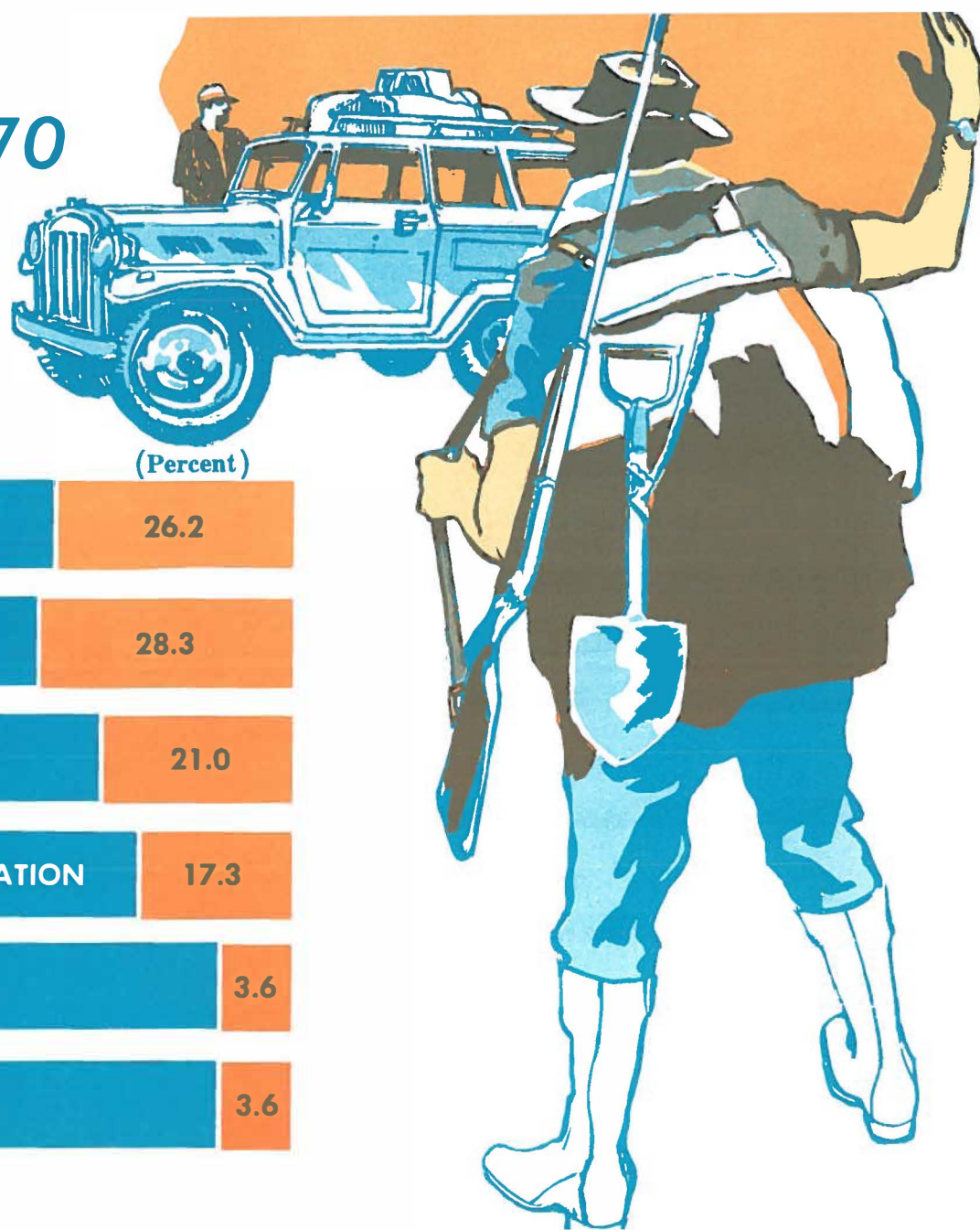




# How Fishermen spent \$5 billion in 1970



# How Hunters spent \$2 billion in 1970



# *Fresh-water Fishing, 1970*

**29,363,000** Fishermen

spent **\$3,734,178,000**

**\$127** a person

on **592,494,000** recreation days

**\$6.30** a day







## Salt-Water Fishing, 1970

	<i>Fishermen</i>	<i>Spent</i>	<i>for Recreation days</i>
Atlantic Coast	5,010,000	\$ 636,380,000	61,032,000
Gulf Coast	2,272,000	404,646,000	35,624,000
Pacific Coast	2,178,000	183,679,000	17,037,000
<b>Total all coasts</b>	<b>9,460,000</b>	<b>\$1,224,705,000</b>	<b>113,694,000</b>

**\$129 each person \$10.77 each day**

# *Waterfowl Hunting, 1970*

**2,894,000 waterfowl hunters**

**Spent \$244,451,000**

**\$84 a person**

**On 25,113,000 recreation days**

**\$9.73 a day**





# *Small Game Hunting, 1970*

**11,671,000 small game hunters  
spent \$945,634,000**

**\$81 a person**

**On 124,041,000 recreation days**

**\$7.62 a day**





# Big Game Hunting, 1970

**7,774,000 big game hunters**

**Spent \$952,563,000**

**\$122 a person**

**On 54,536,000 recreation days**

**\$17.47 a day**

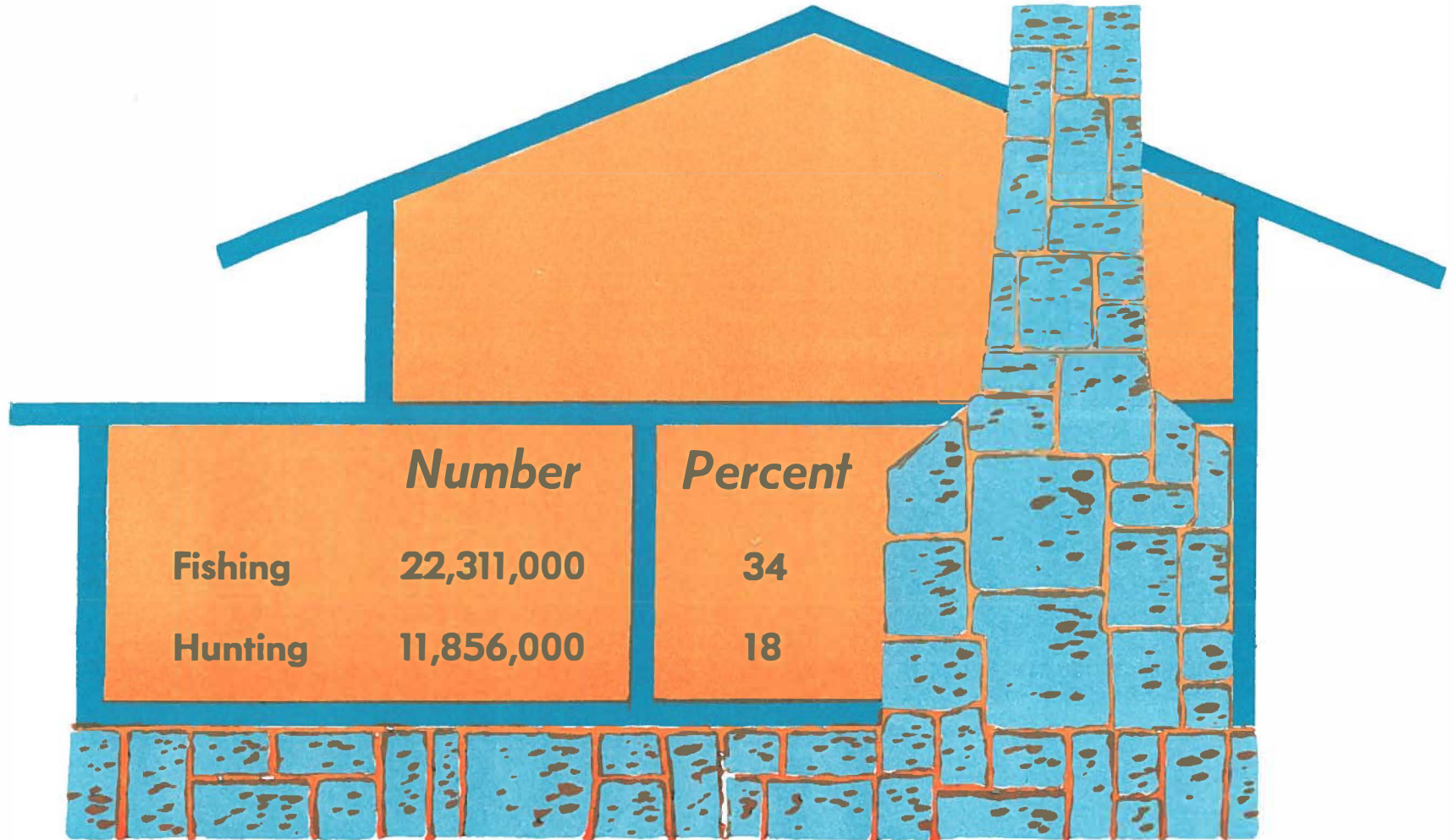


# *Fishing and Hunting Households, 1970*





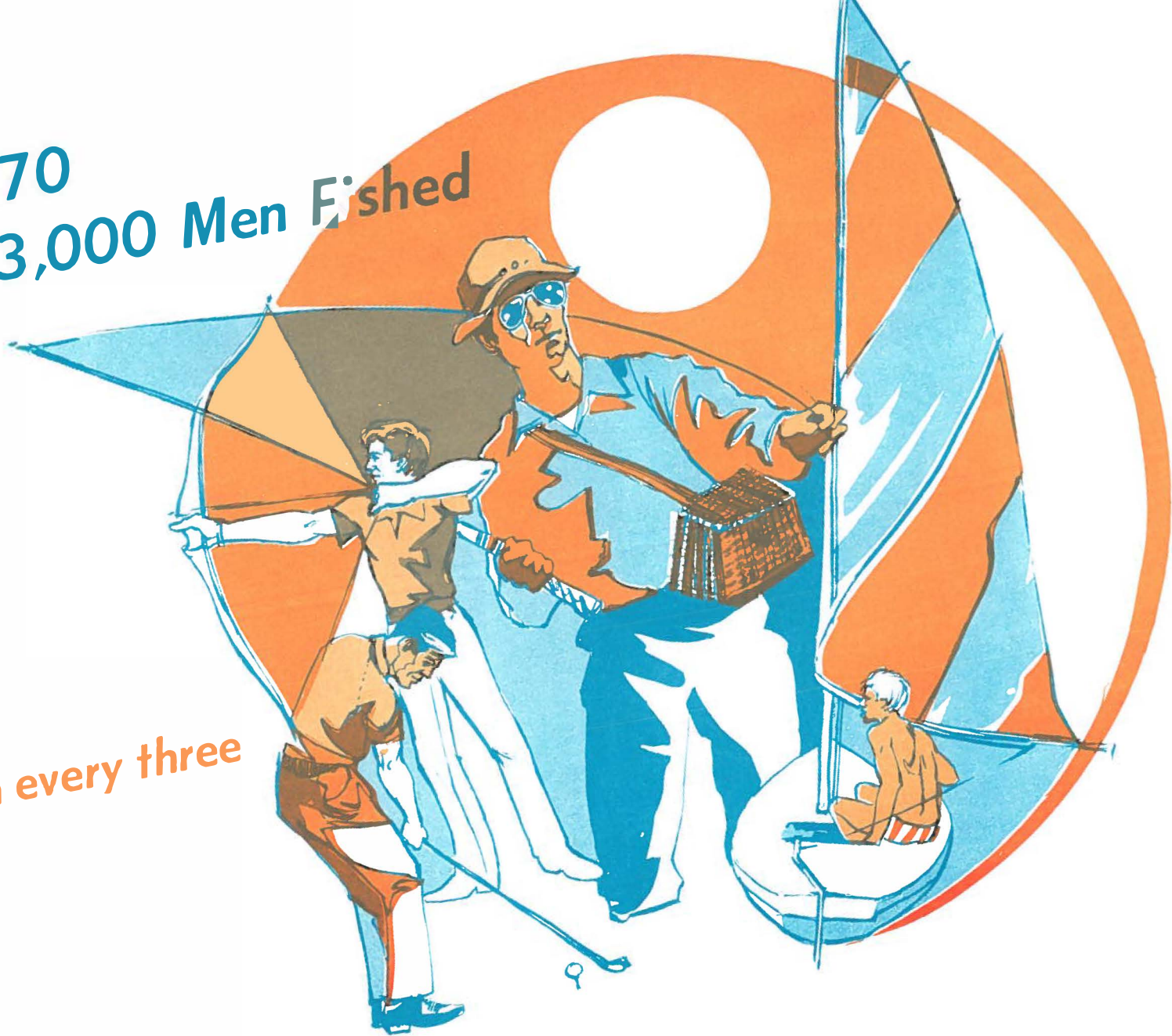
# Households with Fishermen or Hunters





In 1970  
24,073,000 Men Fished

One in every three



***In 1970  
9,085,000  
Women Fished***



***One in every nine.***





*In 1970  
13,467,000  
Men Hunted*

*One in every five*

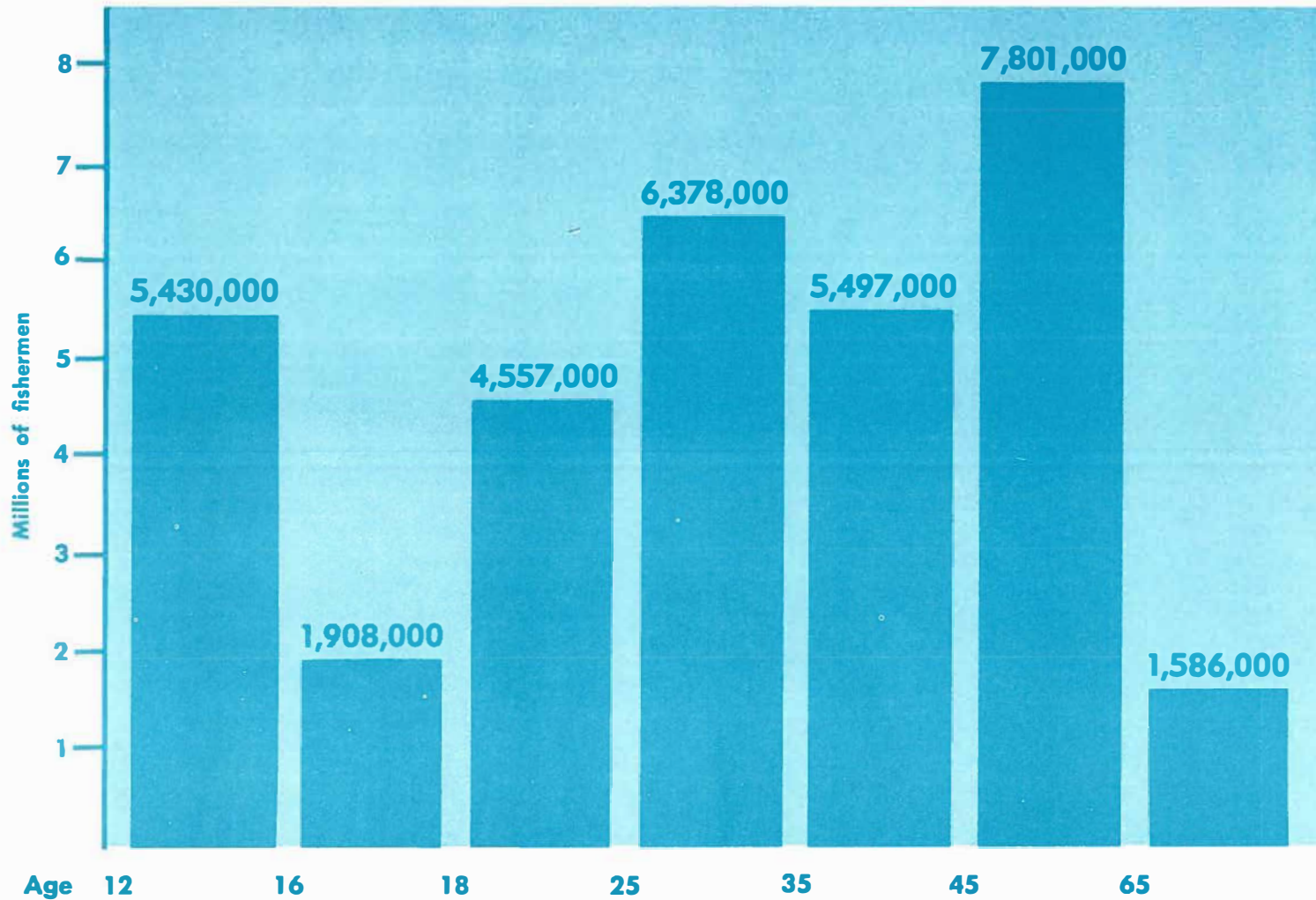


**In 1970  
869,000 Women  
Hunted**

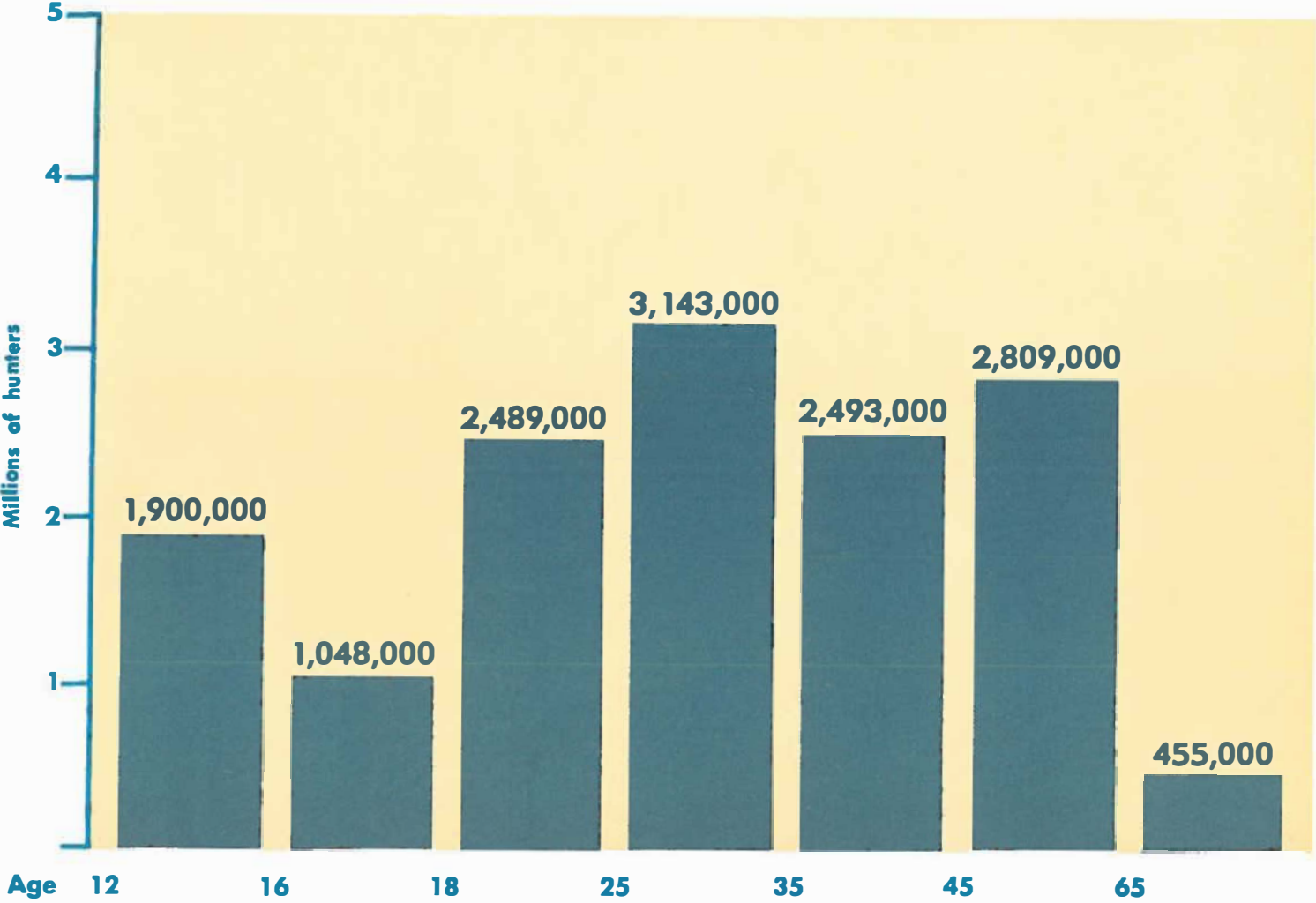
**One in every 94**



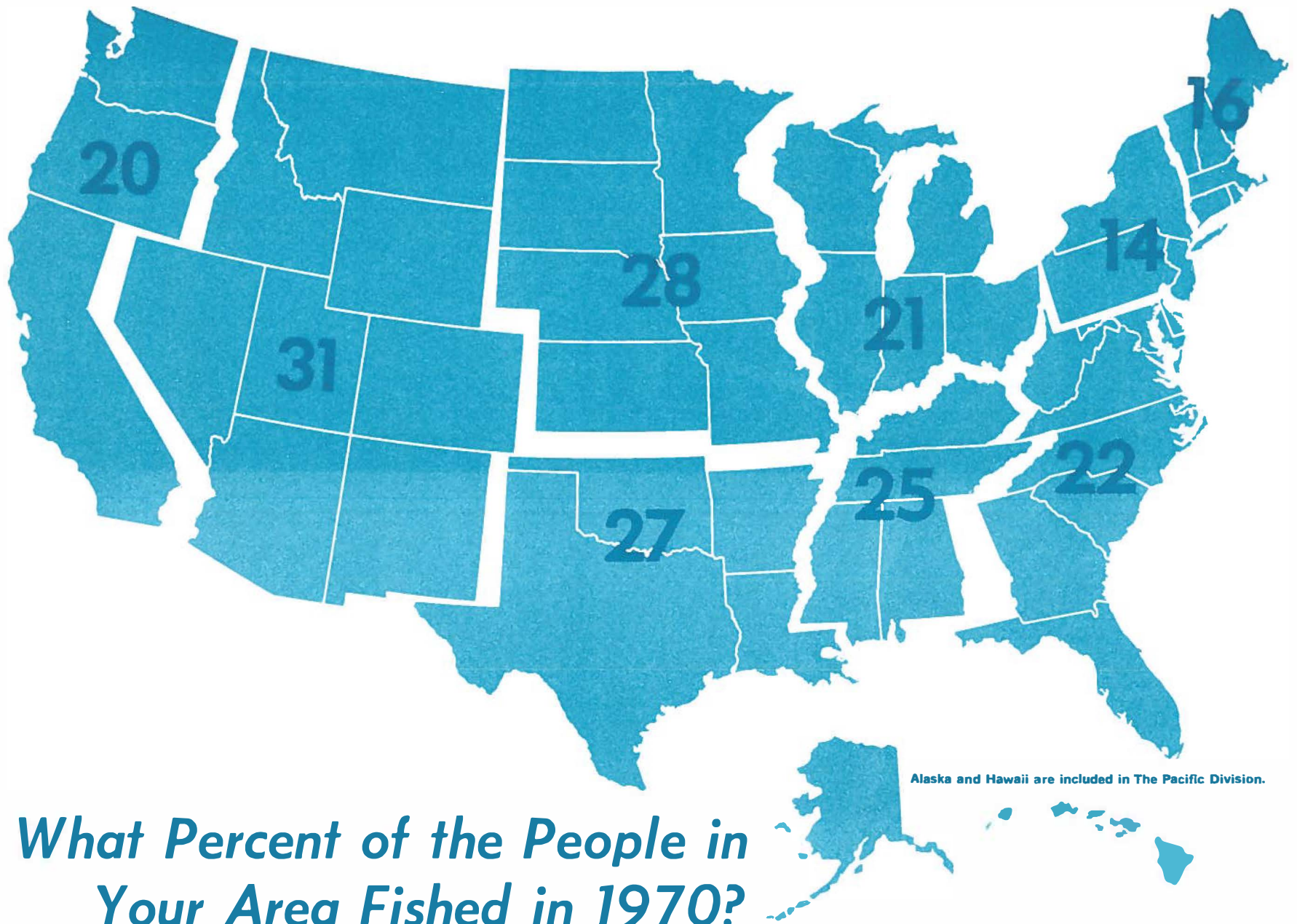
# *Fishermen By Age Groups, 1970*



# Hunters By Age Groups, 1970







*What Percent of the People in  
Your Area Fished in 1970?*

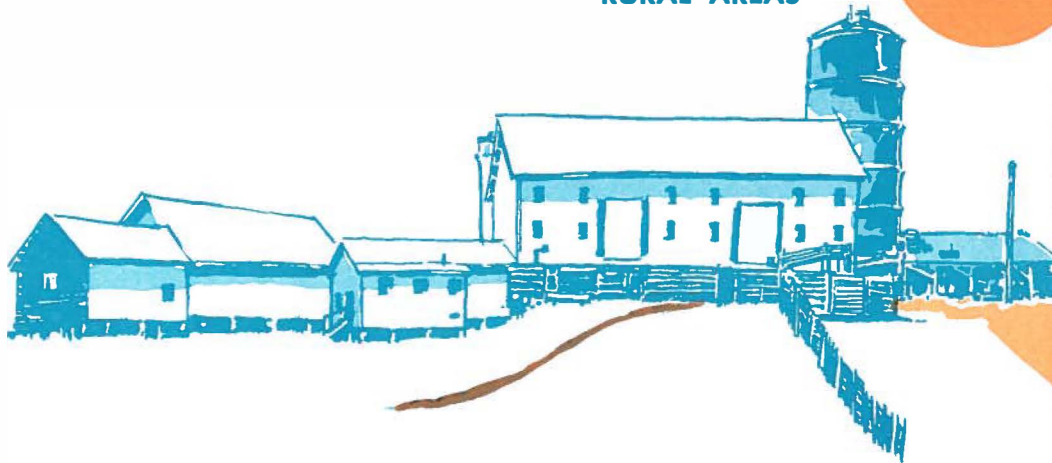
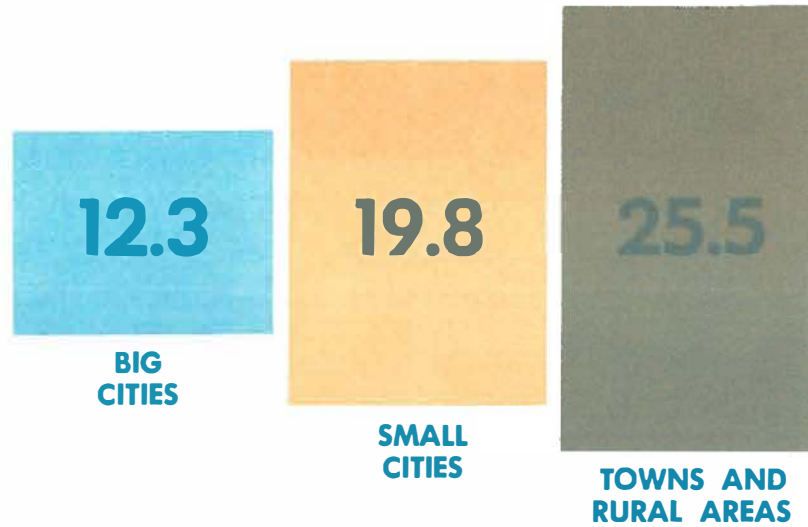
# *What Percent of the People in Your Area Hunted in 1970?*



Alaska and Hawaii are included in the Pacific Division.

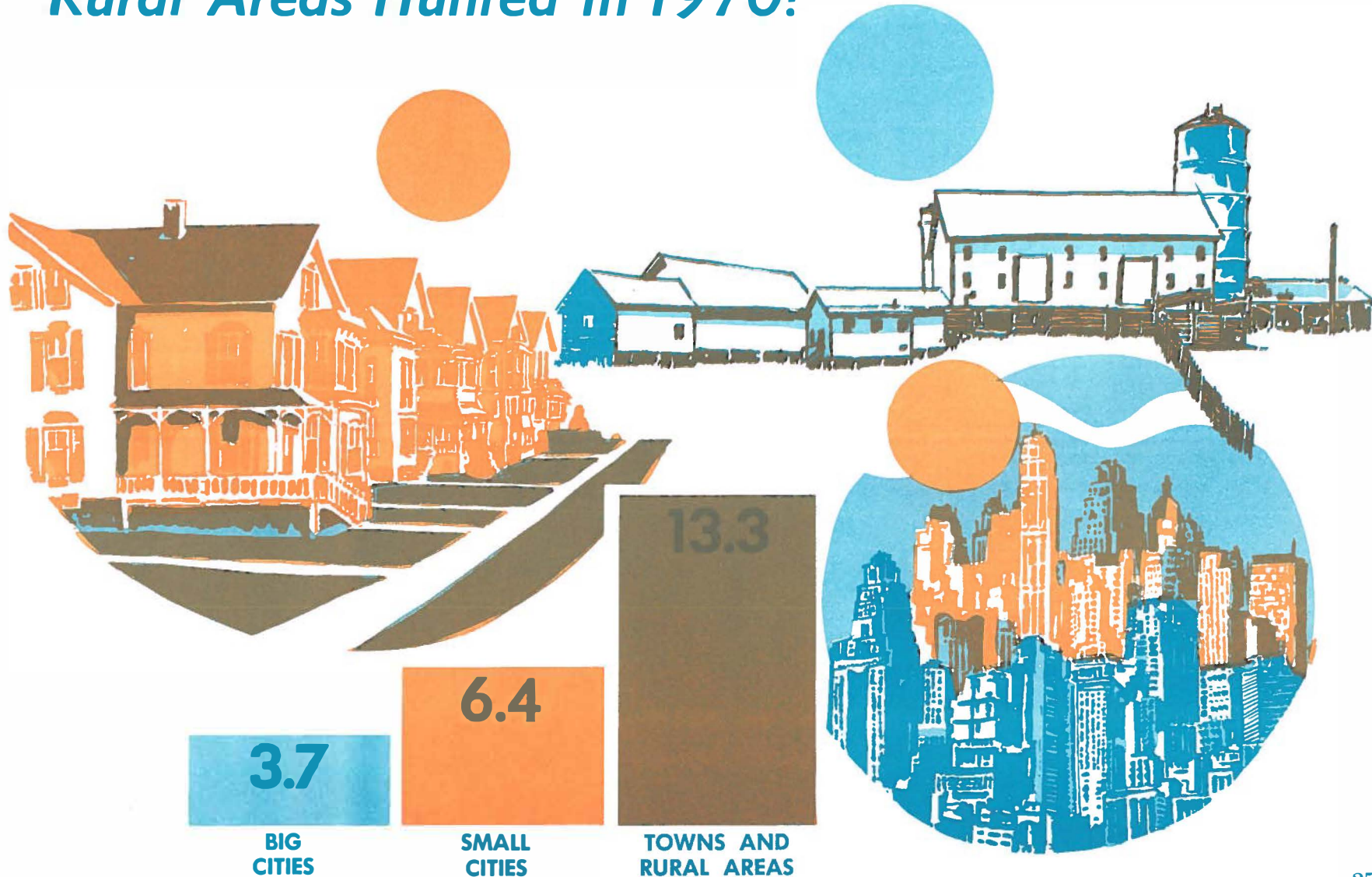


# What Percent of the People in Cities and Towns and Rural Areas Fished in 1970?

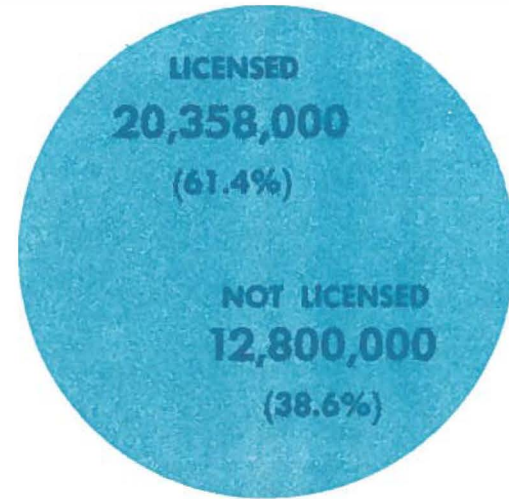




# What Percent of the People in Cities and Towns and Rural Areas Hunted in 1970?



# Licensing of Fishermen





# Licensing of Hunters

LICENSED  
11,274,000  
(78.6%)

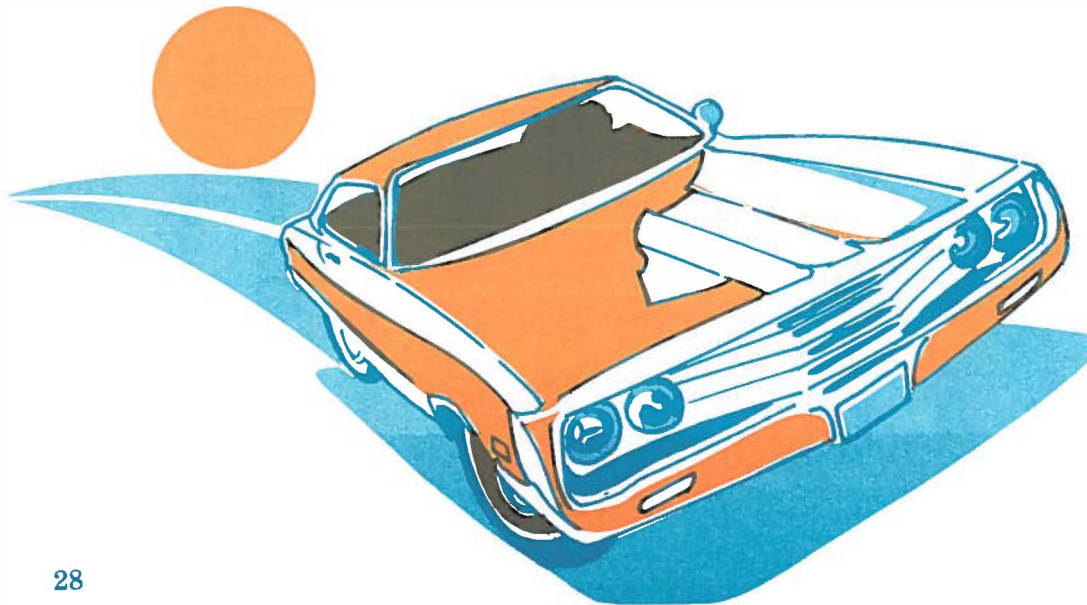
NOT LICENSED  
3,062,000  
(21.4%)





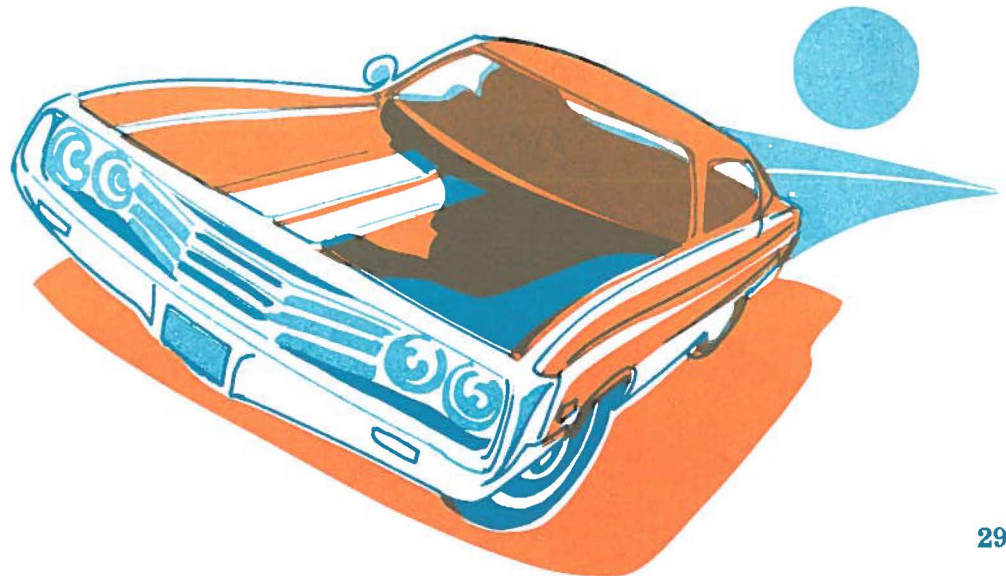
# Miles Traveled to go Fishing, 1970

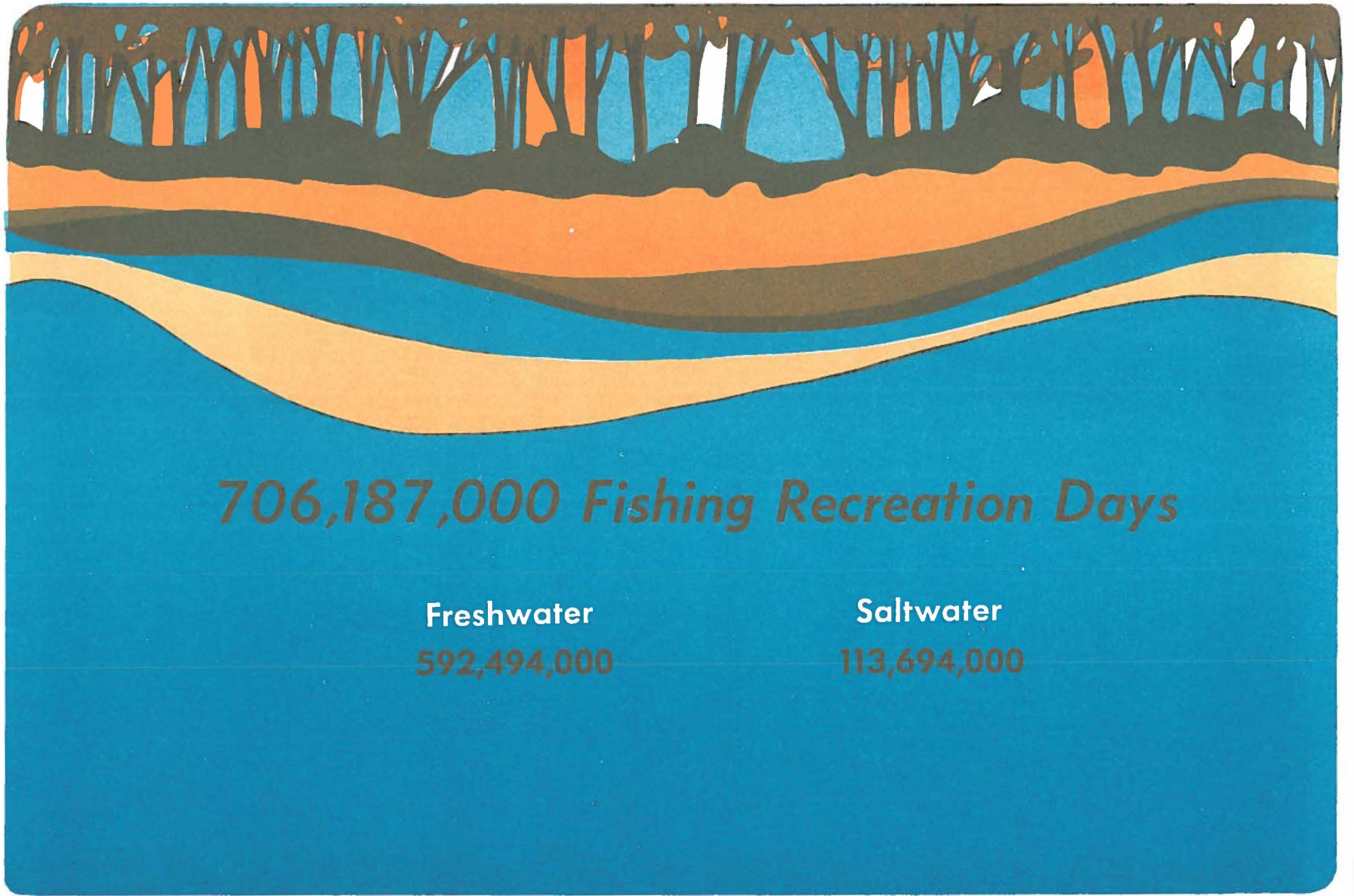
	<u>Miles</u>	Automobile	<u>Passenger-Miles</u>	
	Total		Other	Total
Freshwater	10,461,161,000	23,263,505,000	372,095,000	23,635,600,000
Saltwater	2,573,689,000	5,459,276,000	387,922,000	5,847,198,000
Total	13,034,850,000	28,722,781,000	760,017,000	29,482,798,000



# Miles Traveled to go Hunting, 1970

	<u>Miles</u>	Automobile	<u>Passenger-Miles</u>	Total
	Total		Other	
Waterfowl	567,365,000	1,213,193,000	25,893,000	1,239,086,000
Small game	1,935,897,000	3,958,722,000	111,960,000	4,070,682,000
Big game	1,637,651,000	3,934,818,000	40,366,000	3,975,184,000
Total	4,140,913,000	9,106,733,000	178,219,000	9,284,952,000









## *203,689,000 Hunting Recreation Days*

**Small game**  
**124,041,000**

**Big game**  
**54,536,000**

**Waterfowl**  
**25,113,000**

# Young Sportsmen— 9, 10, and 11 years old

## FISHING

5,345,000  
on  
47,382,000  
Recreation  
Days

Boys 3,479,000  
Days 35,652,000

1,866,000 Girls  
11,730,000 Days

## HUNTING

1,073,000  
on  
6,270,000  
Recreation  
Days

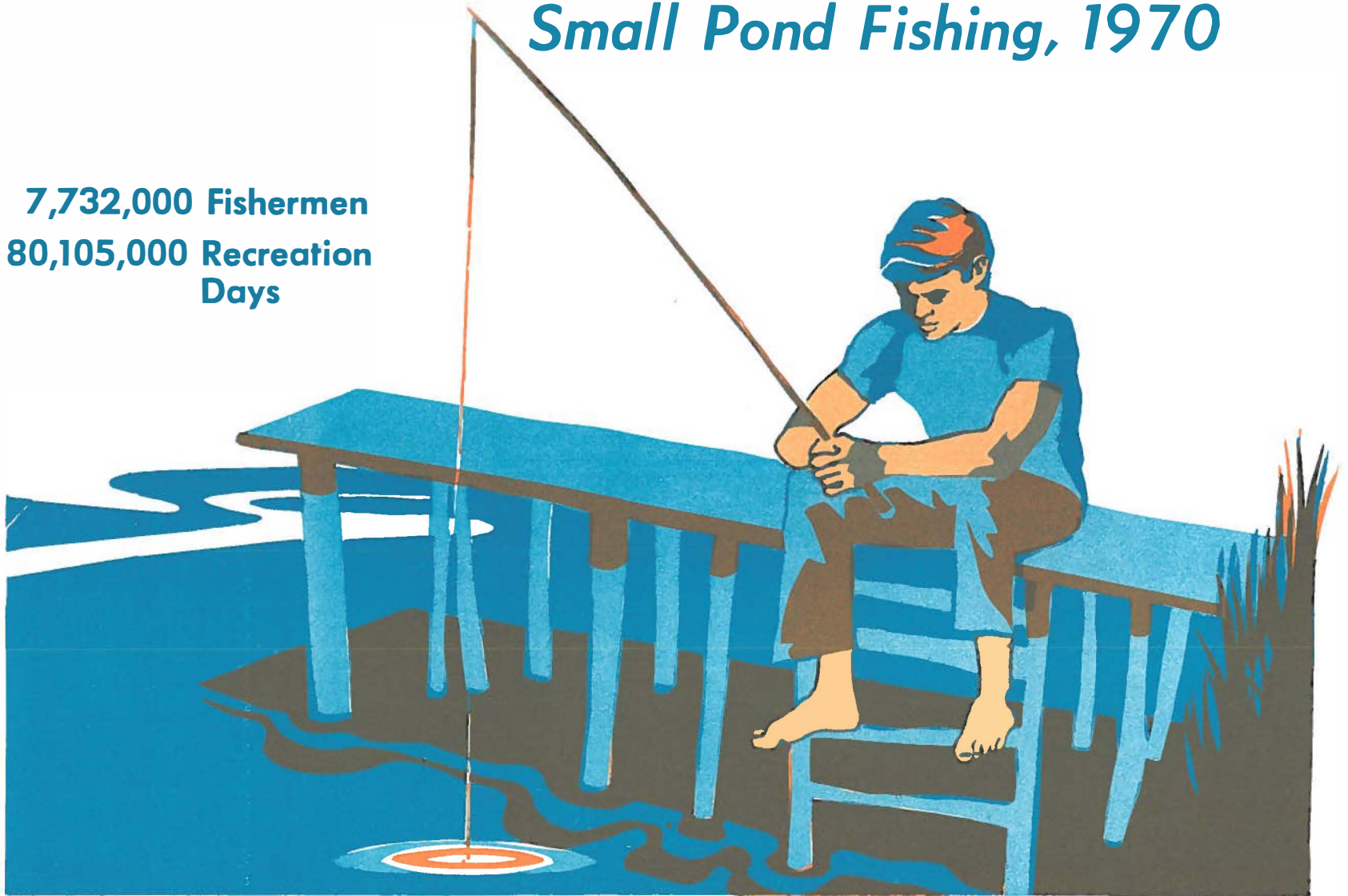
Boys 931,000  
Days 5,688,000

142,000 Girls  
582,000 Days



# *Small Pond Fishing, 1970*

**7,732,000 Fishermen**  
**80,105,000 Recreation**  
**Days**





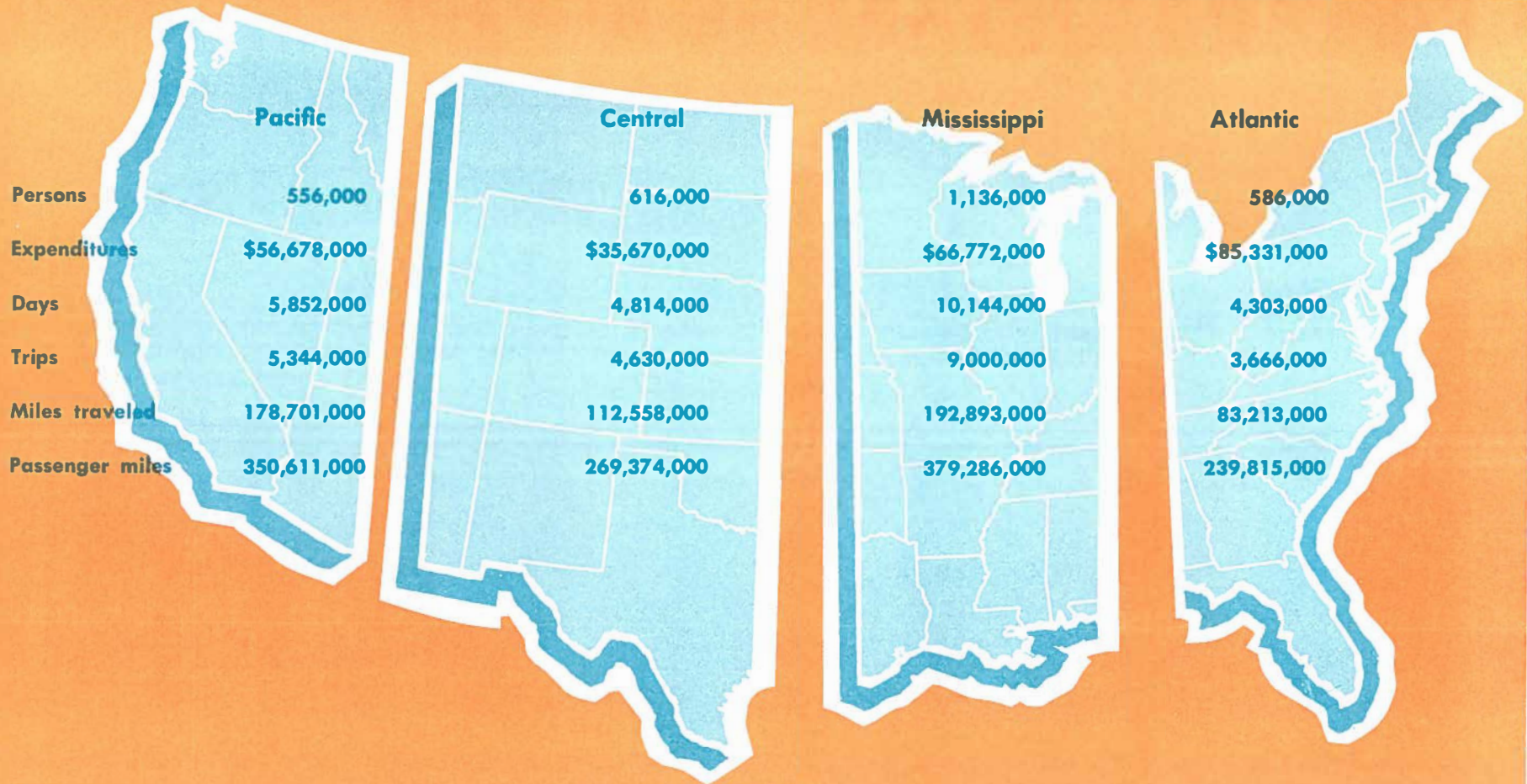
# Hunting on Public Lands



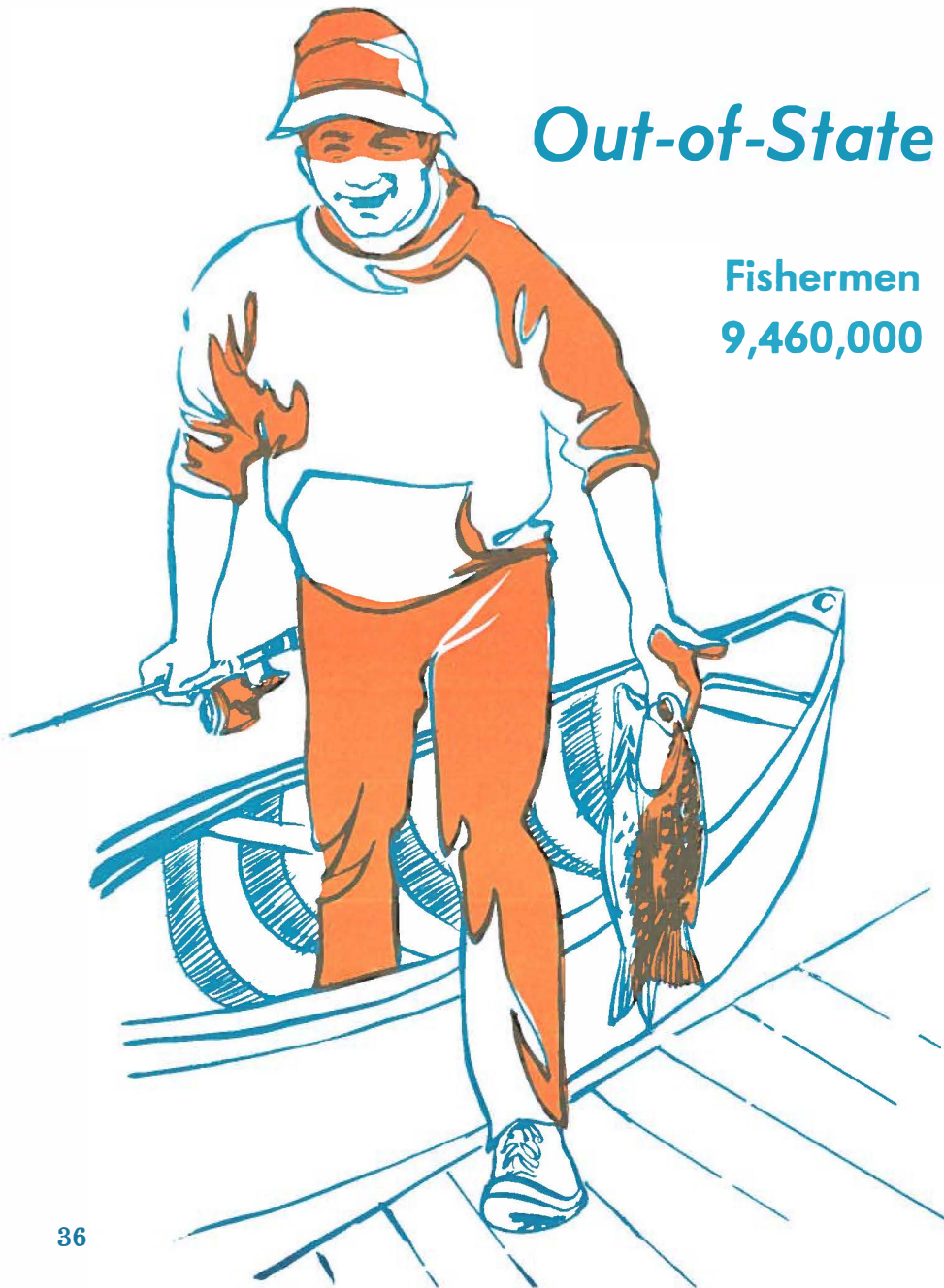
## HUNTERS

All	1,217,000
Most	979,000
About half	1,049,000
Less than half	1,568,000
None	9,530,000

# Waterfowl Hunting in the Flyways



# Out-of-State Fishing



**Fishermen**  
**9,460,000**

**Fresh  
Water**

**6,894,000**

**In one other State**                      **5,927,000**  
**In two other States**                      **813,000**  
**In three other States**                      **114,000**  
**In four or more other States**                      **40,000**

**Salt  
Water**

**3,534,000**

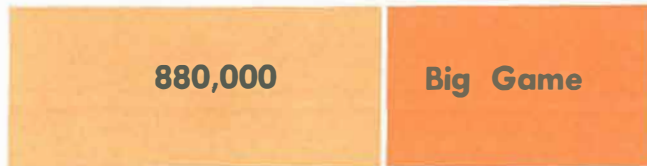
**In one other State**                      **3,157,000**  
**In two other States**                      **316,000**  
**In three other States**                      **61,000**  
**In four or more other States**                      **0**



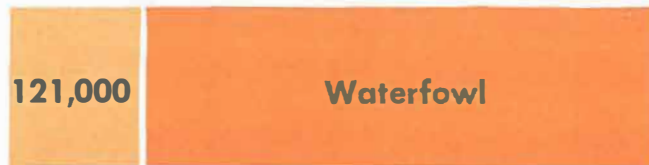
# Out-of-State Hunting



In one other State	943,000
In two other States	61,000
In three other States	0
In four or more other States	0



In one other State	839,000
In two other States	37,000
In three other States	4,000
In four or more other States	0

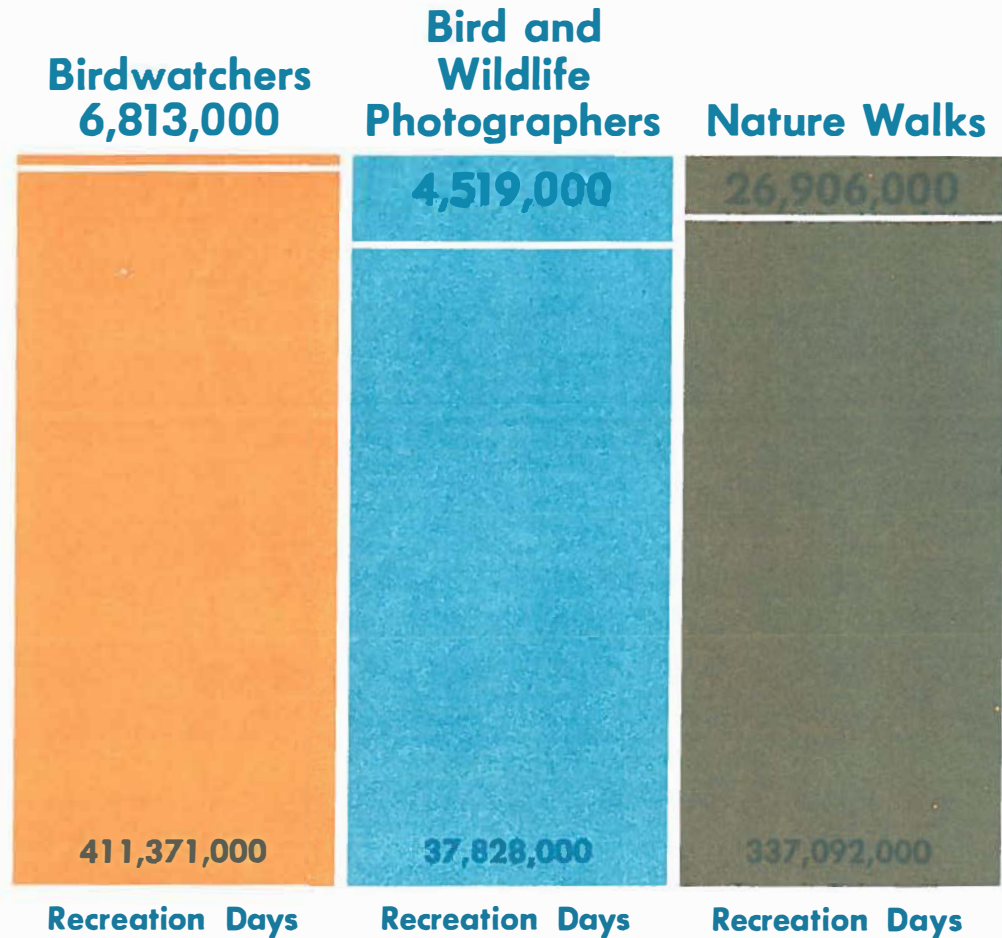


In one other State	113,000
In two other States	8,000
In three other States	0
In four or more other States	0

**Hunters**  
**1,859,000**



# Birds and Other Wildlife Provide Outdoor Activities for . . .



12 years old or older.



# In 1970 What Percent of the People Fished? Who Lived:



IN STANDARD  
METROPOLITAN  
AREAS

18.8%

NONFARM

26.4%

FARM

23.6%

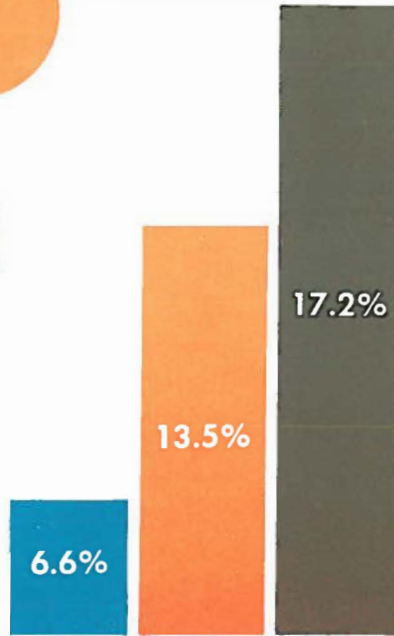


# In 1970 What Percent of the People Hunted?

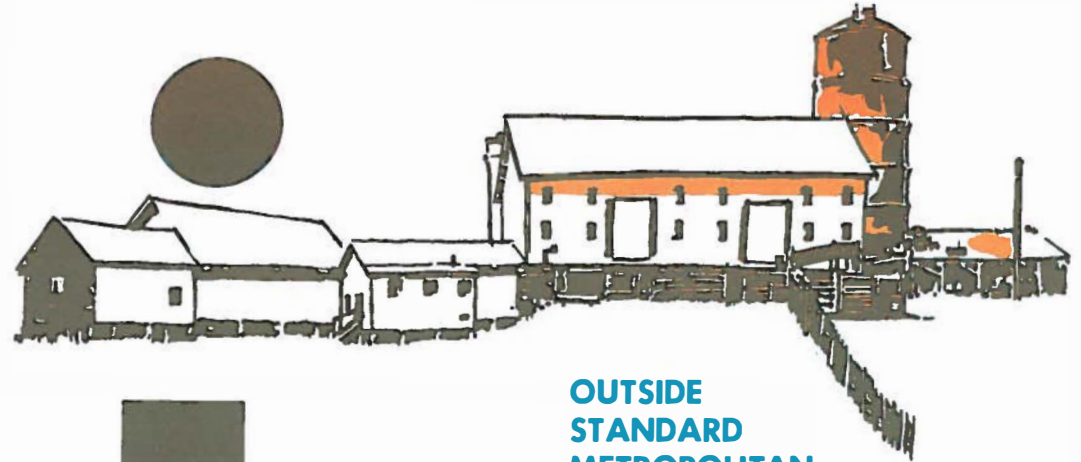
## Who Lived:



**IN STANDARD  
METROPOLITAN  
AREAS**



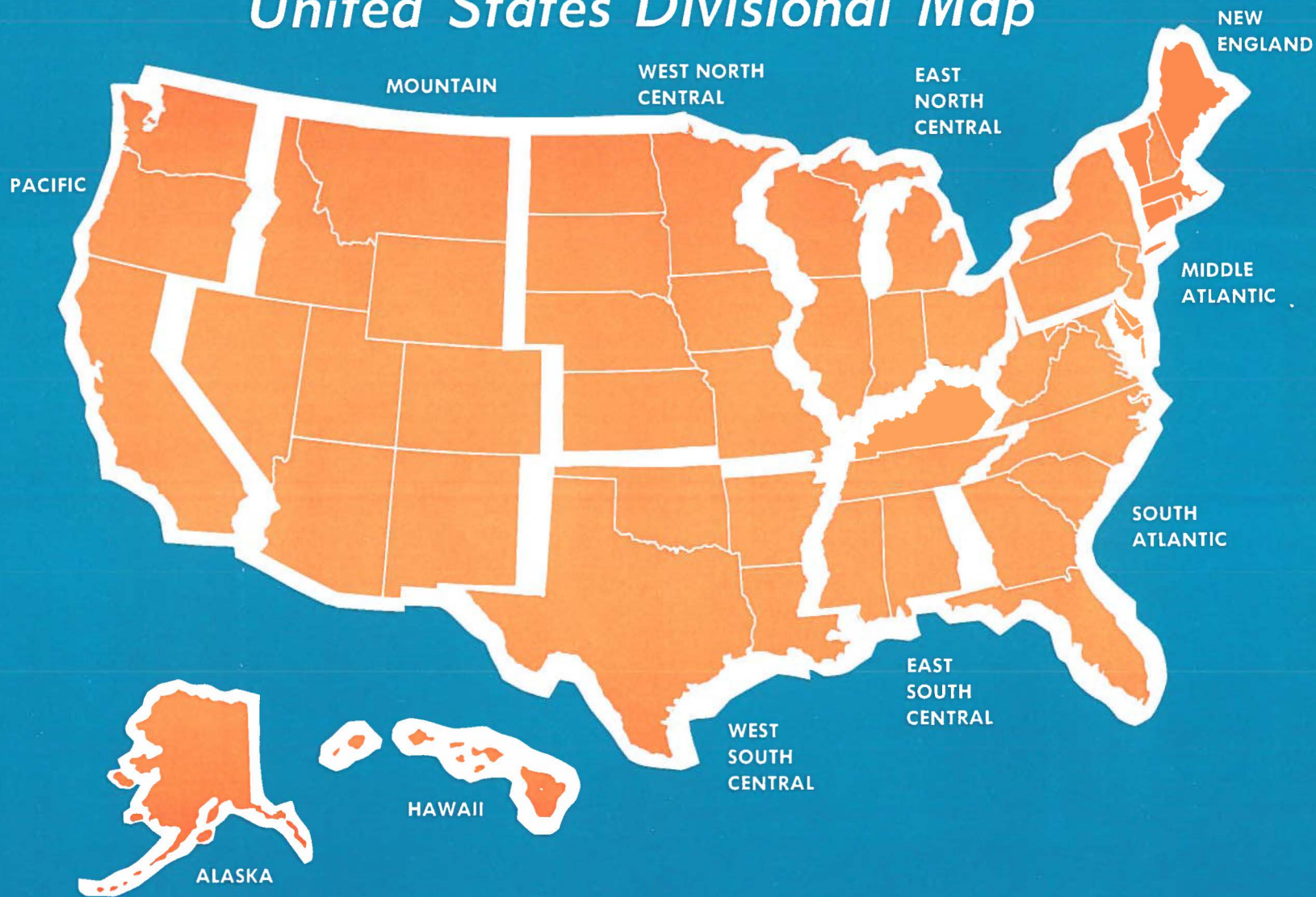
**NONFARM FARM**



**OUTSIDE  
STANDARD  
METROPOLITAN  
AREAS**



# United States Divisional Map



Alaska and Hawaii are included in the Pacific Division.



# **APPENDIX A— *Statistical Tables***

**Detailed data shown in all of the statistical tables in this Appendix do not always add to totals. Differences are due to the independent rounding of each of the estimates at the time the data were computerized and evaluated.**



**Table 1.—Expenditures of Fishermen and Hunters in 1970**

The total number of fishermen and/or hunters (12 and over) in the United States was 36,277,000.

Expenditure item	Number of spenders	Percent of all fishermen and/or hunters	Total spent	Average spent per fisherman and/or hunter	Expenditure item	Number of spenders	Percent of all fishermen and/or hunters	Total spent	Average spent per fisherman and/or hunter
United States, total	<i>Thousands</i> 34,714	95.7	<i>Thousands</i> \$7,101,531	\$195.76	Decoys . . . . .	196	.5	9,282	.26
Food and lodging:					Other hunting equipment . . . . .	3,804	10.5	90,411	2.49
Food . . . . .	18,093	49.9	613,484	16.91	Licenses, tags, and permits:				
Lodging . . . . .	4,486	12.4	197,921	5.46	Licenses . . . . .	24,317	67.0	186,798	5.15
Transportation:					Duck stamps . . . . .	1,366	3.8	4,098	.11
Automobile . . . . .	29,048	80.1	811,876	22.38	Privilege fees and other:				
Bus, rail, air, and water . . . . .	378	1.0	31,197	.86	Annual lease and privilege fees . . . . .	676	1.9	45,214	1.25
Auxiliary equipment:					Daily entrance and privilege fees for fishing . . . . .	2,435	6.7	61,042	1.68
Special fishing and hunting clothing . . . . .	3,395	9.4	61,439	1.69	Daily entrance and privilege fees for hunting on commercial preserves . . . . .	433	1.2	17,678	.49
Tents . . . . .	552	1.5	29,757	.82	Daily entrance and privilege fees for hunting on other private land . . . . .	464	1.3	37,747	1.04
Boats . . . . .	912	2.5	479,653	13.22	Special government fees . . . . .	218	.6	2,261	.06
Motors . . . . .	814	2.2	232,143	6.40	Bait, guide fees, and other trip expenses:				
Other equipment . . . . .	8,242	22.7	1,241,753	34.03	Bait . . . . .	19,176	52.9	567,235	15.64
Fishing and hunting equipment:					Guide fees . . . . .	203	.6	8,839	.24
Fresh-water rods . . . . .	6,211	17.1	87,461	2.42	Head and charter fees . . . . .	2,156	5.9	130,738	3.60
Fresh-water reels . . . . .	5,109	14.1	80,617	2.22	Pack trip fees . . . . .	132	.4	26,077	.72
Salt-water rods . . . . .	1,194	3.3	24,747	.68	Alcoholic beverages . . . . .	7,085	19.5	274,960	7.58
Salt-water reels . . . . .	969	2.7	27,474	.76	Rental equipment . . . . .	4,492	12.4	122,100	3.37
Lures . . . . .	10,666	29.4	84,488	2.33	Other trip expenses . . . . .	10,540	29.1	410,172	11.31
Lines . . . . .	9,497	26.2	37,907	1.04	Magazines . . . . .	6,820	18.8	48,592	1.34
Other fishing equipment . . . . .	15,018	41.4	126,455	3.49	General club dues . . . . .	1,358	3.7	37,307	1.03
Shotguns . . . . .	1,389	3.8	144,296	3.98	Special club dues . . . . .	648	1.8	19,450	.54
Rifles . . . . .	1,300	3.6	135,466	3.73	Boat launching fees . . . . .	1,797	5.0	30,912	.85
Hand guns . . . . .	382	1.1	27,308	.75	Dogs . . . . .	1,967	5.4	238,556	6.58
Shells . . . . .	8,543	23.5	144,261	3.98	Other . . . . .	2,787	7.7	57,010	1.57
Rifle cartridges . . . . .	5,218	14.4	48,620	1.34					
Hand gun cartridges . . . . .	763	2.1	6,729	.18					

**Table 2.—Expenditures of Fishermen in 1970**

The total number of fishermen (12 and over) in the United States was 33,158,000.

Expenditure item	Number of spenders	Percent of all fishermen	Total spent	Average spent per fisherman	Expenditure item	Number of spenders	Percent of all fishermen	Total spent	Average spent per fisherman
	<i>Thousands</i>		<i>Thousands</i>						
United States, total	310407	94.7	\$4,958,883	\$149.55	Other fishing equipment	15,018	45.3	126,455	3.81
Food and lodging:					Licenses, tags, and permits:				
Food	15,352	46.3	477,720	14.41	Licenses	19,874	59.9	108,839	3.28
Lodging	3,795	11.4	166,928	5.03	Privilege fees and other:				
Transportation:					Annual lease and privilege fees	361	1.1	24,637	.74
Automobile	25,462	76.8	613,742	18.51	Daily entrance and privilege fees for fishing	2,435	7.3	61,042	1.84
Bus, rail, air, and water	304	.9	25,000	.75	Special government fees	186	.6	1,740	.05
Auxiliary equipment:					Bait, guide fees, and other trip expenses:				
Special fishing clothing	1,000	3.0	14,441	.44	Bait	19,076	57.8	567,235	17.01
Tents	411	1.2	19,400	.58	Guide fees	160	.5	7,942	.24
Boats	890	2.7	472,147	14.24	Head and charter fees	2,056	6.5	130,738	3.94
Motors	792	2.4	224,226	6.06	Alcoholic beverages	6,027	18.5	223,857	6.05
Other equipment	6,299	19.0	753,071	22.71	Rental equipment	4,401	13.3	119,217	3.59
Fishing equipment:					Other trip expenses	9,644	29.1	340,700	10.27
Fresh-water rods	6,211	18.0	87,061	2.64	Magazines	5,291	16.0	36,356	1.10
Fresh-water reels	5,109	15.4	80,617	2.43	General club dues	930	2.8	33,251	1.00
Salt-water rods	1,194	3.6	24,747	.75	Special club dues	317	1.0	7,855	.24
Salt-water reels	969	2.9	27,474	.83	Boat launching fees	1,762	5.3	30,276	.91
Lures	10,666	32.2	84,488	2.55	Other	2,296	6.9	29,276	.88
Lines	9,497	28.6	37,907	1.14					

**Table 3.—Expenditures of Fresh-Water Fishermen in 1970**

The total number of fresh-water fishermen (12 and over) in the United States was 29,363,000.

Expenditure item	Number of spenders	Percent of all salt-water fishermen	Total spent	Average spent per fisherman	Expenditure item	Number of spenders	Percent of all salt-water fishermen	Total spent	Average spent per fisherman
United States, total	Thousands 27,472	93.6	Thousands \$3,734,178	\$127.17	Other fishing equipment	12,840	43.7	96,980	3.30
Food and lodging:					Licenses, tags, and permits:				
Food	12,476	42.5	342,610	11.67	Licenses	18,699	63.7	103,220	3.51
Lodging	3,021	10.3	131,274	4.47	Privilege fees and other:				
Transportation:					Annual lease and privilege fees	285	1.0	19,506	.66
Automobile	21,991	74.9	504,453	17.18	Daily entrance and privilege fees for fishing	2,054	7.3	540,145	1.84
Bus, rail, air, and water	140	.5	11,787	.40	Special government fees	182	.6	1,714	.06
Auxiliary equipment:					Bait, guide fees, and other trip expenses:				
Special fishing clothing	808	2.8	10,690	.36	Bait	15,716	53.5	421,156	14.34
Tents	355	1.2	17,242	.59	Guide fees	150	.5	6,969	.24
Boats	718	2.4	260,483	8.87	Head and charter fees	447	1.5	48,580	1.65
Motors	668	2.3	172,435	5.87	Alcoholic beverages	4,817	16.4	159,103	5.42
Other equipment	5,321	18.1	660,745	22.50	Rental equipment	3,563	12.1	94,325	3.21
Fishing equipment:					Other trip expense	7,787	26.5	232,575	7.92
Fresh-water rods	6,029	20.5	84,398	2.87	Magazines	4,434	15.1	30,373	1.03
Fresh-water reels	4,947	16.8	77,545	2.64	General club dues	829	2.8	30,217	1.03
Salt-water rods	238	.8	4,146	.14	Special club dues	226	.8	4,719	.16
Salt-water reels	128	.4	7,101	.24	Boat launching fees	1,326	4.5	20,732	.71
Lures	9,407	32.0	74,827	2.55	Other	1,848	6.3	19,282	.66
Lines	8,103	27.6	30,842	1.05					



**Table 4.—Expenditures of Salt-Water Fishermen in 1970**

The total number of salt-water fishermen (12 and over) in the United States was 9,460,000.

Expenditure item	Number of spenders	Percent of all salt-water fishermen	Total spent	Average spent per fisherman	Expenditure item	Number of spenders	Percent of all salt-water fishermen	Total spent	Average spent per fisherman
United States, total	Thousands 8,445	89.3	Thousands \$1,224,705	\$129.46	Other fishing equipment	2,564	27.1	29,474	3.12
Food and lodging:					Licenses, tags, and permits:				
Food	4,366	46.1	135,109	14.28	Licenses	1,403	14.8	5,619	.59
Lodging	970	10.3	35,654	3.77	Privilege fees and other:				
Transportation:					Annual lease and privilege fees	76	.8	5,131	.54
Automobile	6,083	64.3	109,288	11.55	Daily entrance and privilege fees for fishing	315	3.3	6,898	.73
Bus, rail, air, and water	168	1.8	13,213	1.40	Special government fees	4	0	25	0
Auxiliary equipment:					Bait, guide fees, and other trip expenses:				
Special fishing clothing	192	2.0	3,751	.40	Bait	5,501	58.2	146,078	15.44
Tents	56	.6	2,157	.33	Guide fees	21	.2	972	.10
Boats	172	1.8	211,664	22.37	Head and charter fees	1,717	18.1	82,158	8.68
Motors	123	1.3	51,791	5.47	Alcoholic beverages	1,960	20.7	64,754	6.84
Other equipment	1,076	11.4	92,426	9.77	Rental equipment	928	9.8	24,892	2.63
Fishing equipment:					Other trip expense	2,625	27.7	108,125	11.43
Fresh-water rods	181	1.9	3,063	.32	Magazines	858	9.1	5,982	.63
Fresh-water reels	162	1.7	3,072	.32	General club dues	101	1.1	3,033	.32
Salt-water rods	956	10.1	20,600	2.18	Special club dues	91	1.0	3,136	.33
Salt-water reels	840	8.9	20,374	2.15	Boat launching fees	436	4.6	9,544	1.01
Lures	1,259	13.3	9,661	1.02	Other	455	4.8	9,994	1.06
Lines	1,394	14.7	7,065	.75					

**Table 5.—Expenditures of Atlantic Coast Salt-Water Fishermen in 1970**

The total number of salt-water fishermen (12 and over) on the Atlantic Coast was 5,010,000.

Expenditure item	Number of Spenders	Percent of all Atlantic Coast salt-water fishermen	Total spent	Average spent per fisherman	Expenditure item	Number of Spenders	Percent of all Atlantic Coast salt-water fishermen	Total spent	Average spent per fisherman
	<i>Thousands</i>		<i>Thousands</i>						
United States, total.....	4,340	86.6	\$636,380	\$127.02	Lines.....	735	14.7	3,370	.67
Food and lodging:					Other fishing equipment.....	1,283	25.6	13,479	2.69
Food.....	2,065	41.2	74,226	14.82	Licenses, tags, and permits:				
Lodging.....	426	8.6	17,972	3.59	Licenses.....	224	4.5	1,243	.25
Transportation:					Privilege fees and other:				
Automobile.....	2,984	59.6	54,295	10.84	Annual lease and privilege fees.....	32	.6	4,192	.84
Bus, rail, air, and water.....	133	2.7	11,957	2.39	Daily entrance and privilege fees for fishing.....	178	3.5	2,333	.47
Auxiliary equipment:					Special government fees.....	4	.1	25	0
Special fishing clothing.....	92	1.8	2,044	.41	Bait, guide fees, and other trip expenses:				
Tents.....	17	.3	915	.18	Bait.....	2,972	59.3	83,888	16.74
Boats.....	96	1.9	88,356	17.64	Guide fees.....	16	.3	928	.19
Motors.....	76	1.5	32,517	6.49	Head and charter fees.....	828	16.5	44,039	8.79
Other equipment.....	573	11.4	41,094	8.20	Alcoholic beverage.....	962	19.2	43,152	8.79
Fishing equipment:					Rental equipment.....	525	10.5	16,956	3.38
Fresh-water rods.....	106	2.1	1,977	.39	Other trip expense.....	1,347	26.9	54,761	10.93
Fresh-water reels.....	94	1.9	2,117	.42	Magazines.....	471	9.4	3,423	.68
Salt-water rods.....	498	9.9	10,071	2.03	General club dues.....	53	1.0	1,590	.32
Salt-water reels.....	446	8.9	9,862	1.97	Special club dues.....	49	1.0	1,968	.39
Lures.....	727	14.5	5,995	1.20	Boat launching fees.....	206	4.1	5,190	1.04
					Other.....	208	4.2	2,346	.47

**Table 6.—Expenditures of Gulf Coast Salt-Water Fishermen in 1970**

The total number of salt-water fishermen (12 and over) on the Gulf Coast was 2,272,000.

Expenditure item	Number of Spenders	Percent of all Gulf-Coast salt-water fishermen	Total Spent	Average spent per fisherman	Expenditure item	Number of Spenders	Percent of all Gulf-Coast salt-water fishermen	Total Spent	Average spent per fisherman
United States, total	2,151	94.7	\$404,646	\$178.10	Other fishing equipment	685	30.1	10,301	4.53
Food and lodging:					Licenses, tags, and permits:				
Food	1,176	51.7	41,267	18.06	Licenses	538	23.7	1,513	.67
Lodging	316	13.9	12,982	5.71	Privilege fees and other:				
Transportation:					Annual lease and privilege fees	35	1.6	375	.16
Automobile	1,570	69.1	35,336	15.65	Daily entrance and privilege fees for fishing	113	5.0	904	.40
Bus, rail, air, and water	28	1.2	249	.11	Special government fees	0	0	0	0
Auxiliary equipment:					Bait, guide fees, and other trip expenses:				
Special fishing clothing	49	2.1	1,107	.49	Bait	1,445	63.6	47,661	20.98
Tents	19	.9	860	.38	Guide fees	4	.2	44	.02
Boats	55	2.4	96,811	42.61	Head and charter fees	355	15.6	20,838	9.07
Motors	32	1.4	16,347	7.19	Alcoholic beverages	499	21.9	12,884	5.67
Other equipment	311	13.7	27,082	11.92	Rental equipment	220	9.7	4,241	1.87
Fishing equipment:					Other trip expense	826	36.4	43,061	18.95
Fresh-water rods	41	1.8	567	.25	Magazines	235	10.3	1,790	.79
Fresh-water reels	27	1.2	485	.21	General club dues	31	1.4	1,284	.56
Salt-water rods	288	12.7	7,284	3.21	Special club dues	16	.7	823	.36
Salt-water reels	222	9.8	6,825	3.00	Boat launching fees	151	6.6	3,248	1.43
Lures	308	13.6	2,032	.89	Other	139	6.0	4,129	1.82
Lines	363	16.0	2,317	1.02					



**Table 7.—Expenditures of Pacific Coast Salt-Water Fishermen in 1970**

The total number of salt-water fishermen (12 and over) on the Pacific Coast was 2,178,000.

Expenditure item	Number of spenders	Percent of all Pacific Coast salt-water fishermen	Total spent	Average spent per fisherman	Expenditure item	Number of spenders	Percent of all Pacific Coast salt-water fishermen	Total spent	Average spent per fisherman
United States, total	1,954	89.7	\$183,679	\$84.33	Other fishing equipment	597	27.4	5,695	2.61
Food and lodging:					Licenses, tags, and permits:				
Food	1,125	51.7	19,616	9.01	Licenses	641	29.4	2,863	1.31
Lodging	228	10.5	4,700	2.16	Privilege fees and other:				
Transportation:					Annual lease and privilege fees	8	.4	564	.26
Automobile	1,530	70.2	19,658	9.03	Daily entrance and privilege fees for fishing	24	1.1	3,660	1.68
Bus, rail, air, and water	8	.4	1,007	.46	Special government fees	0	0	0	0
Auxiliary equipment:					Bait, guide fees, and other trip expenses:				
Special fishing clothing	52	2.4	600	.27	Bait	1,084	49.8	14,529	6.67
Tents	20	.9	382	.17	Guide fees	0	0	0	0
Boats	21	1.0	26,498	12.17	Head and charter fees	534	24.5	17,281	7.93
Motors	16	.7	2,926	1.34	Alcoholic beverages	499	22.9	8,717	4.00
Other equipment	192	8.8	24,251	11.13	Rental equipment	183	8.4	3,695	1.70
Fishing equipment:					Other trip expense	452	20.7	10,303	4.73
Fresh-water rods	34	1.6	519	.24	Magazines	152	7.0	770	.35
Fresh-water reels	41	1.9	470	.22	General club dues	18	.8	159	.07
Salt-water rods	170	7.8	3,146	1.44	Special club dues	26	1.2	345	.16
Salt-water reels	172	7.9	3,688	1.69	Boat launching fees	79	3.6	1,107	.51
Lures	224	10.3	1,634	.75	Other	108	4.9	3,519	1.62
Lines	296	13.6	1,378	.63					

**Table 8.—Expenditures of Hunters in 1970**

The total number of hunters (12 and over) in the United States was 14,336,000.

Expenditure item	Number of spenders	Percent of all hunters	Total spent	Average spent per hunter	Expenditure item	Number of spenders	Percent of all hunters	Total spent	Average spent per hunter
United States, total	<i>Thousands</i> 13,990	97.6	<i>Thousands</i> \$2,142,648	\$149.46	Licenses, tags, and permits:				
Food and lodging:					Licenses	9,741	67.9	77,959	5.43
Food	6,016	42.0	135,764	9.47	Duck stamps	1,366	9.6	4,098	.29
Lodging	957	6.7	30,993	2.06	Privilege fees and other:				
Transportation:					Annual lease and privilege fees	315	2.2	20,577	1.43
Automobile	11,572	80.7	198,135	13.82	Daily entrance and privilege fees for hunting on commercial preserves	433	3.0	17,678	1.23
Bus, rail, air, and water	87	.6	6,196	.43	Daily entrance and privilege fees for hunting on other private land	464	3.2	37,747	2.63
Auxiliary equipment:					Special government fees	51	.4	521	.04
Special hunting clothing	2,497	17.4	46,998	3.28	Guide fees and other trip expenses:				
Tents	141	1.0	10,357	.72	Guide fees	43	.3	897	.06
Boats	23	.2	7,506	.52	Pack trip fees	132	.9	26,077	1.82
Motors	22	.2	7,916	.55	Alcoholic beverages	2,216	15.6	51,004	3.56
Other equipment	2,814	19.6	488,583	34.08	Rental equipment	110	.8	2,883	.20
Hunting equipment:					Other trip expense	1,880	13.1	69,472	4.85
Shotguns	1,389	9.7	144,296	10.06	Magazines	1,529	10.7	12,236	.85
Rifles	1,300	9.1	135,466	9.45	General club dues	428	3.0	4,057	.28
Hand guns	382	2.7	27,308	1.90	Special club dues	331	2.3	11,594	.81
Shells	8,543	59.6	144,261	10.06	Boat launching fees	35	.2	636	.04
Rifle cartridges	5,218	36.4	48,620	3.39	Dogs	1,967	13.7	238,556	16.64
Hand gun cartridges	763	5.3	6,729	.47	Other	513	3.6	27,734	1.93
Decoys	196	1.4	9,282	.65					
Other hunting equipment	3,804	26.5	90,411	6.31					

**Table 9.—Expenditures of Big-game Hunters in 1970**

The total number of big-game hunters (12 and over) in the United States was 7,774,000.

Expenditure item	Number of spenders	Percent of all big-game hunters	Total spent	Average spent per big-game hunter	Expenditure item	Number of spenders	Percent of all big-game hunters	Total spent	Average spent per big-game hunter
United States, total...	<i>Thousands</i> 7,147	91.9	<i>Thousands</i> \$952,563	\$122.53	Licenses, tags, and permits:				
Food and lodging:					Licenses.....	4,877	62.7	45,619	5.87
Food.....	3,261	42.0	62,710	8.07	Privilege fees and other:				
Lodging.....	660	8.6	24,128	3.00	Annual lease and privilege fees.....	225	2.9	14,357	1.85
Transportation:					Daily entrance and privilege fees for hunting on commercial preserves.....	176	2.3	3,785	.49
Automobile.....	5,660	72.8	79,864	10.27	Daily entrance and privilege fees for hunting on other private land.....	261	3.4	13,055	1.68
Bus, rail, air, and water.....	31	.4	2,501	.32	Special government fees.....	36	.5	305	.04
Auxiliary equipment:					Guide fees and other trip expenses:				
Special hunting clothing.....	1,306	16.8	29,069	3.74	Guide fees.....	39	.5	796	.10
Tents.....	57	.7	4,620	.59	Pack trip fees.....	111	1.4	23,157	2.98
Motors.....	4	.1	403	.05	Alcoholic beverages.....	1,401	18.0	25,613	3.29
Other equipment.....	1,393	17.9	316,926	40.77	Rental equipment.....	19	.2	1,685	.22
Hunting equipment:					Other trip expense.....	956	12.3	34,194	4.40
Shotguns.....	177	2.3	20,417	2.63	Magazines.....	575	7.4	4,846	.62
Rifles.....	780	10.0	99,043	12.74	General club dues.....	129	1.7	1,083	.14
Hand guns.....	89	1.2	6,553	.84	Special club dues.....	158	2.0	4,657	.60
Shells.....	908	11.7	13,617	1.75	Boat launching fees.....	7	.1	22	0
Rifle cartridges.....	3,099	39.9	30,631	3.90	Dogs.....	204	2.6	25,732	3.31
Hand gun cartridges.....	182	2.3	1,571	.20	Other.....	317	4.1	17,813	2.29
Decoys.....	0	0	0	0					
Other hunting equipment.....	1,396	18.0	43,789	5.63					



**Table 10.—Expenditures of Small-game Hunters in 1970**

The total number of small-game hunters (12 and over) in the United States was 11,671,000.

Expenditure item	Number of spenders	Percent of all small-game hunters	Total Spent	Average spent per small-game hunter	Expenditure item	Number of spenders	Percent of all small-game hunters	Total Spent	Average spent per small-game hunter
	<i>Thousands</i>		<i>Thousands</i>						
United States, total	10,375	88.9	\$945,634	\$81.02	Licenses, tags, and permits:				
Food and lodging:					Licenses	5,335	45.7	27,587	2.36
Food	3,060	26.2	47,706	4.09	Privilege fees and other:				
Lodging	239	2.0	5,215	.45	Annual lease and privilege fees	46	.4	1,933	.17
Transportation:					Daily entrance and privilege fees for hunting on commercial preserves	158	1.4	9,798	.84
Automobile	7,036	60.3	91,197	7.81	Daily entrance and privilege fees for hunting on other private land	130	1.1	14,757	1.26
Bus, rail, air, and water	47	.4	2,323	.20	Special government fees	15	.1	116	.01
Auxiliary equipment:					Guide fees and other trip expenses:				
Special hunting clothing	957	8.2	14,185	1.21	Guide fees	4	0	100	.01
Tents	70	.6	5,407	.46	Pack trip fees	10	.1	302	.03
Boats	7	.1	1,086	.09	Alcoholic beverages	878	7.6	16,108	1.38
Motors	7	.1	2,267	.19	Rental equipment	41	.3	684	.06
Other equipment	1,292	11.1	158,295	13.56	Other trip expense	842	7.2	21,030	1.80
Hunting equipment:					Magazines	817	7.0	6,184	.53
Shotguns	1,050	9.0	97,780	8.38	General club dues	245	2.1	2,187	.18
Rifles	508	4.3	35,591	3.05	Special club dues	129	1.1	3,382	.29
Hand guns	284	2.4	20,131	1.72	Boat launching fees	16	.1	48	0
Shells	6,629	56.8	108,293	9.28	Dogs	1,616	13.8	180,572	15.47
Rifle cartridges	2,062	17.7	17,594	1.51	Other	139	1.2	8,583	.73
Hand gun cartridges	548	4.7	4,687	.40					
Decoys	13	.1	270	.02					
Other hunting equipment	2,366	20.3	40,223	3.45					

**Table 11.—Expenditures of Waterfowl Hunters in 1970**

The total number of waterfowl hunters (12 and over) in the United States was 2,894,000.

Expenditure item	Number of spenders	Percent of all waterfowl hunters	Total spent	Average spent per waterfowl hunter	Expenditure item	Number of spenders	Percent of all waterfowl hunters	Total spent	Average spent per waterfowl hunter
United States, total	2,053	71.0	\$244,451	\$84.47	Licenses, tags, and permits:				
Food and lodging:					Licenses	778	26.9	4,753	1.65
Food	821	28.4	25,348	8.76	Duck stamps	1,366	47.2	4,098	1.42
Lodging	103	3.6	1,649	.57	Privilege fees and other:				
Transportation:					Annual lease and privilege fees	44	1.5	4,287	1.48
Automobile	1,609	55.6	27,074	9.35	Daily entrance and privilege fees for hunting on commercial preserves	111	3.8	4,095	1.41
Bus, rail, air, and water	12	.4	1,372	.47	Daily entrance and privilege fees for hunting on other private land	85	2.9	9,935	3.43
Auxiliary equipment:					Special government fees	8	.3	101	.03
Special hunting clothing	238	8.2	3,744	1.29	Guide fees and other trip expenses:				
Tents	14	.5	330	.11	Pack trip fees	12	.4	2,618	.90
Boats	15	.5	6,420	2.22	Alcoholic beverages	282	9.7	9,383	3.24
Motors	11	.4	5,246	1.81	Rental equipment	50	1.7	514	.18
Other equipment	367	12.7	13,361	4.62	Other trip expense	383	13.3	14,248	4.92
Hunting equipment:					Magazines	137	4.7	1,207	.42
Shotguns	162	5.6	26,089	9.01	General club dues	54	1.9	787	.27
Rifles	12	.4	832	.29	Special club dues	44	1.5	3,555	1.23
Hand guns	8	.3	624	.22	Boat launching fees	12	.4	565	.19
Shells	1,006	34.8	22,351	7.72	Dogs	147	5.0	32,252	11.14
Rifle cartridges	56	1.9	395	.14	Other	66	2.3	1,337	.46
Hand gun cartridges	33	1.1	471	.16					
Decoys	182	6.3	9,012	3.11					
Other hunting equipment	502	17.3	6,399	2.21					

**Table 12.—Number of Fishermen and Hunters by Selected Characteristics in 1970**

Characteristics	Total number of persons 12 and over in United States		Total persons who fished and/or hunted		Total persons who fished		Total persons who hunted	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
	<i>Thousands</i>		<i>Thousands</i>		<i>Thousands</i>		<i>Thousands</i>	
United States, total	155,230	100	36,277	23.4	33,158	21.4	14,336	9.2
Census geographic division:								
New England	8,652	100	1,579	18.3	1,430	16.5	582	6.7
Middle Atlantic	28,244	100	4,539	16.1	4,054	14.4	1,731	6.1
East North Central	31,550	100	7,284	23.1	6,699	21.2	2,812	8.9
West North Central	12,904	100	4,000	31.0	3,579	27.7	1,783	13.8
South Atlantic	23,539	100	5,461	23.2	5,129	21.8	1,904	8.1
East South Central	9,862	100	2,660	27.0	2,464	25.0	1,162	11.8
West South Central	14,624	100	4,380	30.0	4,006	27.4	1,918	13.1
Mountain	5,656	100	2,044	36.1	1,769	31.3	980	17.3
Pacific	20,199	100	4,332	21.4	4,030	20.0	1,466	7.3
Population density:								
Big cities	24,222	100	3,212	13.3	2,984	12.3	898	3.7
Small cities and suburbs	57,643	100	12,142	21.1	11,433	19.8	3,708	6.4
Towns and rural areas	73,365	100	20,923	28.6	18,741	25.5	9,731	13.3
Sex and age group:								
Male, total	73,601	100	26,928	36.6	24,073	32.7	13,467	18.3
12-15 years	8,258	100	4,368	52.9	4,143	50.2	1,849	22.4
16-17 years	3,942	100	1,694	43.0	1,496	38.0	995	25.2
18-24 years	10,358	100	3,617	34.9	3,045	29.4	2,213	21.4
25-34 years	11,508	100	5,272	45.8	4,649	40.4	2,953	25.7
35-44 years	10,883	100	4,504	41.4	4,066	37.4	2,345	21.5
45-64 years	20,247	100	6,126	30.3	5,439	26.9	2,678	13.2
65 years and older	8,404	100	1,347	16.0	1,234	14.7	435	5.2

Continued—



**Table 12.—Number of Fishermen and Hunters by Selected Characteristics in 1970**

Characteristics	Total number of persons 12 and over in United States		Total persons who fished and/or hunted		Total persons who fished		Total persons who hunted	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
	<i>Thousands</i>		<i>Thousands</i>		<i>Thousands</i>		<i>Thousands</i>	
Female, total.....	81,629	100	9,349	11.5	9,085	11.1	869	1.1
12-15 years.....0	8,001	100	1,308	16.3	1,287	16.0	51	.6
16-17 years...0	3,897	100	430	11.0	412	10.6	53	1.4
18-24 years...0	12,019	100	1,598	13.3	1,512	12.6	276	2.3
25-34 years...0	12,449	100	1,777	14.3	1,729	13.9	190	1.5
35-44 years...0	11,046	100	1,481	12.0	1,431	12.5	148	1.3
45-64 years...0	22,517	100	2,399	10.7	2,362	10.5	131	.6
65 years and older...	11,028	100	357	3.2	352	3.1	20	.2
Households: Number...0-100.....	65,021	100	24,453	37.6	22,311	34.3	11,856	18.2
Family income:								
0-\$ 999.....	2,769	100	249	9.0	239	8.6	93	3.4
\$ 1,000-\$ 1,999.....	6,857	100	828	12.1	760	11.1	272	4.0
\$ 2,000-\$ 2,999.....	8,034	100	1,088	13.4	960	11.8	464	5.7
\$ 3,000-\$ 3,999.....	9,028	100	1,709	18.9	1,555	17.2	606	6.7
\$ 4,000-\$ 4,999.....	9,226	100	1,912	20.7	1,746	18.9	732	7.9
\$ 5,000-\$ 5,999.....	10,742	100	2,750	25.6	2,444	22.8	1,321	12.3
\$ 6,000-\$ 7,499.....	16,768	100	4,913	29.3	4,484	26.7	2,053	12.2
\$ 7,500-\$ 9,999.....	27,242	100	7,007	26.1	6,516	23.9	3,010	11.0
\$10,000-\$14,999.....	35,718	100	9,571	26.8	8,767	24.5	3,654	10.2
\$15,000-\$24,999.....	15,613	100	3,626	23.2	3,395	21.7	1,272	8.1
\$25,000 and over.....	4,291	100	878	20.5	792	18.5	258	6.0
No response.....0	8,842	100	1,648	18.6	1,500	17.0	601	6.8

Continued-

**Table 12.—Number of Fishermen and Hunters by Selected Characteristics in 1970**

Characteristics	Total number of persons 12 and over in United States		Total persons who fished and/or hunted		Total persons who fished		Total persons who hunted	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
	<i>Thousands</i>		<i>Thousands</i>		<i>Thousands</i>		<i>Thousands</i>	
Occupation:								
Total civilian population 14 years or older.....	146,895	100	33,168	22.6	30,151	20.5	13,542	9.2
Total civilian labor force.....	84,023	100	23,474	27.9	21,054	25.1	10,792	12.8
White collar workers:								
Professionals and technical.....	12,124	100	3,114	25.7	2,869	23.7	1,190	9.8
Farmers.....	1,573	100	601	38.2	450	28.6	423	26.9
Managers and proprietors.....	8,290	100	2,789	33.6	2,443	29.5	1,336	16.1
Clerical.....	15,120	100	2,598	17.2	2,435	16.1	685	4.5
Sales.....	5,621	100	1,496	26.1	1,324	23.6	646	11.5
Blue collar workers:								
Craftsmen.....	10,607	100	4,746	44.7	4,269	40.2	2,485	23.4
Operatives.....	14,391	100	4,456	31.0	3,935	27.3	2,368	16.5
Private household.....	2,206	100	220	10.0	211	9.6	24	1.1
Other service.....	8,559	100	1,555	18.2	1,468	17.2	488	5.7
Farm laborers.....	1,178	100	374	31.7	295	25.0	247	21.0
Other laborers.....	3,902	100	1,420	36.4	1,231	31.5	842	21.6
Never worked full time.....	470	100	132	28.1	123	26.2	58	12.3
Civilian population not in labor force.....	62,872	100	9,694	15.4	9,097	14.5	2,750	4.4
Under 14 years old.....	8,335	100	3,109	37.3	3,007	36.1	794	9.5

**Table 13.—Number of Fresh-Water and Salt-Water Fishermen by Selected Characteristics in 1970**

Characteristics	Fished in fresh-water		Fished in salt-water	
	Number	Percent of population	Number	Percent of population
	<i>Thousands</i>		<i>Thousands</i>	
United States, total .....	29,363	18.9	9,460	6.1
Census geographic division:				
New England.....0.....	1,050	13.3	696	8.0
Middle Atlantic.....	2,991	10.6	1,952	6.9
East North Central.....	6,603	20.9	430	1.4
West North Central.....	3,668	27.7	108	.8
South Atlantic.....	3,930	16.7	2,668	11.3
East South Central.....	2,374	24.1	361	3.7
West South Central.....	3,619	24.7	1,065	7.3
Mountain.....0.....0.....	1,752	31.0	130	2.3
Pacific.....0.....	3,377	16.7	2,049	10.1
Population density:				
Big cities.....0.....	2,359	9.7	1,370	5.7
Small cities and suburbs.....	9,572	16.6	4,231	7.3
Towns and rural areas.....	17,432	23.8	3,859	5.3
Sex and age group:				
Male, total .....	21,408	29.1	7,301	9.9
12-15 years.....	3,964	48.0	892	10.8
16-17 years.....	1,344	34.1	430	10.9
18-24 years.....	2,665	25.7	929	9.0
25-34 years.....	4,122	35.8	1,527	13.3
35-44 years.....0.....	3,549	32.6	1,408	12.9
45-64 years.....0.....	4,713	23.3	1,758	8.7
65 years and older.....	1,051	12.6	357	4.2
Female, total.....	7,955	9.7	2,159	2.6
12-15 years.....	1,161	14.5	230	2.9
16-17 years.....	369	9.5	83	2.1
18-24 years.....	1,277	10.6	492	4.1
25-34 years.....	1,540	12.4	388	3.1
35-44 years.....	1,232	10.7	382	3.3
45-64 years.....	2,071	9.2	517	2.3
65 years and older.....	305	2.7	67	.6
Households: Number.....	19,874	30.6	6,955	10.7



**Table 13.—Number of Fresh-Water and Salt-Water Fishermen by Selected Characteristics in 1970**

Characteristics	Fished in fresh-water		Fished in salt-water	
	Number	Percent of population	Number	Percent of population
	<i>Thousands</i>		<i>Thousands</i>	
<b>Family income:</b>				
0-\$ 999.....	234	8.5	33	1.2
\$ 1,000-\$ 1,999.....	708	10.3	119	1.7
\$ 2,000-\$ 2,999.....	915	11.2	142	1.7
\$ 3,000-\$ 3,999.....	1,374	15.2	349	3.9
\$ 4,000-\$ 4,999.....	1,536	16.6	448	4.9
\$ 5,000-\$ 5,999.....	2,274	21.2	557	5.2
\$ 6,000-\$ 7,499.....	4,025	24.0	1,227	7.3
\$ 7,500-\$ 9,999.....	5,749	21.1	1,752	6.4
\$10,000-\$14,999.....	7,717	21.6	2,712	7.6
\$15,000-\$24,999.....	2,869	18.4	1,233	7.9
\$25,000 and over.....	622	14.5	469	10.9
No response.....	1,340	15.2	420	4.8
<b>Occupation:</b>				
Total civilian population 14 years old or older.....	26,510	18.0	8,851	6.0
Total civilian labor force.....	18,394	21.9	6,600	7.9
White collar workers:				
Professionals and technical.....	2,433	20.1	1,081	8.9
Farmers.....	446	28.4	28	1.8
Managers and proprietors.....	2,012	24.3	966	11.7
Clerical.....	2,069	13.7	765	5.1
Sales.....	1,150	20.5	483	8.6
Blue collar workers:				
Craftsmen.....	3,718	35.1	1,272	12.0
Operatives.....	3,532	24.5	1,072	7.4
Private household.....	183	8.3	53	2.4
Other service.....	1,291	15.1	462	5.4
Farm laborers.....	295	25.0	21	1.8
Other laborers.....	1,141	29.2	359	9.2
Never worked full time.....	123	26.2	37	7.9
Civilian population not in labor force.....	8,116	12.9	2,251	3.6
Under 14 years old.....	2,853	34.2	608	7.3

\*Total number of persons 12 and over in United States" and "Total persons who fished" are the same as in table 12.

**Table 14—Number of Big-Game, Small-Game and Waterfowl Hunters  
by Selected Characteristics in 1970\***

Characteristics	Hunted big-game		Hunted small-game		Hunted waterfowl	
	Number	Percent of population	Number	Percent of population	Number	Percent of population
	<i>Thousands</i>		<i>Thousands</i>		<i>Thousands</i>	
United States, total.....t.....	7,774	5.0	11,671	7.5	2,894	1.9
Census geographic division:						
New England.....t.....	461	5.3	385	4.4	81	.9
Middle Atlantic.....t.....	1,432	5.1	1,442	5.0	192	.7
East North Central.....t.....	1,349	4.3	2,323	7.4	482	1.5
West North Central.....t.....	537	4.2	1,585	12.3	526	4.1
South Atlantic.....t.....	827	3.5	1,734	7.4	313	1.3
East South Central.....t.....	451	4.6	1,112	11.3	149	1.5
West South Central.....t.....	1,074	7.3	1,501	10.3	492	3.4
Mountain.....t.....tt.....t.....tt.....t.....t.....	715	12.6	636	11.2	234	4.1
Pacific.....tt.....	929	4.6	953	4.7	425	2.1
Population density:						
Big cities.....t.....	525	2.2	682	2.8	213	.9
Small cities and suburbs.....t.....	1,756	3.0	3,099	5.4	736	1.3
Towns and rural areas.....t.....	5,493	7.6	7,889	10.6	1,944	2.6
Sex and age group:						
Male, total.....t.....	7,252	9.9	11,059	15.0	2,810	3.8
12-15 years.....t.....	710	8.6	1,709	20.7	423	5.1
16-17 years.....t.....	449	11.4	887	22.6	283	7.2
18-24 years.....t.....tt.....	1,197	11.6	1,894	18.3	544	5.3
25-34 years.....t.....tttt.....	1,642	14.3	2,492	21.7	591	5.0
35-44 years.....t.....tttt.....	1,393	12.8	1,842	16.9	498	4.6
45-64 years.....t.....	1,633	8.1	1,906	9.4	408	2.0
65 years and older.....t.....	228	2.7	330	3.9	63	.7

2,810  
7.2  
3,099 - 4,700  
3,415  
82  
2,103

Continued-

**Table 14—Number of Big-Game, Small-Game and Waterfowl Hunters  
by Selected Characteristics in 1970\***

Characteristics	Hunted big-game		Hunted small-game		Hunted waterfowl	
	Number	Percent of population	Number	Percent of population	Number	Percent of population
	<i>Thousands</i>		<i>Thousands</i>		<i>Thousands</i>	
Female, total.....	522	.6	612	.7	83	.1
12-15 years.....	23	.3	48	.6	4	0
16-17 years.....	21	.5	42	1.1	14	.4
18-24 years.....	143	1.2	219	1.8	22	.2
25-34 years.....	128	1.0	141	1.1	16	.1
35-44 years.....	110	1.0	68	.6	16	.1
45-64 years.....	84	.4	77	.3	8	0
65 years and older.....	13	.1	17	.2	3	0
Households: Number.....	6,489	10.0	9,881	15.2	2,473	5.3
Family income:						
0-\$ 999.....	40	1.4	86	3.1	11	.4
\$ 1,000-\$ 1,999.....	129	1.9	223	3.3	50	.7
\$ 2,000-\$ 2,999.....	230	2.8	401	4.9	53	.7
\$ 3,000-\$ 3,999.....	343	3.8	469	5.2	85	.9
\$ 4,000-\$ 4,999.....	340	3.7	616	6.7	122	1.3
\$ 5,000-\$ 5,999.....	727	6.8	1,040	9.7	274	2.6
\$ 6,000-\$ 7,499.....	1,191	7.1	1,696	10.1	401	2.4
\$ 7,500-\$ 9,999.....	1,645	6.0	2,522	9.3	582	2.1
\$10,000-\$14,999.....	2,013	5.6	2,920	8.2	816	2.3
\$15,000-\$24,999.....	614	3.9	1,027	6.6	291	1.9
\$25,000 and over.....	116	2.7	213	5.0	62	1.4
No response.....	389	4.4	459	5.2	147	1.7

Continued—



**Table 14—Number of Big-Game, Small-Game and Waterfowl Hunters  
by Selected Characteristics in 1970\***

Characteristics	Hunted big-game		Hunted small-game		Hunted waterfowl	
	Number	Percent of population	Number	Percent of population	Number	Percent of population
	<i>Thousands</i>		<i>Thousands</i>		<i>Thousands</i>	
<b>Occupation:</b>						
Total civilian population 14 years old or older.....	7,547	5.1	10,933	7.4	2,729	1.9
Total civilian labor force.....	6,153	7.3	8,647	10.3	2,183	2.6
White collar workers:						
Professionals and technical.....	595	4.9	1,000	8.2	329	2.7
Farmers.....	264	16.8	327	20.8	72	4.6
Managers and proprietors.....	761	9.2	1,029	12.4	295	3.6
Clerical.....	356	2.4	559	3.7	118	.8
Sales.....	358	6.4	554	9.9	122	2.2
Blue collar workers:						
Craftsmen.....	1,648	15.5	1,870	17.6	465	4.4
Operatives.....	1,331	9.2	1,883	13.1	458	3.2
Private household.....	13	.6	15	.7	3	.1
Other service.....	262	3.1	409	4.8	115	1.3
Farm laborers.....	122	10.4	220	18.7	46	3.9
Other laborers.....	407	10.4	728	18.7	143	3.7
Never worked full time.....	39	8.3	53	11.3	16	3.4
Civilian population not in labor force.....	1,394	2.2	2,286	3.6	546	.9
Under 14 years old.....	228	2.7	738	8.9	165	2.0

\*"Total number of persons 12 and over in the United States." and "Total persons who hunted" are the same as in table 12.

**Table 15.—Number of Fresh-Water Fishermen 12 Years Old and Older by Types of Water Fished in Most Often by Selected Characteristics in 1970**

Characteristics	Total fresh-water fishing		Types of fresh-water fishing							
			Man-made				Natural lakes and ponds		Rivers and streams	
	Number	Percent	Reservoirs		Ponds		Number	Percent	Number	Percent
			Number	Percent	Number	Percent				
	Thousands		Thousands		Thousands		Thousands		Thousands	
United States, total.....	29,363	100	8,260	28.1	3,891	1303	7,993	27.2	9,219	31.4
Census geographic division:										
New England.....	1,050	100	132	11.5	40	3.5	565	49.1	413	35.9
Middle Atlantic.....	2,991	100	714	23.9	289	9.7	780	26.1	1,208	40.4
East North Central.....	6,603	100	1,165	17.6	762	11.5	3,056	46.3	1,620	24.5
West North Central.....	3,568	100	813	22.8	548	15.4	1,242	34.8	965	27.0
South Atlantic.....	3,930	100	1,074	27.3	755	19.2	637	16.2	1,464	37.3
East South Central.....	2,375	100	891	37.5	631	26.6	188	7.9	665	28.0
West South Central.....	3,618	100	1,703	47.1	613	16.9	427	11.8	875	24.2
Mountain.....	1,752	100	816	46.6	54	3.1	279	15.9	603	34.4
Pacific.....	3,377	100	952	28.2	201	6.0	818	24.2	1,406	41.6
Population density:										
Big cities.....	2,360	100	827	35.0	296	12.5	667	28.3	570	24.2
Small cities and suburbs.....	9,572	100	2,733	28.6	1,050	11.0	3,319	34.7	2,470	25.8
Towns and rural areas.....	17,432	100	4,700	27.0	2,545	14.6	4,008	23.0	6,079	35.4
Sex and age group:										
Male, total.....	210,408	100	5,963	27.9	2,756	12.9	5,612	26.2	7,077	33.1
12-15 years.....	3,963	100	902	22.8	757	19.1	978	24.7	1,326	33.5
16-17 years.....	1,344	100	280	20.8	188	14.0	319	23.7	557	41.4
18-24 years.....	2,665	100	654	24.3	342	12.8	667	25.0	1,002	37.6
25-34 years.....	4,122	100	1,306	31.7	421	10.2	1,075	26.1	1,320	32.0
35-44 years.....	3,650	100	1,106	31.0	466	13.0	840	23.7	1,138	32.0
45-64 years.....	4,712	100	1,400	29.7	459	9.7	1,426	30.3	1,427	30.3
65 years and older.....	1,052	100	315	29.9	123	11.7	308	29.3	306	29.0

Continued-

**Table 15.—Number of Fresh-Water Fishermen 12 Years Old and Older by Types of Water Fished in Most Often by Selected Characteristics in 1970**

Characteristics	Total fresh-water fishing		Types of fresh-water fishing							
			Man-made				Natural lakes and ponds		Rivers and streams	
	Number	Percent	Reservoirs		Ponds		Number	Percent	Number	Percent
			Number	Percent	Number	Percent				
<i>Thousands</i>		<i>Thousands</i>		<i>Thousands</i>		<i>Thousands</i>		<i>Thousands</i>		
Female, total.....	7,954	100	2,296	28.9	1,135	14.3	2,381	29.9	2,142	26.9
12-15 years.....	1,162	100	234	20.1	207	17.8	351	30.2	370	31.8
16-17 years.....	370	100	94	25.4	68	18.4	132	35.7	76	20.5
18-24 years.....	1,277	100	381	29.8	189	14.8	332	26.0	375	29.4
25-34 years.....	1,541	100	442	28.7	229	14.9	456	29.6	414	26.9
35-44 years.....	1,232	100	377	30.6	137	11.1	366	29.7	352	28.4
45-64 years.....	2,071	100	684	33.0	261	12.6	654	31.6	472	22.8
65 years and older.....	304	100	85	28.0	44	14.5	91	29.9	84	27.6
Family income:										
0-\$ 999.....	234	100	43	18.4	35	15.0	51	21.8	105	44.9
\$ 1,000-\$ 1,999.....	709	100	178	25.1	101	14.2	159	22.4	271	38.2
\$ 2,000-\$ 2,999.....	915	100	221	24.2	138	15.1	249	27.2	307	33.6
\$ 3,000-\$ 3,999.....	1,373	100	290	21.1	260	18.9	320	23.3	503	36.6
\$ 4,000-\$ 4,999.....	1,535	100	350	22.8	304	19.8	277	18.0	604	39.3
\$ 5,000-\$ 5,999.....	2,274	100	533	23.4	309	13.6	632	27.8	800	35.2
\$ 6,000-\$ 7,499.....	4,025	100	1,205	29.9	540	13.4	1,000	24.8	1,280	31.8
\$ 7,500-\$ 9,999.....	5,748	100	1,777	30.9	669	11.6	1,337	23.3	1,965	34.2
\$10,000-\$14,999.....	7,717	100	2,294	29.7	989	12.8	2,319	30.1	2,115	27.4
\$15,000-\$24,999.....	2,869	100	910	31.7	318	11.1	925	32.2	716	25.0
\$25,000 and over.....	622	100	212	34.1	41	6.6	225	36.2	144	23.2
No response.....	1,341	100	246	18.3	186	13.9	500	37.3	409	30.5

Continued-



**Table 15.—Number of Fresh-Water Fishermen 12 Years Old and Older by Types of Water Fished in Most Often by Selected Characteristics in 1970**

Characteristics	Total fresh-water fishing		Types of fresh-water fishing							
			Man-made				Natural lakes and ponds		Rivers and streams	
	Number	Percent	Reservoirs		Ponds		Number	Percent	Number	Percent
			Number	Percent	Number	Percent				
<i>Thousands</i>		<i>Thousands</i>		<i>Thousands</i>		<i>Thousands</i>		<i>Thousands</i>		
Occupation:										
Total civilian population 14 years old or older.....	26,510	100	7,581	28.6	3,374	12.7	7,260	27.4	8,295	31.3
Total civilian labor force.....	18,393	100	5,384	29.3	2,208	12.0	5,052	27.5	5,749	31.3
White collar workers:										
Professionals and technical.....	2,434	100	771	31.7	213	8.8	776	31.9	674	27.7
Farmers.....	447	100	122	27.3	74	16.6	83	18.6	168	37.6
Managers and proprietors.....	2,012	100	729	36.2	188	9.3	575	28.6	520	25.8
Clerical.....	2,069	100	676	32.7	277	13.4	545	26.3	571	27.6
Sales.....	1,149	100	289	25.2	138	12.0	368	32.0	354	30.8
Blue collar workers:										
Craftsmen.....	3,718	100	1,176	31.6	438	11.8	939	25.3	1,165	31.3
Operatives.....	3,531	100	926	26.2	482	13.7	973	27.6	1,150	32.6
Private household.....	184	100	31	16.8	24	13.0	68	37.0	61	33.2
Other service.....	1,292	100	310	24.0	159	12.3	389	30.1	434	33.6
Farm laborers.....	294	100	38	12.9	78	26.5	42	14.3	136	46.3
Other laborers.....	1,142	100	286	25.0	122	10.7	267	23.4	467	40.9
Never worked full time.....	123	100	30	24.4	16	13.0	27	22.0	50	40.7
Civilian population not in labor force.....	8,117	100	2,197	27.1	1,166	14.4	2,208	27.2	2,546	31.4
Under 14 years old.....	2,853	100	678	23.8	518	18.2	733	25.7	924	32.4

**Table 16.—Type of Salt-Water Fishing by Coast in 1970**

Type of fishing	Total number of salt-water fishermen in the United States		Atlantic Coast		Gulf Coast		Pacific Coast	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
	<i>Thousands</i>		<i>Thousands</i>		<i>Thousands</i>		<i>Thousands</i>	
Number of persons: United States, total.....	9,460	100.0	5,010	53.0	2,272	24.0	2,178	23.0
Surf fishing.....	2,925	30.9	1,766	18.7	580	6.1	579	6.1
Bay and sound fishing.....	5,117	54.1	2,870	30.3	1,405	14.9	842	8.9
Tidal river and stream fishing.....	2,421	25.6	1,394	14.7	546	5.8	481	5.1
Ocean fishing.....	5,497	58.1	2,660	28.1	1,280	13.5	1,557	16.5

**Table 17.—Number of Farm and Ranch Pond Fishermen and Recreation Days by Selected Characteristics in 1970**

Characteristics	Number of fishermen	Number of recreation days
	<i>Thousands</i>	<i>Thousands</i>
United States, total.....	7,732	80,105
Census geographic division:		
New England.....	137	1,421
Middle Atlantic.....	626	5,645
East North Central.....	1,262	11,679
West North Central.....	981	10,981
South Atlantic.....	1,564	16,918
East South Central.....	1,177	14,762
West South Central.....	1,277	14,104
Mountain.....	233	1,372
Pacific.....	474	3,225
Population density:		
Big cities.....	560	3,915
Small cities and suburbs.....	1,868	14,845
Towns and rural areas.....	5,305	61,345
Sex and age group:		
Male, total.....	5,739	63,988
12-15 years.....	1,099	14,247
16-17 years.....	395	4,446
18-24 years.....	822	8,850
25-34 years.....	1,196	12,254
35-44 years.....	954	10,598
45-64 years.....	1,010	10,136
65 years and older.....	264	3,457
Female, total.....	1,993	16,117
12-15 years.....	303	1,809
16-17 years.....	138	724
18-24 years.....	287	2,384
25-34 years.....	422	2,886
35-44 years.....	255	2,005
45-64 years.....	493	5,109
65 years and older.....	95	1,200

Characteristics	Number of fishermen	Number of recreation days
	<i>Thousands</i>	<i>Thousands</i>
Family income:		
0\$-999.....	104	1,728
\$ 1,000-\$ 1,999.....	247	3,190
\$ 2,000-\$ 2,999.....	236	2,224
\$ 3,000-\$ 3,999.....	401	7,162
\$ 4,000-\$ 4,999.....	494	5,714
\$ 5,000-\$ 5,999.....	621	6,651
\$ 6,000-\$ 7,499.....	1,068	11,116
\$ 7,500-\$ 9,999.....	1,539	14,985
\$10,000-\$14,999.....	1,799	16,413
\$15,000-\$24,999.....	759	5,659
\$25,000 and over.....	121	693
No response.....	343	4,570
Occupation:		
Total civilian population 14 years or older.....	7,004	73,749
Total civilian labor force.....	4,781	48,773
White collar workers:		
Professionals and technical.....	659	5,677
Farmers.....	217	2,192
Managers and proprietors.....	483	4,362
Clerical.....	552	4,653
Sales.....	290	4,013
Blue collar workers:		
Craftsmen.....	901	9,899
Operatives.....	878	9,650
Private household.....	54	243
Other service.....	273	2,852
Farm laborers.....	143	1,284
Other laborers.....	303	3,792
Never worked full time.....	28	157
Civilian population not in labor force.....	2,223	24,977
Under 14 years old.....	728	6,356



**Table 18.—Number of Small-Game, Migratory Upland-Game Bird, Mourning Dove, Woodcock, Rail and Snipe, and Varmint Hunters by Selected Characteristics in 1970**

Characteristics	Number of small-game hunters		Number of migratory upland-game bird hunters		Number of mourning dove hunters		Number of woodcock hunters		Number of rail and snipe hunters		Number of varmint hunters	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
	<i>Thousands</i>		<i>Thousands</i>		<i>Thousands</i>		<i>Thousands</i>		<i>Thousands</i>		<i>Thousands</i>	
United States, total .....	11,671	100	3,061	26.2	2,464	21.1	663	5.7	210	1.8	1,326	11.4
Census geographic division:												
New England .....	385	100	97	.8	7	.1	87	.7	8	.1	61	.5
Middle Atlantic .....	1,442	100	321	2.8	131	1.1	228	2.0	19	.2	199	1.7
East North Central .....	2,323	100	217	1.9	53	.5	169	1.4	36	.3	100	.9
West North Central .....	1,585	100	218	1.9	185	1.6	18	.2	21	.2	116	1.0
South Atlantic .....	1,734	100	697	6.0	644	5.5	70	.6	51	.4	154	1.3
East South Central .....	1,112	100	369	3.2	361	3.0	47	.4	11	.1	122	1.0
West South Central .....	1,501	100	609	5.2	578	5.0	31	.3	12	.1	273	2.3
Mountain .....	636	100	176	1.5	164	1.4	12	.1	12	.1	112	1.0
Pacific .....	953	100	359	3.1	343	2.9	4	.0	40	.3	189	1.6

**Table 19.—Number of Hunters and Use of Public Lands and Selected Characteristics in 1970**

Characteristics	Total		Portion of hunting spent on public lands									
	Number	Percent	All		Most		About half		Less than half		None	
			Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
	Thou- sands		Thou- sands		Thou- sands		Thou- sands		Thou- sands		Thou- sands	
United States, total.....	14,336	100	1,217	8.5	979	6.8	1,049	7.3	1,568	10.9	9,530	66.4
Census geographic division:												
New England.....	582	100	14	2.4	10	1.7	6	1.1	47	8.2	504	86.7
Middle Atlantic.....	1,731	100	88	5.0	130	7.5	167	9.6	317	18.3	1,028	59.4
East North Central.....	2,815	100	233	8.3	228	8.0	211	7.5	344	12.2	1,799	63.9
West North Central.....	1,783	100	61	3.4	51	2.9	113	6.3	197	11.1	1,360	76.3
South Atlantic.....	1,907	100	119	6.2	81	4.3	93	4.9	185	9.7	1,430	75.0
East South Central.....	1,162	100	30	2.6	73	6.3	56	4.8	124	10.6	879	75.7
West South Central.....	1,918	100	47	2.5	68	3.5	93	4.8	94	4.9	1,616	84.3
Mountain.....	980	100	339	34.6	137	14.0	126	12.8	119	12.2	259	26.4
Pacific.....	1,466	100	286	19.5	202	13.8	184	12.6	140	9.5	654	44.6
Population density:												
Big cities.....	898	100	86	9.5	66	7.4	66	7.4	79	8.8	600	66.9
Small cities and suburbs.....	3,708	100	423	11.4	355	9.6	358	9.6	392	10.6	2,180	58.8
Towns and rural areas.....	90,738	100	708	7.3	558	5.7	625	6.4	1,098	11.3	6,750	69.3
Sex and age group:												
Male, total.....	13,474	100	1,077	8.0	920	6.8	1,013	7.5	1,509	11.0	8,955	66.5
12-15 years.....	10,849	100	126	6.8	59	3.2	90	4.0	173	9.4	1,400	75.7
16-17 years.....	955	100	67	6.7	59	5.9	64	6.4	86	8.6	720	72.4
18-24 years.....	2,216	100	170	7.7	196	8.8	226	10.2	272	12.3	1,352	61.0
25-34 years.....	2,953	100	269	9.1	215	7.0	295	10.0	439	14.9	1,736	58.8
35-44 years.....	2,348	100	172	7.3	178	7.6	152	6.0	278	11.8	1,568	66.8
45-64 years.....	2,678	100	248	9.3	190	7.0	165	6.2	226	8.4	1,848	69.0
65 years and older.....	435	100	24	5.5	23	5.3	23	5.2	35	8.0	331	76.0

Continued-

Table 19.—Number of Hunters and Use of Public Lands and Selected Characteristics in 1970

Characteristics	Total		Portion of hunting spent on public lands									
	Number	Percent	All		Most		About half		Less than half		None	
			Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
	<i>Thou-</i>		<i>Thou-</i>		<i>Thou-</i>		<i>Thou-</i>		<i>Thou-</i>		<i>Thou-</i>	
	<i>sands</i>		<i>sands</i>		<i>sands</i>		<i>sands</i>		<i>sands</i>		<i>sands</i>	
Female, total.....	869	100	140	16.1	59	6.8	36	4.1	59	6.8	575	66.2
12-15 years.....	51	100	3	6.7	3	5.0	0	0	0	0	45	88.3
16-17 years.....	53	100	14	25.9	0	0	2	4.1	4	7.9	33	62.1
18-24 years.....	276	100	38	13.6	25	9.0	17	6.1	21	7.6	176	63.7
25-34 years.....	190	100	23	12.2	16	8.4	4	2.1	7	3.6	140	73.5
35-44 years.....	148	100	42	28.6	7	4.8	0	0	20	13.6	78	53.0
45-64 years.....	131	100	17	12.9	5	3.5	12	9.6	7	5.3	90	68.8
65 years and older.....	20	100	3	17.0	4	20.0	0	0	0	0	13	62.9
Family income:												
0-\$ 999.....	93	100	0	0	0	0	16	17.0	6	7.0	70	76.0
\$ 1,000-\$ 1,999.....	272	100	12	4.4	16	6.0	11	3.9	13	4.6	221	81.1
\$ 2,000-\$ 2,999.....	464	100	31	6.8	46	9.9	48	10.3	30	6.6	308	66.4
\$ 3,000-\$ 3,999.....	606	100	21	3.5	29	4.7	50	8.3	39	6.4	467	77.1
\$ 4,000-\$ 4,999.....	732	100	51	7.0	33	4.6	48	6.6	67	9.1	533	72.8
\$ 5,000-\$ 5,999.....	1,321	100	103	7.8	80	6.0	104	7.9	149	11.3	885	67.0
\$ 6,000-\$ 7,499.....	2,053	100	165	8.0	116	5.7	185	9.0	209	10.2	1,378	67.1
\$ 7,500-\$ 9,999.....	3,010	100	252	8.4	258	8.6	235	7.8	328	10.9	1,937	64.3
\$10,000-\$14,999.....	3,658	100	340	9.3	258	7.0	259	7.0	478	13.1	2,325	63.5
\$15,000-\$24,999.....	1,276	100	136	10.7	108	8.4	58	4.6	142	11.1	833	65.3
\$25,000 and over.....	258	100	19	7.4	15	5.8	12	4.6	36	13.8	177	68.6
No response.....	601	100	87	14.5	21	3.5	24	4.0	73	12.1	396	65.9
Occupation:												
Total civilian population 14 years or older.....	13,549	100	1,078	8.7	965	7.1	1,013	7.5	1,511	11.2	8,882	65.6

Continued-



Table 19.—Number of Hunters and Use of Public Lands and Selected Characteristics in 1970

Characteristics	Total		Portion of hunting spent on public lands									
	Number	Percent	All		Most		About half		Less than half		None	
			Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
	<i>Thou-</i> <i>sands</i>		<i>Thou-</i> <i>sands</i>		<i>Thou-</i> <i>sands</i>		<i>Thou-</i> <i>sands</i>		<i>Thou-</i> <i>sands</i>		<i>Thou-</i> <i>sands</i>	
Total civilian labor force .....	10,799	100	918	8.5	790	7.3	867	8.0	1,225	11.3	6,999	64.8
White collar workers:												
Professionals and technical .....	1,194	100	107	9.0	115	9.7	101	8.5	181	15.2	689	57.7
Farmers .....	423	100	29	6.9	7	1.6	22	5.1	36	8.4	329	77.9
Managers and proprietors .....	1,336	100	145	10.8	83	6.2	76	5.7	181	13.5	851	63.7
Clerical .....	685	100	50	7.3	49	7.1	45	6.5	79	11.6	462	67.5
Sales .....	646	100	28	4.4	32	5.0	64	9.9	59	9.1	463	71.6
Blue collar workers:												
Craftsmen .....	2,485	100	250	10.1	226	9.1	221	8.9	266	10.7	1,522	61.2
Operatives .....	2,368	100	174	7.4	192	8.1	214	9.0	274	11.6	1,514	63.9
Private household .....	24	100	4	17.9	0	0	0	0	11	45.0	9	37.0
Other service .....	488	100	27	5.4	28	5.8	28	5.7	40	8.3	365	74.8
Farm laborers .....	247	100	11	4.5	4	1.5	16	6.5	11	4.3	206	83.2
Other laborers .....	846	100	91	10.8	42	5.0	78	9.2	83	9.8	552	65.2
Never in labor force .....	58	100	0	0	12	20.1	3	5.5	4	7.3	39	67.0
Civilian population not in labor force .....	2,750	100	260	9.4	174	6.3	147	5.3	287	10.4	1,883	68.5
Under 14 years old .....	794	100	39	5.0	14	1.8	35	4.5	57	7.2	648	81.6

**Table 20.—Waterfowl Hunting in the Pacific Flyway by Selected Characteristics in 1970**

Characteristics	Number of hunters	Expenditures	Number of recreation days	Total miles	Passenger—miles
	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>
Pacific Flyway, total.....	556	\$56,678	5,852	178,701	350,611
---- population density:					
Big cities.....	53	7,470	374	51,851	102,878
Small cities and suburbs.....	149	13,972	579	29,122	65,687
Towns and rural areas.....	354	35,237	4,899	97,728	182,046
Sex and age group:					
Male, total.....	534	55,094	5,750	173,756	335,971
12-15 years.....	107	4,677	707	37,539	78,339
16-17 years.....	54	3,777	1,000	18,435	36,821
18-24 years.....	94	6,728	1,632	22,140	52,292
25-34 years.....	111	22,613	1,184	47,028	73,644
35-44 years.....	66	10,183	586	21,083	43,698
45-64 years.....	90	5,409	601	21,272	38,586
65 years and older.....	12	1,707	42	6,258	12,592
Female, total.....	22	1,584	102	4,945	14,640
12-15 years.....	0	0	0	0	0
16-17 years.....	0	0	0	0	0
18-24 years.....	11	1,470	86	4,636	13,636
25-34 years.....	8	56	12	81	242
35-44 years.....	4	57	4	229	762
45-64 years.....	0	0	0	0	0
65 years and older.....	0	0	0	0	0

Continued—

Table 20.—Waterfowl Hunting in the Pacific Flyway by Selected Characteristics in 1970

Characteristics	Number of hunters	Expenditures	Number of recreation days	Total miles	Passenger - miles
	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>
Family income:					
0-\$ 999.....	0	0	0	0	0
\$ 1,000-\$ 1,999.....	0	0	0	0	0
\$ 2,000-\$ 2,999.....	0	0	0	0	0
\$ 3,000-\$ 3,999.....	0	0	0	0	0
\$ 4,000-\$ 4,999.....	27	1,094	82	2,483	5,636
\$ 5,000-\$ 5,999.....	34	6,865	721	25,496	37,683
\$ 6,000-\$ 7,499.....	70	7,964	1,531	25,240	53,977
\$ 7,500-\$ 9,999.....	112	9,335	863	26,671	63,585
\$10,000-\$14,999.....	217	17,055	2,232	81,891	161,100
\$15,000-\$24,999.....	66	9,632	170	13,958	22,913
\$25,000 and over.....	7	3,508	101	1,599	2,204
No response.....	22	1,226	152	1,362	3,513
Occupation:					
Total civilian population 14 years and over.....	518	53,810	5,628	146,577	284,985
Total civilian labor force.....	390	46,974	4,592	124,287	232,141
White collar workers:					
Professional and technical.....	78	10,928	513	20,685	40,484
Farmers.....	19	527	99	4,205	4,988
Managers and proprietors.....	42	13,052	563	24,121	38,995
Clerical.....	9	4,810	26	2,773	5,634
Sales.....	15	2,398	433	9,109	15,679
Blue collar workers:					
Craftsmen.....	84	9,173	1,641	42,627	80,884
Operatives.....	70	3,833	657	14,697	28,359
Private household.....	0	0	0	0	0
Other service.....	15	279	81	2,646	7,719
Farm laborers.....	17	51	51	455	1,518
Other laborers.....	32	1,810	506	2,408	6,246
Never worked full time.....	9	112	23	561	1,637
Civilian population not in labor force.....	128	6,837	1,036	22,289	52,844
Under 14 years old.....	380	2,868	224	32,124	65,626



Table 21.—Waterfowl Hunting in the Central Flyway by Selected Characteristics in 1970

Characteristics	Number of hunters	Expenditures	Number of recreation days	Total miles	Passenger-miles
	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>
Central Flyway, total.....	616	\$35,670	4,814	112,558	269,374
Population density:					
Big cities.....	52	1,538	85	3,110	9,220
Small cities and suburbs.....0	111	6,344	731	19,836	54,864
Towns and rural areas.....	453	27,788	3,998	89,612	205,290
Sex and age group:					
Male, total.....0	595	34,587	4,736	110,699	262,633
12-15 years.....	110	3,978	746	10,715	34,131
16-17 years.....0	69	2,852	1,194	24,074	48,291
18-24 years.....	126	8,522	1,174	31,026	62,022
25-34 years.....	107	12,291	434	14,089	43,157
35-44 years.....	95	3,589	662	19,107	46,615
45 years and older.....0	87	3,354	526	11,689	28,416
Female, total.....	21	1,084	78	1,859	6,741
12-15 years.....	0	0	0	0	0
16-17 years.....0	10	19	29	195	292
18-24 years.....	4	4	4	74	295
25-44 years.....	8	1,060	45	1,591	6,154
45-64 years.....	0	0	0	0	0
65 years and older.....	0	0	0	0	0

Continued-

Table 21.—Waterfowl Hunting in the Central Flyway by Selected Characteristics in 1970

Characteristics	Number of hunters	Expenditures	Number of recreation days	Total miles	Passenger-miles
	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>
<b>Family income:</b>					
0—\$ 2,999	25	4,340	271	8,999	19,304
\$ 3,000—\$ 3,999	32	1,068	130	1,910	5,279
\$ 4,000—\$ 4,999	34	2,398	196	2,088	9,666
\$ 5,000—\$ 5,999	68	1,471	157	4,670	12,462
\$ 6,000—\$ 7,499	104	6,962	791	15,999	38,669
\$ 7,500—\$ 9,999	102	3,984	1,002	20,085	46,479
\$10,000—\$14,999	150	6,774	1,538	36,225	77,295
\$15,000—\$24,999	51	4,780	309	9,955	22,975
\$25,000 and over	26	2,195	145	4,000	15,078
No response	23	1,698	276	8,628	22,168
<b>Occupation:</b>					
Total civilian population 14 years old and over	571	34,670	4,514	106,092	246,815
Total civilian labor force	463	28,792	3,210	80,965	192,369
<b>White collar workers:</b>					
Professionals and technical	58	5,163	236	5,810	16,974
Farmers	26	3,406	198	5,294	12,492
Managers and proprietors	65	3,313	356	6,945	21,569
Clerical	33	1,037	199	10,167	13,060
Sales	44	5,949	473	18,647	42,243
<b>Blue collar workers:</b>					
Craftsmen	63	3,738	428	12,766	32,838
Operatives	98	4,254	671	11,080	30,972
Private household	0	0	0	0	0
Other service	44	1,002	451	6,814	16,717
Farm laborers	9	551	68	3,112	3,859
Other laborers	22	379	132	329	1,647
Never worked full time	0	0	0	0	0
Civilian population not in labor force	108	5,878	1,304	25,126	54,445
Under 14 years old	45	1,001	300	6,467	22,560

**Table 22.—Waterfowl Hunting in the Mississippi Flyway by Selected Characteristics in 1970**

Characteristics	Number of hunters	Expenditures	Number of recreation days	Total miles	Passenger-miles
	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>
Mississippi Flyway, total.....	1,136	\$66,772	10,144	192,893	379,286
Population density:					
Big cities.....	85	4,611	651	25,109	46,358
Small cities and suburbs.....	305	20,895	2,167	79,316	159,830
Towns and rural areas.....	746	41,176	7,326	88,468	173,098
Sex and age group:					
Male, total.....	1,099	66,420	10,046	191,975	377,414
12-15 years.....	155	3,770	747	12,899	33,669
16-17 years.....	85	1,212	604	4,982	10,463
18-24 years.....	233	15,210	2,466	34,002	59,294
25-34 years.....	230	22,487	2,529	72,428	131,393
35-44 years.....	213	13,621	2,386	42,874	91,923
45-64 years.....	159	9,373	1,238	19,952	43,410
65 years and older.....	24	747	76	4,837	7,261
Female, total.....	37	352	98	918	1,872
12-15 years.....	4	4	21	86	214
16-24 years.....	12	240	53	678	1,431
25 years and older.....	20	108	23	155	227

Continued-



Table 22.—Waterfowl Hunting in the Mississippi Flyway by Selected Characteristics in 1970

Characteristics	Number of hunters	Expenditures	Number of recreation days	Total miles	Passenger-miles
	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>
<b>Family income:</b>					
0-\$ 999	4	207	26	296	887
\$ 1,000-\$ 1,999	37	1,363	238	2,166	4,970
\$ 2,000-\$ 2,999	11	81	55	813	832
\$ 3,000-\$ 3,999	15	29	16	85	160
\$ 4,000-\$ 4,999	68	5,007	1,606	12,700	28,310
\$ 5,000-\$ 5,999	123	19,320	1,940	52,463	95,609
\$ 6,000-\$ 7,499	148	12,306	1,817	31,937	63,580
\$ 7,500-\$ 9,999	240	8,547	1,087	36,101	60,956
\$10,000-\$14,999	316	14,328	2,546	45,610	101,929
\$15,000-\$24,999	108	3,420	653	7,508	16,771
\$25,000 and over	29	2,112	193	3,061	4,715
No response	37	53	4	152	568
<b>Occupation:</b>					
Total civilian population 14 years old and over	1,087	66,040	9,890	189,045	367,811
Total civilian labor force	865	57,119	8,244	164,259	319,384
White collar workers:					
Professionals and technical	157	9,771	1,229	28,519	51,164
Farmers	20	867	134	3,141	8,647
Managers and proprietors	116	3,830	642	13,928	25,284
Clerical	52	2,533	534	16,421	36,452
Sales	40	5,341	890	7,648	16,490
Blue collar workers:					
Craftsmen	215	19,339	2,168	50,649	97,739
Operatives	157	10,670	1,592	27,720	48,489
Private household	3	3	9	59	149
Other service	29	3,218	761	13,202	26,740
Farm laborers	11	45	19	160	907
Other laborers	63	1,501	267	2,811	7,321
Never worked full time	3	0	0	0	0
Civilian population not in labor force	222	8,922	1,645	24,786	48,427
Under 14 years old	49	732	254	3,848	11,474

Table 23.—Waterfowl Hunting in the Atlantic Flyway by Selected Characteristics in 1970

Characteristics	Number of hunters	Expenditures	Number of recreation days	Total miles	Passenger-miles
	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>
Atlantic Flyway, total.....0.....	586	\$85,331	4,303	83,213	239,815
Population density:					
Big cities.....0  0.....	23	3,160	156	5,875	15,790
Small cities and suburbs.....	171	13,564	1,374	25,591	98,597
Towns and rural areas.....	391	68,606	2,772	51,747	125,428
Sex and age group:					
Male, total0.....	582	84,953	4,303	83,213	239,815
12-15 years.....	51	915	604	6,905	34,577
16-17 years.....	75	5,488	499	8,994	22,914
18-24 years.....	91	4,522	395	2,572	7,068
25-34 years.....	144	48,013	1,450	35,172	91,543
35-44 years.....	124	18,238	971	18,205	57,420
45-64 years.....	76	4,687	228	5,490	10,504
65 years and older.....	23	3,087	156	5,875	15,790
Female, total.....	3	378	3	0	0
Family income:					
0-\$ 5,999.....0.0.....	115	3,320	649	5,940	15,574
\$ 6,000-\$ 7,499.....	78	4,242	157	4,397	10,410
\$ 7,500-\$ 9,999.....	129	10,653	931	19,241	53,066
\$10,000-\$14,999.....0.....	133	14,283	1,218	42,323	124,632
\$15,000-\$24,999.....	66	39,992	810	6,144	25,111
\$25,000 and over.....	0	0	0	0	0
No response.....	65	12,842	537	5,168	11,022

Continued-

Table 23.—Waterfowl Hunting in the Atlantic Flyway by Selected Characteristics in 1970

Characteristics	Number of hunters	Expenditures	Number of recreation days	Total miles	Passenger-miles
	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>
Occupation:					
Total civilian population 14 years old and over.....	554	84,416	3,699	76,308	205,238
Total civilian labor force.....	465	76,214	3,057	63,926	170,010
White collar workers:					
Professionals and technical.....	36	1,470	136	5,791	120,925
Farmers.....	7	105	35	105	105
Managers and proprietors.....	72	5,990	301	8,023	36,674
Clerical.....	24	663	66	3,020	5,996
Sales.....	23	1,257	118	3,582	7,558
Blue collar workers:					
Craftsmen.....	103	53,276	1,211	9,321	30,258
Operatives.....	133	9,715	832	30,836	70,205
Private household, other service, and farm laborers.....	36	1,045	178	0	36
Other laborers.....	26	1,591	126	1,851	4,058
Never worked full time.....	4	201	52	1,397	2,095
Civilian population not in labor force.....	88	8,202	642	12,382	35,228
Under 14 years old.....	32	915	604	6,905	34,577



**Table 24.—Out-of-State Fishing and Hunting in 1970**

Type of fishing and hunting	Number of sportsmen	Number of recreation days
	<i>Thousands</i>	<i>Thousands</i>
United States, total.....	36,277	909,876
Fishing, total.....	33,158	706,187
In 1 State (not current State of residence).....	2,962	49,209
In 2 States (not current State of residence).....	631	11,052
In 3 States (not current State of residence).....	57	2,878
In 4 or more States (not current State of residence).....	4	79
In current State of residence only.....	23,697	472,589
In current State of residence and 1 other State.....	4,691	126,190
In current State of residence and 2 other States.....	885	34,465
In current State of residence and 3 other States.....	139	6,572
In current State of residence and 4 or more other States.....	91	2,679
In foreign countries, total.....	1,209	7,674
Canada.....	861	5,647
Mexico.....	201	742
Other.....	209	1,611
Fresh-water fishing, total.....	29,363	592,494
In 1 State (not current State of residence).....	2,624	40,035
In 2 States (not current State of residence).....	362	6,291
In 3 States (not current State of residence).....	59	2,706
In 4 or more States (not current State of residence).....	0	0
In current State of residence only.....	22,469	431,081
In current State of residence and 1 other State.....	3,303	89,264
In current State of residence and 2 other States.....	451	19,082
In current State of residence and 3 other States.....	55	2,156
In current State of residence and 4 or more other States.....	40	1,145
In foreign countries, total.....	849	5,902
Canada.....	796	5,501
Mexico.....	18	55
Other.....	36	346

Type of fishing and hunting	Number of sportsmen	Number of recreation days
	<i>Thousands</i>	<i>Thousands</i>
Salt-water fishing, total.....	9,460	113,694
In 1 State (not current State of residence).....	2,579	26,617
In 2 States (not current State of residence).....	246	3,338
In 3 States (not current State of residence).....	6	46
In 4 or more States (not current State of residence).....	0	0
In current State of residence only.....	5,926	68,215
In current State of residence and 1 other State.....	578	12,106
In current State of residence and 2 other States.....	70	1,778
In current State of residence and 3 other States.....	55	1,594
In current State of residence and 4 or more other States.....	0	0
In foreign countries, total.....	364	1,809
Canada.....	65	146
Mexico.....	184	687
Other.....	173	1,264
Hunting, total.....	14,336	203,069
In 1 State (not current State of residence).....	909	10,297
In 2 States (not current State of residence).....	58	894
In 3 States (not current State of residence).....	8	61
In 4 or more States (not current State of residence).....	0	0
In current State of residence only.....	12,477	176,390
In current State of residence and 1 other State.....	809	14,759
In current State of residence and 2 other States.....	75	1,289
In current State of residence and 3 other States.....	0	0
In current State of residence and 4 or more other States.....	0	0
In foreign countries, total.....	67	668
Canada.....	67	487
Mexico.....	0	0
Other.....	11	181
Big-game hunting, total.....	7,774	54,536

Table 24.—Out-of-State Fishing and Hunting in 1970

Type of fishing and hunting	Number of sportsmen	Number of recreation days
	<i>Thousands</i>	<i>Thousands</i>
In 1 State (not current State of residence).....t	606	4,823
In 2 States (not current State of residence).....t	24	216
In 3 States (not current State of residence).....t	4	33
In 4 or more States (not current State of residence).....t	0	0
In current State of residence only.....t	6,894	46,032
In current State of residence and 1 other State.....t	233	3,239
In current State of residence and 2 other States.....t	13	192
In current State of residence and 3 other States.....t	0	0
In current State of residence and 4 or more other States.....t	0	0
In foreign countries, total.....t	30	244
Canada.....t	30	240
Mexico.....t	0	0
Other.....t	4	4
Small-game hunting, total.....t	110671	124,041
In 1 State (not current State of residence).....t	604	5,801
In 2 States (not current State of residence).....t	22	166
In 3 States (not current State of residence).....t	0	0
In 4 or more States (not current State of residence).....t	0	0
In current State of residence only.....t	10,667	1110843
In current State of residence and 1 other State.....t	339	5,877
In current State of residence and 2 other States.....t	39	354
In current State of residence and 3 other States.....t	0	0

Type of fishing and hunting	Number of sportsmen	Number of recreation days
	<i>Thousands</i>	<i>Thousands</i>
In current State of residence and 4 or more other States.....t	0	0
In foreign countries, total.....t	19	193
Canada.....t	19	160
Mexico.....t	0	0
Other.....t	5	33
Waterfowl hunting, total.....t	2,894	25,113
In 1 State (not current State of residence).....t	79	1,293
In 2 States (not current State of residence).....t	8	362
In 3 States (not current State of residence).....t	0	0
In 4 or more States (not current State of residence).....t	0	0
In current State of residence only.....t	2,773	22,552
In current State of residence and 1 other State.....t	34	906
In current State of residence and 2 other States.....t	0	0
In current State of residence and 3 other States.....t	0	0
In current State of residence and 4 or more other States.....t	0	0
In foreign countries, total.....t	18	86
Canada.....t	18	86
Mexico.....t	0	0
Other.....t	0	0

**Table 25.—Licensing by Type of Sport: Number of Fishermen and Hunters, Expenditures, Recreation Days, Trips, Total Miles and Passenger Miles.**

Type of sport	Total		Licensed		Unlicensed	
	Number	Percent	Number	Percent	Number	Percent
	<i>Thousands</i>		<i>Thousands</i>		<i>Thousands</i>	
<b>Total fishing:</b>						
Number of fishermen.....t.....	33,158	100	20,358	61.4	12,799	38.6
Expenditures on fishing.....t.....	\$4,958,883	100	\$4,037,044	81.0	\$921,840	18.6
Number of fishing days.....t.....	706,187	100	474,858	67.2	231,329	32.7
Number of fishing trips.....t.....	576,210	100	385,120	66.8	191,090	33.2
Total miles traveled to fish.....t.....	13,034,850	100	10,528,129	80.8	2,506,721	19.2
Total passenger-miles to fish.....t.....	29,482,797	100	23,170,249	78.6	6,312,548	21.4
<b>Fresh-water fishing:</b>						
Number of fresh-water fishermen.....t.....	29,363	100	19,662	66.6	9,801	33.4
Expenditures on fresh-water fishing.....t.....	\$3,734,178	100	\$3,355,000	89.8	\$378,678	10.1
Number of fresh-water fishing days.....t.....	592,494	100	418,056	70.5	174,438	29.4
Number of fresh-water fishing trips.....t.....	481,420	100	337,652	70.1	143,868	29.9
Total miles traveled to fish in fresh water.....t.....	10,461,061	100	9,028,770	86.6	1,432,391	13.7
Total passenger-miles traveled to fish in fresh water.....t.....	23,635,599	100	19,758,645	83.6	3,877,055	16.4
<b>Salt-water fishing:</b>						
Number of salt-water fishermen.....t.....	9,460	100	4,734	50.0	4,726	49.9
Expenditures on salt-water fishing.....t.....	\$1,022,705	100	\$681,054	55.6	\$543,161	44.3
Number of salt-water fishing days.....t.....	113,069	100	56,802	50.0	56,891	50.0
Number of salt-water fishing trips.....t.....	94,789	100	47,668	50.2	47,222	49.8
Total miles traveled to fish in salt water.....t.....	2,573,689	100	1,499,359	58.2	1,074,330	41.07
Total passenger-miles traveled to fish in salt water.....t.....	5,847,198	100	3,411,070	58.3	2,435,493	41.6
<b>Total hunting:</b>						
Number of hunters.....t.....	14,336	100	11,274	78.6	3,062	21.4
Expenditures on hunting.....t.....	\$2,142,648	100	\$1,089,098	88.5	\$245,650	11.5
Number of hunting days.....t.....	203,689	100	158,630	77.9	45,060	22.1
Number of hunting trips.....t.....	176,201	100	135,507	76.9	40,694	23.1
Total miles traveled to hunt.....t.....	4,040,913	100	3,589,324	86.7	551,589	13.3
Total passenger-miles traveled to hunt.....t.....	9,284,952	100	7,831,858	84.3	1,453,094	15.6

Continued—



**Table 25.—Licensing by Type of Sport: Number of Fishermen and Hunters, Expenditures, Recreation Days, Trips, Total Miles and Passenger Miles.**

Type of sport	Total		Licensed		Unlicensed	
	Number	Percent	Number	Percent	Number	Percent
	<i>Thousands</i>		<i>Thousands</i>		<i>Thousands</i>	
<b>Big-game hunting:</b>						
Number of big-game hunters .....	7,774	100	6,763	87.0	1,012	13.0
Expenditures on big-game hunting .....	\$952,563	100	\$873,195	91.7	\$79,368	8.3
Number of big-game hunting days .....	54,536	100	48,719	89.3	5,817	10.7
Number of big-game hunting trips .....	39,684	100	35,499	89.4	4,185	10.5
Total miles traveled to hunt big game .....	1,637,651	100	1,467,778	89.6	169,873	10.4
Total passenger-miles traveled to hunt big game .....	3,975,184	100	3,406,785	85.7	568,398	14.3
<b>Small-game hunting:</b>						
Number of small-game hunters .....	11,671	100	8,291	76.4	2,750	23.6
Expenditures on small-game hunting .....	\$945,634	100	\$795,600	84.1	\$150,034	15.9
Number of small-game hunting days .....	124,041	100	87,644	70.6	36,396	29.3
Number of small-game hunting trips .....	113,877	100	79,833	70.1	34,044	29.9
Total miles traveled to hunt small game .....	1,935,897	100	1,592,974	82.3	342,923	17.7
Total passenger-miles traveled to hunt small game .....	4,070,683	100	3,301,028	81.1	769,655	18.9
<b>Waterfowl hunting:</b>						
Number of waterfowl hunters .....	2,894	100	2,465	85.2	429	14.8
Expenditures on waterfowl hunting .....	\$244,451	100	\$228,302	93.4	\$16,149	6.6
Number of waterfowl hunting days .....	25,113	100	22,267	88.7	2,846	11.3
Number of waterfowl hunting trips .....	22,640	100	20,174	89.1	2,465	10.9
Total miles traveled to hunt waterfowl .....	567,365	100	528,572	93.2	38,793	6.8
Total passenger-miles traveled to hunt waterfowl .....	1,239,086	100	1,124,045	90.7	115,041	9.3

**Table 26.—Specific Number of Fishing and Hunting Trips by Persons 12 Years Old and Older, Expenditures, Days, Total Miles Traveled, and Passenger-miles in 1970**

Number of trips by selected variables	Fishing and/or hunting		Fishing		Hunting	
	Number	Percent	Number	Percent	Number	Percent
	<i>Thousands</i>		<i>Thousands</i>		<i>Thousands</i>	
<b>Number of sportsmen:</b>						
United States, total.....	36,277	100.0	33,158	100.0	14,336	100.0
1 trip.....	2,955	8.1	2,985	9.0	1,546	10.8
2 trips.....	2,069	5.7	2,057	6.2	1,292	9.0
3 trips.....	2,717	7.5	2,754	8.3	1,488	10.4
4 trips.....	2,106	5.8	2,155	6.5	1,108	7.7
5 trips.....	2,079	5.7	2,118	6.4	1,031	7.2
6 trips.....	1,976	5.4	2,006	6.0	776	5.4
7 trips.....	1,262	3.5	1,285	3.9	607	4.2
8 trips.....	1,232	3.4	1,245	3.8	579	4.0
9 trips.....	897	2.5	820	2.5	410	2.9
10 trips.....	1,496	4.0	1,645	5.0	709	4.9
11-15 trips.....	4,254	11.7	3,643	11.0	1,552	10.8
16-20 trips.....	2,760	7.6	2,554	7.7	964	6.7
21-30 trips.....	3,551	9.8	3,015	9.1	1,120	7.8
31-40 trips.....	2,022	5.6	1,531	4.6	448	3.1
41-60 trips.....	2,246	6.2	1,705	5.1	384	2.7
61-80 trips.....	964	2.7	548	1.7	178	1.2
81-100 trips.....	585	1.6	387	1.2	49	.3
101 and over.....	1,103	3.0	705	2.1	96	.7
<b>Expenditures:</b>						
United States, total.....	\$7,101,531	100.0	\$4,958,883		\$2,142,648	
1 trip.....	153,377		134,582		139,822	
2 trips.....	143,553		110,339		125,457	
3 trips.....	128,957		107,536		99,477	
4 trips.....	131,314		115,191		110,025	
5 trips.....	223,637		137,985		157,934	
6 trips.....	178,819		151,035		99,506	
7 trips.....	141,264		170,838		90,829	
8 trips.....	207,392		199,505		49,084	
9 trips.....	105,694		91,809		79,645	
10 trips.....	115,646		140,738		92,135	
11-15 trips.....	753,948		485,820		248,901	
16-20 trips.....	631,559		415,284		145,927	
21-30 trips.....	936,880		742,611		236,285	
31-40 trips.....	600,949		399,332		159,851	
41-60 trips.....	981,035		677,523		151,301	
61-80 trips.....	573,680		299,067		81,902	
81-100 trips.....	334,081		184,921		11,763	
101 and over.....	758,946		394,568		63,616	

**Table 26.—Specific Number of Fishing and Hunting Trips by Persons 12 Years Old and Older, Expenditures, Days, Total Miles Traveled, and Passenger-miles in 1970**

Number of trips by selected variables	Fishing and/or hunting		Fishing		Hunting	
	Number	Percent	Number	Percent	Number	Percent
	<i>Thousands</i>		<i>Thousands</i>		<i>Thousands</i>	
Number of recreation days: United States, total.....	909,876	100.0	706,187	100.0	203,689	
1 trip.....	16,363		20,113		6,854	
2 trips.....	11,088		11,007		6,326	
3 trips.....	16,918		16,281		6,601	
4 trips.....	12,706		12,991		6,049	
5 trips.....	14,635		14,737		6,626	
6 trips.....	19,558		17,442		5,952	
7 trips.....	15,364		14,152		5,277	
8 trips.....	14,746		13,915		5,697	
9 trips.....	13,044		11,840		4,288	
10 trips.....	18,542		20,706		8,182	
11-15 trips.....	71,986		59,804		22,479	
16-20 trips.....	63,362		58,273		18,992	
21-30 trips.....	108,884		90,990		30,275	
31-40 trips.....	83,207		62,411		16,936	
41-60 trips.....	124,630		93,998		20,234	
61-80 trips.....	72,183		41,424		12,470	
81-100 trips.....	57,255		37,450		4,648	
101 and over.....	175,408		108,653		15,807	
Number of miles traveled: United States, total.....	17,175,763		13,034,850		4,140,914	
1 trip.....	280,113		265,082		199,942	
2 trips.....	347,956		315,749		224,593	
3 trips.....	325,925		260,017		249,320	
4 trips.....	340,413		317,281		154,181	
5 trips.....	342,465		301,843		234,614	
6 trips.....	433,009		345,081		165,043	
7 trips.....	337,551		340,641		150,704	
8 trips.....	350,347		331,546		124,514	
9 trips.....	274,860		269,984		158,938	
10 trips.....	354,117		339,914		182,536	
11-15 trips.....	1,629,892		1,341,101		530,562	
16-20 trips.....	1,439,997		1,226,381		323,170	
21-30 trips.....	2,368,654		1,869,990		535,915	
31-40 trips.....	1,768,543		1,216,908		284,414	
41-60 trips.....	2,371,325		1,827,310		349,026	
61-80 trips.....	1,177,665		608,400		160,621	
81-100 trips.....	774,084		479,226		36,967	
101 and over.....	2,258,847		1,318,394		75,854	



**Table 26.—Specific Number of Fishing and Hunting Trips by Persons 12 Years Old and Older, Expenditures, Days, Total Miles Traveled, and Passenger-miles in 1970**

Number of trips by selected variables	Fishing and/or hunting		Fishing		Hunting	
	Number	Percent	Number	Percent	Number	Percent
	<i>Thousands</i>		<i>Thousands</i>		<i>Thousands</i>	
Passenger-miles traveled: United States, total	38,767,751		29,482,799		9,284,953	
1 trip	707,774		673,340		453,373	
2 trips	762,051		731,387		514,157	
3 trips	834,352		685,521		502,610	
4 trips	830,309		790,960		367,967	
5 trips	829,228		778,736		515,860	
6 trips	979,499		824,380		395,021	
7 trips	781,087		826,551		359,429	
8 trips	912,259		844,973		289,227	
9 trips	651,936		657,092		358,280	
10 trips	818,061		907,633		422,601	
11-15 trips	3,953,647		3,145,885		1,316,304	
16-20 trips	3,301,641		2,769,844		748,029	
21-30 trips	5,459,252		4,271,737		1,189,470	
31-40 trips	3,931,022		2,641,034		616,037	
41-60 trips	5,113,575		3,886,460		698,646	
61-80 trips	2,566,055		1,331,038		332,413	
81-100 trips	1,765,487		1,036,922		68,240	
101 and over	4,569,357		2,679,108		136,889	

**Table 27.—Specified Travel Distances by Persons 12 Years Old and Older, Expenditures, Recreation Days in 1970**

Distance traveled by selected variables	Fishing Number	Hunting Number
	<i>Thousands</i>	<i>Thousands</i>
<b>Number of sportsmen:</b>		
Total.....	33,158	14,336
Less than 1 mile.....	6,204	1,634
1-5 miles.....	283	174
6-24 miles.....	3,153	1,717
25-49 miles.....	2,388	1,179
50-99 miles.....	3,102	1,819
100-249 miles.....	6,740	3,434
250-499 miles.....	4,326	1,984
500-999 miles.....	3,491	1,457
1,000-1,499 miles.....	1,386	490
1,500-1,999 miles.....	823	206
2,000-2,999 miles.....	613	165
3,000-3,999 miles.....	292	31
4,000-4,999 miles.....	179	26
5,000 miles and over.....	178	20
<b>Expenditures:</b>		
Total.....	\$4,958,883	\$2,142,648
Less than 1 mile.....	264,244	70,589
1-5 miles.....	2,080	5,649
6-24 miles.....	86,029	68,618
25-49 miles.....	109,532	88,959
50-99 miles.....	193,194	144,866
100-249 miles.....	645,717	428,858

Distance traveled by selected variables	Fishing Number	Hunting Number
	<i>Thousands</i>	<i>Thousands</i>
250-499 miles.....	678,393	405,530
500-999 miles.....	1,053,919	408,673
1,000-1,499 miles.....	550,562	183,497
1,500-1,999 miles.....	433,062	145,833
2,000-2,999 miles.....	360,851	126,741
3,000-3,999 miles.....	241,524	27,505
4,000-4,999 miles.....	160,610	22,941
5,000 miles & over.....	189,165	14,388
<b>Number of recreation days:</b>		
Total.....	706,187	203,689
Less than 1 mile.....	76,454	15,768
1-5 miles.....	2,729	1,360
6-24 miles.....	30,785	12,045
25-49 miles.....	28,012	9,861
50-99 miles.....	46,142	23,922
100-249 miles.....	114,197	40,574
250-499 miles.....	98,590	36,690
500-999 miles.....	112,063	32,878
1,000-1,499 miles.....	57,963	15,226
1,500-1,999 miles.....	45,719	5,782
2,000-2,999 miles.....	37,144	6,272
3,000-3,999 miles.....	23,109	859
4,000-4,999 miles.....	16,758	1,182
5,000 miles and over.....	16,523	1,271

**Table 28.—Mileage Traveled to Fish and to Hunt in 1970**

	Total miles			Passenger-miles		
	Automobile	Other	Total	Automobile	Other	Total
	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>
Total fishing and hunting.....	16,237,527	938,236	17,175,763	37,829,513	938,236	38,767,749
Fishing:						
Fresh-water.....	10,089,066	372,095	10,461,161	23,263,505	372,095	23,635,600
Salt-water.....	2,185,767	387,922	2,573,689	5,459,276	387,922	5,847,198
Total.....	12,274,833	760,017	13,034,850	28,722,781	760,017	29,482,798
Hunting:						
Big-game.....	1,597,285	40,366	1,637,651	3,934,818	40,366	3,975,184
Small-game.....	1,823,937	111,960	1,935,897	3,958,722	111,960	4,070,682
Waterfowl.....	541,472	25,893	567,365	1,213,193	25,893	1,239,086
Total.....	3,962,694	178,219	4,140,913	9,106,733	178,219	9,284,952



**Table 29.—Expenditures on Boat Launchings and Number of Paid Launchings by Type of Fishing in 1970**

Type of sport	Boat launchings	
	Expenditures	Number of times
United States, total.....	<i>Thousands</i> 30,913	<i>Thousands</i> 13,627
Fishing, total.....	30,277	13,304
Fresh-water.....	20,675	8,697
Saltwater.....	9,602	4,607
Hunting, total.....	636	323

**Table 30.—Fishing and Hunting by Family Income: Number of Persons 12 Years Old and Older, Expenditures, Recreation Days, Trips, Total Miles, and Passenger Miles in 1970**  
 [Figures in thousands]

	Total	Under \$1,000	\$1,000- \$1,999	\$2,000- \$2,999	\$3,000- \$3,999	\$4,000- \$4,999	\$5,000- \$5,999	\$6,000- \$7,499	\$7,500- \$9,999	\$10,000- \$14,999	\$15,000- \$24,999	\$25,000 and over	No response
<b>Fishing and hunting:</b>													
Number of fishermen and hunters	36,277	249	828	1,088	1,709	1,912	2,750	4,913	7,107	9,571	3,626	878	1,648
Expenditures	\$7,101,531	\$22,177	\$89,857	\$199,561	\$215,778	\$274,132	\$502,591	\$925,209	\$1,452,201	\$1,993,770	\$728,641	\$256,721	\$440,893
Number of recreation days	909,876	7,305	19,114	28,672	54,092	56,230	82,115	127,067	189,690	220,563	69,976	15,348	39,705
Number of fishing and hunting trips	752,411	5,666	17,341	22,956	48,166	48,994	71,828	110,614	156,139	174,413	53,345	11,192	31,757
Total miles traveled	17,175,763	58,524	229,842	382,924	668,161	911,139	1,295,912	2,269,415	3,772,925	4,476,993	1,745,528	500,067	863,832
Total passenger-miles traveled	38,767,175	115,553	496,096	879,813	1,530,560	1,915,821	2,721,580	5,099,482	8,850,175	10,154,896	3,893,058	915,133	1,802,374
<b>Fishing:</b>													
Number of fishermen	33,158	239	760	960	1,555	1,746	2,444	4,484	6,516	8,767	3,395	792	1,500
Expenditures	\$4,958,883	\$16,086	\$60,433	\$153,468	\$159,839	\$208,433	\$313,910	\$614,329	\$1,032,806	\$1,338,510	\$502,301	\$207,952	\$350,816
Number of recreation days	706,187	6,130	15,039	22,321	44,734	44,143	61,376	95,209	148,232	167,896	56,746	13,105	31,256
Number of fishing trips	576,210	4,787	13,511	17,538	40,209	38,640	53,143	82,944	119,842	129,264	42,576	9,296	24,459
Total miles traveled	13,034,850	48,633	182,617	297,483	520,661	725,743	908,372	1,667,016	2,816,117	3,372,997	1,353,029	408,006	724,175
Total passenger-miles traveled	29,482,799	93,816	398,116	685,092	1,151,723	1,551,438	1,909,788	3,841,052	6,658,613	8,035,148	2,948,111	708,039	1,501,855
<b>Fresh-water fishing:</b>													
Number of fishermen	29,363	234	708	915	1,374	1,536	2,274	4,025	5,749	7,717	2,869	622	1,340
Expenditures	\$3,734,178	\$14,112	\$54,810	\$144,896	\$91,000	\$165,091	\$246,511	\$459,484	\$786,334	\$1,040,551	\$364,274	\$70,265	\$296,850
Number of recreation days	592,494	5,515	13,573	20,526	33,424	37,003	51,374	82,481	125,030	142,385	44,717	8,785	27,681
Number of fishing trips	481,420	4,633	12,200	15,930	29,419	32,089	43,864	71,795	100,738	109,172	33,325	6,232	22,024
Total miles traveled	10,461,161	34,323	168,901	250,331	376,130	585,152	746,185	1,338,509	2,264,793	2,744,959	1,142,356	208,484	601,037
Total passenger-miles traveled	23,635,601	69,903	366,831	533,296	797,278	1,243,740	1,558,405	3,076,838	5,365,057	6,560,509	2,463,692	370,267	1,229,776
<b>Salt-water fishing:</b>													
Number of fishermen	9,460	33	119	142	349	448	557	1,227	1,752	2,712	1,233	469	420
Expenditures	\$1,122,705	\$11,974	\$5,624	\$8,572	\$68,839	\$43,342	\$67,400	\$154,845	\$246,472	\$297,959	\$138,027	\$137,687	\$53,965
Number of recreation days	113,694	614	1,466	1,795	1,130	7,141	10,002	12,728	23,202	25,512	12,029	4,320	3,575
Number of fishing trips	94,789	154	1,311	1,608	10,790	6,551	9,279	11,149	19,104	20,092	9,251	3,064	2,435
Total miles traveled	2,573,689	14,310	131,716	47,152	144,530	140,591	162,187	338,507	551,323	628,038	210,673	199,522	123,139
Total passenger-miles traveled	5,847,198	23,912	311,284	151,796	354,445	307,698	351,384	764,214	1,293,556	1,474,639	484,419	337,772	272,079
<b>Hunting:</b>													
Number of hunters	14,336	93	272	464	606	732	1,321	2,053	3,010	3,654	1,272	258	601
Expenditures	\$2,242,648	\$6,090	\$29,424	\$46,093	\$55,940	\$65,699	\$188,680	\$310,880	\$419,395	\$655,260	\$226,340	\$48,769	\$90,078
Number of recreation days	203,689	1,175	4,075	6,351	9,358	12,087	20,739	31,858	41,458	52,666	13,230	2,243	8,449
Number of hunting trips	176,201	879	3,830	5,418	7,957	10,354	18,684	27,670	36,297	45,149	10,770	1,896	7,298
Total miles traveled	4,140,913	9,890	47,275	85,441	147,950	185,396	387,541	592,399	956,809	1,103,996	392,498	92,061	139,657
Total passenger-miles traveled	9,284,953	21,737	97,980	194,721	378,837	364,382	811,792	1,258,430	2,191,562	2,512,949	944,947	207,094	300,518
<b>Big-game hunting:</b>													
Number of big-game hunters	7,774	40	129	230	343	340	727	1,191	1,645	2,013	614	116	389
Expenditures	\$952,563	\$1,870	\$6,735	\$13,046	\$23,951	\$22,348	\$71,128	\$152,897	\$172,573	\$344,924	\$81,598	\$23,442	\$37,952
Number of recreation days	54,536	282	905	1,112	2,721	2,595	5,294	9,394	11,128	14,091	3,997	553	2,363
Number of hunting trips	39,684	274	751	908	2,059	2,154	4,208	7,102	8,172	9,664	2,442	365	1,588
Total miles traveled	1,637,651	5,695	17,673	21,741	67,364	50,023	154,441	232,284	375,295	429,342	156,253	52,620	74,918
Total passenger-miles traveled	3,975,184	13,395	47,336	58,318	235,528	101,010	368,060	591,091	893,263	1,017,113	382,530	112,608	154,930
<b>Small-game hunting:</b>													
Number of small-game hunters	11,671	86	223	401	469	616	1,040	1,696	2,522	2,920	1,027	213	459
Expenditures	\$945,634	\$3,456	\$21,325	\$28,627	\$28,334	\$35,900	\$88,646	\$126,509	\$214,203	\$257,895	\$86,919	\$17,512	\$36,307
Number of recreation days	124,041	867	2,932	4,913	6,373	7,685	12,016	18,204	26,347	31,041	7,291	1,252	5,119
Number of hunting trips	113,877	580	2,841	4,238	5,639	6,790	11,490	16,780	24,671	28,400	6,566	1,130	4,751
Total miles traveled	1,935,898	3,900	27,436	53,888	75,874	120,585	144,764	282,542	479,145	468,604	198,680	30,780	49,429
Total passenger-miles traveled	4,070,683	7,455	45,674	116,267	131,549	225,344	283,141	500,703	1,074,214	1,030,878	474,648	72,489	108,317
<b>Waterfowl hunting:</b>													
Number of waterfowl hunters	2,984	11	50	53	85	122	274	401	582	816	291	62	147
Expenditures	\$244,451	\$764	\$11,363	\$4,421	\$3,654	\$7,452	\$28,907	\$31,473	\$32,519	\$52,440	\$57,823	\$7,815	\$15,819
Number of recreation days	25,113	26	238	326	263	1,807	3,428	4,259	3,883	7,534	1,942	439	968
Number of hunting trips	22,640	26	238	272	259	1,410	2,986	3,789	3,454	7,085	1,762	401	959
Total miles traveled	567,365	296	2,166	9,812	4,712	14,788	88,335	77,573	102,099	206,050	37,565	8,661	15,309
Total passenger-miles traveled	1,239,086	887	4,970	20,316	11,760	38,028	160,590	166,635	224,085	464,957	87,769	21,997	37,271

Table 31.—Seasonal Distribution of Fishing and Hunting Activities by Census Geographic Divisions in 1970

Activity and census geographic divisions	Total		Summer activities			Fall activities			Winter activities			Spring activities		
	Number of sportsmen	Number of recreation days	Number of sportsmen	Recreation days		Number of sportsmen	Recreation days		Number of sportsmen	Recreation days		Number of sportsmen	Recreation days	
				Number	Percent of annual		Number	Percent of annual		Number	Percent of annual		Number	Percent of annual
	Thousands	Thousands	Thousands	Thousands		Thousands	Thousands		Thousands	Thousands		Thousands	Thousands	
United States, total . . . . .	36,277	909,087	30,486	431,023	47.3	19,622	215,847	23.7	8,962	81,069	8.8	17,412	184,291	20.2
Fishing, total . . . . .	33,058	706,187	29,933	418,076	59.2	9,541	82,657	11.07	3,571	28,879	4.01	16,967	176,574	25.0
New England . . . . .	1,430	29,534	1,318	190,832	67.1	290	2,335	7.9	68	271	.9	696	7,096	24.0
Middle Atlantic . . . . .	4,054	82,063	3,710	51,022	62.2	755	6,288	7.7	190	1,739	2.1	2,084	23,014	28.0
East North Central . . . . .	6,699	137,317	5,993	89,960	65.6	1,657	14,288	10.4	671	5,692	4.1	2,926	27,377	19.9
West North Central . . . . .	3,679	66,448	3,365	45,806	68.9	868	6,323	9.5	332	1,649	2.05	1,635	12,069	19.1
South Atlantic . . . . .	5,129	137,036	4,598	69,328	50.6	2,079	21,159	15.4	844	8,172	6.0	2,888	38,377	28.0
East South Central . . . . .	2,464	62,343	2,059	33,031	53.0	682	7,062	11.5	143	1,429	2.3	1,447	20,721	33.2
West South Central . . . . .	4,006	86,823	3,590	44,694	51.5	1,442	11,557	13.3	694	4,614	5.3	2,578	25,958	29.9
Mountain . . . . .	1,769	25,476	1,647	18,759	73.0	373	2,016	7.9	111	468	1.8	607	4,234	16.6
Pacific . . . . .	4,030	79,048	3,653	45,644	57.7	1,394	11,527	14.6	518	4,845	6.1	2,008	17,130	21.06
Hunting, total . . . . .	14,366	203,689	1,086	12,525	6.2	12,637	131,070	64.7	5,856	51,086	25.4	839	7,593	3.7
New England . . . . .	582	7,234	23	290	4.0	519	5,744	79.4	129	988	13.7	12	212	2.9
Middle Atlantic . . . . .	1,731	25,004	92	1,495	6.0	1,549	17,386	69.5	962	5,457	21.8	116	667	2.7
East North Central . . . . .	2,812	35,279	134	1,595	4.6	2,608	27,030	76.6	776	6,099	17.3	53	555	1.6
West North Central . . . . .	1,783	24,020	142	1,452	6.0	1,606	15,588	64.09	690	6,123	25.5	110	858	3.6
South Atlantic . . . . .	1,904	29,568	125	825	2.3	1,527	16,917	57.2	1,074	11,305	38.2	97	521	1.8
East South Central . . . . .	1,162	20,043	92	901	4.6	936	10,347	51.06	707	7,913	39.05	86	881	4.4
West South Central . . . . .	1,918	30,206	148	2,054	7.1	1,646	16,281	53.9	1,037	9,932	32.9	133	1,838	6.1
Mountain . . . . .	980	10,392	85	610	5.9	916	7,748	74.6	234	1,695	16.3	94	340	3.3
Pacific . . . . .	1,466	21,943	244	3,202	14.6	1,332	14,726	67.1	248	2,294	10.5	137	1,721	7.8



Table 32.—Number of Fishermen and Hunters by Geographic Division in 1955, 1960, 1965, and 1970

Geographic division	Total number of persons 12 and over		Total persons who fished and/or hunted		Total persons who fished		Total persons who hunted	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
	<i>Thousands</i>		<i>Thousands</i>		<i>Thousands</i>		<i>Thousands</i>	
United States, total:								
1955.....	118,366	100	24,917	21.1	20,813	17.6	11,784	10.0
1960.....	131,026	100	30,435	23.2	25,323	19.3	14,637	11.2
1965.....	141,928	100	32,881	23.2	28,348	20.0	13,585	9.6
1970.....	155,230	100	36,277	23.4	33,158	21.4	14,336	9.2
Geographic division:								
New England:								
1955.....	7,919	100	1,224	15.4	1,002	12.7	589	7.4
1960.....	8,349	100	1,368	16.4	1,205	14.4	517	6.2
1965.....	9,256	100	1,650	17.8	1,488	16.0	583	6.3
1970.....	8,652	100	1,579	18.3	1,430	16.5	582	6.7
Middle Atlantic:								
1955.....	24,869	100	3,539	14.2	2,811	11.3	1,608	6.5
1960.....	26,493	100	3,432	13.0	2,569	9.7	1,723	6.5
1965.....	27,346	100	3,602	13.2	2,760	10.0	1,631	6.0
1970.....	28,244	100	4,639	16.1	4,054	14.0	1,731	6.1
East North Central:								
1955.....	25,733	100	5,489	21.3	4,583	17.8	2,538	9.9
1960.....	26,833	100	6,316	23.5	5,317	19.8	2,985	11.1
1965.....	28,124	100	6,214	22.1	5,336	19.0	2,563	9.1
1970.....	31,550	100	7,284	23.1	6,699	21.2	2,812	8.9
West North Central:								
1955.....	9,201	100	2,913	31.7	2,346	25.5	1,534	16.7
1960.....	10,149	100	3,383	33.3	2,855	28.1	1,709	16.8
1965.....	11,681	100	3,678	31.5	3,226	27.6	1,620	13.9
1970.....	12,904	100	4,000	31.0	3,579	27.7	1,783	13.8

Continued—

**Table 32.—Number of Fishermen and Hunters by Geographic Division in 1955, 1960, 1965, and 1970**

Geographic division	Total number of persons 12 and over		Total persons who fished and/or hunted		Total persons who fished		Total persons who hunted	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
	<i>Thousands</i>		<i>Thousands</i>		<i>Thousands</i>		<i>Thousands</i>	
<b>South Atlantic:</b>								
1955.....	14,336	100	3,223	22.5	2,805	19.6	1,449	10.1
1960.....	17,798	100	4,423	24.9	3,695	20.8	2,045	11.5
1965.....	20,593	100	5,626	27.3	5,054	24.5	1,900	9.2
1970.....	23,539	100	5,461	23.2	5,129	21.8	1,904	8.1
<b>East South Central:</b>								
1955.....	7,959	100	1,963	24.7	1,665	20.9	989	12.4
1960.....	9,277	100	2,778	29.9	2,207	23.8	1,510	16.3
1965.....	9,652	100	2,587	26.8	2,201	22.8	1,294	13.4
1970.....	9,862	100	2,660	27.0	2,464	25.0	1,162	11.8
<b>West South Central:</b>								
1955.....	10,250	100	2,560	25.0	2,237	21.8	1,165	11.4
1960.....	11,837	100	3,666	31.0	3,133	26.5	1,750	14.8
1965.....	12,724	100	3,713	29.2	3,278	25.8	1,571	12.3
1970.....	14,624	100	4,380	30.0	4,006	27.4	1,918	13.1
<b>Mountain:<sup>1</sup></b>								
1955.....	4,529	100	1,369	30.2	1,112	24.6	796	17.6
1960.....	5,222	100	1,646	31.5	1,372	26.3	1,120	21.4
1965.....	5,029	100	1,565	31.1	1,261	25.1	988	19.6
1970.....	5,656	100	2,044	36.1	1,769	31.3	980	17.3
<b>Pacific:</b>								
1955.....	13,570	100	2,637	19.4	2,252	16.6	1,116	8.2
1960.....	15,268	100	3,422	22.4	2,971	19.5	1,279	8.4
1965.....	17,523	100	4,246	24.2	3,744	21.4	1,433	8.2
1970.....	20,199	100	4,332	21.4	4,030	20.0	1,466	7.3

<sup>1</sup> The population 12 years or older in Mountain States was actually 5,570,000 in 1965. To obtain the actual number of sportsmen the total population should be multiplied by the figure in the percent column; or 1,732,000 for those who fished and/or hunted, 1,398,000 for those who fished, and 1,092,000 for those who hunted.

**Table 33.—Comparison of Major Findings of the 1955, 1960, 1965 and 1970 National Surveys of Fishing and Hunting**

Major findings	1955	1960	1965	1970
	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>
Number of fishermen and hunters.....	24,917	30,435	32,881	36,277
Number of fishermen.....	20,813	25,323	28,348	33,158
Fresh-water.....	18,420	21,677	23,962	29,363
Salt-water.....	4,557	6,292	8,305	9,460
Number of hunters.....	11,784	14,637	13,583	14,336
Small-game.....	9,822	12,105	10,576	11,671
Big-game.....	4,414	6,277	6,566	7,774
Waterfowl <sup>1</sup> .....	1,986	1,955	1,650	2,894
Expenditures of fishermen and hunters <sup>2</sup> .....	\$2,850,979	\$3,852,116	\$4,046,440	\$7,101,531
Expenditures of fishermen.....	1,914,292	2,690,872	2,925,304	4,958,883
Fresh-water.....	1,425,353	2,064,680	2,125,652	3,734,178
Salt-water.....	488,939	626,191	799,656	1,224,705
Expenditures of hunters.....	936,687	1,161,242	1,121,135	2,142,648
Small-game.....	494,033	726,118	615,234	945,634
Big-game.....	323,909	345,694	418,764	952,563
Waterfowl.....	118,745	89,431	87,136	244,451
Number of recreation days spent fishing and hunting.....	566,870	658,308	708,578	909,876
Fishing.....	397,447	465,769	522,759	706,187
Fresh-water.....	338,826	385,167	426,922	592,494
Salt-water.....	58,621	80,602	95,837	113,694
Hunting.....	169,423	192,539	185,819	203,689
Small-game.....	118,630	138,192	128,448	124,041
Big-game.....	30,834	39,190	43,845	54,536
Waterfowl.....	19,959	15,158	13,526	25,113
Passenger-miles traveled by automobile for fishing and hunting.....	23,982,730	26,447,562	30,447,130	37,829,515
Fishing.....	17,910,434	18,834,947	22,111,249	28,722,782
Fresh-water.....	15,006,433	15,430,001	17,972,943	23,263,506
Salt-water.....	2,904,001	3,404,945	4,138,307	5,459,276
Hunting.....	6,072,296	7,612,615	8,365,881	9,106,734
Small-game.....	3,094,974	3,962,020	4,010,499	3,958,723
Big-game.....	2,222,373	2,998,178	3,718,767	3,934,818
Waterfowl.....	754,949	652,417	636,615	1,213,193

<sup>1</sup> See Appendix C, note (3).

<sup>2</sup> For comparative purposes excludes expenditures on alcoholic beverages which were included in preceding tables (for 1970).



**Table 34.—Number of Fishermen and Hunters 25 Years Old and Older in 1970 by Years of School Completed**

Education	Total persons 25 and over in United States		Total persons who fished		Total persons who hunted	
	Number	Percent	Number	Percent	Number	Percent
	<i>Thousands</i>		<i>Thousands</i>		<i>Thousands</i>	
United States, total.....	108,756	100	21,263	19.5	8,899	8.2
Education:						
No education.....	1,054	100	31	2.9	7	.7
1-7 years of elementary school.....	13,643	100	1,798	13.2	701	5.1
8 years of elementary school.....	13,423	100	2,272	16.9	1,181	8.8
1-3 years of high school.....	18,107	100	3,838	21.2	1,655	9.1
4 years of high school.....	37,988	100	8,102	21.3	3,308	8.7
1-3 years of college.....	11,696	100	2,418	20.7	977	8.4
4 years of college.....	7,460	100	1,598	21.4	608	8.2
5 years or more of college.....	5,148	100	1,186	23.0	462	9.0
Other.....	237	100	20	8.4	0	0

**Table 35.—Number of Persons 9 Years and Over Participating in Selected Outdoor Recreation Activities and Those Who Also Participated in Fishing and Hunting in 1970<sup>1</sup>**

[Total population 9 and over in the United States was 167,944,000]

Outdoor recreation activity	Total number of participants	Percent of population 9 and over	Total number of recreation days	Of total participants those who also fish and hunt			
				Fishing		Hunting	
				Number of persons	Number of days	Number of persons	Number of days
	<i>Thousands</i>		<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>
United States, total	127,938	76.2	12,126,000	490,435	562,052	200,887	216,704
Boating, sailing, and canoeing	41,036	24.5	421,530	230,876	320,528	9,670	105,734
Swimming	77,298	46.0	1,721,996	32,217	360,973	12,066	139,021
Wildlife and bird photography	4,864	2.9	40,048	2,607	33,307	1,248	13,302
Fishing	49,435	29.4	562,052	49,435	562,052	15,686	176,050
Horseback riding	16,054	9.6	207,831	8,246	85,004	4,095	44,517
Camping	35,199	21.0	397,162	200,111	254,909	9,270	105,465
Bicycling	37,112	22.1	1,735,916	16,093	159,320	5,302	52,458
Outdoor games and sports	590,985	35.7	2,673,362	25,829	279,653	10,784	116,448
Nature walking	30,509	18.2	374,394	14,096	166,077	5,289	56,647
Birdwatching	7,457	4.4	432,515	3,410	47,535	1,213	14,335
Walking for pleasure	50,270	29.9	1,860,540	19,170	217,115	6,863	72,372
Picnicking	820,47	48.9	542,161	32,797	364,545	12,982	139,996
Attending outdoor sporting events	59,374	35.4	628,471	24,889	269,534	10,328	109,711
Hunting	200,887	12.0	216,704	15,686	233,445	20,887	216,704
Other	10,655	6.3	311,032	4,359	54,318	1,918	25,666
Nonparticipating	40,006	23.08					

<sup>1</sup> These data were derived from the first part of the survey as explained on page iii and are not comparable with those in the rest of the report except as noted on p. 81.

# APPENDIX B—

## Definitions

### Fishing

Fishing is the act of catching, or attempting to catch, fish with a hook and line, rod and reel, spear-fishing equipment, or bow and arrow.

### Hunting

Hunting is the act of taking, or attempting to take, game with a firearm or bow and arrow.

### Bird Watching

Bird watching is the act of observing birds in their natural surroundings, often done with binoculars or special equipment.

### Wildlife Photography

Wildlife photography is the act of taking photographs of birds and animals in their natural surroundings.

### Boating

Boating includes use of rowboats, outboard motorboats, inboard motorboats, canoes, sailboats, etc. Canoeing is propelling a light boat by paddles instead of oars. Sailing is using any vessel primarily intended to be propelled by wind in a sail, or sails. Sailboats include such boats that may have auxiliary engines, or dinghies equipped with sail not primarily meant to be rowed.

### Horseback Riding

Horseback riding refers only to recreational riding, not that

to and back from school, or as part of the job such as a “cow-boy” or a mounted policeman.

### Camping

Camping means living out-of-doors in a nonpermanent type of shelter such as a tent, or a trailer, and involving the transportation, or rental, of equipment such as sleeping bags and cooking utensils, and food. Cabins may be included if equipment and food has to be brought in on each trip. Formal camps, such as boy scout camps, are not included.

### Bicycling

Bicycling refers only to recreational riding, not that done to go to or back from school or work.

### Outdoor Games and Sports

This category includes competitive participation activities, team or nonteam, either against other people, the clock, a record, etc. Team sports include baseball, football, etc. Non-team sports may include tennis, golf, etc.

### Walking for Pleasure

Walking for pleasure includes any walks lasting up to all day, but does not include backpacking, hiking, or nature walks.

### Nature Walks

Nature walks are for the purpose of observing either plants, birds, or animals. They may also include the collecting of specimens, photographing natural subjects, etc.

## **Picnics**

Picnics are primarily for eating out-of-doors away from home.

## **Attending Outdoor Sport Events**

The attendance at any outdoor sports event as a spectator, but not as a participant, official, etc.

## **Other Outdoor Activities**

Other outdoor activities include all other activities not previously defined such as snow skiing, driving for pleasure, etc.

## **Nonparticipants**

The number of nonparticipants include estimates of the number of people who do not participate in any kind of outdoor activity.

## **Fishing and Hunting Outside the United States**

Only resident U.S. sportsmen who fished and hunted in the United States in 1970 are included in this survey except for the data in table 24, page 79. Some of these sportsmen also fished and hunted in foreign countries. Persons who participated exclusively in foreign countries are not reported.

## **Fishing and Hunting Outside State of Residence**

The number of sportsmen who traveled outside their State of residence (as of December 1970) to fish and hunt is shown in the illustration on pages 36–37.

## **Expenditures on Fishing and Hunting**

Expenditures on fishing and hunting made in the United States during 1970 are shown in the illustrations on pages 6–13 and in the tables on pages 43–53. Individual fishermen and hunters identified from a sample of households were asked detailed questions about their expenditures on these sports in

personal interview. This report includes fishermen or hunters who spent \$7.50 or more or reported three or more fishing and hunting recreation days during 1970. No one reported on the expenditures of other sportsmen except for some under 16 years of age. The illustrations and tables show national figures in total and by different kinds of fishing and hunting and by type of goods and service bought. These sportsmen's expenditures include purchases by individuals and the value of gifts received during 1970. Sportsmen were asked to designate, for each purchase, the activity for which they used this purchase the most. The entire expenditure for these items was shown under the designated activity despite the fact that the items may have been used for more than one activity. Total expenditures on goods and services made chiefly for fishing and hunting are the sum of expenditures on: (1) food and lodging; (2) transportation; (3) auxiliary equipment; (4) fishing and hunting equipment; (5) licenses, tags, and permits; and (6) privilege fees and other.

(1) *Food and lodging.*—Outlays on food and lodging are the sum of expenditures on these items made by sportsmen on fishing and hunting trips. Outlays on food are the sum of meals plus the cost of snacks and refreshments while fishing and hunting. However, \$10.50 a week per person was deducted from outlays for restaurant meals to account for that portion of these costs representing the average cost of meals eaten at home. The cost of groceries brought from home, or purchased on a fishing or hunting trip for preparation by the sportsman, plus all kinds of alcoholic beverages, was excluded from outlays on food.

Outlays on lodging while fishing and hunting were obtained directly from the schedule as reported by the sportsman as his share of these costs.

(2) *Transportation.*—Outlays on transportation are the sum of expenditures on automobile transportation and for all other types of transportation when primarily for a fishing and hunting trip.

Expenditures on automobile transportation were computed at 5 cents a mile and these were divided among the number of



sportsmen making a trip together. Expenditures on all other types of transportation, or a share thereof when not on a public conveyance, when made as part of a fishing and hunting trip, were included in expenditures on transportation.

(3) *Auxiliary equipment.*—Expenditures on auxiliary equipment are shown in the illustrations on pages 6–8 and in tables 1–11, pages 43–53. Expenditures on other equipment, or general equipment are the sum of purchases and cost of maintenance of sleeping gear, cooking and eating utensils, lanterns, binoculars, trailers, cabins, and other goods used primarily for fishing and hunting.

(4) *Fishing and hunting equipment.*—Expenditures of fishermen on fishing equipment are shown in the illustrations shown on pages 7, 9, and 10 in tables 1–8 on pages 43–50. Expenditures on other fishing equipment include miscellaneous equipment and the maintenance and repair of fishing equipment.

Expenditures of hunters on hunting equipment are shown in the illustration on page 8 and in tables 8–11 on pages 50–53. Expenditures on other hunting equipment includes miscellaneous equipment and the maintenance and repair of hunting equipment.

(5) *Licenses, tags, and permits.*—Expenditures on fishing and hunting licenses, tags, stamps and permits are the sum of fees paid for these items to Federal and State governments for the privilege of sport fishing and hunting. Total sales in 1970 of Migratory Bird Hunting Stamps, required of all 16 years of age and over who hunt waterfowl, amounted to 2,409,000 compared with the 1,366,000 shown in the survey on pages 43, 50, and 53. Some of this difference is due to the sale of duck stamps to persons who did no waterfowl hunting during 1970.

(6) *Privilege fees and other.*—Expenditures on privilege fees and other expenses primarily for fishing and hunting are the sum of: (a) annual lease and privilege fees; (b) daily entrance and privilege fees and special government (Federal, State, or local) fees; (c) bait, guide fees, and other trip expenses; (d) boat launchings; (e) expenditures on hunting dogs; and (f) other expenses.

(a) *Annual Lease and Privilege Fees.*—Expenditures on annual lease and privilege fees include the purchase of the privilege to fish or to hunt on private lands on a seasonal or annual basis.

(b) *Entrance and Other Privilege Fees.*—Expenditures on entrance and other privilege fees include the purchase of the privilege to fish or to hunt on private lands on a daily or trip basis. These expenditures include the fees paid by hunters to hunt on shooting preserves. Special government fees include such fees as the Federal Golden Eagle Pass, the George Washington National Forest Stamp, and other localized charges.

(c) *Bait, Guide Fees, etc.*—Expenditures on bait, guide fees, head and charter boat fees, pack trip fees, general and special club dues, other trip expenses, boat launchings, dogs, and alcoholic drinks, are shown in the illustrations on pages 6–8, and in tables 1–11 on pages 43–53. Other trip expenses include such items as rentals, gasoline for the boat, and ice. Other expenses are the sum of costs of fishing and hunting magazines, and costs not classified in other categories.

### Coastal Area Fishing

The number of salt-water fishermen and their expenditures are divided among the coastal areas of the United States—the Atlantic, the Gulf, and the Pacific. These data are shown in the illustrations on page 10 and in the tables on pages 46–49. The Atlantic Coast includes the coastal area from Canada south through Dade County, Fla. to the Gulf Coast, from Dade County, Fla., to Mexico and the Pacific Coast, from Canada to Mexico, and Alaska and Hawaii. Salt-water fishermen who fished beyond the territorial limits of the United States and returned to a port in the United States are included in these statistics. Those who fished only from ports outside the United States are not included.

### Fresh-Water, Salt-Water, and Pond Fishermen and Big-Game, Small-Game, Waterfowl, and Special Small-Game Hunters

The number of fishermen and hunters in the United States

in 1970 is shown in the illustrations on pages 4–5 and in the tables on pages 54–56. The tables also show these sportsmen by sex and by age divisions.

Fishermen are classified as fresh-water or salt-water anglers. Fresh-water fishing is defined as fishing upstream from tidal areas, and in any inland stream, lake or reservoir for fresh-water species. Salt-water fishing is defined as fishing in the ocean, coastal bays and estuaries, surf, and coastal streams below tidal limits. Many anglers fish in both fresh water and salt water. Consequently, the sum of the number of fresh-water anglers and salt-water anglers exceeds the number of total anglers reported.

### Fishing in Farm and Ranch Ponds

The number of fishermen and the number of days they fished on farm or ranch ponds under 10 acres in size in 1970 is shown in the illustration on page 33. The fishermen were also identified by ownership of ponds they fished in the most.

Hunters are classified as big-game hunters, small-game hunters, and waterfowl hunters. Big-game hunting includes hunting for antelope, bear, deer, javelina (peccary), moose, mountain goat, mountain sheep, wild boar, and wild turkey. Small-game hunting includes hunting for fox, opossum, rabbit, raccoon, squirrel, dove, grouse, partridge, pheasant, pigeon, prairie chicken, quail, rail, snipe, and woodcock. Waterfowl hunting includes hunting for coot, duck, gallinule (marsh hen), and geese. Many hunters hunt more than one kind of game. Consequently, the sum of the number of the three types of hunters exceeds the total number of hunters reported.

### Waterfowl Hunting by Flyways

Various data on waterfowl hunting is shown in the illustrations on pages 11 and 35 and in tables 11, 20, 21, 22, and 23 on pages 53 and 71–78. For purposes of this study whole States were included in the flyways and not divided into parts. This is shown in the following list of States included in the specific flyways.

## FLYWAYS AND STATES

### *ATLANTIC*

Maine	New York	West Virginia
New Hampshire	Pennsylvania	Virginia
Vermont	New Jersey	North Carolina
Massachusetts	Delaware	South Carolina
Rhode Island	Maryland	Georgia
Connecticut	District of Columbia	Florida

### *CENTRAL*

North Dakota	Kansas	New Mexico
South Dakota	Oklahoma	Colorado
Nebraska	Texas	Wyoming

### *MISSISSIPPI*

Minnesota	Indiana	Arkansas
Wisconsin	Ohio	Louisiana
Michigan	Missouri	Mississippi
Iowa	Kentucky	Alabama
Illinois	Tennessee	

### *PACIFIC*

Montana	Arizona	Oregon
Idaho	California	Washington
Utah	Nevada	

### Special Small Game Hunters

The number of special small-game hunters is shown in table 18, page 67. It includes the number of small-game hunters who hunted upland migratory game birds, mourning doves, woodcock, rail and snipe, and varmints. These numbers are not additive as some hunted more than one species.

### “Varmint” Hunting

The number of varmint hunters in the United States in 1970 is shown in table 18 on page 67. Varmint hunting is hunting for animals or birds considered pests for which there are no bag limits or closed seasons. “Varmints” include the following

animals: coyote, fox (gray or red), ground squirrel, jack rabbit, Norway rat, nutria, opossum, porcupine, prairie dog, snowshoe hare, woodchuck (sometimes called ground hogs or rockchucks); and certain birds: The crow, feral pigeon, English sparrow, and starling. Certain of these animals, like the hares and fox, are not considered as “varmints” in all parts of the country.

## **Population**

The number of fishermen and hunters was projected from a sample of households. The relationship of the number of these sportsmen to the population is shown in the illustrations on pages 14–15 and in the tables on pages 54–56. These data also include the geographic and population density distribution age, and sex of the sport fishermen and hunters.

Persons 12 years old and older who fished and/or hunted in 1970 are included in this survey and include limited information for children 9 through 11 years old. The sum of the “total who fished” and “total who hunted” exceeds the total number of fishermen and hunters because both of these classifications include a number of sportsmen who both fished and hunted.

The illustrations on pages 20–21 and the tables on pages 54–56 show the fishing and hunting population by age and by sex. One reason for the division of teenagers is the requirement that waterfowl hunters 16 years and older must have a Federal Migratory Bird Hunting Stamp.

## **Place of Residence:**

### **Standard Metropolitan Statistical Area (SMSA)**

In the past, central cities were defined by corporate limits as the basic unit. Changes in population density and characteristics of suburban areas have caused city limits to be less meaningful for economic analysis. Office of Management and Budget developed the concept of the Standard Metropolitan Statistical Area (SMSA) to provide a more rational basis for compiling statistics on local areas.

An SMSA is defined as including at least one city having 50,000 inhabitants or two cities with contiguous boundaries and a combined population of at least 50,000. Except in New England the county is the basic unit of an SMSA. An outlying county is considered part of an SMSA if at least 15 percent of its residents work in the central county or if residents of the central county make up at least 25 percent of its working force. SMSA’s may, therefore, include not only urban centers but also suburban and rural areas.

Not-in-SMSA covers the rest of the population who do not live in or near large or urban centers. These persons may live in urban areas, or on the farm, or in areas which are neither urban nor farm.

### **Population density**

“Big” cities are central cities in an SMSA with population of 500,000 or more.

“Small” cities are all other urban areas in an urbanized area with populations of 2,500 but less than 500,000.

Towns and rural areas are all places with populations under 2,500 and places with 2,500 persons or more not in an urbanized area.

## **Sport Fishing and Hunting Trips**

Transportation for fishing and hunting trips includes all types—from walking to air travel. The automobile accounted for the major portion of the distance traveled. Illustrations showing summary data on total miles traveled and automobile passenger mileage are on pages 28–29. Additional data on trips and miles traveled are shown in tables 26–28 on pages 83–87.

Distance traveled is the total number of miles traveled using all types of transportation on trips taken primarily for fishing and hunting.

Car miles are the miles traveled by automobile primarily for fishing and hunting. Passenger miles are the number of miles

traveled by sportsmen in automobiles on trips taken primarily for fishing and hunting. For example, if three fisherman traveled 100 miles on a fishing trip, the car miles would be 100 and the passenger miles would be 300.

### Recreation Day

A recreation day is a day, any part of which was spent fishing or hunting.

### Fishing and Hunting Licenses

These data include only licenses purchased during 1970 by sportsmen who fished or hunted during the year. Some sportsmen may have purchased licenses that were applicable to 1970 before January 1, 1970. Others obtained licenses without cost. Thus these data do not represent accurately the license status of each sportsman in the sample. Nor should these data be compared with license sales data; since (1) some persons bought licenses but did not use them, and (2) some persons bought more than one license.

Most sportsmen who fish or hunt are required to buy licenses and to pay specific fees to the State or Federal governments. Sportsmen who are exempted in some States from paying some kind of fee includee (1) those under a specified age; (2) those over a specified age; (3) the disabled; (4) active servicemen; (5) property owners; and, (6) aborigines and indigents. Licenses are required for fishing in salt water in several States. Many States provide limited additional privileges for fishing to veterans and active servicemen.

### Sportsmen by License Status and by Activity, 1970

	<i>Fishing</i>	<i>Hunting</i>
Total sportsmen -----	33,158,000	14,336,000
Number licensed -----	20,358,000	11,274,000
Percent licensed -----	61.4	78.6

### Membership in Fishing and Hunting Clubs

Persons interviewed were asked about membership in fishing or hunting clubs of any kind. The totals for the United States in 1970 are as follows:

Number -----	1,855,000
Percent of all fishermen and/or hunters -----	5.1
Percent of all persons 12 years old and over -----	1.2

### Education, Family Income, Household, Race, and Occupation

Respondents in the survey were not questioned directly about these categories. This information was transcribed from the records of the Current Population Survey conducted monthly by the Bureau of the Census. The CPS is a probability sample of households representing the noninstitutional population of the United States to keep up-to-date facts about the number of persons in the country who are employed, unemployed, or not in the labor market for employment. It provides the work status of individuals not just job totals. Facts about the kind of work people are doing are essential for judging the economic condition of the country.

### Households

Households include all persons who occupy a "housing unit." A housing unit may be a house, an apartment or other group of rooms, or a room that may be "separate living quarters." A household includes the related family members and all unrelated persons, if any, such as lodgers, foster children, wards or employees who share the housing unit. A person living alone or a group of unrelated persons sharing the same housing unit as partners are included. Group quarters are not considered as housing units. Group quarters may be a rooming house, an institution, a dormitory, or a military barracks.

### Race

The tabulations are presented by dividing the population into two groups on the basis of racee



- (a) White
- (b) Negro and other races. The last category includes other than white.

**Occupation**

As already stated, this survey is drawn from the monthly Current Population Survey (CPS) which determines the work status of individuals throughout the country. The reference period for the CPS is related to one week of the month, the week containing the 12th.

Broadly speaking, people 14 years of age and older are divided into two groups, those in the civilian labor force and those not in the civilian labor force. The civilian labor force consists of two groups, the employed and the unemployed. The employed fall into several categories: paid employees, work own businesses, professions or farms, or unpaid helpers in a nonfarm family business. Those temporarily absent because of illness, bad weather, labor disputes, or some valid personal reason are classified as employed. The unemployed consist of all those who did not work during the survey week and were actively looking for work. Active jobseeking means specific activities such as going to some employment service, answering an ad, applying to an employer, and so on. These activities must have taken place within the past 4 weeks and the job-seeker must be available for work.

Those persons in the civilian labor force are classified by occupation and combined into standard census occupation groupings as shown in tables 12–15, and others, pages 54–64, and others. Those classified as not in the labor force consist of the retired, housewives, students and others who for some reason are not employed or actively seeking employment.

**Education**

The level of education attained by sport fishermen and hunters 25 years old and older is shown in table 34 on page 94. The category “none” includes those sportsmen who never attended school or did not complete first grade, but who may

have attended kindergarten. The other categories show the amount of school training completed.

**Family Income**

Fishing and hunting by class income are shown in various tables and particularly in table 30 on page 89. Family income consists of the money income before taxes received by the respondent and all related household members living in the sample unit. This covers total income which includes Wages and salaries, net income from business or farm, pensions, dividends, interest, rent, and other money income received by members of the family.

**Geographic Regions and Divisions**

**NORTHEAST REGION**

*New England Division:*

- Maine
- New Hampshire
- Vermont
- Massachusetts
- Connecticut
- Rhode Island

*Middle Atlantic Division:*

- New York
- New Jersey
- Pennsylvania

**NORTH CENTRAL REGION**

*East North Central Division:*

- Ohio
- Indiana
- Illinois
- Michigan
- Wisconsin

*West North Central Division:*

- Minnesota
- Iowa
- Missouri
- North Dakota
- South Dakota
- Nebraska
- Kansas

**SOUTH REGION**

*South Atlantic Division:*

- Delaware
- Maryland
- District of Columbia
- Virginia
- West Virginia
- North Carolina
- South Carolina

*East South Central Division:*

- Kentucky
- Tennessee
- Alabama
- Mississippi

*West South Central Division:*

- Arkansas
- Louisiana

## WEST REGION

### *Mountain Division:*

Montana  
Idaho  
Wyoming  
Colorado  
New Mexico  
Arizona  
Utah  
Nevada

### *Pacific Division:*

Alaska  
Washington  
Oregon  
California  
Hawaii

number of most outdoor recreation activities in coordination with the Bureau of Outdoor Recreation. In this way a total of some 49 million were found to participate in fishing and/or hunting. The 1970 National Survey of Fishing and Hunting reports on 36 million more active and substantial participants. This technique is essentially the same as that developed for the 1965 survey.

To obtain detailed data on other than substantial participants is too time consuming and excessively costly for the value of the return. Special analyses of similar data collected for 1960 showed that although substantial participants accounted for only 60 percent of the total number of fishermen and hunters, these substantial participants accounted for close to 95 percent of total recreation days and around 99 percent of the expenditures on fishing and hunting.

The 1960, 1965, and 1970 National Surveys of Fishing and Hunting differ from the 1955 National Survey in classification of expenditures as explained later. In general the surveys may be compared for totals, but details should take into account the exceptions noted below. The effect of these items should be considered in assessing trends.

(1) Alaska and Hawaii were not included in the 1955 survey. The effect of this is probably not very significant.

(2) Generally the 1970 data are shown in much greater detail. However, the classification of some expenditures differs in the 1960, 1965, and 1970 surveys from those in 1955 in the following respects:

(a) "Boats and boat motors" now shown under "auxiliary equipment" were under "equipment, other" in 1955.

(b) "Entrance and other privilege fees" now shown separately were under "trip expenditures, other" in 1955.

(c) "Snacks and refreshments" not included with "food" expenditures were under "trip expenditures, other" in 1955.

(d) Expenditures on equipment, magazines, club dues, licenses, and other similar items are now classified by the one sport activity for which expenditures were chiefly made. In 1955, these expenditures were evenly divided among all the activities in which the sportsman took part.

# APPENDIX C— Differences Between Surveys

The 1970 National Survey of Fishing and Hunting is essentially comparable with that for 1965 but not entirely comparable with those covering 1955 and 1960. This report and the one for 1965 include only the fishing and hunting activities of those persons considered as substantial participants. Details on other participants were excluded as incidental on the basis that they had fished or hunted once or twice and had spent little or no money in 1970 to do so. A fuller explanation follows.

## Differences Between Total Participants and Substantial Participants

Two sets of estimates were prepared on the number of fishermen and hunters in 1970 similar to those prepared in 1965. This was conducted as a two-stage survey: the first being a screening of the population in which fishermen and hunters were identified and then interviewing in detail those who had been so identified in the "screen." The screen covered a selected

(e) Expenditures on “other” now have been reduced as compared with 1955 by transferring certain items to a more appropriate category.

(f) Expenditures on alcoholic beverages have been included for the first time in the 1970 survey.

(g) The definition of a substantial participant was changed for the 1970 survey from \$5 or 3 days to \$7.50 or 3 days.

(3) The number of waterfowl hunters in the 1970 survey is not comparable with those reported in the 1960 and 1965 surveys. In 1960 and 1965, respondent sportsmen were not included in the waterfowl hunter total if they reported that they went waterfowl hunting but did not take the trip *chiefly* to hunt waterfowl. In 1970, all respondents who reported that they had hunted waterfowl during 1970, whether or not the trip purpose was *chiefly* to hunt waterfowl, were included in the total. The number of hunters who did not take trips chiefly to hunt waterfowl in 1970 was 1,054,000.

## APPENDIX D— Technique of the Survey

The Fourth National Survey of Fishing and Hunting was designed mainly to collect information about expenditures, number of trips, and days spent fishing and hunting during 1970. The results related to persons 9 years of age and older in the December 1970 population of the United States. However, extensive detailed data were collected and tabulated only on that part of the population 12 years old and over who participated on any part of three different days or more, or spent \$7.50 or more to go fishing or hunting during 1970.

Others who may have fished or hunted during 1970 but who did not meet these modest criteria were excluded. Still others,

who usually go fishing or hunting, but did not do so during 1970, were not included. Some of these persons may have purchased a license or equipment during 1970.

The survey was conducted for the Bureau of Sport Fisheries and Wildlife by the Bureau of the Census, U.S. Department of Commerce.

### Identification and Interviewing

The procedures for identifying sportsmen in 1970 differed from those in 1955, 1960, and 1965 surveys. In the 1955 and 1960 surveys a responsible household member provided the information as part of the CPS interview. In 1965 each person himself indicated whether he fished or hunted. In 1970 a short questionnaire covering a number of outdoor recreational activities was left with each family to complete and mail in. Part of the questionnaire concerned the extent of the fishing and hunting participation for each household member.

From the questionnaire, households were screened into four classes of participation (one class of nonparticipants and three levels of participation) depending on the highest classification among the household members. A subsample of the households in the three levels of participation was taken, and household members identified as fishermen and hunters on this screening questionnaire were revisited and interviewed in greater detail concerning their fishing and hunting participation. The subsampling rates differed from each of the three levels of participation, with one-third of the households in the lowest level revisited, 70 percent of the households in the next highest level and all of the households in the highest levels.

The interviewing for detailed expenditures was conducted during the first part of February. Altogether over 8,700 sportsmen were interviewed, of whom 5,200 had fished only, 600 had hunted only, and 2,900 had both fished and hunted.

The personnel used for the various phases of the survey were the experienced interviewers employed on the Current Population Survey and other regular programs of the Bureau of the Census. The interviewers received detailed personal training

on the content of the survey. Interviewers also were provided complete manuals of instruction, both for training purposes and for assistance while interviewing. In order to assist the sportsmen in providing the desired detail, calendars, lists of equipment items, and booklets of license types were utilized. As each group of households was completed, the results were checked carefully, both for completeness and consistency. The same high degree of quality control was maintained in processing the results and preparing the data.

### **The Sample**

Persons included in the National Survey of Fishing and Hunting were actually a subsample of persons previously selected from the Current Population Survey (CPS) conducted monthly by the Bureau of the Census. The CPS provides an accurate cross-section of the population and is conducted on a nationwide basis in 449 areas, each area being a county, or group of counties, and cities spread throughout the 50 States

and the District of Columbia. Half of this sample, or about 24,000 households with some 60,000 persons 9 years of age or older were screened for inclusion in the National Survey of Fishing and Hunting.

About 1,100 of the 24,000 households were not left questionnaires because the occupants were not found at home after repeated calls or were unavailable for some other reason. Also, about 3,000 interviewed households did not complete and mail in their questionnaires. In an effort to reduce the nonresponse rate, about 1,200 of these 3,000 households were revisited and detailed interviews were obtained from household members identified as fishermen and hunters. In addition to the 24,000 households, there were about 4,250 sample units which were visited but found to be vacant or otherwise not enumerated.

The estimating procedure involved the inflation of weighted sample results to independent estimates of the civilian noninstitutional population of the United States by age, race, and sex.



# APPENDIX E—

## Statistical Reliability Analysis

Since the estimates in this report are based on a sample, they may differ somewhat from the figures that would have been obtained from a complete census, using the same schedules, instructions and enumerators. As in any survey work, the results are subject to sampling variability.

The standard error is primarily a measure of sampling variability; that is, of the variations that occur by chance because a sample rather than the whole of the population is surveyed. The chances are about 68 out of 100 that an estimate from the survey differs from a complete census figure by less than the standard error. Thus, the 68 percent confidence interval is defined as the estimate  $\pm$  the standard error; i.e., it ranges from the estimate less the standard error to the estimate plus the standard error. The chances are about 95 out of 100 that the difference would be less than twice the standard error.

The figures presented in tables 1, 2 and 3 are approximations to the standard errors of various estimates shown in this report. In order to derive standard errors that would be applicable to a wide variety of items and could be prepared at a moderate cost, a number of approximations were required. As a result, the tables of standard errors provided are an indication of the order of magnitude rather than the precise standard error for any specific item. As calculated for this report, the standard error also partially measures the effect of response and interviewer errors but does not measure any systematic biases in the data.

Table 1 provides estimates of standard errors for the major findings of the 1970 survey. Table 2 shows standard errors of

estimates for sportsmen or fishermen and table 3 shows the standard errors for hunters.

**Table 1.—Standard Error Estimates for Major Findings of the 1970 Survey**

Item	Estimates	Standard error of estimates	Confidence interval
		(68 chances out of 100)	(68 percent probability)
<b>A. EXPENDITURES OF FISHERMEN AND HUNTERS:</b>	(Thousands)	(Thousands)	(Millions)
Fishermen and hunters ..	\$7,101,531	\$444,000	\$6,65705-7,54505
Fishermen .....	4,958,883	314,000	4,64409-5,27209
Fresh-water .....	3,734,178	240,000	3,49402-3097402
Salt-water .....	1,224,705	87,000	1,13707-10311.7
Hunters .....	2,142,648	143,000	1,999.6-2,285.6
Big-game .....	952,563	70,000	88206-1002206
Small-game .....	945,634	70,000	87506-1001506
Waterfowl .....	244,451	25,000	219.5- 269.5
<b>B. NUMBER OF FISHERMEN AND HUNTERS:</b>			
Fishermen and hunters ..	36,277	760	35.5-37.0
Fishermen .....	33,158	730	32.4-33.9
Fresh-water .....	29,363	700	28.7-3001
Salt-water .....	9,460	430	9.0- 9.9
Hunters .....	14,336	340	14.0-14.7
Big-game .....	7,774	260	7.5- 8.0
Small-game .....	11,671	310	11.4-12.0
Waterfowl .....	2,894	160	2.7- 3.1
<b>C. NUMBER OF RECREATION DAYS:</b>			
Fishermen and hunters ..	909,876	35,200	87407-94501
Fishermen .....	706,187	27,900	678.3-734.1
Fresh-water .....	592,494	23,800	568.7-616.3
Salt-water .....	113,694	6,200	107.5-119.9
Hunters .....	203,689	9,600	194.1-213.3
Big-game .....	54,556	3,800	50.7- 58.3
Small-game .....	124,041	6,600	117.4-130.6
Waterfowl .....	25,113	2,400	22.7- 27.5

**Table 2.—Standard Errors of Estimated Number of Sportsmen or Fishermen <sup>1</sup>**

(68 chances out of 100)

Size of estimate	Standard error	Size of estimate	Standard error
<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>
125	51	5,000	315
250	72	10,000	438
500	101	15,000	527
1,000	143	20,000	598
2,000	201	25,000	656
3,000	246	30,000	705
4,000	283	35,000	746

<sup>1</sup> For estimates of sportsmen or of fishermen. Use Table 3 for estimates of hunters only.

The reliability of an estimated percentage, computed by using sample data for both numerator and denominator depends upon both the size of the percentage and the size of the total upon which the percentage is based. Estimated percentages are relatively more reliable than the corresponding esti-

**Table 3.—Standard Errors of Estimated Number of Hunters**

(68 chances out of 100)

Size of estimate	Standard error	Size of estimate	Standard error
<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>
125	33	3,000	161
250	47	4,000	186
500	66	5,000	207
1,000	94	10,000	288
2,000	132	15,000	346

mates of the numerators of the percentages, particularly if the percentages are 50 percent or more.

Table 4 shows the standard errors of percentages for sportsmen or fishermen. Table 5 shows standard errors of percentages for hunters.

**Table 4.—Standard Errors of Estimated Percentages of Sportsmen or Fishermen <sup>1</sup>**

(68 chances out of 100)

Estimated percentage	Base of percentage (thousands)											
	500	1000	2000	3000	4000	5000	10,000	15,000	20,000	25,000	30,000	35,000
2 or 98	2.8	2.0	1.4	1.2	1.0	0.9	0.6	0.5	0.4	0.4	0.4	0.3
5 or 95	4.4	3.1	2.2	1.8	1.6	1.4	1.0	0.8	0.7	0.6	0.6	0.5
10 or 90	6.1	4.3	3.0	2.5	2.1	1.9	1.4	1.1	1.0	0.9	0.8	0.7
25 or 75	8.8	6.2	4.4	3.6	3.1	2.8	2.0	1.6	1.4	1.2	1.1	1.0
50	10.1	7.2	5.1	4.1	3.6	3.2	2.3	1.8	1.6	1.4	1.3	1.2

<sup>1</sup> For estimates of sportsmen or of fishermen. Use Table 5 for estimates of hunters only.

**Table 5.—Standard Errors of Estimated Percentages of Hunters**

(68 chances out of 100)

Estimated percentage	Base of percentage (thousands)							
	500	1000	2000	3000	4000	5000	10,000	15,000
2 or 98.....	1.9	1.3	0.9	0.8	0.7	0.6	0.4	0.3
5 or 95.....	2.9	2.0	1.4	1.2	1.0	0.9	0.6	0.5
10 or 90.....	4.0	2.8	2.0	1.6	1.4	1.3	0.9	0.7
25 or 75.....	5.8	4.1	2.9	2.4	2.0	1.8	1.3	1.1
50.....	6.6	4.7	3.3	2.7	2.4	2.1	1.5	1.2

*Illustration of the use of tables of standard errors*

Table 12 of this report shows that 9,085,000 persons were female fishermen. Interpolation in table 2 of this appendix shows the standard error of 9,085,000 fishermen to be approximately 415,000. The chances are 68 out of 100 that the estimate would differ from a complete census figure by less than 415,000. The chances are 95 out of 100 that the estimate would differ from a complete census figure by less than 830,000 i.e., this 95 percent confidence interval would be from 8,255,000 to 9,915,000. Of these 9,085,000 female fishermen, 1,512,000 or 16.6 percent were 18-24 years old. Interpolation in table 4 of this appendix shows the standard error of 16.6 percent on a base of 9,085,000 to be approximately 1.8 percent. Consequently, chances are 68 out of 100 that the 16.6 percent would be within 1.8 percentage points of a complete figure. Chances are 95 out of 100 that the estimate would be within 3.6 percentage points of a complete census figure, i.e., this 95 percent confidence interval would be from 13.0 to 20.2 percent.

