

**The 2006 Economic Benefits of
Hunting, Fishing and Wildlife Watching in**

**NORTH
CAROLINA**

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Executive Summary

The purpose of this project was to help resource managers and the public develop a better understanding of the economic contributions of hunting, sportfishing and wildlife watching activities in North Carolina in 2006. When used effectively, economic data can help increase legislative, public, business and media awareness of the importance of fish and wildlife, and as a result, help boost conservation efforts and public recreational opportunities.

In 2006, 3.4 million residents and non-residents participated in some form of fish and wildlife-related recreation in North Carolina. These anglers, hunters and wildlife viewers spent \$2.62 billion in retail sales (\$2.05 billion by residents and \$570 million by nonresidents), creating \$1.26 billion in salaries and wages, and supporting 45,224 jobs. The total economic effect (multiplier effect) from fish and wildlife-related recreation was estimated at \$4.3 billion.

Table E-1: Executive Summary

	RETAIL SALES	OUTPUT	EARNINGS	JOBS	FEDERAL TAX REVENUE	STATE & LOCAL TAX REVENUE
All Freshwater						
Fishing:	\$633,571,740	\$1,039,646,237	\$300,094,918	10,588	\$71,455,644	\$62,852,799
Residents Only:	\$536,901,373	\$886,507,289	\$254,043,890	8,883	\$59,871,424	\$52,635,444
Non-Residents Only:	\$96,670,367	\$153,138,948	\$46,051,028	1,705	\$11,584,220	\$10,217,355
All Saltwater Fishing:	\$558,870,611	\$913,124,494	\$267,161,574	9,735	\$64,755,879	\$58,543,508
Residents Only:	\$289,750,765	\$477,237,864	\$139,472,529	4,877	\$32,760,217	\$28,266,630
Non-Residents Only:	\$269,119,847	\$435,886,630	\$127,689,045	4,858	\$31,995,662	\$30,276,878
All Hunting:	\$511,546,347	\$856,474,235	\$251,130,695	8,851	\$58,037,991	\$48,743,257
Residents Only:	\$488,139,422	\$818,813,458	\$215,826,259	8,332	\$55,495,446	\$46,563,110
Non-Residents Only:*	\$23,406,925	\$37,660,777	\$35,304,436	519	\$2,542,545	\$2,180,147
All Wildlife Watching						
Activities:	\$916,907,774	\$1,525,765,137	\$438,667,048	16,050	\$102,946,765	\$88,564,774
Residents Only:	\$735,821,794	\$1,221,299,560	\$349,788,984	12,751	\$82,024,339	\$69,991,357
Non-Residents Only:	\$181,085,980	\$304,465,577	\$88,878,064	3,299	\$20,922,426	\$18,573,417
All Fish and Wildlife Related Recreation (combined):	\$2,620,896,473	\$4,335,010,102	\$1,257,054,236	45,224	\$297,196,279	\$258,704,338
Residents Only:	\$2,050,613,354	\$3,403,858,171	\$959,131,662	34,843	\$230,151,426	\$197,456,541
Non-Residents Only:	\$570,283,119	\$931,151,931	\$297,922,574	10,381	\$67,044,853	\$61,247,797

* = data based on a small sample size

Introduction

Expenditures made for fish and wildlife-related recreation support significant industries. Unlike traditional industries which are often easily recognized by large factories, the hunting, fishing and wildlife viewing industries are comprised of widely scattered retailers, manufacturers, wholesalers and support services that, when considered together, become quite significant. Given that outdoor recreation dollars are often spent in rural or lightly populated areas, the economic contributions of fish and wildlife resources can be especially important to rural economies.

This project assesses the 2006 economic contributions of fish and wildlife-based recreation in North Carolina. The purpose was to provide resource managers with the economic information necessary to better conserve and manage wildlife and other natural resources. Only the effects of recreation expenditures that occurred within North Carolina are considered.

This report contains sections devoted to demographic, participation, and economic impact information that provide the reader with a better understanding of the activities undertaken by outdoor recreationists. Definitions of several terms used in this report are provided in Appendix A. Appendix B provides methodological descriptions. Appendix C presents detailed expenditures for hunting, Appendix D provides detailed expenditures for freshwater fishing, Appendix E provides detailed expenditures for saltwater fishing, and Appendix F presents detailed expenditures for wildlife watching.

Methods

Data on demographics, participation and expenditures were obtained from the 2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation (Survey), which is conducted approximately every five years by the U.S. Fish and Wildlife Service and the U.S. Bureau of the Census. The Survey provides data required by natural resource management agencies, industry and private organizations at state and national levels to assist in optimally managing natural resources. The Survey is funded through excise taxes on hunting and fishing equipment through the Federal Aid in Sport Fish and Wildlife Restoration Acts. The expenditure data were analyzed using economic models to quantify economic impacts. A more detailed description of the methods used to generate the economic estimates is presented in Appendix B. Standard errors for major estimates are also presented in Appendix B.

Demographics

Hunter Demographics

Participants in hunting (Table 1) are, on average, approximately 45 years old, are predominantly male, and are likely to be married. The average household income for North Carolina hunters is approximately \$60,145, significantly higher than the \$42,061 state average (U.S. Census Bureau). About 43 percent have at least some college education. Non-resident hunters typically have a higher income but a similar educational background. About fifteen percent of those hunting in North Carolina report they are non-white.

Table 1 does not necessarily represent the most popular types of game in North Carolina. The species presented are those most often cited by hunters as targets of their activity, which may be driven by availability rather than preference. In other words, hunters may often pursue species based on the higher likelihood of hunting success rather than the species they actually desire. Please note that much of the non-resident data could not be calculated due to small sample size issues. Also, big game includes deer, turkey, and bear. Small Game includes rabbit/hare, quail, grouse, squirrel and pheasant.

Table 1. North Carolina Hunter Demographics by Species Hunted in North Carolina in 2006
(Participants 16 years old and older)

	<u>Big Game</u> ¹	<u>Small Game</u>	<u>Deer</u>	<u>Turkey</u>	<u>All Hunting</u>
ALL HUNTERS					
<i>sample size</i>	77	43	68	23	106
Race (non-white)	12%	13%	13%	0% *	15%
Average age	44	48	44	46 *	45
Gender (male)	95%	97%	95%	100% *	92%
Marital Status (married)	73%	68%	72%	83% *	74%
Average household income	\$59,348	\$62,318	\$59,232	\$67,376 *	\$60,145
Education					
<i>8 years or less</i>	3%	6%	2%	11% *	4%
<i>9 to 11 years</i>	7%	4%	7%	3% *	8%
<i>High school graduate</i>	50%	42%	49%	46% *	45%
<i>1 to 3 years of college</i>	28%	29%	31%	26% *	28%
<i>4 or more years of college</i>	11%	19%	11%	14% *	15%
RESIDENT					
<i>sample size</i>	66	41	60	22	91
Race (non-white)	11%	13%	12%	0% *	14%
Average age	44	49	43	46 *	45
Gender (male)	95%	97%	94%	100% *	91%
Marital Status (married)	74%	68%	72%	83% *	74%
Average household income	\$58,907	\$60,375	\$59,031	\$67,651 *	\$58,671
Education					
<i>8 years or less</i>	4%	6%	2%	11% *	4%
<i>9 to 11 years</i>	8%	4%	8%	3% *	9%
<i>High school graduate</i>	48%	43%	48%	46% *	44%
<i>1 to 3 years of college</i>	30%	29%	32%	26% *	30%
<i>4 or more years of college</i>	11%	17%	11%	14% *	14%

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* = Sample size is small and results should be interpreted with caution. ** = Sample size is too small to report reliably.

NOTE: A hunter may target multiple species and can be included in more than one species above.

¹ “Big Game” – deer, turkey, and bear; “Small Game” – rabbit/hare, quail, grouse, squirrel and pheasant

**Table 1. (Continued) North Carolina Hunter Demographics by Species Hunted in North Carolina in 2006
(Participants 16 years old and older)**

	<u>Big Game</u> ²	<u>Small Game</u>	<u>Deer</u>	<u>Turkey</u>	<u>All Hunting</u>
NON-RESIDENT					
<i>sample size</i>	11	2	8	1	15
Race (non-white)	20% *	*	*	*	18% *
Average age	51 *	*	*	*	49 *
Gender (male)	100% *	*	*	*	100% *
Marital Status (married)	65% *	*	*	*	73% *
Average household income	\$64,545 *	*	*	*	\$75,106 *
Education					
<i>8 years or less</i>	0% *	*	*	*	0% *
<i>9 to 11 years</i>	0% *	*	*	*	0% *
<i>High school graduate</i>	70% *	*	*	*	61% *
<i>1 to 3 years of college</i>	12% *	*	*	*	9% *
<i>4 or more years of college</i>	18% *	*	*	*	30% *

² “Big Game” – deer, turkey, and bear; “Small Game” – rabbit/hare, quail, grouse, squirrel and pheasant

* = Sample size is small and results should be interpreted with caution. ** = Sample size is too small to report reliably.

NOTE: A hunter may target multiple species and can be included in more than one species above.

Angler Demographics

Freshwater anglers (Table 2a) are, on average, approximately 43 years old, are predominantly male, and are likely to be married. The average household income for anglers participating in freshwater fishing in North Carolina is approximately \$55,242, significantly higher than the \$42,061 state average (U.S. Census Bureau). Non-resident anglers report higher incomes than North Carolina resident anglers. About 45 percent of freshwater anglers in North Carolina have at least some college education. Approximately eighteen percent of all freshwater anglers in North Carolina report they are non-white. Demographic characteristics across species fished were similar with the exception being that those who fished for any freshwater species- rather than a specific species- reported lower average education levels and were more likely to be non-white.

Saltwater anglers (Table 2b) are, on average, approximately 44 years old, are predominantly male, and are likely to be married. The average household income for anglers participating in saltwater fishing in North Carolina is approximately \$66,170, greater than freshwater anglers. About 62 percent of saltwater anglers in North Carolina have at least some college experience. Approximately nine percent of saltwater anglers in North Carolina report they are non-white. Non-resident saltwater anglers report slightly higher education and income levels than their resident counterparts.

The tables below do not necessarily represent the most popular species in North Carolina. The species presented are those most often cited by anglers as targets of their activity, which may be driven by availability rather than preference. In other words, anglers may often fish for the species that is more likely to bite on a given day rather than the species they would actually prefer to catch.

Table 2a. North Carolina Freshwater Angler Demographics by Species Fished, 2006
(Participants 16 years old and older)

<u>ALL ANGLERS</u>	<u>Crappie</u>	<u>Panfish</u>	<u>White & Striped Bass</u>	<u>Black Bass</u>	<u>Catfish</u>	<u>Trout</u>	<u>Any Freshwater</u>	<u>All Freshwater</u>
<i>sample size</i>	88	75	74	119	103	73	56	295
Race (non-white)	21%	22%	17%	13%	25%	11%	42%	18%
Average age	45	45	43	43	46	43	42	43
Gender (male)	83%	77%	82%	86%	87%	78%	86%	81%
Marital Status (married)	73%	66%	68%	74%	68%	70%	61%	72%
Average household income	\$51,254	\$43,634	\$57,445	\$56,366	\$46,044	\$61,951	\$50,646	\$55,242
Education								
<i>8 years or less</i>	5%	8%	1%	1%	4%	1%	2%	3%
<i>9 to 11 years</i>	12%	14%	13%	13%	17%	4%	34%	13%
<i>High school graduate</i>	45%	38%	34%	43%	42%	35%	34%	39%
<i>1 to 3 years of college</i>	23%	17%	32%	23%	22%	32%	16%	25%
<i>4 or more years of college</i>	16%	24%	20%	19%	16%	28%	14%	20%
<u>RESIDENT</u>								
<i>sample size</i>	82	65	60	100	98	52	52	244
Race (non-white)	21%	25%	21%	14%	26%	16%	44%	21%
Average age	45	45	43	43	45	41	42	43
Gender (male)	85%	77%	85%	83%	86%	80%	85%	81%
Marital Status (married)	73%	64%	68%	71%	67%	63%	59%	69%
Average household income	\$50,721	\$41,929	\$53,977	\$50,202	\$43,195	\$53,780	\$48,896	\$50,457
Education								
<i>8 years or less</i>	5%	9%	1%	2%	4%	2%	2%	4%
<i>9 to 11 years</i>	12%	16%	16%	15%	18%	4%	36%	15%
<i>High school graduate</i>	44%	38%	41%	48%	43%	44%	32%	42%
<i>1 to 3 years of college</i>	23%	13%	23%	19%	23%	23%	16%	21%
<i>4 or more years of college</i>	15%	25%	19%	16%	12%	26%	14%	18%

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NOTE: An angler may target multiple species and can be included in more than one species above.

Table 2a. (Continued) North Carolina Freshwater Angler Demographics by Species Fished, 2006
(Participants 16 years old and older)

	<u>Crappie</u>	<u>Panfish</u>	<u>White & Striped Bass</u>	<u>Black Bass</u>	<u>Catfish</u>	<u>Trout</u>	<u>Any Freshwater</u>	<u>All Freshwater</u>
<u>NON-RESIDENT</u>								
<i>sample size</i>	6	10	14	19	5	21	4	51
Race (non-white)	**	0% *	0% *	4% *	**	0% *	**	2%
Average age	**	46 *	44 *	46 *	**	47 *	**	45
Gender (male)	**	74% *	65% *	100% *	**	72% *	**	82%
Marital Status (married)	**	82% *	68% *	92% *	**	91% *	**	84%
Average household income	**	\$53,289 *	\$70,969 *	\$81,967 *	**	\$80,908 *	**	\$75,379
Education								
<i>8 years or less</i>	**	0% *	0% *	0% *	**	0% *	**	0%
<i>9 to 11 years</i>	**	0% *	0% *	0% *	**	4% *	**	2%
<i>High school graduate</i>	**	35% *	0% *	20% *	**	8% *	**	20%
<i>1 to 3 years of college</i>	**	42% *	72% *	44% *	**	55% *	**	46%
<i>4 or more years of college</i>	**	23% *	28% *	36% *	**	34% *	**	32%

* = Sample size is small and results should be interpreted with caution.

** = Sample size is too small to report reliably.

NOTE: An angler may target multiple species and can be included in more than one species above.

Table 2b. North Carolina Saltwater Angler Demographics by Species Fished, 2006
(Participants 16 years old and older)

<u>ALL ANGLERS</u>	<u>Bluefish*</u>	<u>Flounder & Halibut</u>	<u>Saltwater Finfish #1</u>	<u>Any Saltwater</u>	<u>All Saltwater Fishing</u>
<i>sample size</i>	35	54	56	76	202
Race (non-white)	4%	3%	4%	20%	9%
Average age	42	43	44	46	44
Gender (male)	80%	78%	74%	69%	77%
Marital Status (married)	68%	69%	77%	71%	76%
Average household income	\$70,714	\$69,689	\$65,315	\$66,087	\$66,170
Education					
<i>8 years or less</i>	0%	1%	3%	1%	1%
<i>9 to 11 years</i>	16%	7%	4%	2%	5%
<i>High school graduate</i>	22%	24%	52%	30%	31%
<i>1 to 3 years of college</i>	22%	25%	25%	34%	30%
<i>4 or more years of college</i>	41%	43%	15%	32%	32%
 <u>RESIDENT</u>					
<i>sample size</i>	12 *	21 *	21 *	33	83
Race (non-white)	0% *	0% *	5% *	33%	14%
Average age	42 *	43 *	44 *	48	45
Gender (male)	80% *	76% *	79% *	61%	78%
Marital Status (married)	58% *	50% *	88% *	64%	73%
Average household income	\$58,156 *	\$59,015 *	\$54,066 *	\$60,880	\$61,132
Education					
<i>8 years or less</i>	0% *	0% *	7% *	2%	2%
<i>9 to 11 years</i>	23% *	9% *	5% *	3%	7%
<i>High school graduate</i>	24% *	35% *	66% *	45%	44%
<i>1 to 3 years of college</i>	36% *	38% *	20% *	27%	26%
<i>4 or more years of college</i>	16% *	18% *	2% *	24%	21%

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* = Sample size is small and results should be interpreted with caution.

NOTE: An angler may target multiple species and can be included in more than one species above.

Table 2b. (Continued) North Carolina Saltwater Angler Demographics by Species Fished, 2006
(Participants 16 years old and older)

<u>NON-RESIDENT</u>	<u>Bluefish*</u>		<u>Flounder & Halibut</u>	<u>Saltwater Finfish #1</u>	<u>Any Saltwater</u>	<u>All Saltwater Fishing</u>
<i>sample size</i>	23	*	33	35	43	119
Race (non-white)	8%	*	5%	4%	6%	4%
Average age	43	*	43	44	44	43
Gender (male)	79%	*	79%	69%	77%	75%
Marital Status (married)	79%	*	86%	65%	78%	79%
Average household income	\$86,661	*	\$78,182	\$74,615	\$71,679	\$70,922
Education						
<i>8 years or less</i>	0%	*	2%	0%	0%	0%
<i>9 to 11 years</i>	8%	*	6%	4%	2%	3%
<i>High school graduate</i>	19%	*	13%	38%	15%	20%
<i>1 to 3 years of college</i>	7%	*	13%	31%	42%	34%
<i>4 or more years of college</i>	67%	*	66%	28%	41%	43%

* = Sample size is small and results should be interpreted with caution.

NOTE: An angler may target multiple species and can be included in more than one species above.

Wildlife Viewer Demographics

Wildlife watching is divided into two major categories: Residential (near home) - activities that occur within one mile of the home; and Non-Residential (away from home) - activities that occur one mile or further from home.

Non-residential, or “away-from-home” activity can be divided into two: *residents* and *non-residents*. Residents are people who reside in North Carolina and non-residents represent out-of-state visitors. As a result of these definitions, terms will arise such as “resident non-residential participation” meaning state residents who participate in wildlife viewing one mile or more from their home. To help reduce the confusion, the “near home” and “away from home” terms are often used.

Participants in wildlife watching (Table 3) tend to be older than hunters and anglers, are split fairly evenly between male and female, and are likely to be married. Just under 12 percent of wildlife viewers in North Carolina report they are non-white.

Table 3. North Carolina Wildlife Watching Demographics, 2006
(Participants 16 years old and older)

	Nonresidential (Away from Home)		Residential Activity	All Participants:
	Resident	Nonresident		
<i>Sample Size</i>	36	54	238	295
Race (non-white)	6.8%	9.5%	12.4%	11.9%
Average age	43	50	51	51
Gender (male)	65.3%	44.5%	46.3%	46.0%
Marital Status (married)	69.4%	73.9%	68.7%	69.5%
Average HH Income	\$62,894	\$67,006	\$54,509	\$56,424
Education				
<i>8 years or less</i>	1.8%	1.9%	2.0%	2.0%
<i>9-11 years</i>	0.0%	3.8%	10.9%	9.8%
<i>12 years</i>	30.5%	24.3%	27.8%	27.4%
<i>1-3 years college</i>	14.8%	37.9%	27.7%	29.2%
<i>4 years college or more</i>	52.9%	32.1%	31.6%	31.6%

The average household income for participants in non-residential activities is higher than for those participating in residential wildlife watching, with an average of \$56,424. Just like hunters and anglers, wildlife watchers tend to have incomes higher than the 2006 state average (\$42,061, U.S. Census Bureau). Participants in non-residential wildlife watching are slightly more educated than those involved in residential activity; for all participants at least 60 percent have some college education.

Participation

Hunter Participation

In 2006, there were 304,204 hunters (residents and nonresidents), hunting a total of 4.9 million days in North Carolina (Table 4). Of the total hunters in North Carolina, 277,357 were state residents and 26,847 were nonresidents (caution: non-resident results are based on small sample size). Big game hunting was the most popular in terms of both hunters and days, the largest portion of which is made up of deer hunters. The average hunter spent 16 days afield while the average non-resident hunter spent eight days afield in North Carolina. In terms of specific species, deer hunting was most popular, both in total participants and total days. In terms of the average number of days per hunter, more days were spent hunting small game than deer. For total days hunted, residents outnumbered nonresidents by more than twenty to one.

Table 4. Hunting Participation by Residential Status and Species Hunted in North Carolina in 2006
(Participants 16 years old and older)

<u>Number of participants</u>	Big Game	Small Game	Deer	Turkey	All Hunting
Resident	213,738	104,247	197,220	73,867 *	277,357
Nonresident	20,296 *	*	*	*	26,847 *
Total	234,034	107,222	215,043	74,607 *	304,204
 <u>Number of days</u>					
Resident	3,074,547	1,457,490	2,525,814	468,811 *	4,655,984
Nonresident	200,326 *	*	*	*	224,403 *
Total	3,274,873	1,462,318	2,700,508	473,990 *	4,880,386
 <u>Average days of participation</u>					
Resident	14.4	14.0	12.8	6.3	16.8
Nonresident	10 *	*	*	*	8.4 *
Total	14.0	13.6	12.6	6.4 *	16.0
 <i>Number of Observations/ Sample Size:</i>					
<i>Resident</i>	66	41	60	22	91
<i>Nonresident</i>	11	2	8	1	15
<i>Total</i>	77	43	68	23	106

NOTE: A hunter may target multiple species and can be included in more than one species above.

NOTE: Each category above is not exclusive of others. For example, deer and turkey are also part of "Big Game." The Definitions appendix explains each category.

* = Sample size is small and results should be interpreted with caution.

** = Sample size is too small to report reliably.

Angler Participation

In 2006, there were 884,185 freshwater anglers (residents and nonresidents), fishing a total of 13.9 million days in North Carolina (Table 5a). Of the total freshwater anglers in North Carolina, 739,818 were state residents and 144,367 were nonresidents. The total number of days fished was 13.9 million, averaging 16 days per angler. Most fishing effort was directed at black bass, followed by catfish and trout. In terms of total days fished for all freshwater species, residents outnumbered nonresidents by 18 to one.

For saltwater fishing there were 518,865 participants, almost equally divided between North Carolina residents and non-residents (Table 5b). In terms of days spent fishing for a particular species, flounder and halibut were the most popular saltwater fish. The greatest number of days, however, was spent fishing for unspecified species of saltwater fish, measured in this survey as “any saltwater fish”.

The number of freshwater and saltwater anglers cannot be added together to derive the total number of anglers as many anglers fish in both. Altogether, in 2006, 1,263,000 residents and non-residents fished in North Carolina, of which 868,000 were residents.

Wildlife Watching Participation

Participation information is divided into two subsections. The first subsection explores non-residential activities by state residents and visitors (non-residents). The second subsection examines residential activities (activities occurring within one mile of home).

Non-Residential Participation (away from home; occurring one or more miles from home):

In 2006, there were 686,141 watchable wildlife recreationists (residents and non-residents) participating in non-residential activities in North Carolina (Table 6). Of the total participating in activities more than one mile from home, more than half were non-residents. State residents spend more days per year than non-residents, averaging more than eight days. Altogether, wildlife watchers spent 4.9 million days in non-residential activities in 2006,

The primary watchable wildlife activity, measured in terms of participants and number of activity days, was observing wildlife. Photographing wildlife was the second preferred activity in terms of number of participants and days, while feeding wildlife was third. Please note one participant may engage in two or more activities per trip as these activities are not exclusive of one another.

Participation by resident and non-resident recreationists in terms of sites visited and wildlife observed, fed, or photographed is presented in Table 7. Ninety percent of all participants observe, feed or photograph birds; mammals are the second most common category of wildlife. More than twice as many of these recreationists visit public land than private land. Note that the results presented in Table 7 do not necessarily imply that recreationists prefer a certain site type

or prefer to observe a certain wildlife type; the results in Table 7 reflect participants' preferences *and* the availability of sites and wildlife.

Table 5a. Freshwater Fishing Participation by Residential Status and Species Fished in North Carolina in 2006
(Participants 16 years old and older)

	<u>Crappie</u>	<u>Panfish</u>	<u>White Bass & Striped Bass</u>	<u>Black Bass</u>	<u>Catfish</u>	<u>Trout</u>	<u>Any Freshwater</u>	<u>All Freshwater</u>
<u>Number of Participants</u>								
Resident	243,119	174,603	174,557	289,681	281,885	188,201	159,792	739,818
Nonresident	**	24,570 *	38,099 *	58,169 *	**	69,089 *	**	144,367
Total	253,621	199,174	212,656	347,850	294,032	257,290	166,502	884,185
<u>Number of Days</u>								
Resident	3,580,106	1,432,218	2,054,628	4,910,657	4,085,300	3,985,544	1,157,668	13,206,755
Nonresident	**	123,154 *	193,814 *	279,347 *	**	217,185 *	**	716,042
Total	3,614,404	1,555,372	2,248,442	5,190,004	4,243,881	4,202,729	1,187,451	13,922,797
<u>Avg. Days of Participation</u>								
Resident	14.7	8.2	11.8	17.0	14.5	21.2	7.2	18
Nonresident	**	5.0 *	5.1 *	4.8 *	**	3.1 *	**	5
Total	14.3	7.8	10.6	14.9	14.4	16.3	7.1	16
<i>Number of Observations/ Sample Size:</i>								
<i>Resident</i>	82	65	60	100	98	52	52	244
<i>Nonresident</i>	6	10	14	19	5	21	4	51
<i>Total</i>	88	75	74	119	103	73	56	295

* = Sample size is small and results should be interpreted with caution.

** = Sample size is too small to report reliably.

**Table 5b. Saltwater Fishing Participation by Residential Status and Species Fished in North Carolina in 2006
(Participants 16 years old and older)**

	<u>Bluefish</u>	<u>Flounder & Halibut</u>	<u>Saltwater Finfish #1</u>	<u>Any Saltwater Fish</u>	<u>All Saltwater Fishing</u>
<u>Number of participants</u>					
Resident	45,923 *	66,769 *	70,007 *	94,506	253,029
Nonresident	43,472 *	73,062	70,216	92,965	265,836
Total	89,395	139,831	140,223	187,471	518,865
<u>Number of days</u>					
Resident	363,047 *	354,480 *	351,616 *	797,662	1,922,259
Nonresident	264,185 *	670,164	303,534	740,318	1,511,387
Total	627,231	1,024,644	655,149	1,537,980	3,433,646
<u>Avg Days of Participation</u>					
Resident	7.9 *	5.3 *	5.0 *	8.4	7.6
Nonresident	6.1 *	9.2	4.3	8.0	5.7
Total	7.0	7.3	4.7	8.2	6.6
<i>Number of Observations/ Sample Size:</i>					
<i>Resident</i>	<i>12</i>	<i>21</i>	<i>21</i>	<i>33</i>	<i>83</i>
<i>Nonresident</i>	<i>23</i>	<i>33</i>	<i>35</i>	<i>43</i>	<i>119</i>
<i>Total</i>	<i>35</i>	<i>54</i>	<i>56</i>	<i>76</i>	<i>202</i>

* = Sample size is small and results should be interpreted with caution.

** = Sample size is too small to report reliably.

Table 6. Participation in Non-Residential Watchable Wildlife Recreation in North Carolina in 2006 (Participants 16 years old and older)

	Resident	Nonresident	Total
Number of participants	300,321	385,819	686,141
observing wildlife	255,357	277,230	532,586
photographing wildlife	108,476	175,958	284,433
feeding wildlife	66,601	62,843	129,444
Number of days	2,551,921	2,315,836	4,867,758
observing wildlife	2,266,095	1,552,874	3,818,969
photographing wildlife	1,052,082	782,837	1,834,919
feeding wildlife	1,390,253	291,772	1,682,025
Number of trips	1,619,431	1,099,065	2,718,496
Average days participation	8.5	6	7.1
<i>Number of Observations/ Sample Size:</i>	36	54	90

Table 7. Participation in Non-Residential Watchable Wildlife Recreation by Site Visited and Wildlife Observed, Fed, or Photographed in North Carolina in 2006 (Participants 16 years old and older; Ranked by number of participants per activity)

	Resident	Nonresident	Total
Number of participants	300,321	385,819	686,141
Number of recreationists visiting:			
Public land	242,474	325,824	568,298
Private land	103,458	133,924	237,382
Number of recreationists observing, feeding, photographing:			
Birds	283,669	336,086	619,755
waterfowl	159,530	235,046	394,577
songbirds	184,278	300,702	484,980
birds of prey	153,100	200,212	353,313
other birds	76,574	92,823	169,397
shorebirds	94,673	215,422	310,096
Mammals	191,392	220,053	411,445
small land mammals	180,412	171,480	351,892
large land mammals	145,285	132,110	277,395
ocean mammals	-	64,802	64,802
Other wildlife	91,850	114,301	206,151
Fish	68,330	82,284	150,614
<i>Number of Observations/ Sample Size:</i>	36	54	90

Residential Participation (near home activity occurring within one mile of home):

In 2006, there were 2,237,284 residential watchable wildlife participants in North Carolina (Table 8). This number represents North Carolina residents participating in watchable wildlife recreation within one mile of their home. Compared to non-residential activity, there are more than three times the residents who participate within one mile of their homes than those who travel away from home.

Table 8. Participation in Residential Watchable Wildlife Recreation in North Carolina in 2006
(Participants 16 years old and older)

Number of participants	2,237,284
feeding birds & other wildlife	2,050,926
birds	1,981,028
other wildlife	722,302
observing wildlife	1,229,303
photographing wildlife	521,453
visiting parks near home	318,071
maintaining natural areas around home	368,586
maintaining plantings around home	298,674
Number of days	
observing wildlife	147,429,783
photographing wildlife	4,710,880
<i>Number of Observations/ Sample Size:</i>	238

The primary residential watchable wildlife activity, measured in terms of number of participants, was feeding wildlife. Observing wildlife was the second most popular residential watchable wildlife activity. This is in contrast to the ranking of the non-residential activities, in which observing wildlife was the most popular activity. Of those who participate in feeding birds and wildlife, most feed wild birds.

Given the manner in which the survey questions were asked, we cannot determine the number of days spent feeding wildlife. However, we can determine the number of days spent observing and photographing wildlife around the home. In terms of days spent participating in watchable wildlife activities, observing wildlife again was the most popular activity. Residents spent approximately 147 million days observing wildlife around their home on an average of 66 days per resident annually.

The most common type of wildlife observed by residential recreationists in North Carolina was birds (Table 9). The second most prominent category to be observed by residents was small mammals. The results in Table 9 do not necessarily imply that recreationists prefer to observe a certain wildlife type because the results reflect participants' preferences and the availability of wildlife types.

Table 9. Participation in Residential Watchable Wildlife Recreation by Wildlife Observed in North Carolina in 2006 (Participants 16 years old and older)

Number of recreationists	
birds	1,181,482
mammals	1,036,824
large mammals	684,043
small mammals	970,193
insects or spiders	368,722
amphibians or reptiles	301,122
fish & other insects	174,863
<i>Number of Observations/ Sample Size:</i>	238

Note = A participant may view more than one type of wildlife listed above.

Economic Impacts

Retail Sales

Tables 10a, 10b, 11 and 12 present retail sales and the resulting economic impacts in North Carolina associated with freshwater fishing, saltwater fishing, hunting and wildlife watching. Table 13 presents combined expenditures and impacts for all fish and wildlife-related recreation. Altogether, these activities generated \$2.62 billion in consumer expenditures for equipment and services. Most of these were made by residents (\$2.05 billion), while nonresidents contributed \$570 million. Tables detailing the expenditures and economic impacts of each activity and by species are provided in Appendices C-F. Please note that in Table 12, wildlife viewing impacts are divided in to resident and non-resident impacts versus near-home and away-from home (residential versus non-residential, respectively). Expenditure data for wildlife viewing were provided based on the individual's place of residence and not where the activities took place.

Total Economic Effect (Output)

Original expenditures made by hunters, anglers and wildlife watchers generate rounds of additional spending throughout the economy. For example, a retailer buys more inventory and pays bills, wholesalers buy more from manufacturers, and all these pay employees who then spend their paychecks. The sum of these impacts is the total economic impact resulting from the original expenditures (Appendix B includes methods and sources). The total economic effect from 2006 fish and wildlife-related recreation in North Carolina was estimated to be \$4.3 billion. In other words, if hunters, anglers and wildlife watchers were to stop spending money in North Carolina and not spend these dollars on other in-state items, the state economy would shrink by \$4.3 billion. Freshwater sportfishing accounted for \$1 billion and saltwater fishing, \$913 million. \$856 million and \$1.5 billion came from hunting and wildlife-watching, respectively.

Earnings

The business activity stimulated throughout the North Carolina economy by outdoorsmen and women generates salaries and wages. In addition, many of the businesses supporting these individuals pay dividends. Altogether, these represent earnings created for North Carolina as a result of hunting, fishing and wildlife watching activities. Total earnings in 2006 in North Carolina from fish and wildlife related activities were estimated at \$1.3 billion, with \$959 million from residents and \$298 million from non-residents.

Employment

Expenditures made for hunting, fishing and wildlife watching activities support jobs throughout the state. Many of these are in companies that directly serve recreationists such as retailers, restaurants, and more. Others are in companies that support the first companies and employees such as wholesalers, utilities, manufacturers, grocers and more. Total jobs, full and part time, supported in North Carolina in 2006 from fish and wildlife related activities were estimated at 45,224, with 8,851, and 16,050 from hunting, and wildlife watching respectively. Freshwater and saltwater fishing accounted for an estimated 10,588 and 9,735 jobs respectively.

Tax Revenues

State and local tax revenues generated from 2006 fish and wildlife-related recreation in North Carolina were estimated to be \$259 million (\$197 million by residents and \$61 million by non-residents). Freshwater anglers accounted for \$63 million, saltwater anglers \$59 million; hunters and wildlife watchers generated \$49 million and \$89 million of the total, respectively. All fish and wildlife-related recreation generated \$297 million in tax revenues to the federal government.

Table 10a. Economic Activity Generated by North Carolina Freshwater Anglers, 2006[†]
(Participants 16 years old and older)

	RETAIL SALES	OUTPUT	EARNINGS	JOBS	FEDERAL TAX REVENUE	STATE/LOCAL TAX REVENUE
All Freshwater Fishing:	\$633,571,740	\$1,039,646,237	\$300,094,918	10,588	\$71,455,644	\$62,852,799
Residents Only:	\$536,901,373	\$886,507,289	\$254,043,890	8,883	\$59,871,424	\$52,635,444
Non-Residents Only:	\$96,670,367	\$153,138,948	\$46,051,028	1,705	\$11,584,220	\$10,217,355
Black Bass Fishing:	\$142,381,702	\$235,195,504	\$68,594,437	2,436	\$16,296,873	\$14,364,911
Residents Only:	\$103,852,721	\$171,216,763	\$48,903,385	1,729	\$11,610,789	\$10,418,414
Non-Residents Only:*	\$38,528,981	\$63,978,741	\$19,691,052	707	\$4,686,084	\$3,946,497
White/Striped Bass Fishing:	\$50,509,352	\$83,837,612	\$23,773,716	832	\$5,556,901	\$4,874,172
Residents Only:	\$39,191,515	\$65,051,570	\$18,641,285	645	\$4,347,343	\$3,758,518
Non-Residents Only:*	\$11,317,837	\$18,786,042	\$5,132,431	187	\$1,209,558	\$1,115,654
Crappie Fishing:	\$78,414,937	\$128,760,555	\$35,324,662	1,234	\$8,464,983	\$8,721,311
Residents Only:	\$76,412,544	\$125,395,203	\$34,317,820	1,192	\$8,226,214	\$8,507,531
Non-Residents Only:**	**	**	**	**	**	**
Panfish Fishing:	\$36,591,287	\$59,691,842	\$17,999,531	674	\$4,234,776	\$3,657,950
Residents Only:	\$33,401,847	\$54,354,573	\$16,423,563	611	\$3,863,484	\$3,329,214
Non-Residents Only:*	\$3,189,440	\$5,337,269	\$1,575,968	63	\$371,292	\$328,736
Catfish Fishing:	\$63,518,395	\$103,153,882	\$29,271,702	1,100	\$7,091,194	\$6,681,218
Residents Only:	\$61,521,047	\$99,810,711	\$28,364,400	1,067	\$6,878,495	\$6,480,153
Non-Residents Only:**	**	**	**	**	**	**
Trout	\$133,940,049	\$224,990,738	\$63,396,511	2,192	\$14,921,461	\$13,237,021
Residents Only:*	\$106,662,995	\$179,709,562	\$49,795,101	1,669	\$11,576,462	\$10,169,623
Non-Residents Only:	\$27,277,053	\$45,281,176	\$13,601,410	523	\$3,344,999	\$3,067,398
Any Freshwater Fish:	\$55,151,830	\$89,216,001	\$27,830,092	992	\$6,479,734	\$5,093,601
Residents Only:	\$54,865,565	\$88,738,451	\$27,697,803	987	\$6,448,561	\$5,064,557
Non-Residents Only:**	**	**	**	**	**	**

[†] The sample sizes presented for each species in the Angler Demographics section apply here as well.

* = Sample size is small and results should be interpreted with caution.

** = Sample size is too small to report reliably.

Table 10b. Economic Activity Generated by North Carolina Saltwater Anglers, 2006
(Participants 16 years old and older)

	RETAIL SALES	OUTPUT	EARNINGS	JOBS	FEDERAL TAX REVENUE	STATE & LOCAL TAX REVENUE
All Saltwater Fishing:	\$558,870,611	\$913,124,494	\$267,161,574	9,735	\$64,755,879	\$58,543,508
Residents Only:	\$289,750,765	\$477,237,864	\$139,472,529	4,877	\$32,760,217	\$28,266,630
Non-Residents Only:	\$269,119,847	\$435,886,630	\$127,689,045	4,858	\$31,995,662	\$30,276,878
Flounder/Halibut Fishing:	\$57,251,133	\$93,939,258	\$27,623,764	1,006	\$6,568,876	\$5,751,956
Residents Only:*	\$37,847,927	\$61,494,177	\$17,499,190	605	\$4,137,736	\$3,646,894
Non-Residents Only:	\$19,403,207	\$32,445,081	\$10,124,574	401	\$2,431,140	\$2,105,062
Bluefish	\$38,899,885	\$63,056,742	\$19,228,616	745	\$4,589,670	\$4,074,524
Residents Only:*	\$28,918,896	\$46,353,891	\$14,123,606	538	\$3,370,396	\$2,997,917
Non-Residents Only:*	\$9,980,989	\$16,702,851	\$5,105,010	207	\$1,219,274	\$1,076,607
Other Finfish Fishing:	\$286,721,089	\$470,798,939	\$143,241,586	5,394	\$34,041,452	\$29,563,277
Residents Only:	\$148,091,938	\$241,181,197	\$72,384,181	2,716	\$17,147,586	\$15,169,374
Non-Residents Only:*	\$138,629,151	\$229,617,742	\$70,857,405	2,678	\$16,893,866	\$14,393,903
Any Saltwater Species:	\$97,480,263	\$161,943,594	\$47,551,517	1,835	\$11,372,972	\$10,225,077
Residents Only:	\$32,472,164	\$53,478,791	\$14,782,793	563	\$3,505,307	\$3,256,892
Non-Residents Only:	\$65,008,099	\$108,464,803	\$32,768,724	1,272	\$7,867,665	\$6,968,185

* = Sample size is small and results should be interpreted with caution.

Table 11. Economic Activity Generated by North Carolina Hunters, 2006
(Participants 16 years old and older)

	RETAIL SALES	OUTPUT	EARNINGS	JOBS	FEDERAL TAX REVENUE	STATE & LOCAL TAX REVENUE
All Hunting:	\$511,546,347	\$856,474,235	\$251,130,695	8,851	\$58,037,991	\$48,743,257
Residents Only:	\$488,139,422	\$818,813,458	\$215,826,259	8,332	\$55,495,446	\$46,563,110
Non-Residents Only:*	\$23,406,925	\$37,660,777	\$35,304,436	519	\$2,542,545	\$2,180,147
Big Game Hunting:	\$246,766,840	\$409,653,596	\$130,646,479	4,591	\$30,203,953	\$25,720,458
Residents Only:	\$230,917,142	\$383,737,622	\$122,673,927	4,255	\$28,334,753	\$24,176,017
Non-Residents Only:*	\$15,849,697	\$25,915,974	\$7,972,552	336	\$1,869,200	\$1,544,441
Small Game Hunting:	\$170,927,961	\$282,151,792	\$77,572,337	3,132	\$18,163,142	\$15,605,740
Residents Only:	\$166,278,864	\$275,021,383	\$75,982,120	3,012	\$17,762,627	\$15,222,342
Non-Residents Only:**	**	**	**	**	**	**
Deer Hunting:	\$193,291,446	\$322,280,805	\$102,230,179	3,408	\$23,594,219	\$20,010,126
Residents Only:	\$187,453,980	\$312,545,985	\$98,788,777	3,299	\$22,825,222	\$19,444,217
Non-Residents Only:**	**	**	**	**	**	**
Turkey Hunting:*	\$36,123,923	\$58,458,931	\$18,337,455	756	\$4,308,409	\$3,861,827
Residents Only:*	\$35,614,391	\$57,610,326	\$18,060,958	747	\$4,245,136	\$3,812,542
Non-Residents Only:**	**	**	**	**	**	**

* = Sample size is small and results should be interpreted with caution.

** = Sample size is too small to report reliably.

Table 12. Economic Activity Generated by North Carolina Wildlife Watchers, 2006
(Participants 16 years old and older)

	RETAIL SALES	OUTPUT	EARNINGS	JOBS	FEDERAL TAX REVENUE	STATE & LOCAL TAX REVENUE
All Wildlife Watching Activities:	\$916,907,774	\$1,525,765,137	\$438,667,048	16,050	\$102,946,765	\$88,564,774
Residents Only:	\$735,821,794	\$1,221,299,560	\$349,788,984	12,751	\$82,024,339	\$69,991,357
Non-Residents Only:	\$181,085,980	\$304,465,577	\$88,878,064	3,299	\$20,922,426	\$18,573,417

**Table 13. Economic Activity Generated by Combined North Carolina Hunters, Anglers and
Wildlife Watchers, 2006**

Table 13a: Combined Fishing and Hunting Impacts in North Carolina, 2006
(Participants 16 years old and older)

	RETAIL SALES	OUTPUT	EARNINGS	JOBS	FEDERAL TAX REVENUE	STATE & LOCAL TAX REVENUE
All Fishing and Hunting Related Recreation:	\$1,703,988,699	\$2,809,244,965	\$818,387,188	29,174	\$194,249,514	\$170,139,564
Residents Only:	\$1,314,791,560	\$2,182,558,611	\$609,342,678	22,092	\$148,127,087	\$127,465,184
Non-Residents Only:	\$389,197,139	\$626,686,354	\$209,044,510	7,082	\$46,122,427	\$42,674,380

**Table 13b: Combined Fishing, Hunting and Wildlife-Watching Recreation
in North Carolina, 2006** (Participants 16 years old and older)

	RETAIL SALES	OUTPUT	EARNINGS	JOBS	FEDERAL TAX REVENUE	STATE & LOCAL TAX REVENUE
All Fish and Wildlife Related Recreation:	\$2,620,896,473	\$4,335,010,102	\$1,257,054,236	45,224	\$297,196,279	\$258,704,338
Residents Only:	\$2,050,613,354	\$3,403,858,171	\$959,131,662	34,843	\$230,151,426	\$197,456,541
Non-Residents Only:	\$570,283,119	\$931,151,931	\$297,922,574	10,381	\$67,044,853	\$61,247,797

Per Participant and Per Day Expenditures

Table 14 presents estimates of the amount spent by recreationists per person and per day. These estimates can be used to approximate changes in economic activity when it is known how specific management or other actions may affect participation in fish and wildlife recreation.

Table 14. Per Day and Per Person Expenditures, 2006 (Participants 16 years old and older)

HUNTING								
	Big Game	Small Game	Deer	Turkey	All Hunting¹			
All Hunters:								
Average daily expenditures	\$75.35	\$116.89	\$71.58	\$76.21*	\$104.82			
Average annual expenditures	\$1,054.41	\$1,594.15	\$898.85	\$484.19*	\$1,681.59			
Resident Hunters:								
Average daily expenditures	\$75.11	\$114.09	\$74.22	\$75.97*	\$104.84			
Average annual expenditures	\$1,080.37	\$1,595.05	\$950.48	\$482.14*	\$1,759.97			
Non-Resident Hunters:								
Average daily expenditures	\$79.12*	**	**	**	\$104.31*			
Average annual expenditures	\$780.94*	**	**	**	\$871.87*			
FRESHWATER FISHING								
	Crappie	Panfish	White & Striped Bass	Black Bass	Catfish	Trout	Any Freshwater	All Freshwater¹
All Anglers:								
Average daily expenditures	\$21.70	\$23.53	\$22.46	\$27.43	\$14.97	\$31.87	\$46.45	\$45.51
Average annual expenditures	\$309.18	\$183.72	\$237.52	\$409.32	\$216.03	\$520.58	\$331.24	\$716.56
Resident Anglers:								
Average daily expenditures	\$21.34	\$23.32	\$19.07	\$21.15	\$15.06	\$26.76	\$47.39	\$40.65
Average annual expenditures	\$314.30	\$191.30	\$224.52	\$358.51	\$218.25	\$566.75	\$343.36	\$725.72
Non-Resident Anglers:								
Average daily expenditures	**	\$25.90*	\$58.40*	\$137.93*	**	\$125.59*	**	\$135.01
Average annual expenditures	**	\$129.81*	\$297.06*	\$662.37*	**	\$394.81*	**	\$669.62

(continued)

* = Sample size is small and results should be interpreted with caution.

** = Sample size is too small to report reliably.

¹ These figures present the average expenditures for all hunters or anglers, regardless of species targeted. These figures include big-ticket items such as vehicles, boats, and other items that sportsmen and women could not assign to any specific species. Some of these big-ticket items may be left out of species specific expenditure estimates, thus the "All Species" expenditure averages are generally higher than reported for any other species in the above table.

**Table 14. (Continued) Per Day and Per Person Expenditures in North Carolina, 2006
(Participants 16 years old and older)**

SALTWATER FISHING

	Bluefish	Flounder	Other Finfish	Any Saltwater	All Saltwater¹
All Anglers:					
Average daily expenditures	\$62.02	\$55.87	\$437.64	\$63.38	\$162.76
Average annual expenditures	\$435.15	\$409.43	\$2,044.75	\$519.98	\$1,077.10
Resident Anglers:					
Average daily expenditures	\$79.66*	\$106.77*	\$421.18*	\$40.71	\$150.73
Average annual expenditures	\$629.73*	\$566.85*	\$2,115.39*	\$343.60	\$1,145.13
Non-Resident Anglers:					
Average daily expenditures	\$37.78*	\$28.95	\$456.72	\$87.81	\$178.06
Average annual expenditures	\$229.59*	\$265.57	\$1,974.31	\$699.27	\$1,012.35

WILDLIFE WATCHING

Average per participant, annually	Residents	Non-Residents	All Participants
On residential activities, annually	\$107.65	-	
On non-residential activities, annually	\$1,648.13	\$469.34	\$985.29
Average per day, per participant			
For non-residential activities, including equipment items:	\$193.96	\$78.19	\$138.88
For non-residential activities, travel expenses only (food, hotel, etc):	\$33.01	\$70.24	\$50.72

* = Sample size is small and results should be interpreted with caution.
** = Sample size is too small to report reliably.

¹ These figures present the average expenditures for all hunters or anglers, regardless of species targeted. These figures include big-ticket items such as vehicles, boats, and other items that sportsmen and women could not assign to any specific species. Some of these big-ticket items may be left out of species specific expenditure estimates, thus the "All Species" expenditure averages are generally higher than reported for any other species in the above table.

Travel-Related Expenditures:

Table 15 presents travel-related expenditures made by North Carolina anglers, hunters and wildlife viewers. Through travel, participants help distribute wealth to rural areas where economic opportunities may be limited compared to urban and suburban regions. These expenditures include food, transportation costs (mostly fuel), lodging, guide fees, equipment rental, etc. While not all of these dollars may be spent in rural areas, many are. In addition to travel expenses, many participants will spend money on equipment and services in rural areas. Such equipment and service expenditures are not included in the table below.

Table 15. Travel-Related Expenditures in North Carolina by Residents and Non-Residents Combined (Participants 16 years old and older)

Hunting:	
Big Game	\$65,564,600
Small Game	\$16,996,657
Deer	\$50,347,750
Turkey	\$10,851,220
<i>All Hunting, all species</i>	<i>\$89,979,024</i>
Freshwater Fishing:	
Crappie	\$36,016,591
Panfish	\$18,216,003
White & Striped Bass	\$32,070,434
Black Bass	\$79,062,138
Catfish	\$28,737,241
Trout	\$73,843,685
Any Freshwater	\$12,470,173
<i>All Freshwater Fishing</i>	<i>\$301,848,325</i>
Saltwater Fishing:	
Bluefish	\$32,378,025
Flounder & Halibut	\$43,196,439
Saltwater Finfish #1	\$253,503,903
Any Saltwater	\$92,197,918
<i>All Saltwater Fishing</i>	<i>\$391,128,752</i>
Wildlife Watching	
Non-residential only [†]	\$246,906,221

[†] Per-day expenditure estimates are not possible for residential wildlife viewing activities

Public and Private Land Activity, Expenditures and Impacts

Use of Public Lands

Hunters and non-residential wildlife viewers depend on a combination of public and private lands. With urban and suburban populations increasing, it is likely that public lands will play an increasing role in supplying residents and visitors alike with opportunities to experience North Carolina's wildlife resources. Table 16 presents the percentage of North Carolina resident wildlife viewers using public and private lands for non-residential activities (those occurring more one or more miles from home). Table 17 presents the percentage of North Carolina hunters using public and private lands. The 2006 National Survey does not ask anglers about activities on public and/or private waters. Therefore, estimates regarding fishing on public waters are not possible.

Although the sample sizes are quite small, wildlife viewers appear to be much more dependent on public lands for non-residential activities. One reason among several for this difference might

be related to a higher percentage of participants living in non-rural regions and therefore less likely to have access to private lands.

Please note that Table 17 presents hunting activity that takes place on public and/or private lands, exclusively. In most cases, the number of respondents who report that all of their hunting takes place on one type of land (public or private) is smaller compared to those who report hunting a particular species on one type of land. In North Carolina, the number of observations for people who hunt all species on public or private land, exclusively, is too small to report the results reliably, while the sample sizes for people who hunt specific species exclusively are sometimes large enough to report.

Table 16. Percentage of Non-Residential[†] Wildlife Watching Activity and Days Occurring on Public and Private Land in North Carolina (Residents only, 16+ years)

	Residents	Nonresidents	Total
<u>Public Land Exclusively</u>	N=19	N=28	N=47
Participants	57.7% *	58.5% *	58.1%
Days of Participation	45.3% *	40.1% *	42.8%
<u>Private Land Exclusively</u>			N=12
Participants	**	**	11.6% *
Days of Participation	**	**	9.1% *
<u>Use Both Public and Private Lands</u>		N=15	N=24
Participants	**	26.0% *	23.0% *
Days of Participation	**	45.3% *	30.0% *

[†] “Non-Residential” describes people who watch, photograph and/or feed wildlife *one mile or more* from their place of residence. Data were not available for residential (around the home) activity.

* = Sample size is small and results should be interpreted with caution.

** = Sample size is too small to report reliably.

Table 17. Percentage of Hunters and Hunting Days on Public and Private Land (Participants 16 years old and older)

	<u>All Hunting</u>		<u>Big Game</u>		<u>Small Game</u>		<u>Deer</u>		<u>Turkey</u>	
<u>NUMBER OF HUNTERS WHO USE:</u>										
All Types of Land:	304,204		234,034		107,222		215,043		74,607*	
Residents:	278,918		213,738		104,247		198,781		73,867*	
Non-residents:	25,285*		20,296*		**		**		**	
Public Lands Exclusively:										
Residents:										
Non-residents:										
Private Lands Exclusively:	-		164,763	70%	75,548	70%	152,033	71%	43,329*	58%
Residents:			147,601	69%	72,572	70%	138,906	70%	43,329*	59%
Non-residents:			**		**		**		**	
Both Public and Private Lands:	55,912*	18%	43,216*	18%	-		43,216*	20%	-	
Residents:	53,517*	19%	40,822*	19%			40,822*	21%		
Non-residents:	**		**				**			
<u>DAYS OF HUNTING:</u>										
All Hunters, All Types of Land	4,880,386		3,274,873		1,462,318		2,700,508		473,990*	
Residents:	4,655,984		3,074,547		1,457,490		2,525,814		468,811*	
Non-residents:	224,403*		200,326*		**		**		**	
Public Lands Exclusively:										
Residents:										
Non-residents:										
Private Lands Exclusively:	-		2,439,936	75%	1,170,024	80%	2,054,581	76%	313,328*	66%
Residents:			2,273,913	74%	1,165,197	80%	1,909,012	76%	313,328*	67%
Non-residents:			**		**		**		**	
Both Public and Private Lands:	864,190*	18%	565,740*	17%	-		453,038*	17%	-	
Residents:	840,244*	18%	541,794*	18%			429,092	17%		
Non-residents:	**		**				**			

* = Sample size is small and results should be interpreted with caution.

** = Sample size is too small to report reliably. The results do not mean that non-residents did not use these types of lands. The results do imply that such use by non-residents is infrequent.

Expenditures (Retail Sales) and Economic Impacts Associated with Activities on Public and Private Lands

Significant public funds go into managing fish and wildlife on all lands, public and private. Additional funds are used to acquire and manage habitat on public lands. To help gain an understanding of the return from public lands, Table 18 *estimates* the expenditures and economic impacts created by wildlife viewers associated with their activity occurring on public and private lands. Only the impacts from non-residential activities (more than one mile from home) are included in these estimates. Table 19 presents the same information for hunters. These estimates are based on the number of days each spends on public and private lands respectively. The 2006 National Survey does not ask anglers about activities on public and/or private waters. Therefore, such estimates are not possible for anglers.

Table 18. Economic Activity Generated by Non-Residential Wildlife Viewers, by Type of Land Used, 2006 (Participants 16 years old and older, "N = number of survey samples)

	RETAIL SALES	OUTPUT	EARNINGS	JOBS	FEDERAL TAX REVENUE	STATE & LOCAL TAX REVENUE
Public Land						
Exclusively (N=47)	\$61,338,817	\$266,972,517	\$74,367,783	2,497	\$17,328,272	\$14,971,582
Residents (N=19)*	\$54,071,196	\$185,568,019	\$52,527,001	1,745	\$12,195,690	\$10,095,725
Non-Residents (N=29)*	\$7,267,621	\$81,404,498	\$21,840,782	752	\$5,132,582	\$4,875,857
Private Land						
Exclusively (N=12)						
Residents (N=4)**						Not enough data to report reliably
Non-Residents (N=8)**						
Both Public and Private Lands (N=15)*						
Residents (N=9)**	\$96,444,232	\$276,220,121	\$78,659,458	2,877	\$18,782,671	\$16,741,679
Non-Residents (N=15)*	\$11,654,627	\$171,804,143	\$50,464,765	1,926	\$12,001,050	\$10,794,610

* = Sample size is small and results should be interpreted with caution.

** = Sample size is too small to report reliably. The results do not mean that non-residents did not use these types of lands. The results do imply that such use of private land by non-residents is infrequent.

**Table 19. Economic Activity Generated by North Carolina Hunters,
by Type of Land Used, 2006 (Participants 16 years old and older, "N" = survey samples)**

Hunting on All Types of Lands:

(Participants 16+ years)	RETAIL SALES	OUTPUT	EARNINGS	JOBS	FEDERAL TAX REVENUE	STATE & LOCAL TAX REVENUE
All Hunting (N=106)	\$511,546,347	\$856,474,225	\$225,516,627	8,851	\$58,037,990	\$48,743,256
Residents Only (N=92)	\$488,139,422	\$818,813,458	\$215,826,259	8,332	\$55,495,446	\$46,563,110
Non-Residents Only (N=14)*	\$23,406,925	\$37,660,767	\$9,690,368	519	\$2,542,544	\$2,180,146
Big Game Hunting (N=77)	\$246,766,840	\$409,653,596	\$130,646,479	4,591	\$30,203,953	\$25,720,458
Residents Only (N=66)	\$230,917,142	\$383,737,622	\$122,673,927	4,255	\$28,334,753	\$24,176,017
Non-Residents Only(N=11)*	\$15,849,697	\$25,915,974	\$7,972,552	336	\$1,869,200	\$1,544,441
Small Game Hunting (N=43)	\$170,927,961	\$282,151,792	\$77,572,337	3,132	\$18,163,142	\$15,605,740
Residents Only(N=41)	\$166,278,864	\$275,021,383	\$75,982,120	3,012	\$17,762,627	\$15,222,342
Non-Residents Only(N=2)	**	**	**	**	**	**

Hunters Who Use Private Lands Exclusively:

(Participants 16+ years)	RETAIL SALES	OUTPUT	EARNINGS	JOBS	FEDERAL TAX REVENUE	STATE & LOCAL TAX REVENUE
All Types of Hunting (N=4)						
Residents Only(N=4)			Not enough data to report reliably			
Non-Residents Only(N=0)						
Big Game Hunting (N=57)	\$139,414,235	\$227,607,649	\$76,314,918	\$2,853	\$17,752,428	\$15,409,477
Residents Only(N=48)	\$130,044,533	\$211,942,546	\$71,018,819	2,665	\$16,535,397	\$14,456,014
Non-Residents Only(N=9)	**	**	**	**	**	**
Small Game Hunting (N=33)	\$108,239,057	\$183,140,103	\$46,106,003	\$1,731	\$10,656,590	\$8,633,603
Residents Only(N=31)	\$108,174,310	\$183,032,711	\$46,068,495	1,730	\$10,648,427	\$8,627,851
Non-Residents Only(N=2)	**	**	**	**	**	**

Hunters Who Use Public Lands Exclusively:

Not enough data to report reliably.

(continued)

* = Sample size is small and results should be interpreted with caution.

** = Sample size is too small to report reliably. The results do not mean that residents and non-residents did not use these types of lands. The results do imply that such use is infrequent.

**Table 19. (Continued) Economic Activity Generated by North Carolina Hunters,
by Type of Land Used, 2006 (Participants 16 years old and older)**

Hunters Who Use Both Public AND Private Lands:

(Participants 16+ years)	RETAIL SALES	OUTPUT	EARNINGS	JOBS	FEDERAL TAX REVENUE	STATE & LOCAL TAX REVENUE
All Hunting (N=16)*	\$59,217,686	\$97,665,948	\$31,638,980	\$1,106	\$7,368,042	\$6,547,662
Residents Only(N=15)*	\$58,178,430	\$95,931,384	\$31,121,826	1,087	\$7,244,336	\$6,434,879
Non-Residents Only(N=1)	**	**	**	**	**	**
Big Game Hunting(N=11)*	\$43,486,138	\$71,920,810	\$23,347,637	\$822	\$5,442,396	\$4,829,149
Residents Only(N=10)*	\$42,446,882	\$70,186,246	\$22,830,483	803	\$5,318,690	\$4,716,366
Non-Residents Only(N=1)	**	**	**	**	**	**
Small Game Hunting(N=5)						
Residents Only(N=5)		Not enough data to report reliably				
Non-Residents Only(N=0)						

* = Sample size is small and results should be interpreted with caution.

** = Sample size is too small to report reliably. The results do not mean that residents and non-residents did not use these types of lands. The results do imply that such use is infrequent.

Conclusion

Fish and wildlife provide numerous recreation opportunities for North Carolina residents. The recreation expenditures benefit North Carolina with significant jobs, income and other economic activity. These benefits are particularly important in rural or remote areas where other sources of income are limited. Anglers, hunters and wildlife viewers spend dollars that, in turn, benefit many other industries throughout the state. The resulting economic benefits reach every corner of the state and its economy. Every resident and tourist of North Carolina benefits from fish and wildlife recreation spending. It is clear that fish and wildlife generates significant economic impacts that must be considered in policy-making.

APPENDIX A DEFINITIONS

Economic benefits can be estimated by two types of economic measures: economic impacts and economic values. An **economic impact** addresses the business and financial activity resulting from the use of a resource. **Economic value**, on the other hand, measures the difference between what an individual would be willing to pay and what they actually pay for a commodity or activity. This concept is also known as “consumer surplus”. Only economic impacts are addressed in this report.

There are three types of economic impacts: direct, indirect and induced. A **direct impact** is defined as the economic impact of the initial purchase made by the consumer. For example, when a person buys a rod and reel for \$50 there is a direct impact to the retailer of \$50. **Indirect impacts** are the secondary effects generated from a direct impact. Indirect impacts indicate that sales in one industry affect not only that industry, but also the industries that supply the first industry. For example, the retail store must purchase additional rods and reels; the rod and reel manufacturers must purchase additional materials for production; materials manufacturers must buy inputs, and so on. Therefore, the original expenditure of \$50 for the rod and reel benefits a host of other industries. An **induced impact** results from the salaries and wages paid by the directly and indirectly impacted industries. The employees of these industries spend their income on various goods and services. These expenditures are induced impacts which, in turn, create a continual cycle of indirect and induced effects.

The sum of the direct, indirect and induced impact effects equals the **total economic impact**. As the original retail purchase (direct impact) goes through round after round of indirect and induced effects, the economic impact of the original purchase is multiplied, benefiting many industries and individuals. Likewise, the reverse is true. If a particular item or industry is removed from the economy, the economic loss is greater than the original retail sale. Once the original retail purchase is made, each successive round of spending is smaller than the previous round. When the economic benefits are no longer measurable, the economic examination ends.

Just like hunting and fishing, wildlife viewing is divided into two user groups: *residents* and *non-residents*. Residents are people who reside in North Carolina, and non-residents represent out-of-state visitors. In addition, there are two types of wildlife viewing. One is **residential**, meaning activity within one mile of the home. The other is **non-residential** activity, referring to activity more than a mile from home. As a result of these definitions, terms will arise such as “resident non-residential participation” meaning state residents who participate in wildlife viewing one mile or more from their home. To help reduce the confusion, the “**near home**” and “**away from home**” terms are often used.

Species Included in this Study:

“Big Game” – deer, turkey, and bear

“Small Game” – rabbit/hare, quail, grouse, squirrel and pheasant

APPENDIX B METHODS

The methods used to generate the economic impact estimates for North Carolina are separated into four stages:

- 1) tabulate the expenditures made by recreationists (16 years old and older) from the 2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation (Survey);
- 2) allocate the detailed expenditures to the appropriate sectors of the economy that are directly impacted the spending;
- 3) estimate the indirect and induced effects of the consumer spending through the use of an input-output model of the North Carolina economy and the IMPLAN economic modeling software;
- 4) estimate federal and state/local tax revenues with the IMPLAN economic modeling software.

1. Tabulating Expenditures

Hunters, anglers and wildlife watchers' expenditures were obtained from the 2006 National Survey of Fishing, Hunting and Wildlife-Associated Recreation (Survey). This Survey is conducted approximately every five years by the U.S. Fish and Wildlife Service and U.S. Bureau of the Census. The Survey provides data required by natural resource management agencies, industry and private organizations at the local, state, and national levels to assist in optimally managing natural resources. The Survey is funded through excise taxes on hunting and fishing equipment through the Federal Aid in Sport Fish and Wildlife Restoration Acts.

To generate the statewide economic results, expenditures were categorized into resident and nonresident files. Both included information on trip-related and equipment expenditures. Together, the resident and nonresident files represent all expenditures made in North Carolina during 2006 for hunting, fishing and wildlife viewing.

The Survey contains data on trip-related expenditures (such as food, lodging, fuel) made by participants where the primary purpose of each purchase was for fishing, hunting and/or wildlife viewing. The Survey also contains data on equipment expenditures (such as rods, firearms, boats, camping gear, etc) made by sportsmen that can be used for both hunting and fishing. Anglers were able to specify their angler-related equipment expenditures to either Great Lakes fishing, freshwater (non-Great Lakes) fishing, saltwater fishing, or unspecified fishing. Anglers were able to specify their hunting and fishing related expenditures to one of five fishing categories: Great Lakes fishing, freshwater fishing, saltwater fishing, unspecified fishing, and unspecified hunting and fishing. (Please note: the Survey is a national survey. Therefore the Great Lakes category was included though it had no bearing on this state's study).

For individuals who indicated their equipment expenditures were for non-Great Lakes freshwater fishing, we allocated the relevant expenditures to North Carolina fishing. For individuals who indicated their equipment expenditures were for unspecified fishing, we allocated expenditures based on the number of days of reported fishing, by type. For individuals who indicated their equipment expenditures were for unspecified fishing and hunting purposes, we allocated these expenditures evenly across hunting and fishing. The U.S. Fish and Wildlife Service does not attempt to allocate unspecified angler expenditures. Therefore, the equipment expenditures reported here are slightly higher than those reported by the U.S. Fish and Wildlife Service.

Estimates of standard error for major point estimates are presented at the end of this section.

Data Adjustments and Assumptions

The Survey does not report expenditures for activity related to specific species, such as deer hunting or black bass fishing. Therefore, these had to be estimated. To do this, we used two different methods - one for the trip-related expenditure data and another for the equipment expenditure data. Freshwater fishing will be used as the example here to explain methods:

To allocate the freshwater trip-related expenditures to three categories of interest, we first calculated the following ratio for each observation:

$$\text{Ratio 1} = \text{DFS/DFFW}$$

where DFS = days spent fishing for the species of interest, and DFFW = total days spent freshwater fishing. We then multiplied each trip-related expenditure reported by survey respondents by its corresponding 'Ratio 1'. We could not apply this method to the equipment expenditures because some individuals purchased angling equipment in 2006, but did not take any freshwater fishing trips that year. Applying the above method would underestimate the equipment expenditures to each subcategory. To allocate angling equipment expenditures to pan fish, black bass, trout, etc., we multiplied the total expenditures spent on each equipment category by the corresponding average 'Ratio 1'.

Statistical analyses such as those reported here are based upon samples of the population contacted through the Survey. Because the primary purpose of the Survey was not to specifically contact anglers fishing for specific species but rather hunters, anglers and other wildlife recreationists in general, some species categories have small samples of respondents. Small samples can lead to results that are influenced by a single, unusual observation or results that are not representative of the population at large. Results dependent on small samples are footnoted in the tables and should be interpreted with extra caution.

2. Disaggregating Expenditures

Retail sales (angler expenditures) were separated into manufacturing, wholesale and retail subcategories because economic impact analysis treats each segment as separate industries. The amount of each retail sale attributed to each segment is known as a trade margin. A trade margin is the percentage (mark-up) of a sale attributable to either the retail, wholesale or manufacturing

sector. A gross margin is the revenue remaining after the cost of the goods sold is subtracted. Data used to calculate gross margins are from the U.S. Department of Commerce (census of wholesale and retail trade). These sources contain national sales figures for most retail and wholesale industry sectors. To derive margins, each wholesale and retail industry's gross margin was divided by its total sales. This produces the typical price mark-up for that industry. Next, two formulas are applied to estimate the value added (price mark-up) for each sector:

$R/(1+R)$ = retail margin, where R = retail mark-up

$W/\{(1+W)(1+R)\}$ = wholesale margin, where W = wholesale mark-up.

These formulas estimate the percentage of a product's final selling price that accrue to each sector. The manufacturing margin is derived by summing the retail and wholesale margins and subtracting the total from 100 percent. Since there are no wholesale or manufacturing activities in the service sector, services are not subjected to the above process.

3. Applying the Economic Model

To estimate the economic impacts, the data were analyzed with the 2006 version of the IMPLAN input-output model. The IMPLAN model was developed by MIG, Inc. of Stillwater, Minnesota originally for use by the U.S. Forest Service. Input-output models describe how sales in one industry impact other industries. For example, once a sportsman makes a purchase, the retailer buys more merchandise from wholesalers, who buy more from manufacturers, who, in turn, purchase new inputs and supplies. In addition, the salaries and wages paid by these businesses stimulate more benefits. Simply, the first purchase creates numerous rounds of purchasing. Input-output analysis tracks how the various rounds of purchasing benefits other industries and generates economic benefits.

The relationships between industries are explained through multipliers. For example, an income multiplier of .09 for industry X would indicate that for every dollar received by the industry under study, nine cents would be paid to the employees of industry X for its products or services. The IMPLAN model provides multipliers for all major industries in the U.S. and for each state. The IMPLAN model includes output, earnings and employment multipliers, which are updated annually. The **output** multiplier measures the total economic effect created by the original retail sale. The **earnings** multiplier measures the total salaries and wages generated by the original retail sale. The **employment** multiplier estimates the number of jobs supported by the original retail sale. IMPLAN also estimates federal, state and local tax revenues.

To apply the IMPLAN model, angler expenditures are each matched to the appropriate output, earnings and employment multipliers. For example, dollars attributed to gasoline refining are multiplied separately by the earnings, output and employment multipliers specific to gasoline refinement. The resulting estimates describe the salaries and wages, total economic effects, and jobs supported by the refining industry as a result of fuel purchases made by anglers. This same process is repeated for all reported expenditures. After all expenditures and multipliers have been applied together, the retail, wholesale and manufacturing results for each category are summed together.

	Point Estimates			Standard Error			90% Confidence Interval					
	People	Expenditures	Days	People	Expenditures	Days	People		Expenditures		Days	
							Lower limit	Upper limit	Lower limit	Upper limit	Lower limit	Upper limit
Fishing	1,403,050	1,192,442,351	17,356,443	72,956	220,299,168	2,734,906	1,283,037	1,523,063	830,050,220	1,554,834,482	12,857,523	21,855,363
Freshwater	884,185	633,571,740	13,922,797	60,674	121,339,498	2,289,397	784,376	983,994	433,968,265	833,175,215	10,156,739	17,688,855
Resident	739,818	536,901,373	13,206,755	56,182	104,697,991	2,218,884	647,398	832,238	364,673,178	709,129,568	9,556,691	16,856,819
Nonresident	144,367	96,670,367	716,042	26,024	25,945,202	160,899	101,558	187,176	53,990,510	139,350,224	451,364	980,720
Saltwater	518,865	558,870,611	3,433,646	47,911	113,948,600	594,959	440,051	597,679	371,425,164	746,316,058	2,454,938	4,412,354
Resident	253,029	289,750,765	1,922,259	34,167	67,315,050	383,023	196,825	309,233	179,017,507	400,484,023	1,292,186	2,552,332
Nonresident	265,836	269,119,847	1,511,387	34,986	61,834,142	293,682	208,284	323,388	167,402,684	370,837,010	1,028,280	1,994,494
Hunting	304,204	511,546,347	4,880,386	33,875	118,979,057	951,997	248,480	359,928	315,825,799	707,266,895	3,314,350	6,446,422
Big game	234,034	246,766,840	3,274,873	29,874	60,293,865	677,767	184,891	283,177	147,583,431	345,950,249	2,159,946	4,389,800
Deer	215,043	193,291,446	2,700,508	28,678	48,067,084	569,639	167,867	262,219	114,221,092	272,361,800	1,763,452	3,637,564
Turkey	74,607	36,123,923	473,990	17,073	12,064,656	135,379	46,521	102,693	16,277,564	55,970,282	251,291	696,689
Small gm.	107,222	170,927,961	1,462,318	20,417	50,867,592	381,934	73,635	140,809	87,250,773	254,605,149	834,037	2,090,599
WW												
Watching	2,923,425	916,907,774		120,466	235,716,492	-	2,725,258	3,121,592	529,154,145	1,304,661,403	-	-
Away												
from Home	686,141	676,053,699	350,000	73,569	192,830,800	109,336	565,120	807,162	358,847,033	993,260,365	170,142	529,858
Residential (or total)	2,237,284	240,854,075		117,142	62,563,712	-	2,044,586	2,429,982	137,936,769	343,771,381	-	-
All Fish & Wildlife Activity	4,630,679	2,620,896,472		115,066	664,973,789	-	4,441,395	4,819,963	1,527,014,590	3,714,778,354	-	-
Days per Angler			12.4			1.6					9.8	14.9
Freshwater			15.7			2.0					12.5	19.0
Resident			17.9			2.3					14.1	21.6
Nonresident												
Saltwater			5.0			0.8					3.6	6.3
Resident			6.6			0.8					5.2	8.0
Nonresident			7.6			1.1					5.8	9.4
Small												
Days per Hunter			16.0			2.3					12.3	19.7
Big game			14.0			2.1					10.6	17.4
Deer			12.6			1.9					9.4	15.7
Turkey			6.4			1.3					4.2	8.5
Small			13.6			2.5					9.5	17.8

game

**Days per
WW**

7.1

0.1

6.9

7.3

APPENDIX C
DETAILED HUNTING EXPENDITURES AND IMPACTS

This appendix reports the expenditures made by resident and non-resident hunters for specific items. The data source, the 2006 National Survey of Fishing, Hunting and Wildlife-Associated Recreation, asked hunters, anglers and wildlife viewers about their expenditures for a uniform list of items. Many of these items may or may not be common in North Carolina, such as bass boat expenditures for hunting. In such cases, these items will be listed with zero dollars. This does not mean that nothing was spent for this specific item. Instead, it means that no one in the sample reported such expenditures. In such cases, a zero value should only be interpreted to mean the item is not a common purchase in North Carolina.

DETAILED EXPENDITURES BY ALL HUNTERS IN NORTH CAROLINA, 2006.

Sample Size =	91	15	106
	RESIDENTS	NONRESIDENTS*	TOTAL
Food	\$36,963,037	\$2,627,243	\$39,590,281
Lodging	\$3,822,836	\$3,189,568	\$7,012,404
Airplane fare	\$881,834	\$0	\$881,834
Public transport	\$223,096	\$184,948	\$408,044
Automobile	\$34,872,418	\$4,010,899	\$38,883,317
Guide fees	\$566,257	\$738,384	\$1,304,641
Public land fees	\$293,364	\$51,736	\$345,101
Private land fees	\$1,172,911	\$0	\$1,172,911
Heat/cook fuel	\$202,425	\$0	\$202,425
Equip rentals	\$178,067	\$0	\$178,067
Boat fuel	\$0	\$0	\$0
Boat launch fee	\$0	\$0	\$0
Boat mooring	\$0	\$0	\$0
Rifles	\$30,179,465	\$0	\$30,179,465
Shotguns	\$24,014,704	\$0	\$24,014,704
Muzzle loader	\$1,190,246	\$0	\$1,190,246
Handgun	\$19,578,011	\$0	\$19,578,011
Bows	\$14,455,939	\$0	\$14,455,939
Scopes - guns	\$12,731,278	\$0	\$12,731,278
Decoys	\$3,054,899	\$197,088	\$3,251,987
Ammo	\$11,255,848	\$111,092	\$11,366,940
Handloading	\$1,632,934	\$0	\$1,632,934
Dogs	\$60,627,012	\$10,081,936	\$70,708,948
Other hunt equip	\$13,728,734	\$0	\$13,728,734
Camping gear	\$12,108,396	\$0	\$12,108,396
Binoculars	\$1,653,889	\$0	\$1,653,889
Foul weather gear	\$8,137,624	\$375,947	\$8,513,571
Taxidermy	\$9,625,998	\$333,273	\$9,959,271
Other items	\$152,653	\$0	\$152,653
Bass boat	\$0	\$0	\$0
Boat	\$0	\$0	\$0
Canoe	\$0	\$0	\$0
Boat motor	\$0	\$0	\$0
Van	\$160,848,028	\$0	\$160,848,028
Cabin	\$0	\$0	\$0
Off-road vehicle	\$102,153	\$0	\$102,153
Other special equip	\$1,911,559	\$0	\$1,911,559
Books	\$2,337,269	\$23,398	\$2,360,666
Dues	\$6,205,530	\$100,003	\$6,305,534
Licenses	\$7,063,045	\$1,381,409	\$8,444,454
Land purchase	\$1,660,041	\$0	\$1,660,041
Land lease	\$4,707,922	\$0	\$4,707,922
TOTAL	\$488,139,422	\$23,406,925	\$511,546,347

* = data based on a small sample size

ECONOMIC SECTORS STIMULATED BY NONRESIDENT HUNTER SPENDING*

	Total Output (Sales)	Employment	Income
Ag, Forestry, Fish & Hunting	7,564,574	168	649,336
Mining	134,321	1	19,247
Utilities	456,542	1	89,571
Construction	313,017	4	134,235
Manufacturing	4,731,979	12	585,282
Wholesale Trade	1,059,924	8	451,829
Transportation & Warehousing	3,286,030	15	879,155
Retail trade	5,240,056	105	2,357,229
Information	516,238	2	124,183
Finance & insurance	923,560	5	310,477
Real estate & rental	1,350,878	9	222,936
Professional- scientific & tech svcs	843,673	8	394,895
Management of companies	281,360	2	132,450
Administrative & waste services	418,662	9	191,915
Educational svcs	92,528	2	51,327
Health & social services	938,895	13	518,005
Arts- entertainment & recreation	1,260,813	23	410,815
Accommodation & food services	5,027,842	91	1,641,043
Other services	605,113	11	234,076
Government & non NAICs	2,562,430	30	1,293,593
Institutions	52,334	-	-
TOTAL	37,660,769	519	10,691,599

* = data based on a small sample size

ECONOMIC SECTORS STIMULATED BY RESIDENT HUNTER SPENDING

	Total Output (Sales)	Employment	Income
Ag, Forestry, Fish & Hunting	47,450,960	1,029	4,304,830
Mining	1,515,218	8	223,217
Utilities	7,175,324	15	1,391,731
Construction	4,732,503	57	2,042,839
Manufacturing	322,640,768	979	62,167,772
Wholesale Trade	26,684,508	208	11,375,197
Transportation & Warehousing	57,442,732	271	15,200,144
Retail trade	137,121,504	3,059	69,324,416
Information	12,166,412	53	2,949,849
Finance & insurance	19,379,846	109	6,580,289
Real estate & rental	26,311,252	182	4,402,277
Professional- scientific & tech svcs	21,888,740	207	11,038,951
Management of companies	6,923,471	41	3,259,218
Administrative & waste services	7,723,912	164	3,630,371
Educational svcs	2,122,198	44	1,178,991
Health & social services	21,128,182	298	11,657,217
Arts- entertainment & recreation	14,652,179	291	4,273,264
Accommodation & food services	34,072,788	741	11,161,145
Other services	15,967,836	403	6,808,189
Government & non NAICs	30,766,208	174	7,469,190
Institutions	946,911	-	-
TOTAL	818,813,452	8,332	240,439,097

ECONOMIC SECTORS STIMULATED BY RESIDENT+NONRESIDENT HUNTER SPENDING

	Total Output (Sales)	Employment	Income
Ag, Forestry, Fish & Hunting	55,015,534	1,196	4,954,166
Mining	1,649,539	9	242,464
Utilities	7,631,866	16	1,481,302
Construction	5,045,520	61	2,177,074
Manufacturing	327,372,747	991	62,753,054
Wholesale Trade	27,744,432	216	11,827,026
Transportation & Warehousing	60,728,762	286	16,079,299
Retail trade	142,361,560	3,164	71,681,645
Information	12,682,650	55	3,074,032
Finance & insurance	20,303,406	114	6,890,766
Real estate & rental	27,662,130	191	4,625,213
Professional- scientific & tech svcs	22,732,413	215	11,433,846
Management of companies	7,204,831	42	3,391,668
Administrative & waste services	8,142,574	172	3,822,286
Educational svcs	2,214,726	46	1,230,318
Health & social services	22,067,077	311	12,175,222
Arts- entertainment & recreation	15,912,992	314	4,684,079
Accommodation & food services	39,100,630	832	12,802,188
Other services	16,572,949	415	7,042,265
Government & non NAICs Institutions	33,328,638 999,245	204 -	8,762,783 -
TOTAL	856,474,221	8,851	251,130,696

APPENDIX D

DETAILED FRESHWATER FISHING EXPENDITURES AND IMPACTS

This appendix reports the expenditures made by resident and non-resident anglers for specific items. The data source, the 2006 National Survey of Fishing, Hunting and Wildlife-Associated Recreation (2006 National Survey), asked hunters, anglers and wildlife viewers about their expenditures for a uniform list of items. Many of these items may or may not be common in North Carolina, such as ice fishing gear. In such cases, these items will be listed with zero dollars. This does not mean that nothing was spent for this specific item. Instead, it means that no one in the sample reported such expenditures. In such cases, a zero value should only be interpreted to mean the item is not a common purchase in North Carolina.

While anglers certainly spent dollars for fishing licenses, these expenditures are left out of this analysis. The fishing expenditures in this report are meant to match those in the ASA publication "Sportfishing in America: An Economic Engine and Conservation Powerhouse." This report presents sportfishing expenditures for all 50 states. At the request of members of the Association of Fish and Wildlife Agencies who funded the report, license expenditures were left out to prevent confusion between each state's actual reported license revenues and those generated by the 2006 National Survey. Each state had the ability to add this back in. This adjustment was not made to the hunting expenditures.

DETAILED EXPENDITURES BY ALL FRESHWATER ANGLERS IN NORTH CAROLINA, 2006.

Sample Size =	244	51	295
	RESIDENTS	NONRESIDENTS	TOTAL
Food	\$54,776,369	\$14,296,058	\$69,072,428
Lodging	\$7,542,048	\$35,643,968	\$43,186,016
Airfare	\$2,728,066	\$661,730	\$3,389,796
Public transportation	\$199,838	\$1,144,651	\$1,344,488
Private transportation	\$67,388,794	\$21,431,202	\$88,819,996
Boat fuel	\$24,530,688	\$1,205,424	\$25,736,112
Guides	\$3,380,136	\$182,266	\$3,562,402
Public land use fees	\$1,805,889	\$289,517	\$2,095,406
Private land use fees	\$733,313	\$0	\$733,313
Boat launching	\$1,168,050	\$30,539	\$1,198,589
Boat mooring	\$16,537,896	\$63,622	\$16,601,519
Equipment rental	\$5,632,293	\$6,621,899	\$12,254,192
Bait (live, cut, prepared)	\$25,198,125	\$1,399,565	\$26,597,690
Ice	\$5,912,322	\$677,386	\$6,589,708
Heating & cooking fuel	\$630,249	\$36,422	\$666,671
Rods, reels & components	\$46,325,143	\$6,442,299	\$52,767,442
Lines & leaders	\$11,328,588	\$590,887	\$11,919,475
Lures, flies & artificial bait	\$19,189,485	\$1,417,141	\$20,606,626
Hooks, sinkers, other terminal tackle	\$9,294,574	\$257,343	\$9,551,917
Tackle boxes	\$2,830,547	\$105,538	\$2,936,085
Creels, strings, landing nets, etc.	\$1,383,498	\$39,023	\$1,422,521
Bait buckets, minnow traps, etc.	\$1,045,868	\$31,229	\$1,077,098
Depth finder, fish finders, other electronics	\$4,585,577	\$189,433	\$4,775,010
Ice fishing equipment	\$0	\$0	\$0
Other fishing equipment	\$4,662,542	\$74,124	\$4,736,666
Camping gear	\$21,223,898	\$0	\$21,223,898
Binoculars	\$398,843	\$113,608	\$512,451
Special fishing clothing, foul weather gear	\$9,610,032	\$0	\$9,610,032
Bass boats	\$2,969,929	\$0	\$2,969,929
Other motorized boats	\$67,044,154	\$763,470	\$67,807,623
Canoes, non-motorized boats	\$2,405,169	\$0	\$2,405,169
Boat motors, trailers, hitches, etc.	\$1,894,645	\$25,449	\$1,920,094
Pick-ups, campers, motor homes, etc.	\$74,134,684	\$0	\$74,134,684
Cabins	\$160,144	\$0	\$160,144
4x4 and off-road vehicles	\$2,075,691	\$0	\$2,075,691
Other special equipment	\$1,066,343	\$0	\$1,066,343
Taxidermy & processing	\$3,118,273	\$0	\$3,118,273
Books & magazines	\$2,591,545	\$471,740	\$3,063,285
Dues and contributions	\$1,459,618	\$34,535	\$1,494,154
Other misc. fishing expenditures	\$198,518	\$54,513	\$253,032
Land purchased for fishing	\$25,883,784	\$2,375,785	\$28,259,570
Land leased for fishing	\$1,856,205	\$0	\$1,856,205
TOTAL	\$536,901,373	\$96,670,367	\$633,571,740

ECONOMIC SECTORS STIMULATED BY NONRESIDENT FRESHWATER ANGLER SPENDING

	Total Output (Sales)	Employment	Income
Ag, Forestry, Fish & Hunting	1,934,687	33	268,070
Mining	747,195	4	106,392
Utilities	2,228,281	5	429,385
Construction	1,961,465	24	835,855
Manufacturing	27,324,750	74	3,457,751
Wholesale Trade	4,526,003	35	1,929,366
Transportation & Warehousing	15,498,696	67	3,871,531
Retail trade	16,941,592	353	8,118,856
Information	2,819,974	12	678,336
Finance & insurance	4,064,842	23	1,387,190
Real estate & rental	14,694,484	123	3,996,322
Professional- scientific & tech svcs	4,451,267	42	2,073,031
Management of companies	1,314,255	8	618,684
Administrative & waste services	2,382,470	49	1,076,393
Educational svcs	422,384	9	234,087
Health & social services	4,267,460	60	2,354,620
Arts- entertainment & recreation	867,509	19	359,811
Accommodation & food services	45,385,860	772	14,806,656
Other services	2,971,812	58	1,173,448
Government & non NAICs	5,712,788	16	698,715
Institutions	32,829	-	-
TOTAL	160,550,603	1,784	48,474,499

ECONOMIC SECTORS STIMULATED BY RESIDENT FRESHWATER ANGLER SPENDING

	Total Output (Sales)	Employment	Income
Ag, Forestry, Fish & Hunting	22,739,434	460	2,414,354
Mining	3,235,886	17	461,403
Utilities	8,638,113	17	1,650,230
Construction	7,464,154	91	3,230,690
Manufacturing	309,521,568	1,076	53,137,024
Wholesale Trade	28,998,352	226	12,361,553
Transportation & Warehousing	82,046,696	321	19,587,524
Retail trade	146,046,112	3,320	72,939,760
Information	14,093,159	62	3,410,968
Finance & insurance	21,541,020	122	7,356,232
Real estate & rental	55,858,664	401	10,409,187
Professional- scientific & tech svcs	23,809,300	216	10,840,130
Management of companies	7,455,077	44	3,509,471
Administrative & waste services	9,947,426	217	4,764,711
Educational svcs	2,225,848	46	1,234,623
Health & social services	22,357,070	315	12,335,324
Arts- entertainment & recreation	25,237,194	457	8,662,746
Accommodation & food services	47,805,296	1,026	15,640,821
Other services	16,983,944	377	6,956,054
Government & non NAICs	27,846,270	73	3,141,089
Institutions	2,656,708	-	-
TOTAL	886,507,291	8,884	254,043,894

**ECONOMIC SECTORS STIMULATED BY RESIDENT+NONRESIDENT
FRESHWATER ANGLER SPENDING**

	Total Output (Sales)	Employment	Income
Ag, Forestry, Fish & Hunting	24,674,121	493	2,682,424
Mining	3,983,081	21	567,795
Utilities	10,866,394	22	2,079,615
Construction	9,425,619	114	4,066,545
Manufacturing	336,846,318	1,151	56,594,775
Wholesale Trade	33,524,355	261	14,290,919
Transportation & Warehousing	97,545,392	388	23,459,055
Retail trade	162,987,704	3,673	81,058,616
Information	16,913,133	74	4,089,304
Finance & insurance	25,605,862	145	8,743,422
Real estate & rental	70,553,148	524	14,405,509
Professional- scientific & tech svcs	28,260,567	258	12,913,161
Management of companies	8,769,332	52	4,128,155
Administrative & waste services	12,329,896	265	5,841,104
Educational svcs	2,648,232	55	1,468,710
Health & social services	26,624,530	376	14,689,944
Arts- entertainment & recreation	26,104,703	476	9,022,557
Accommodation & food services	93,191,156	1,798	30,447,477
Other services	19,955,756	435	8,129,502
Government & non NAICs	33,559,058	89	3,839,804
Institutions	2,689,537	-	-
TOTAL	1,047,057,894	10,667	302,518,393

APPENDIX E

DETAILED SALTWATER FISHING EXPENDITURES AND IMPACTS

This appendix reports the expenditures made by resident and non-resident saltwater anglers for specific items. The data source, the 2006 National Survey of Fishing, Hunting and Wildlife-Associated Recreation, asked hunters, anglers and wildlife viewers about their expenditures for a uniform list of items. Many of these items may or may not be common in North Carolina. In such cases, these items will be listed with zero dollars. This does not mean that nothing was spent for this specific item. Instead, it means that no one in the sample reported such expenditures. In such cases, a zero value should only be interpreted to mean the item is not a common purchase in North Carolina.

While anglers certainly spent dollars for fishing licenses, these expenditures are left out of this analysis. The fishing expenditures in this report are meant to match those in the ASA publication "Sportfishing in America: An Economic Engine and Conservation Powerhouse." This report presents sportfishing expenditures for all 50 states. At the request of members of the Association of Fish and Wildlife Agencies who funded the report, license expenditures were left out to prevent confusion between each state's actual reported license revenues and those generated by the 2006 National Survey. Each state had the ability to add this back in. This adjustment was not made to the hunting expenditures.

**DETAILED EXPENDITURES BY ALL SALTWATER ANGLERS IN NORTH CAROLINA
2006.**

Sample Size	83	119	202
	RESIDENTS	NONRESIDENTS	TOTAL
Food	\$25,881,719	\$38,276,122	\$64,157,841
Lodging	\$15,951,599	\$88,911,227	\$104,862,826
Airfare	\$3,166,586	\$1,169,414	\$4,335,999
Public transportation	\$0	\$1,985,218	\$1,985,218
Private transportation	\$35,303,855	\$34,312,633	\$69,616,487
Boat fuel	\$19,187,512	\$2,829,151	\$22,016,663
Guides	\$29,615,413	\$9,622,621	\$39,238,034
Public land use fees	\$1,667,822	\$143,702	\$1,811,524
Private land use fees	\$103,294	\$391,155	\$494,450
Boat launching	\$1,567,808	\$304,342	\$1,872,150
Boat mooring	\$26,819,233	\$336,697	\$27,155,930
Equipment rental	\$10,313,238	\$22,843,234	\$33,156,472
Bait (live, cut, prepared)	\$7,849,231	\$4,790,109	\$12,639,340
Ice	\$5,492,584	\$1,993,964	\$7,486,549
Heating & cooking fuel	\$91,005	\$208,263	\$299,268
Rods, reels & components	\$24,780,473	\$5,966,381	\$30,746,854
Lines & leaders	\$2,929,900	\$842,552	\$3,772,452
Lures, flies & artificial bait	\$4,517,781	\$817,557	\$5,335,338
Hooks, sinkers, other terminal tackle	\$3,036,252	\$759,962	\$3,796,214
Tackle boxes	\$589,554	\$0	\$589,554
Creels, strings, landing nets, etc.	\$675,824	\$610,085	\$1,285,909
Bait buckets, minnow traps, etc.	\$118,939	\$0	\$118,939
Depth finder, fish finders, other electronics	\$524,002	\$0	\$524,002
Ice fishing equipment	\$0	\$0	\$0
Other fishing equipment	\$7,796,903	\$142,810	\$7,939,713
Camping gear	\$6,134,232	\$325,879	\$6,460,111
Binoculars	\$371,710	\$113,608	\$485,318
Special fishing clothing, foul weather gear	\$1,843,923	\$251,336	\$2,095,259
Bass boats	\$0	\$0	\$0
Other motorized boats	\$7,573,732	\$0	\$7,573,732
Canoes, non-motorized boats	\$0	\$0	\$0
Boat motors, trailers, hitches, etc.	\$7,782,044	\$0	\$7,782,044
Pick-ups, campers, motor homes, etc.	\$33,630,936	\$0	\$33,630,936
Cabins	\$0	\$0	\$0
4x4 and off-road vehicles	\$2,075,691	\$0	\$2,075,691
Other special equipment	\$843,338	\$0	\$843,338
Taxidermy & processing	\$0	\$0	\$0
Books & magazines	\$1,204,010	\$37,204	\$1,241,214
Dues and contributions	\$305,983	\$60,759	\$366,741
Other misc. fishing expenditures	\$4,641	\$54,513	\$59,154
Land purchased for fishing	\$0	\$51,019,348	\$51,019,348
Land leased for fishing	\$0	\$0	\$0
TOTAL	\$289,750,765	\$269,119,847	\$558,870,611

ECONOMIC SECTORS STIMULATED BY NONRESIDENT SALTWATER ANGLER SPENDING

	Total Output (Sales)	Employment	Income
Ag, Forestry, Fish & Hunting	6,026,984	107	819,402
Mining	1,314,416	7	187,841
Utilities	6,220,045	13	1,215,592
Construction	5,584,816	65	2,316,948
Manufacturing	51,545,820	140	6,654,785
Wholesale Trade	10,696,763	83	4,559,867
Transportation & Warehousing	28,354,672	141	7,646,730
Retail trade	33,594,500	676	15,770,978
Information	6,663,837	28	1,599,524
Finance & insurance	11,180,678	63	3,821,539
Real estate & rental	89,958,096	691	19,877,712
Professional- scientific & tech svcs	11,081,897	106	5,237,000
Management of companies	3,051,125	18	1,436,314
Administrative & waste services	7,247,372	147	3,254,546
Educational svcs	1,116,336	23	618,524
Health & social services	11,265,595	159	6,215,897
Arts- entertainment & recreation	10,662,909	193	3,835,802
Accommodation & food services	115,078,224	1,967	37,551,232
Other services	8,076,859	195	3,431,259
Government & non NAICs Institutions	15,895,826 1,244,161	37 -	1,637,552 -
TOTAL	435,860,931	4,859	127,689,044

ECONOMIC SECTORS STIMULATED BY RESIDENT SALTWATER ANGLER SPENDING

	Total Output (Sales)	Employment	Income
Ag, Forestry, Fish & Hunting	8,230,549	156	981,053
Mining	1,855,067	10	264,262
Utilities	4,969,591	10	954,577
Construction	4,393,742	53	1,899,591
Manufacturing	134,286,256	392	20,521,624
Wholesale Trade	14,511,884	113	6,186,194
Transportation & Warehousing	44,373,312	177	10,749,878
Retail trade	64,635,732	1,377	31,724,636
Information	7,950,552	35	1,933,365
Finance & insurance	11,867,784	67	4,079,709
Real estate & rental	23,732,666	197	6,441,416
Professional- scientific & tech svcs	12,971,183	119	5,957,613
Management of companies	4,025,430	24	1,894,968
Administrative & waste services	5,658,944	122	2,698,858
Educational svcs	1,221,723	25	677,719
Health & social services	12,270,445	173	6,770,050
Arts- entertainment & recreation	52,598,044	905	18,300,258
Accommodation & food services	36,000,792	699	11,766,809
Other services	8,909,259	171	3,437,809
Government & non NAICs Institutions	15,724,710 7,050,203	52 -	2,232,144 -
TOTAL	477,237,868	4,877	139,472,533

**ECONOMIC SECTORS STIMULATED BY RESIDENT+NONRESIDENT
SALTWATER ANGLER SPENDING**

	Total Output (Sales)	Employment	Income
Ag, Forestry, Fish & Hunting	14,257,533	263	1,800,455
Mining	3,169,483	16	452,103
Utilities	11,189,636	23	2,170,169
Construction	9,978,558	119	4,216,539
Manufacturing	185,832,076	532	27,176,409
Wholesale Trade	25,208,647	196	10,746,061
Transportation & Warehousing	72,727,984	318	18,396,608
Retail trade	98,230,232	2,053	47,495,614
Information	14,614,389	63	3,532,889
Finance & insurance	23,048,462	131	7,901,248
Real estate & rental	113,690,762	888	26,319,128
Professional- scientific & tech svcs	24,053,080	225	11,194,613
Management of companies	7,076,555	42	3,331,282
Administrative & waste services	12,906,316	270	5,953,404
Educational svcs	2,338,059	48	1,296,243
Health & social services	23,536,040	332	12,985,947
Arts- entertainment & recreation	63,260,953	1,097	22,136,060
Accommodation & food services	151,079,016	2,667	49,318,041
Other services	16,986,118	365	6,869,068
Government & non NAICs Institutions	31,620,536 8,294,364	89 -	3,869,696 -
TOTAL	913,098,799	9,735	267,161,577

APPENDIX F
DETAILED WILDLIFE WATCHING EXPENDITURES AND IMPACTS

This appendix reports the expenditures made by resident and non-resident wildlife viewers for specific items. The data source, the 2006 National Survey of Fishing, Hunting and Wildlife-Associated Recreation, asked hunters, anglers and wildlife viewers about their expenditures for a uniform list of items. Many of these items may or may not be common in North Carolina. In such cases, these items will be listed with zero dollars. This does not mean that nothing was spent for this specific item. Instead, it means that no one in the sample reported such expenditures. In such cases, a zero value should only be interpreted to mean the item is not a common purchase in North Carolina.

DETAILED EXPENDITURES BY ALL WILDLIFE WATCHING IN NORTH CAROLINA, 2006.

**Does not include residential activities.*

Sample Size =	36	54	90
	RESIDENTS	NONRESIDENTS	TOTAL
Food	\$20,636,153	\$42,036,969	\$62,673,122
Lodging	\$21,048,902	\$48,208,301	\$69,257,203
Airfare	\$13,931,639	\$4,396,278	\$18,327,917
Public transportation	\$320,288	\$697,568	\$1,017,857
Private transportation	\$25,334,991	\$54,659,752	\$79,994,743
Guide fees	\$11,439	\$461,831	\$473,270
Public land access fees	\$893,899	\$142,382	\$1,036,281
Private land access fees	\$11,439	\$629,447	\$640,886
Equipment rental	\$1,757,589	\$152,630	\$1,910,219
Boat fuel	\$0	\$2,501,388	\$2,501,388
Other boat costs	\$265,397	\$1,037,492	\$1,302,889
Heating & cooking fuel	\$33,406	\$7,737,039	\$7,770,445
Cameras	\$6,744,987	\$554,682	\$7,299,669
Film & developing	\$65,233,468	\$0	\$65,233,468
Binoculars & spotting scopes	\$26,822,472	\$0	\$26,822,472
Commercial bird food	\$90,164,346	\$893,905	\$91,058,251
Other bird food	\$21,742,989	\$0	\$21,742,989
Food for other wildlife	\$27,389,507	\$202,669	\$27,592,176
Nest boxes, feeders	\$30,797,759	\$1,208,034	\$32,005,792
Other special equipment	\$1,889,407	\$872,487	\$2,761,894
Tents, tarps	\$6,505,184	\$0	\$6,505,184
Backpacking equipment	\$3,534,675	\$0	\$3,534,675
Other camping equipment	\$5,064,293	\$0	\$5,064,293
Day packs	\$17,652,981	\$2,220,028	\$19,873,009
Magazines & books	\$13,026,387	\$322,323	\$13,348,709
Membership dues, contributions	\$16,010,443	\$9,719,826	\$25,730,269
Other equipment	\$795,685	\$0	\$795,685
Off-road vehicles	\$0	\$0	\$0
Pickup, camper, motor home	\$134,051,270	\$0	\$134,051,270
Boat	\$0	\$0	\$0
Trailer, boat accessories	\$0	\$0	\$0
Cabin	\$0	\$0	\$0
Other equipment	\$144,317,560	\$0	\$144,317,560
Land purchases	\$25,795,161	\$2,425,950	\$28,221,111
Land leases	\$0	\$0	\$0
Plantings	\$14,038,076	\$0	\$14,038,076
TOTAL	\$735,821,794	\$181,080,980	\$898,574,857

**ECONOMIC SECTORS STIMULATED BY NONRESIDENT WILDLIFE
WATCHING SPENDING**

	Total Output (Sales)	Employment	Income
Ag, Forestry, Fish & Hunting	3,103,963	43	526,682
Mining	2,036,334	11	289,381
Utilities	4,149,262	8	788,997
Construction	3,378,795	41	1,475,751
Manufacturing	56,774,304	113	5,756,612
Wholesale Trade	9,594,156	75	4,089,842
Transportation & Warehousing	38,664,724	148	9,247,504
Retail trade	33,097,724	644	15,515,332
Information	5,539,663	24	1,302,945
Finance & insurance	7,625,495	43	2,604,464
Real estate & rental	13,310,213	92	2,213,273
Professional- scientific & tech svcs	9,055,564	83	4,204,379
Management of companies	2,522,042	15	1,187,249
Administrative & waste services	4,860,494	99	2,206,514
Educational svcs	806,332	17	441,226
Health & social services	7,828,029	110	4,318,339
Arts- entertainment & recreation	2,463,943	50	963,611
Accommodation & food services	74,038,936	1,332	24,147,984
Other services	15,607,222	332	6,755,267
Government & non NAICs Institutions	9,844,769 163,616	19 -	842,714 -
TOTAL	304,465,580	3,318	88,878,066

**ECONOMIC SECTORS STIMULATED BY RESIDENT WILDLIFE WATCHING
SPENDING**

	Total Output (Sales)	Employment	Income
Ag, Forestry, Fish & Hunting	112,854,160	2,388	12,273,835
Mining	1,730,587	9	253,560
Utilities	11,513,599	24	2,249,295
Construction	9,890,327	119	4,231,807
Manufacturing	384,417,984	1,330	69,981,208
Wholesale Trade	40,239,208	313	17,153,360
Transportation & Warehousing	108,202,584	475	28,316,298
Retail trade	216,408,080	4,467	107,751,712
Information	28,035,668	130	6,879,880
Finance & insurance	29,458,484	166	9,998,388
Real estate & rental	61,414,612	427	10,419,470
Professional- scientific & tech svcs	31,333,654	293	14,813,061
Management of companies	10,063,592	59	4,737,428
Administrative & waste services	13,919,751	286	6,362,871
Educational svcs	3,118,327	65	1,721,583
Health & social services	30,747,760	434	16,963,624
Arts- entertainment & recreation	4,394,449	99	1,911,056
Accommodation & food services	49,157,876	956	16,120,878
Other services	37,200,984	646	14,760,418
Government & non NAICs	36,407,020	66	2,889,256
Institutions	790,834	-	-
TOTAL	1,221,299,540	12,751	349,788,988

**ECONOMIC SECTORS STIMULATED BY RESIDENT+NONRESIDENT
WILDLIFE WATCHING SPENDING**

	Total Output (Sales)	Employment	Income
Ag, Forestry, Fish & Hunting	115,958,123	2,431	12,800,517
Mining	3,766,921	20	542,941
Utilities	15,662,861	32	3,038,292
Construction	13,269,122	160	5,707,558
Manufacturing	441,192,288	1,442	75,737,820
Wholesale Trade	49,833,364	388	21,243,202
Transportation & Warehousing	146,867,308	624	37,563,802
Retail trade	249,505,804	5,111	123,267,044
Information	33,575,331	154	8,182,825
Finance & insurance	37,083,979	209	12,602,852
Real estate & rental	74,724,825	519	12,632,743
Professional- scientific & tech svcs	40,389,218	376	19,017,440
Management of companies	12,585,634	74	5,924,677
Administrative & waste services	18,780,245	385	8,569,385
Educational svcs	3,924,659	81	2,162,809
Health & social services	38,575,789	544	21,281,963
Arts- entertainment & recreation	6,858,392	150	2,874,667
Accommodation & food services	123,196,812	2,287	40,268,862
Other services	52,808,206	978	21,515,685
Government & non NAICs	46,251,789	85	3,731,970
Institutions	954,450	-	-
TOTAL	1,525,765,120	16,050	438,667,054

APPENDIX G
‘SOUND BITES’ REGARDING THE ECONOMIC SIGNIFICANCE OF FISH AND WILDLIFE IN NORTH CAROLINA

1. Wildlife viewing supports more jobs in-state as employed by Progress Energy, a North Carolina Fortune 500 company (*source: 2006 Fortune 500 (March 2007), Progress Energy’s jobs are in-state and out-of-state*).
2. Hunting, fishing and wildlife viewing supports nearly twice as many jobs in-state than employed by Duke Energy) (*source: 2006 Fortune 500 (March 2007), Duke Energy’s jobs are in-state and out-of-state*).
3. Wildlife watching, photography and feeding is enjoyed by 2.64 million North Carolina residents –two-thirds more than the population of the Charlotte metropolitan area (*U.S. Census Bureau*).
4. Hunting is enjoyed by 304,000 North Carolina residents, an amount nearly equal to half the population of the Greensboro-High Point metropolitan area (*U.S. Census Bureau*).
5. Recreational fishing is enjoyed by 884,000 North Carolina residents, an amount nearly equal to the population of the Raleigh-Cary metropolitan area (*U.S. Census Bureau*).
6. Almost one of every two North Carolina residents participates in either hunting, fishing or wildlife viewing. (*6.72 million state residents over 16 years of age in 2006 per U.S. Census Bureau, and 2.82 million resident hunters, anglers and wildlife watchers in NC*).
7. North Carolina ranks as the fifth nationally (after California) in the number of people participating in watchable-wildlife recreation (*U.S. Fish and Wildlife Service’s 2006 National Survey of Fishing, Hunting and Wildlife-Associated Recreation*).
8. Since 2001, the number of people who visited North Carolina to view wildlife increased 29 percent (*source: U.S. Fish and Wildlife Service’s 2001 and 2006 National Surveys of Fishing, Hunting and Wildlife-Associated Recreation*).
9. In 2006, North Carolina residents who participated in wildlife viewing could fill:
 - a. Charlotte’s Bank of America Stadium nearly 31 times,
 - b. Raleigh’s Carter-Finley Stadium 41 times, and
 - c. Chapel Hill’s Kenan Stadium nearly 38 times.
(*source: University athletic websites*)
10. In 2006, North Carolina’s resident hunters could fill:
 - a. Charlotte’s Bank of America Stadium nearly four times,
 - b. Raleigh’s Carter-Finley Stadium nearly five times, and
 - c. Chapel Hill’s Kenan Stadium over 4.5 times.
(*source: University athletic websites*)
11. In 2006, North Carolina’s resident anglers could fill:
 - a. Charlotte’s Bank of America Stadium nearly 12 times,
 - b. Raleigh’s Carter-Finley Stadium over 15 times, and
 - c. Chapel Hill’s Kenan Stadium over 14 times.
(*source: University athletic websites*)

12. In 2006, North Carolina's 2.8 million resident hunters, anglers and wildlife viewers exceeded the populations of 18 states (*source: U.S. Census Bureau*).
13. In 2006, if the jobs supported by fishing, hunting and wildlife viewing had disappeared, the state unemployment rate would have jumped from 4.9 percent to 5.9 percent (*as of Dec, 2006; data source: U.S. Bureau of Labor Statistics*).
14. The total spent in 2006 in North Carolina for hunting, fishing and wildlife viewing (\$2.95 billion) is equivalent to the entire value of the state's poultry and egg production (\$2.91 billion) or the value of all crop harvests (\$2.93 billion for tobacco, soy beans, cotton, greenhouses, vegetables, grains, etc.) (*Source: North Carolina Agricultural Statistics, 2007*).
15. In 2006, nearly five times more was spent just in North Carolina for wildlife viewing, hunting and fishing than earned nationally in all years by "Titanic" – the top grossing movie of all time (*source: BoxOfficeMojo.com*).
16. The average North Carolina angler has an annual household income 31 percent greater than the statewide average. (Average household income per angler = \$55,242; NC average household income per U.S. Census Bureau = \$42,061).
17. The average North Carolina hunter has an annual household income 43 percent greater than the statewide average. (Average household income per hunter = \$60,145; NC average household income per U.S. Census Bureau = \$42,061).
18. The average North Carolina resident who enjoys wildlife in their yard has an annual household income 30 percent greater than the statewide average. (Average household income per angler = \$54,509; NC average household income per U.S. Census Bureau = \$42,061).