### THE ECONOMIC IMPACT OF MOUNTAIN TROUT FISHING IN NORTH CAROLINA

Final Report

#### MOUNTAIN FISHERIES INVESTIGATIONS

Federal Aid in Fish Restoration Project F-86

Period Covered: November 2008-June 2009

Prepared for: North Carolina Wildlife Resources Commission

Prepared by: Responsive Management and Southwick Associates







This study was funded under the Federal Aid in Sport Fish Restoration Program utilizing state fishing license money and federal grant funds derived from federal excise taxes on fishing tackle and other fishing related expenditures.

Funds from the Sport Fish Restoration Program are used for fisheries management and research, aquatic education, and boating access facilities. The program is administered cooperatively by the N.C. Wildlife Resources Commission and the U.S. Fish and Wildlife Service.

### THE ECONOMIC IMPACT OF MOUNTAIN TROUT FISHING IN NORTH CAROLINA

#### 2009

#### **Responsive Management National Office**

Mark Damian Duda, Executive Director
Martin Jones, Senior Research Associate
Tom Beppler, Research Associate
Steven J. Bissell, Ph.D., Qualitative Research Associate
Andrea Criscione, Research Associate
James B. Herrick, Ph.D., Research Associate
Joanne Nobile, Research Associate
Amanda Ritchie, Research Associate
Carol L. Schilli, Research Associate
Megan Wilkes, Research Associate
Tim Winegord, Survey Center Manager
Alison Lanier, Business Manager

130 Franklin Street
Harrisonburg, VA 22801
Phone: 540/432-1888 Fax: 540/432-1892
E-mail: mark@responsivemanagement.com
www.responsivemanagement.com

A also accide d'accepta					
Acknowledgments  Responsive Management would like to thank Kerry Linehan, Doug Besler, and Kent Nelson of					
the North Carolina Wildlife Resources Commission for their input, support, and guidance on this project.					
the North Carolina Wildlife Resources Commission for their input, support, and guidance on this					
the North Carolina Wildlife Resources Commission for their input, support, and guidance on this					
the North Carolina Wildlife Resources Commission for their input, support, and guidance on this					
the North Carolina Wildlife Resources Commission for their input, support, and guidance on this					
the North Carolina Wildlife Resources Commission for their input, support, and guidance on this					

#### **EXECUTIVE SUMMARY**

In total, 92,769 mountain trout anglers (76,761 residents and 16,008 nonresidents) fished for 1.42 million days in North Carolina in 2008. They spent \$146 million and had a total economic output of \$174 million when indirect economic effects are factored in.

Mountain trout fishing in Hatchery Supported Waters contributed an estimated \$72.7 million to North Carolina's economy. Mountain trout fishing in Delayed Harvest Waters contributed an estimated \$46.5 million to North Carolina's economy. Finally, mountain trout fishing in Wild Trout Waters contributed an estimated \$55.2 million to the economy of North Carolina.

The typical resident mountain trout angler spends approximately \$65 per day on trip expenditures when mountain trout fishing in North Carolina; nonresidents average \$158 on trip expenditures. Annually, the typical resident mountain trout angler spends a little over \$500 on mountain trout fishing equipment in North Carolina.

The typical resident mountain trout angler fishes for mountain trout about 10 days in North Carolina in a year; the typical nonresident fishes for about 5 days for mountain trout in North Carolina. Anglers fished an estimated 625,147 days in Hatchery Supported Waters, 374,611 days in Delayed Harvest Waters, and 422,671 days in Wild Trout Waters. Most trips taken by mountain trout anglers last only 1 day.

More than three-fourths of mountain trout anglers are North Carolina residents. The typical mountain trout angler is approximately 50 years old (the mean ages are 51.2 years among resident anglers and 48.9 years among nonresident anglers). Finally, mountain trout anglers are overwhelmingly male (92% of resident anglers; 96% of nonresident anglers).

This study was conducted for the North Carolina Wildlife Resources Commission (the Commission) to determine mountain trout anglers' contribution to North Carolina's economy. The study entailed a telephone survey of North Carolina licensed anglers and an economic analysis of their spending on mountain trout fishing activities.

For the survey, telephones were selected as the preferred sampling medium because almost all of the anglers in the sample owned a telephone. The telephone survey questionnaire was developed cooperatively by Responsive Management, Southwick Associates, and the Commission. The survey was conducted in late March through early April 2009. Responsive Management obtained a total of 1,232 completed interviews. The software used for data collection was Questionnaire Programming Language.

The full survey was limited to only those anglers who satisfied all of the following conditions:

- o They were at least 18 years old.
- o They had a valid North Carolina fishing license for the 2008 fishing season that included privileges for fishing in public mountain trout waters.
- o They fished for brook trout, brown trout, or rainbow trout in North Carolina in 2008, collectively known as mountain trout.
- They fished for mountain trout in Hatchery Supported Waters, Delayed Harvest Waters, or Wild Trout Waters. (Wild Trout Waters encompass Wild Trout Waters, Wild Trout With Natural Bait Waters, Catch and Release Artificial Lures Only Waters, and Catch and Release Artificial Flies Only Waters.)

The analysis of data, excepting the economic analysis, was performed using Statistical Package for the Social Sciences software as well as proprietary software developed by Responsive Management.

The estimation of economic contributions to the North Carolina economy by anglers who fish for mountain trout consisted of two components:

- Calculation of expenditures made by mountain trout anglers in North Carolina by residency, region, and trout fishery management regime (i.e., Hatchery Supported Waters, Delayed Harvest Waters, or Wild Trout Waters).
- o Estimation of the multiplier effects that result from spending by mountain trout anglers.

The estimation of spending by mountain trout anglers is based on the data from the telephone survey of resident and nonresident anglers who fished for mountain trout in 2008. The results of the survey were coupled with counts of licensed anglers and estimates of fishing activity (angler-days) to estimate the total amount of fishing-related spending by anglers, the specific goods and services purchased, and the regional locations of the spending. An input-output model of the North Carolina economy was then used to estimate the economic multiplier effects of the anglers' spending.

Regarding *mountain trout* fishing *in North Carolina*, a majority of residents (59%) and a large majority of nonresidents (78%) fished for mountain trout from 1 to 10 days in 2008 in North Carolina; the medians were 10 and 5 days, respectively. Most commonly, fishing trips taken by anglers last only a day: 67% of residents and 40% of nonresidents said that their most recent fishing trip lasted 1 day.

The leading counties of mountain trout fishing participation are Transylvania, Watauga, Haywood, Cherokee, Henderson, Jackson, and Ashe. Hatchery Supported Waters are the most popular.

In total, 92,769 mountain trout anglers (76,761 residents and 16,008 nonresidents) fished a total of 1.42 million days in North Carolina in 2008 (this number represents 16.2% of resident fishing license holders and 60.5% of nonresident fishing license holders in 2008). They spent \$146 million and had a total economic output of \$174 million when indirect economic effects are factored in.

Resident mountain trout anglers' total trip expenditures were \$83.5 million; nonresident mountain trout anglers' total trip expenditures were \$23.3 million. Resident mountain trout anglers' total equipment expenditures were \$36.9 million.

The survey also gathered demographic data on mountain trout anglers. Ages of respondents follow a bell-curve, slightly skewed to the older age groups; the mean ages are 51.2 years among resident anglers and 48.9 years among nonresident anglers. Finally, the sample of anglers is overwhelmingly male (92% of resident anglers; 96% of nonresident anglers).

#### **TABLE OF CONTENTS**

Introduction and Methodology	1
Telephone Survey Methods	
Economic Contributions of North Carolina Mountain Trout Fishing: Estimation	
Procedures	4
Mountain Trout Angler Expenditures	
Trip Expenditures	
Equipment Expenditures	
Multiplier Effects and Economic Contributions	8
Fishing Participation and Avidity	
Fishing Locations and Types of Waters	
Mountain Trout Fishing's Effect on North Carolina's Economy	
Demographic Data	
About Responsive Management	
List of Figures	
Figure 1. North Carolina Regions Used in Study	4
Figure 2. Conceptual Framework for Estimation of the Economic Contributions of	
Mountain Trout Angler Spending in North Carolina	5
Figure 3. Overall Fishing Participation	
Figure 4. Mountain Trout Fishing Participation	
Figure 5. Trends in Mountain Trout Fishing Participation From 2007 to 2008	
Figure 6. Length of Mountain Trout Fishing Trips	
Figure 7. Days of Fishing on Last Trip	
Figure 8. Counties of Fishing Participation	
Figure 9a. Percent Who Frequently Fish Various Mountain Trout Waters	18
Figure 9b. Percent Who Frequently or Occasionally Fish Various Mountain Trout Waters	19
Figure 9c. Percent Who Fish at Least Some Times in Various Mountain Trout Waters	20
Figure 9d. Percent Who Never Fish Various Mountain Trout Waters	
Figure 9e. Frequency of Fishing in Hatchery Supported Waters	
Figure 9f. Frequency of Fishing in Delayed Harvest Waters	
Figure 9g. Frequency of Fishing in Wild Trout Waters	
Figure 10. Residency Status of Respondents	
Figure 11. Ages of Respondents	59
Figure 12. Gender of Respondents	
List of Tables	
Table 1. Survey Responses Used in the Analysis of Mountain Trout Fishing in	
North Carolina, by Residency, Region, and Type of Waters	
Table 2. Economic Summary for All Mountain Trout Fishing (Statewide)	26
Table 3. Total Trip Expenditures (Statewide)	27
Table 4. Total Equipment Expenditures (Statewide)	
Table 5. Economic Summary for Statewide Hatchery Supported Trout Fishing	
Table 6. Economic Summary for Statewide Delayed Harvest Trout Fishing	
Table 7 Economic Summary for Statewide Wild Trout Fishing	31

#### **TABLE OF CONTENTS (cont.)**

List of Ta	ables (cont.)	
Table 8. 1	Economic Summary for All Mountain Trout Fishing in the Mountain Region	32
	Trip Expenditures: Mountain Region	
Table 10.	Equipment Expenditures: Mountain Region	34
	Economic Summary for Hatchery Supported Trout Fishing in Mountain Region	
Table 12.	Economic Summary for Delayed Harvest Trout Fishing in Mountain Region	36
Table 13.	Economic Summary for Wild Trout Fishing in Mountain Region	37
Table 14.	Economic Summary for All Mountain Trout Fishing in the Piedmont Region	38
	Trip Expenditures: Piedmont Region	
Table 16.	Equipment Expenditures: Piedmont Region	40
Table 17.	Economic Summary for Hatchery Supported Trout Fishing in Piedmont Region	41
Table 18.	Economic Summary for Delayed Harvest Trout Fishing in Piedmont Region	42
Table 19.	Economic Summary for Wild Trout Fishing in Piedmont Region	43
	Average Spending Per Day: Resident (Statewide)	
	Average Spending Per Day: Nonresident (Statewide)	
	Average Annual Spending: Resident (Statewide)	
	Average Annual Spending: Nonresident (Statewide)	
	Total Spending: Resident Trip Expenditures (Statewide)	
	Total Spending: Nonresident Trip Expenditures (Statewide)	
	Total Spending: Resident Equipment Expenditures (Statewide)	
	Total Spending: Nonresident Equipment Expenditures (Statewide)	
	Average Spending Per Day: Resident (Mountain Region)	
Table 29.	Average Spending Per Day: Nonresident (Mountain Region)	51
	Average Annual Spending: Resident (Mountain Region)	
	Average Annual Spending: Nonresident (Mountain Region)	
	Total Spending: Resident Trip Expenditures (Mountain Region)	
	Total Spending: Nonresident Trip Expenditures (Mountain Region)	
	Total Spending: Resident Equipment Expenditures (Mountain Region)	
Table 35.	Total Spending: Nonresident Equipment Expenditures (Mountain Region)	56

#### INTRODUCTION AND METHODOLOGY

This study was conducted for the North Carolina Wildlife Resources Commission (the Commission) to determine mountain trout anglers' contribution to North Carolina's economy. The study entailed a telephone survey of North Carolina licensed anglers and an economic analysis of their spending on mountain trout fishing activities. Specific aspects of the research methodology are discussed below.

#### TELEPHONE SURVEY METHODS

For the survey, telephones were selected as the preferred sampling medium because almost all of the anglers in the sample owned a telephone. In addition, a central polling site at the Responsive Management office allowed for rigorous quality control over the telephone interviews and data collection. Responsive Management maintains its own in-house telephone interviewing facilities. These facilities are staffed by interviewers with experience conducting computer-assisted telephone interviews on the subjects of natural resources and outdoor recreation. The telephone survey questionnaire was developed cooperatively by Responsive Management, Southwick Associates, and the Commission. Responsive Management conducted a pre-test of the questionnaire to ensure proper wording, flow, and logic in the survey.

To ensure the integrity of the telephone survey data, Responsive Management has interviewers who have been trained according to the standards established by the Council of American Survey Research Organizations. Methods of instruction included lecture and role-playing. The Survey Center Managers and other professional staff conducted project briefings with the interviewers prior to the administration of this survey. Interviewers were instructed on type of study, study goals and objectives, handling of survey questions, interview length, termination points and qualifiers for participation, interviewer instructions within the survey instrument, reading of the survey instrument, skip patterns, and probing and clarifying techniques necessary for specific questions on the survey instrument. The Survey Center Managers and statisticians monitored the data collection, including monitoring of the actual telephone interviews without the interviewers' knowledge, to evaluate the performance of each interviewer and ensure the integrity of the data. After the surveys were obtained by the interviewers, the Survey Center Managers and/or statisticians checked each completed survey to ensure clarity and completeness.

Interviews were conducted Monday through Friday from 9:00 a.m. to 9:00 p.m., Saturday from noon to 5:00 p.m., and Sunday from 5:00 p.m. to 9:00 p.m., local time. A five-callback design was used to maintain the representativeness of the sample, to avoid bias toward people easy to reach by telephone, and to provide an equal opportunity for all to participate. When a respondent could not be reached on the first call, subsequent calls were placed on different days of the week and at different times of the day. The survey was conducted in late March through early April 2009. Responsive Management obtained a total of 1,232 completed full interviews.

The survey was limited to only those anglers who satisfied all of the following conditions:

- They were at least 18 years old.
- o They had a valid North Carolina fishing license for the 2008 fishing season that included privileges for fishing in public mountain trout waters.
- o They fished for brook trout, brown trout, or rainbow trout (collectively referred to as mountain trout) in North Carolina in 2008.
- They fished for mountain trout in Hatchery Supported Waters, Delayed Harvest Waters, or Wild Trout Waters. (Wild Trout Waters encompass Wild Trout Waters, Wild Trout With Natural Bait Waters, Catch and Release Artificial Lures Only Waters, and Catch and Release Artificial Flies Only Waters.)

The software used for data collection was Questionnaire Programming Language (QPL). The survey data were entered into the computer as each interview was being conducted, eliminating manual data entry after the completion of the survey and the concomitant data entry errors that may occur with manual data entry. The survey instrument was programmed so that QPL branched, coded, and substituted phrases in the survey based on previous responses to ensure the integrity and consistency of the data collection.

The analysis of data, excepting the economic analysis, was performed using Statistical Package for the Social Sciences software as well as proprietary software developed by Responsive Management. (The economic analysis methods are detailed in the next subsection of the report.)

Throughout this report, findings of the telephone survey are reported at a 95% confidence interval. For the entire sample of licensed anglers, the sampling error is at most plus or minus 2.77 percentage points. This means that if the survey were conducted 100 times on different samples that were selected in the same way, the findings of 95 out of the 100 surveys would fall

within plus or minus 2.77 percentage points of each other. Sampling error was calculated using the formula described below, with a sample size of 1,232 who completed the full questionnaire and a population size of 92,769 licensed anglers who fished for mountain trout.

#### **Sampling Error Equation**

$$B = \left(\sqrt{\frac{\frac{N_p(.25)}{N_s} - .25}{N_p - 1}}\right) (1.96)$$
Where: B = maximum sampling error (as decimal)
$$N_P = \text{population size (i.e., total number who could be surveyed)}$$

$$N_S = \text{sample size (i.e., total number of respondents surveyed)}$$

Derived from formula: p. 206 in Dillman, D. A. 2000. Mail and Internet Surveys. John Wiley & Sons, NY.

**Note**: This is a simplified version of the formula that calculates the <u>maximum</u> sampling error using a 50:50 split (the most conservative calculation because a 50:50 split would give maximum variation).

The number of mountain trout anglers was determined by multiplying the proportions of the sample that fished for mountain trout (determined separately for resident and nonresident license holders) by the total number of resident and nonresident license holders: 16.2% of residents and 60.5% of nonresidents fished for mountain trout in 2008. A total of 11,941 telephone numbers were contacted to determine these proportions (this entailed more than 11,941 telephone *calls*, because some telephone numbers were tried up to five times). For the results shown, 1,232 full interviews of license holders who fished for mountain trout were conducted. To ensure that the proportions were accurate (necessary, in part, because the researchers noted that the percentages differed from a previous trout survey conducted in North Carolina in 2007), a second supplementary survey was conducted solely to verify the percentages of license holders who fished for mountain trout. The second supplementary survey obtained 1,378 interviews.

Included in the telephone numbers above are those that are no longer working or that are business/government numbers, telephone numbers that were busy on every attempt (up to five call-backs), telephone numbers for which an answering machine was reached every time (up to five call-backs), and numbers that were never answered (again, for up to five call-backs).

In reading the results, note that some graphs may not sum to exactly 100% because of rounding. The graphs of questions that allow multiple responses may sum to more than 100%.

### ECONOMIC CONTRIBUTIONS OF NORTH CAROLINA MOUNTAIN TROUT FISHING: ESTIMATION PROCEDURES

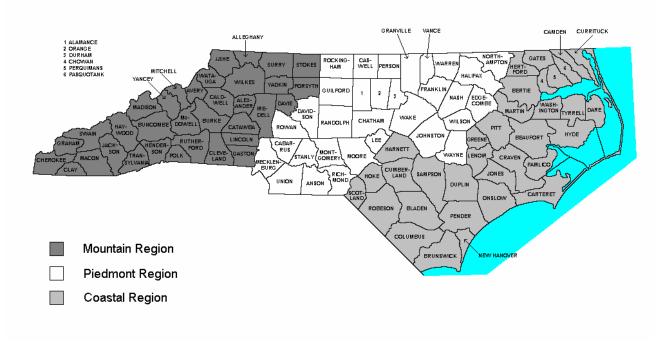
The estimation of economic contributions to the North Carolina economy by anglers who fish for mountain trout consisted of two components:

- Calculation of expenditures made by mountain trout anglers in North Carolina by residency, region, and trout fishery management regime (i.e., Hatchery Supported Waters, Delayed Harvest Waters, or Wild Trout Waters).
- o Estimation of the multiplier effects that result from spending by mountain trout anglers.

The regions used in the study are shown in Figure 1 below.

Figure 1. North Carolina Regions Used in Study

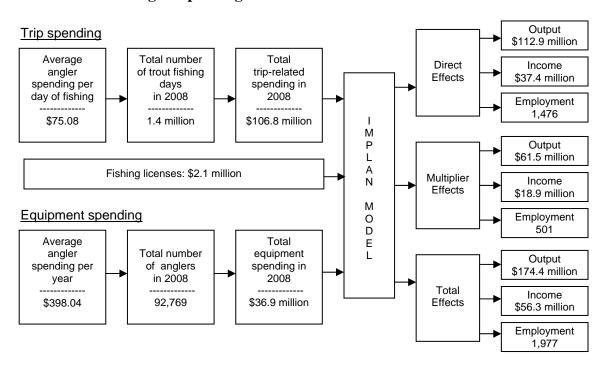
NORTH CAROLINA REGIONAL BREAKDOWN FOR TROUT ECONOMIC STUDY



#### MOUNTAIN TROUT ANGLER EXPENDITURES

The estimation of spending by mountain trout anglers is based on the data from the telephone survey of resident and nonresident anglers who fished for mountain trout in 2008. The results of the survey were coupled with counts of licensed anglers and estimates of fishing activity (angler-days) to estimate the total amount of fishing-related spending by anglers, the specific goods and services purchased, and the regional locations of the spending. An input-output model of the North Carolina economy was then used to estimate the economic multiplier effects of the anglers' spending (Figure 2).

Figure 2. Conceptual Framework for Estimation of the Economic Contributions of Mountain Trout Angler Spending in North Carolina



The survey asked anglers to report: a) their residency status in 2008, b) the county in which they fished for mountain trout most often in 2008 (from which they were assigned into a region), and c) what types of mountain trout waters they had fished in (Hatchery Supported Waters, Delayed Harvest Waters, or Wild Trout Waters). Those who had fished in multiple types of water were randomly assigned to answer questions about only one type of mountain trout waters, including questions about their most recent trip to that type of water. In total, 1,230 usable full surveys were included in the economic analysis. The number of responses by residency, region, and type

of trout waters are shown in Table 1. (Note that there were insufficient responses to provide reliable estimates in all of the regions in all of the tables.)

The number of mountain trout anglers, statewide, was determined on the basis of total licenses sold by the Commission in 2008 that included trout fishing privileges. Most licenses are designated specifically for sale to either residents or to nonresidents, but not to both. Special Trout Fishing licenses and Mountain Trout Heritage licenses are sold to both resident and nonresidents; their numbers were apportioned to residents and nonresidents based on license sales data provided by the Commission.

Table 1. Survey Responses Used in the Analysis of Mountain Trout Fishing in North

Carolina, by Residency, Region, and Type of Waters

Caronna, by Residency, Region, and Type of Waters			
Region of Residence (Based on ZIP Codes)			
Region 1 - Coastal	28		
Region 2 - Piedmont	154		
Region 3 - Mountain	715		
Out of state*	314		
Unknown	19		
Total	1,230		
Region Fished			
Region 1 - Coastal	9		
Region 2 - Piedmont	30		
Region 3 - Mountain	1,098		
Unknown	93		
Total	1,230		
Trout Targeted			
Hatchery Supported	593		
Delayed Harvest	289		
Wild Trout	348		
Total	1,230		
*Eight respondents indicated they were NC residents but reported a home ZIP code located in another state.			

The number of mountain trout angler-days fished statewide by residents and nonresidents was estimated on the basis of the average days of mountain trout fishing reported in the survey multiplied by the total number of resident and nonresident anglers. The total statewide angler-days were then allocated to the study strata (regions and types of waters) based on the distribution of total anglers-days reported in the survey in response to questions about total days fished for mountain trout in 2008 and region where the fishing primarily occurred.

#### **Trip Expenditures**

The expenditures portion of the survey was divided into two sections: a) trip expenditures associated with the anglers' most recent trip and b) equipment expenditures during 2008 for items used for mountain trout fishing. Trip expenditures are purchases of those goods and services that are consumed almost entirely during the fishing trip. Examples of these expenditures include travel costs, food, lodging, bait, and guide services. Because fishing can occur during a trip that includes other non-fishing activities, respondents were asked how likely it was that they would have taken the trip had they been unable to go fishing. The response to this question was used to properly allocate trip expenditures to fishing activity. No expenditures are allocated to fishing on those trips that would have taken place regardless of the opportunity to go fishing; all trip spending is allocated to fishing on those trips that would not have occurred had fishing not been possible.

#### **Equipment Expenditures**

Equipment costs are associated with durable goods that are used over the course of multiple trips. Examples include rods, reels, lures, and other items that survey respondents reported were used for mountain trout fishing, including boats, trailers, coolers, and clothing. Equipment purchases are typically made in the same region where anglers reside; therefore, the equipment purchases are allocated to the region where anglers live and purchases made outside of the state by nonresidents do not have an economic impact on the North Carolina economy. Most fishing equipment can be used for multiple types of fishing. Therefore, to properly allocate the equipment expenditures to mountain trout fishing, the equipment expenditures were multiplied by the ratio of days that the respondent fished for mountain trout in 2008 to the number of days of all types of fishing (e.g., if a respondent fished for mountain trout 25% of the time, then 25% of fishing equipment expenditures were allocated to mountain trout fishing). Vehicles are a special case of equipment because they are unlikely to be used solely for fishing and are typically used year-round for multiple non-fishing purposes. Expenditures for vehicles were allocated to mountain trout fishing on the basis the total number of days fished for mountain trout in 2008 divided by 365 days.

#### **MULTIPLIER EFFECTS AND ECONOMIC CONTRIBUTIONS**

The expenditures made by anglers for mountain trout fishing activities generated additional economic benefits throughout the North Carolina economy beyond the initial angler spending. These additional economic benefits were estimated with an IMPLAN input-output model that relates changes in specific industries to impacts in other industries within the statewide economy. For this study, a single statewide model was used to estimate the multiplier effects on the state economy of spending attributed to each region and trout water type. The model produced estimates of the total economic multiplier effects (indirect and induced) from the spending by mountain trout anglers. The direct effect of angler spending refers to the dollars that are captured by North Carolina businesses that provide the goods and services purchased by anglers. Much of the equipment purchased by anglers is manufactured outside of the state and does not have a direct effect on North Carolina's manufacturing economy. In that case, the direct effect consists primarily of retail trade margins and typically is less than the total amount spent by anglers. **Indirect effect** refers to the economic activity (e.g., output, employment, income) that occurs in the industries that supply those businesses that are stimulated by the direct effect. The induced effect measures the economic activity that results from the household spending of salaries and wages by employees whose jobs are supported by the direct and indirect effects.

Interpretation of the model results depends on the spending under consideration. The term "economic impact" is normally reserved to describe some level of economic activity that would not occur except for the economic stimulus. In the case of recreational activities like mountain trout fishing, it is generally agreed that economic impact comes from spending by visitors to the state. If not for their presence, their spending would never occur in North Carolina. If quality mountain trout fishing were no longer available in North Carolina, for example, nonresident anglers might choose to fish and spend their money elsewhere and thus not generate economic activity in the North Carolina economy. Most resident anglers, on the other hand, choose fishing as an activity on which to spend their recreational dollars locally. If quality mountain trout fishing were no longer available, an unknown portion of residents would likely choose some other local recreational activity on which to spend their money in place of fishing, and their spending would still remain in the state's economy. This study focused on the total economic contribution from spending by residents and nonresidents. However, the analysis presents the results of angler spending separately for resident and nonresidents to distinguish the total economic impact of mountain trout fishing from its total economic contribution. Additional breakdowns by region and water type as reported by respondents are also provided. Note that

2.05% of respondents (n = 26) reported fishing for trout in the Piedmont region, most commonly in counties adjacent to or very near the mountain region (e.g., 8 people reported fishing for mountain trout in Davidson County). This accounts for expenditures attributed to mountain trout fishing in the Piedmont region economic tables.

Where applicable, tables include a row for "income provided." The income provided figure represents the value of wages and benefits earned through employment that is directly or indirectly supported by angler spending. It also includes proprietary income, which is the profits earned by non-incorporated businesses (i.e., sole proprietors, partnerships). Note that this differs from the induced effect, which is the economic activity that is driven by the household spending of the disposable portion of the income provided through direct and indirect effects.

#### FISHING PARTICIPATION AND AVIDITY

- ➤ Overall fishing participation among anglers interviewed in this survey, including freshwater and saltwater fishing in any state, is shown in Figure 3. Just more than a third of resident anglers (37%) fished from 1 to 10 days in 2008 in any state for any species. The median was 16.5 days. The number of days of *mountain trout* fishing in 2008 in North Carolina is shown in Figure 4. A majority of resident anglers (59%) fished for mountain trout in North Carolina from 1 to 10 days in 2008; the median was 10 days.
  - A third of nonresident anglers (33%) fished from 1 to 10 days in 2008, and their median was 20 days. Regarding fishing for mountain trout in North Carolina, a large majority of nonresidents (78%) fished for mountain trout from 1 to 10 days in 2008 in North Carolina; the median was 5 days.
- The survey asked anglers to assess their own participation trends from 2007 to 2008, as shown in Figure 5. Most commonly, resident and nonresident anglers say their participation was about the same in the two years (46% among residents; 39% among nonresidents). Otherwise, among residents the percentage saying that their participation was less (33%) exceeds the percentage saying their participation was more (21%) in 2008 compared to 2007. Nonresidents, on the other hand, more often say they fished more (36%) than less (24%).
- As shown in Figure 6, most fishing trips taken by anglers last only a day: 67% of residents and 40% of nonresidents said that their most recent fishing trip lasted 1 day. Figure 7 shows the number of days of actual fishing participation during those trips, which closely matches the graph of length of days of trips.

Figure 3. Overall Fishing Participation

# Q14. How many total days did you fish in 2008, in any state for any type of freshwater or saltwater fish? Please keep in mind that one trip may include more than one day of fishing.

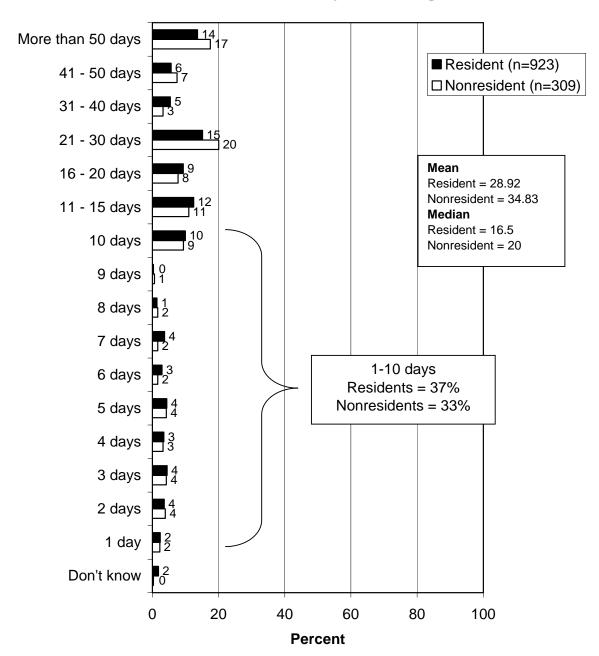


Figure 4. Mountain Trout Fishing Participation

Q17. How many days did you fish for mountain trout in North Carolina in 2008, including days you fished only for trout and days you fished for trout and other species? Again, please keep in mind that one trip may include more than one day of fishing.

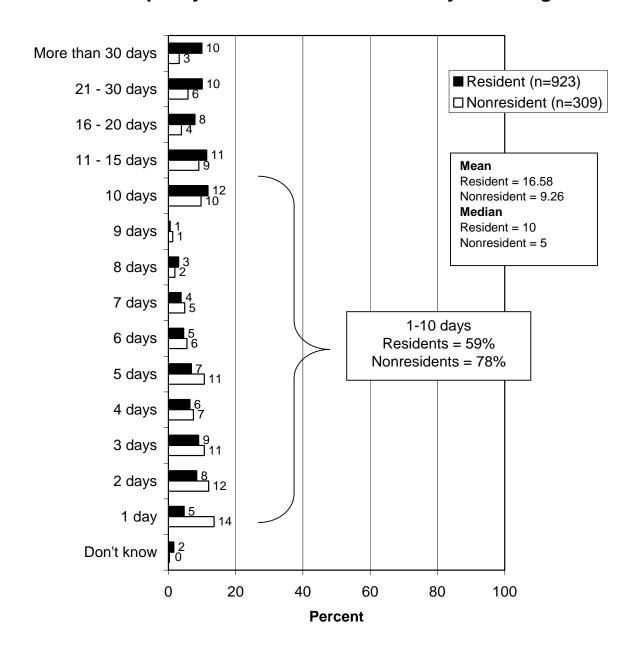


Figure 5. Trends in Mountain Trout Fishing Participation From 2007 to 2008

## Q19. Compared to 2007, would you say you fished more, about the same, or less for mountain trout in North Carolina in 2008?

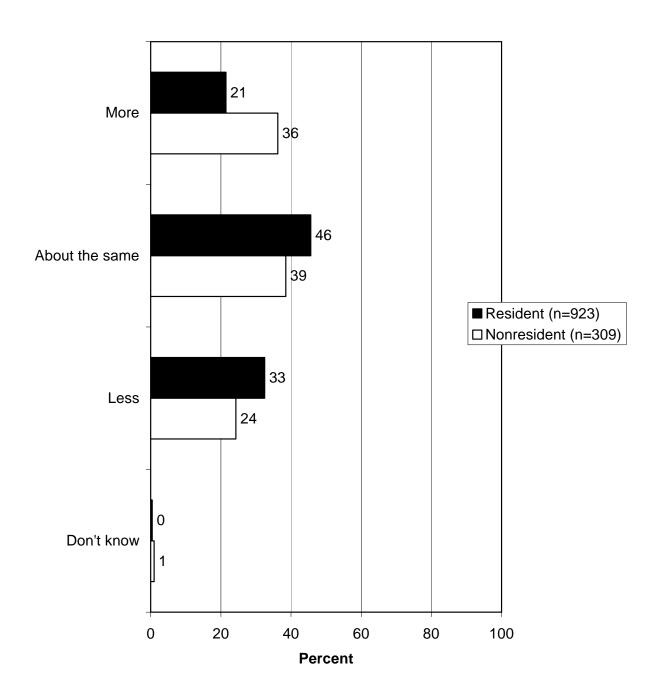


Figure 6. Length of Mountain Trout Fishing Trips

Q34. How long, in days, was your most recent trip during which you fished for mountain trout in Hatchery Supported Waters, Delayed Harvest Waters, or any Wild Trout Waters in North Carolina in 2008, including fishing days, non-fishing days, and travel days?

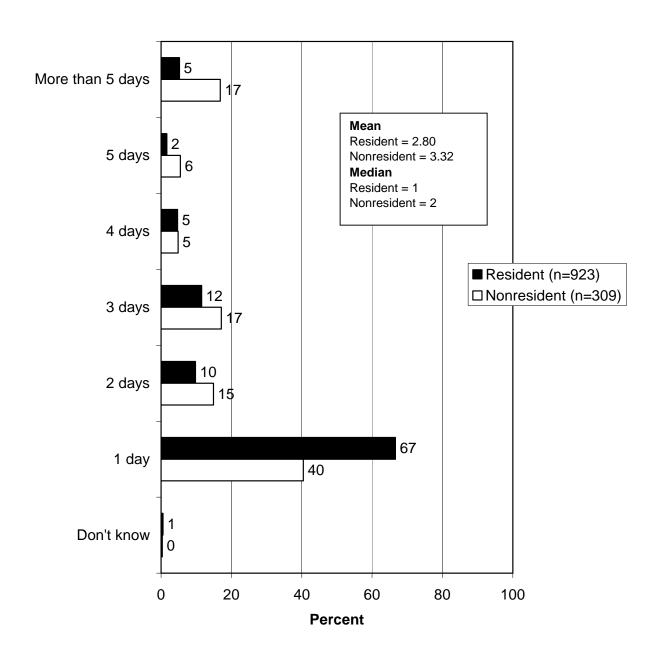
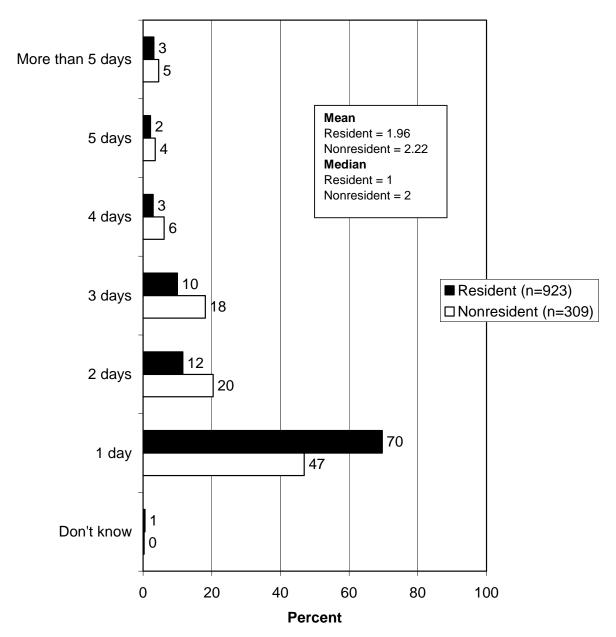


Figure 7. Days of Fishing on Last Trip

# Q36. How many days did you actually fish for mountain trout during your most recent trip during which you fished for trout in Hatchery Supported Waters/Delayed Harvest Waters/any Wild Trout Waters in North Carolina in 2008?



#### FISHING LOCATIONS AND TYPES OF WATERS

- ➤ The counties of mountain trout fishing participation are shown in Figure 8. Transylvania, Watauga, Haywood, Cherokee, Henderson, Jackson, and Ashe are the leading counties. Note that the graph shows the primary county of mountain trout fishing participation, not all the counties in which the angler may have fished for mountain trout.
- Figures 9a-9d compare three questions regarding how often anglers fish for mountain trout in Hatchery Supported Waters, Delayed Harvest Waters, and Wild Trout Waters. The questions are then shown individually in Figures 9e-9g. The comparisons show that Hatchery Supported Waters are the most popular.

Figure 8. Counties of Fishing Participation

# Q20. In what county did you fish for mountain trout most often in North Carolina in 2008? (Shows only those counties with more than 1% of total.)

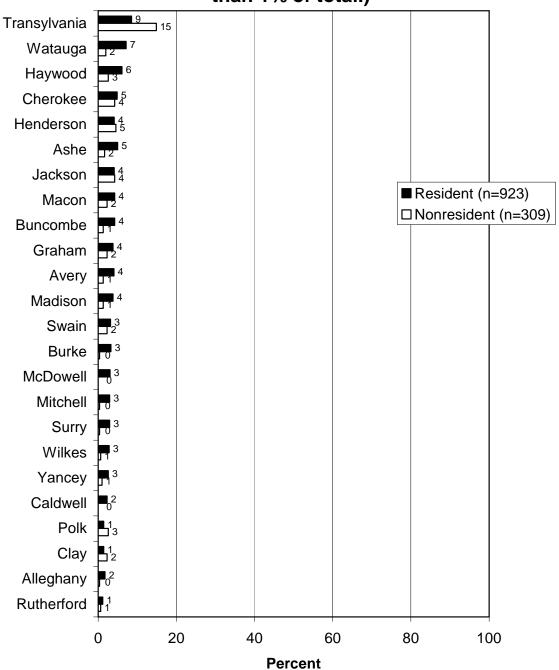


Figure 9a. Percent Who Frequently Fish Various Mountain Trout Waters

## Percent who *frequently* fished for mountain trout in streams with the following classifications in North Carolina in 2008.

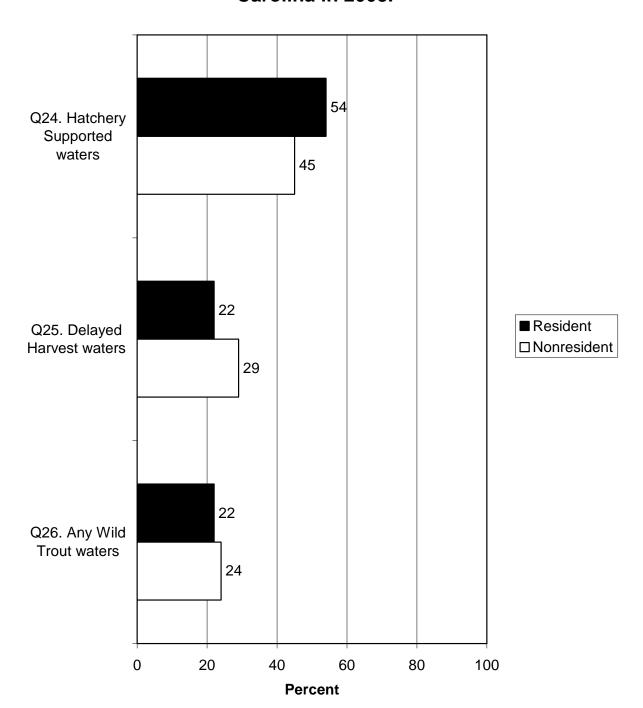


Figure 9b. Percent Who Frequently or Occasionally Fish Various Mountain Trout Waters

## Percent who *frequently* or *occasionally* fished for mountain trout in streams with the following classifications in North Carolina in 2008.

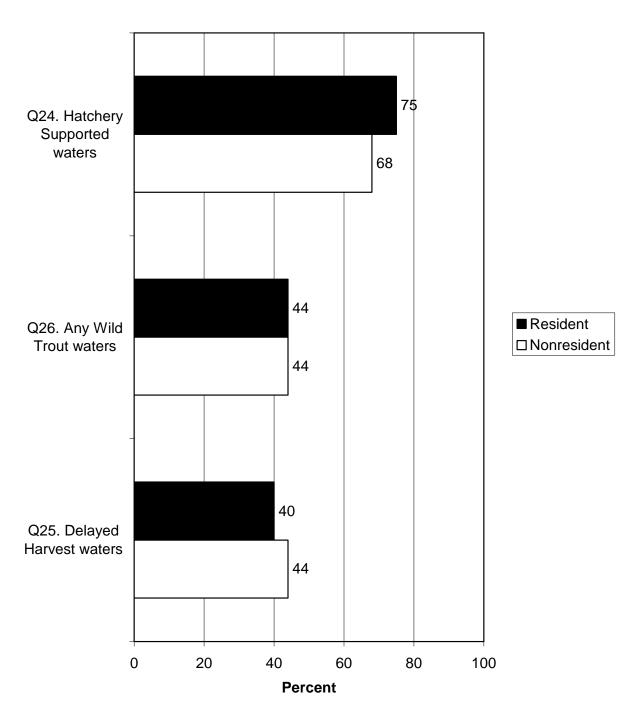


Figure 9c. Percent Who Fish at Least Some Times in Various Mountain Trout Waters

Percent who *frequently*, *occasionally*, or *rarely* fished for mountain trout in streams with the following classifications in North Carolina in 2008.

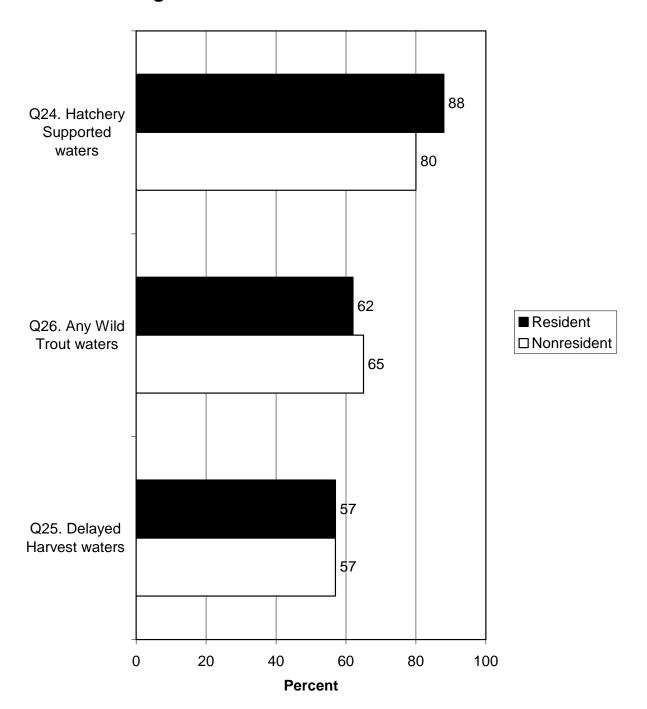


Figure 9d. Percent Who Never Fish Various Mountain Trout Waters

# Percent who *never* fished for mountain trout in streams with the following classifications in North Carolina in 2008.

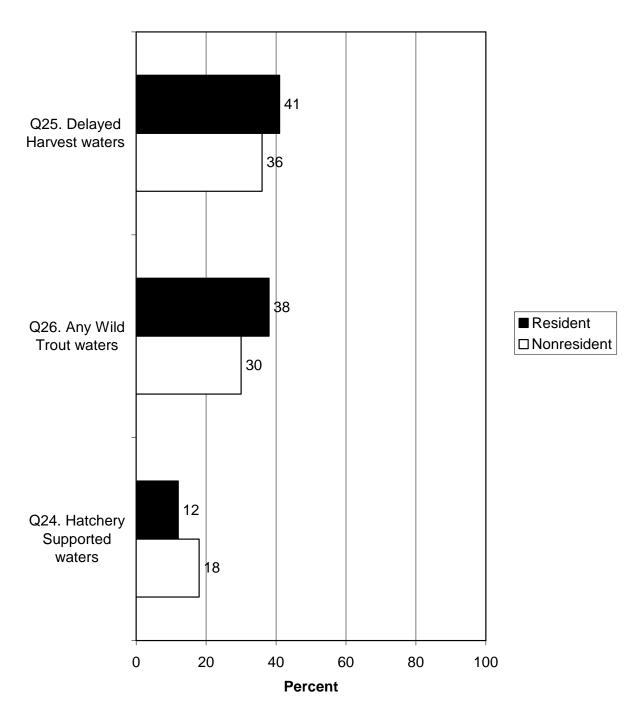


Figure 9e. Frequency of Fishing in Hatchery Supported Waters

Q24. How often have you fished for mountain trout in streams in North Carolina in Hatchery Supported Waters?

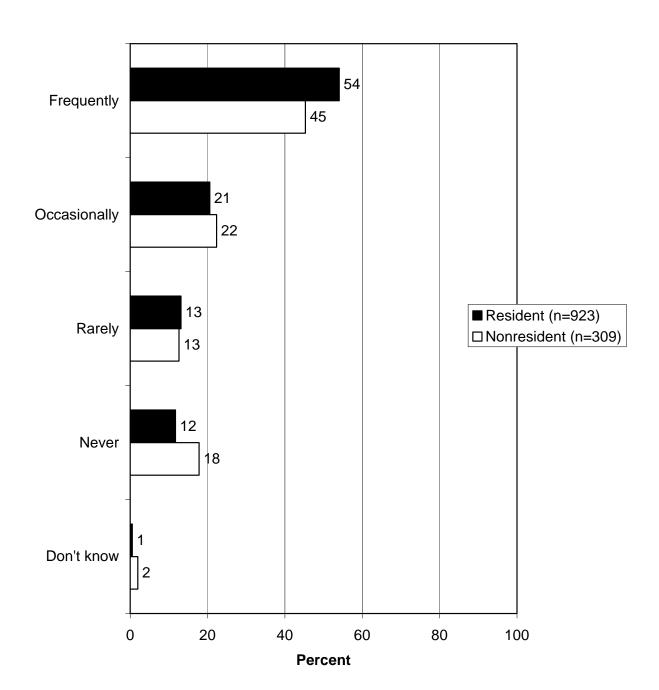


Figure 9f. Frequency of Fishing in Delayed Harvest Waters

# Q25. How often have you fished for mountain trout in streams in North Carolina in Delayed Harvest Waters?

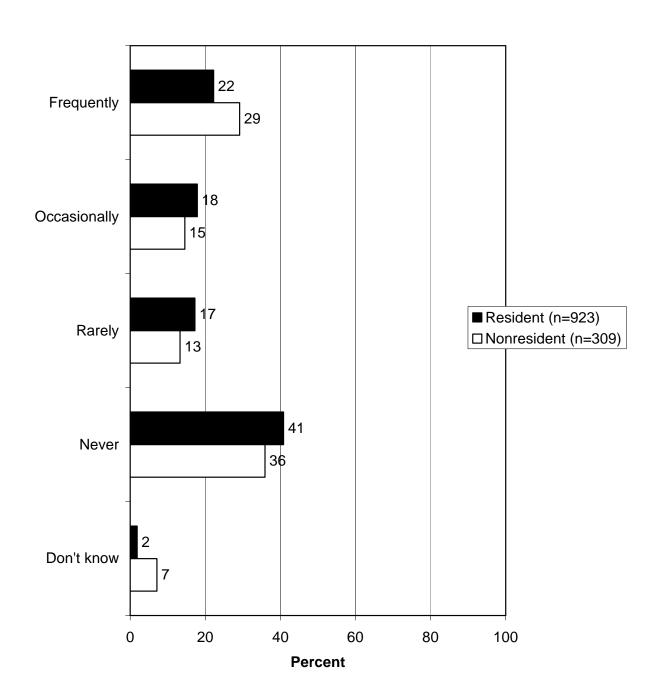
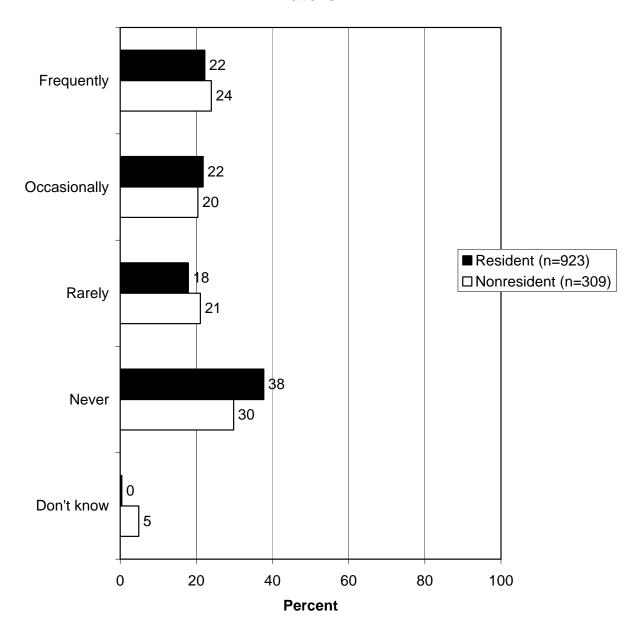


Figure 9g. Frequency of Fishing in Wild Trout Waters

Q26. How often have you fished for mountain trout in streams in North Carolina in any Wild Trout Waters, which, for the purpose of this survey, include Wild Trout Waters, Wild Trout With Natural Bait Waters, Catch and Release Artificial Lures Only Waters, and Catch and Release Artificial Flies Only Waters?



### MOUNTAIN TROUT FISHING'S EFFECT ON NORTH CAROLINA'S ECONOMY

- > The tabulations that follow show the results of the economic analysis that was conducted.
  - Tables 2, 3, and 4 show statewide results.
  - Tables 5, 6, and 7 show statewide summaries for fishing in Hatchery Supported Waters, Delayed Harvest Waters, and Wild Trout Waters.
  - Tables 8-13 show summaries and expenditures for the Mountain Region. (Note that the sample was too small in the Coastal Regions for analysis.)
  - Tables 14-19 show summaries and expenditures for the Piedmont Region. (Note that the sample was too small in the Coastal Regions for analysis.)
  - Tables 20-23 show average spending for residents and nonresidents.
  - Tables 24-27 show total spending for residents and nonresidents.
  - Tables 28-31 show average spending for residents and nonresidents in the Mountain Region. (Note that the samples were too small for these analyses in the Piedmont and Coastal Regions.)
  - Tables 32-35 show total spending for residents and nonresidents in the Mountain Region.
     (Note that the samples were too small for these analyses in the Piedmont and Coastal Regions.)

TABLE 2. ECONOMIC SUMMARY FOR ALL MOUNTAIN TROUT FISHING (STATEWIDE)					
	RESIDENT ANGLERS	NONRESIDENT ANGLERS	ALL ANGLERS		
MOUNTAIN TROUT ANGLERS	76,761	16,008	92,769		
DAYS FISHED FOR MOUNTAIN TROUT	1,274,528	147,901	1,422,428		
ANGLER PURCHASES					
LICENSES AND FEES	\$1,679,326	\$432,333	\$2,111,659		
TRIP EXPENDITURES	\$83,468,702	\$23,335,331	\$106,804,033		
EQUIPMENT EXPENDITURES	\$36,925,432	*	\$36,925,432		
TOTAL DOLLARS SPENT	\$122,073,460	\$23,767,664	\$145,841,124		
IMPACTS FROM TRIP SPENDING					
TOTAL ECONOMIC OUTPUT	\$118,879,235	\$30,814,136	\$149,693,371		
INCOME PROVIDED	\$37,417,675	\$9,837,538	\$47,255,213		
JOBS SUPPORTED	1,322	347	1,669		
IMPACTS FROM EQUIPMENT SPENDING					
TOTAL ECONOMIC OUTPUT	\$24,683,912	*	\$24,683,912		
INCOME PROVIDED	\$9,080,790	*	\$9,080,790		
JOBS SUPPORTED	308	*	308		
IMPACTS FROM ALL SPENDING					
TOTAL ECONOMIC OUTPUT	\$143,563,147	\$30,814,136	\$174,377,283		
INCOME PROVIDED	\$46,498,465	\$9,837,538	\$56,336,003		
JOBS SUPPORTED	1,630	347	1,977		
TAX REVENUES FROM ALL SPENDING					
STATE AND LOCAL	\$11,175,095	\$2,232,836	\$13,407,931		
FEDERAL	\$11,342,552	\$2,397,591	\$13,740,143		

\*Most equipment spending takes place where people live; nonresidents generally spend little on equipment in NC.

Note that the total economic output, which is \$174,377,283 in this table, reflects the economic activity (including multiplier effects) resulting from trip expenditures, equipment expenditures, and spending on licenses and fees. Licenses and fees are reported separately as an expenditure, but for purposes of the impact analysis, licenses and fees are included as a trip expenditure and are counted as a direct effect. In practical terms, they have no multiplier effect because purchases by the government sector are considered part of final demand. This reasoning applies to all tables that include a row for "total economic output."

TABLE 3. TOTAL TRIP EXPENDITURES (STATEWIDE)				
	RESIDENTS	NONRESIDENTS		
GROCERIES	\$20,113,788	\$4,915,228		
RESTAURANTS	\$9,355,892	\$2,910,702		
LODGING	\$10,821,770	\$6,777,362		
VEHICLE FUEL	\$23,638,112	\$3,777,406		
PUBLIC TRANSPORTATION	\$75,559	\$408,446		
CAR RENTALS	\$99,795	\$178,017		
GUIDE FEES	\$2,988,216	\$1,386,179		
BOAT LAUNCH/DOCKS	\$1,663,443	\$1,638		
ICE	\$1,917,642	\$139,019		
COOKING/HEATING FUEL	\$2,117,760	\$205,913		
EQUIPMENT RENTAL	\$1,013,605	\$280,487		
BAIT	\$4,501,238	\$143,788		
SOUVENIRS	\$1,786,670	\$1,037,145		
ENTERTAINMENT	\$3,109,496	\$1,061,490		
OTHER TRIP EXPENSES	\$265,714	\$112,510		
TOTAL TRIP EXPENDITURES	\$83,468,702	\$23,335,331		

TABLE 4. TOTAL EQUIPMENT EX	PENDITURES (STA	TEWIDE)
	RESIDENTS	NONRESIDENTS
LICENSES	\$1,679,326	\$432,333
RODS AND REELS	\$6,585,706	*
LINE AND LEADERS	\$1,507,996	*
LURES	\$2,154,941	*
TACKLE BOXES	\$329,686	*
HOOKS, SINKERS, SWIVELS	\$492,311	*
DEPTH FINDERS, ELECTRONICS	\$602,447	*
CREELS, STRINGERS, NETS	\$296,899	*
OTHER FISHING EQUIPMENT	\$606,844	*
FLY TYING EQUIPMENT	\$716,414	*
CLOTHING	\$1,139,251	*
WADERS, BOOTS, SHOES	\$1,864,988	*
LIFE JACKETS, PFDS	\$167,842	*
TAXIDERMY	\$614,591	*
BOOKS AND MAGAZINES	\$721,953	*
COOLERS	\$388,526	*
BOATS, CANOES, KAYAKS	\$4,964,163	*
BOAT MOTORS	\$549,429	*
TRAILERS, HITCHES, ACCESSORIES	\$956,854	*
BOAT PARTS, ACCESSORIES	\$717,136	*
BUG SPRAY, SUNSCREEN	\$468,345	*
CAMERAS, BINOCULARS	\$1,750,858	*
TENTS, TARPS, PACKS	\$776,783	*
CAMPING TRAILER	\$3,460,686	*
OTHER CAMPING EQUIPMENT	\$568,643	*
TRUCKS, SUVs, RVs	\$4,511,908	*
OTHER EQUIPMENT	\$10,232	*
TOTAL EQUIPMENT EXPENDITURES	\$36,925,432	*

	RESIDENT ANGLERS	NONRESIDENT ANGLERS	ALL ANGLERS
MOUNTAIN TROUT ANGLERS	36,857	7,904	44,760
DAYS FISHED FOR MOUNTAIN TROUT	549,784	75,363	625,147
ANGLER PURCHASES			
LICENSES AND FEES	\$706,292	\$229,715	\$936,007
TRIP EXPENDITURES	\$34,230,614	\$9,604,112	\$43,834,726
EQUIPMENT EXPENDITURES	\$16,613,915	*	\$16,613,915
TOTAL DOLLARS SPENT	\$51,550,821	\$9,833,827	\$61,384,648
IMPACTS FROM TRIP SPENDING			
TOTAL ECONOMIC OUTPUT	\$48,664,288	\$12,687,363	\$61,351,651
INCOME PROVIDED	\$15,293,949	\$4,015,327	\$19,309,276
JOBS SUPPORTED	550	140	690
IMPACTS FROM EQUIPMENT SPENDING			
TOTAL ECONOMIC OUTPUT	\$11,325,253	*	\$11,325,253
INCOME PROVIDED	\$4,148,257	*	\$4,148,257
JOBS SUPPORTED	139	*	139
IMPACTS FROM ALL SPENDING			
TOTAL ECONOMIC OUTPUT	\$59,989,541	\$12,687,363	\$72,676,904
INCOME PROVIDED	\$19,442,206	\$4,015,327	\$23,457,533
JOBS SUPPORTED	689	140	829
TAX REVENUES FROM ALL SPENDING			
STATE AND LOCAL	\$4,689,376	\$916,345	\$5,605,721
FEDERAL	\$4,744,423	\$978,282	\$5,722,705

<sup>\*</sup>Most equipment spending takes place where people live; nonresidents generally spend little on equipment in NC.

TABLE 6. ECONOMIC SUMMARY FOR STATEWIDE DELAYED HARVEST TROUT FISHING			TROUT FISHING
	RESIDENT ANGLERS	NONRESIDENT ANGLERS	ALL ANGLERS
MOUNTAIN TROUT ANGLERS	18,864	3,467	22,331
DAYS FISHED FOR MOUNTAIN TROUT	343,102	31,509	374,611
ANGLER PURCHASES			
LICENSES AND FEES	\$422,916	\$81,090	\$504,006
TRIP EXPENDITURES	\$22,807,603	\$5,740,122	\$28,547,724
EQUIPMENT EXPENDITURES	\$9,541,734	*	\$9,541,734
TOTAL DOLLARS SPENT	\$32,772,252	\$5,821,211	\$38,593,464
IMPACTS FROM TRIP SPENDING			
TOTAL ECONOMIC OUTPUT	\$32,503,532	\$7,668,772	\$40,172,304
INCOME PROVIDED	\$10,093,080	\$2,451,338	\$12,544,418
JOBS SUPPORTED	352	88	440
IMPACTS FROM EQUIPMENT SPENDING			
TOTAL ECONOMIC OUTPUT	\$6,335,278	*	\$6,335,278
INCOME PROVIDED	\$2,348,280	*	\$2,348,280
JOBS SUPPORTED	84	*	84
IMPACTS FROM ALL SPENDING			
TOTAL ECONOMIC OUTPUT	\$38,838,810	\$7,668,772	\$46,507,582
INCOME PROVIDED	\$12,441,360	\$2,451,338	\$14,892,698
JOBS SUPPORTED	436	88	524
TAX REVENUES FROM ALL SPENDING			
STATE AND LOCAL	\$3,042,182	\$565,917	\$3,608,099
FEDERAL	\$3,049,942	\$599,117	\$3,649,059

	RESIDENT ANGLERS	NONRESIDENT ANGLERS	ALL ANGLERS
MOUNTAIN TROUT ANGLERS	20,887	4,607	25,494
DAYS FISHED FOR MOUNTAIN TROUT	381,642	41,029	422,671
ANGLER PURCHASES			
LICENSES AND FEES	\$549,774	\$122,555	\$672,329
TRIP EXPENDITURES	\$26,830,231	\$7,581,903	\$34,412,134
EQUIPMENT EXPENDITURES	\$10,735,999	*	\$10,735,999
TOTAL DOLLARS SPENT	\$38,116,004	\$7,704,458	\$45,820,461
IMPACTS FROM TRIP SPENDING			
TOTAL ECONOMIC OUTPUT	\$38,296,121	\$9,922,204	\$48,218,325
INCOME PROVIDED	\$12,211,782	\$3,193,434	\$15,405,216
JOBS SUPPORTED	423	113	537
IMPACTS FROM EQUIPMENT SPENDING			
TOTAL ECONOMIC OUTPUT	\$6,993,682	*	\$6,993,682
INCOME PROVIDED	\$2,573,859	*	\$2,573,859
JOBS SUPPORTED	85	*	85
IMPACTS FROM ALL SPENDING			
TOTAL ECONOMIC OUTPUT	\$45,289,803	\$9,922,204	\$55,212,007
INCOME PROVIDED	\$14,785,641	\$3,193,434	\$17,979,075
JOBS SUPPORTED	508	113	622
TAX REVENUES FROM ALL SPENDING			
STATE AND LOCAL	\$3,485,567	\$711,727	\$4,197,294
FEDERAL	\$3,590,234	\$776,971	\$4,367,206

<sup>\*</sup>Most equipment spending takes place where people live; nonresidents generally spend little on equipment in NC.

MOUNTAIN REGION				
	RESIDENT ANGLERS	NONRESIDENT ANGLERS	ALL ANGLERS	
MOUNTAIN TROUT ANGLERS	61,202	8,401	69,602	
DAYS FISHED FOR MOUNTAIN TROUT	1,261,681	140,653	1,402,334	
ANGLER PURCHASES				
LICENSES AND FEES	\$1,362,020	\$232,979	\$1,595,000	
TRIP EXPENDITURES	\$80,060,421	\$22,607,527	\$102,667,948	
EQUIPMENT EXPENDITURES	\$29,139,048	*	\$29,139,048	
TOTAL DOLLARS SPENT	\$110,561,490	\$22,840,506	\$133,401,996	
IMPACTS FROM TRIP SPENDING				
TOTAL ECONOMIC OUTPUT	\$113,902,192	\$29,611,865	\$143,514,057	
INCOME PROVIDED	\$35,568,637	\$9,453,759	\$45,022,396	
JOBS SUPPORTED	1,250	333	1,583	
IMPACTS FROM EQUIPMENT SPENDING				
TOTAL ECONOMIC OUTPUT	\$19,358,768	*	\$19,358,768	
INCOME PROVIDED	\$7,131,432	*	\$7,131,432	
JOBS SUPPORTED	245	*	245	
IMPACTS FROM ALL SPENDING				
TOTAL ECONOMIC OUTPUT	\$133,260,960	\$29,611,865	\$162,872,825	
INCOME PROVIDED	\$42,700,069	\$9,453,759	\$52,153,828	
JOBS SUPPORTED	1,495	333	1,828	
TAX REVENUES FROM ALL SPENDING				
STATE AND LOCAL	\$10,297,596	\$2,127,932	\$12,425,529	
FEDERAL	\$10,431,106	\$2,304,018	\$12,735,124	

<sup>\*</sup>Most equipment spending takes place where people live; nonresidents generally spend little on equipment in NC.

TABLE 9. TRIP EXPENDITURES: MOUNTAIN REGION			
	RESIDENTS	NONRESIDENTS	
GROCERIES	\$20,054,810	\$4,679,037	
RESTAURANTS	\$8,784,278	\$2,708,404	
LODGING	\$9,729,161	\$7,237,130	
VEHICLE FUEL	\$23,147,025	\$3,386,399	
PUBLIC TRANSPORTATION	\$79,987	\$433,225	
CAR RENTALS	\$105,643	\$186,805	
GUIDE FEES	\$2,408,729	\$1,076,521	
BOAT LAUNCH/DOCKS	\$1,505,320	\$2,021	
ICE	\$1,939,761	\$139,204	
COOKING/HEATING FUEL	\$2,147,899	\$203,956	
EQUIPMENT RENTAL	\$1,058,041	\$248,568	
BAIT	\$4,242,277	\$153,993	
SOUVENIRS	\$1,553,807	\$917,453	
ENTERTAINMENT	\$3,039,316	\$1,165,766	
OTHER TRIP EXPENSES	\$264,367	\$69,048	
TOTAL TRIP EXPENDITURES	\$80,060,421	\$22,607,527	

	RESIDENTS	NONRESIDENTS	
LICENSES	\$1,362,020	\$232,979	
RODS AND REELS	\$5,201,603	*	
LINE AND LEADERS	\$1,212,265	*	
LURES	\$1,727,081	*	
TACKLE BOXES	\$269,286	*	
HOOKS, SINKERS, SWIVELS	\$436,988	*	
DEPTH FINDERS, ELECTRONICS	\$545,035	*	
CREELS, STRINGERS, NETS	\$263,017	*	
OTHER FISHING EQUIPMENT	\$483,420	*	
FLY TYING EQUIPMENT	\$553,197	*	
CLOTHING	\$792,911	*	
WADERS, BOOTS, SHOES	\$1,581,490	*	
LIFE JACKETS, PFDS	\$150,980	*	
TAXIDERMY	\$618,763	*	
BOOKS AND MAGAZINES	\$554,824	*	
COOLERS	\$362,037	*	
BOATS, CANOES, KAYAKS	\$3,999,248	*	
BOAT MOTORS	\$303,037	*	
TRAILERS, HITCHES, ACCESSORIES	\$225,651	*	
BOAT PARTS, ACCESSORIES	\$720,765	*	
BUG SPRAY, SUNSCREEN	\$370,655	*	
CAMERAS, BINOCULARS	\$1,438,328	*	
TENTS, TARPS, PACKS	\$729,953	*	
CAMPING TRAILER	\$2,605,928	*	
OTHER CAMPING EQUIPMENT	\$454,540	*	
TRUCKS, SUVs, RVs	\$3,529,123	*	
OTHER EQUIPMENT	\$8,922	*	
TOTAL EQUIPMENT EXPENDITURES	\$29,139,048	*	

<sup>\*</sup>Most equipment spending takes place where people live; nonresidents generally spend little on equipment in NC.

TABLE 11. ECONOMIC SUMMARY FOR HATCHERY SUPPORTED TROUT FISHING IN MOUNTAIN REGION			T FISHING IN
	RESIDENT ANGLERS	NONRESIDENT ANGLERS	ALL ANGLERS
MOUNTAIN TROUT ANGLERS	29,996	4,865	34,861
DAYS FISHED FOR MOUNTAIN TROUT	545,065	74,012	619,077
ANGLER PURCHASES			
LICENSES AND FEES	\$611,094	\$132,580	\$743,674
TRIP EXPENDITURES	\$33,096,714	\$4,494,041	\$37,590,755
EQUIPMENT EXPENDITURES	\$14,519,209	*	\$14,519,209
TOTAL DOLLARS SPENT	\$48,227,017	\$4,626,621	\$52,853,638
IMPACTS FROM TRIP SPENDING			
TOTAL ECONOMIC OUTPUT	\$47,002,466	\$6,253,521	\$53,255,987
INCOME PROVIDED	\$14,634,207	\$1,898,737	\$16,532,944
JOBS SUPPORTED	520	69	588
IMPACTS FROM EQUIPMENT SPENDING			
TOTAL ECONOMIC OUTPUT	\$9,598,239	*	\$9,598,239
INCOME PROVIDED	\$3,510,521	*	\$3,510,521
JOBS SUPPORTED	118	*	118
TAX REVENUES FROM ALL SPENDING			
STATE AND LOCAL	\$4,403,609	\$460,575	\$4,864,183
FEDERAL	\$4,435,167	\$467,191	\$4,902,358

<sup>\*</sup>Most equipment spending takes place where people live; nonresidents generally spend little on equipment in NC.

TABLE 12. ECONOMIC SUMMARY FOR DELAYED HARVEST TROUT FISHING IN MOUNTAIN REGION			
	RESIDENT ANGLERS	NONRESIDENT ANGLERS	ALL ANGLERS
MOUNTAIN TROUT ANGLERS	14,522	1,606	16,129
DAYS FISHED FOR MOUNTAIN TROUT	338,383	30,342	368,725
ANGLER PURCHASES			
LICENSES AND FEES	\$328,033	\$41,762	\$369,795
TRIP EXPENDITURES	\$20,967,445	\$1,880,087	\$22,847,532
EQUIPMENT EXPENDITURES	\$7,227,976	*	\$7,227,976
TOTAL DOLLARS SPENT	\$28,523,454	\$1,921,849	\$30,445,303
IMPACTS FROM TRIP SPENDING			
TOTAL ECONOMIC OUTPUT	\$29,930,255	\$2,638,129	\$32,568,384
INCOME PROVIDED	\$9,233,380	\$796,604	\$10,029,984
JOBS SUPPORTED	322	28	350
IMPACTS FROM EQUIPMENT SPENDING			
TOTAL ECONOMIC OUTPUT	\$4,825,078	*	\$4,825,078
INCOME PROVIDED	\$1,782,665	*	\$1,782,665
JOBS SUPPORTED	65	*	65
TAX REVENUES FROM ALL SPENDING			
STATE AND LOCAL	\$2,698,309	\$196,002	\$2,894,311
FEDERAL	\$2,702,658	\$196,579	\$2,899,237

<sup>\*</sup>Most equipment spending takes place where people live; nonresidents generally spend little on equipment in NC.

	FOR WILD TROUT FISHING IN MOUNTAIN REGION		
	RESIDENT ANGLERS	NONRESIDENT ANGLERS	ALL ANGLERS
MOUNTAIN TROUT ANGLERS	16,684	1,929	18,613
DAYS FISHED FOR MOUNTAIN TROUT	378,233	36,300	414,533
ANGLER PURCHASES			
LICENSES AND FEES	\$423,725	\$57,253	\$480,978
TRIP EXPENDITURES	\$26,269,310	\$2,521,098	\$28,790,408
EQUIPMENT EXPENDITURES	\$7,385,633	*	\$7,385,633
TOTAL DOLLARS SPENT	\$34,078,668	\$2,578,351	\$36,657,019
IMPACTS FROM TRIP SPENDING			
TOTAL ECONOMIC OUTPUT	\$37,389,190	\$3,525,207	\$40,914,397
INCOME PROVIDED	\$11,840,064	\$1,092,997	\$12,933,061
JOBS SUPPORTED	412	39	451
IMPACTS FROM EQUIPMENT SPENDING			
TOTAL ECONOMIC OUTPUT	\$4,933,140	*	\$4,933,140
INCOME PROVIDED	\$1,837,756	*	\$1,837,756
JOBS SUPPORTED	62	*	62
TAX REVENUES FROM ALL SPENDING			
STATE AND LOCAL	\$3,227,098	\$257,877	\$3,484,975
FEDERAL	\$3,326,700	\$267,140	\$3,593,840

<sup>\*</sup>Most equipment spending takes place where people live; nonresidents generally spend little on equipment in NC.

TABLE 14. ECONOMIC SUMMARY FOR ALL MOUNTAIN TROUT FISHING IN THE PIEDMONT REGION			
TIEDWONT REGION	RESIDENT ANGLERS	NONRESIDENT ANGLERS	ALL ANGLERS
MOUNTAIN TROUT ANGLERS	13,226	**	13,226
DAYS FISHED FOR MOUNTAIN TROUT	1,261,681	**	1,261,681
ANGLER PURCHASES			
LICENSES AND FEES	**	**	\$271,201
TRIP EXPENDITURES	**	**	\$1,450,116
EQUIPMENT EXPENDITURES	\$6,406,073	*	\$6,406,073
TOTAL DOLLARS SPENT	**	**	\$8,127,390
IMPACTS FROM TRIP SPENDING			
TOTAL ECONOMIC OUTPUT	**	**	\$2,425,019
INCOME PROVIDED	**	**	\$928,243
JOBS SUPPORTED	**	**	30
IMPACTS FROM EQUIPMENT SPENDING			
TOTAL ECONOMIC OUTPUT	\$4,426,611	*	\$4,426,611
INCOME PROVIDED	\$1,630,513	*	\$1,630,513
JOBS SUPPORTED	54	*	54
IMPACTS FROM ALL SPENDING			
TOTAL ECONOMIC OUTPUT	**	**	\$6,851,630
INCOME PROVIDED	**	**	\$2,558,756
JOBS SUPPORTED	**	**	84
TAX REVENUES FROM ALL SPENDING			
STATE AND LOCAL	**	**	\$615,876
FEDERAL	**	**	\$613,208

<sup>\*</sup>Most equipment spending takes place where people live; nonresidents generally spend little on equipment in NC.

<sup>\*\*</sup>Insufficient number of observations to provide reliable estimates.

	RESIDENTS	NONRESIDENTS	TOTAL
GROCERIES	**	**	\$384,848
RESTAURANTS	**	**	\$185,372
LODGING	**	**	\$115,842
VEHICLE FUEL	**	**	\$287,106
PUBLIC TRANSPORTATION	**	**	\$0
CAR RENTALS	**	**	\$0
GUIDE FEES	**	**	\$381,921
BOAT LAUNCH/DOCKS	**	**	\$1,247
ICE	**	**	\$9,138
COOKING/HEATING FUEL	**	**	\$17,062
EQUIPMENT RENTAL	**	**	\$17,848
BAIT	**	**	\$24,504
SOUVENIRS	**	**	\$16,990
ENTERTAINMENT	**	**	\$8,238
OTHER TRIP EXPENSES	**	**	\$0
TOTAL TRIP EXPENDITURES	**	**	\$1,450,116

TABLE 16. EQUIPMENT EXPENDI	TABLE 16. EQUIPMENT EXPENDITURES: PIEDMONT REGION				
	RESIDENTS	NONRESIDENTS			
LICENSES	\$253,396	\$17,805			
RODS AND REELS	\$1,331,705	*			
LINE AND LEADERS	\$284,341	*			
LURES	\$381,669	*			
TACKLE BOXES	\$65,691	*			
HOOKS, SINKERS, SWIVELS	\$46,214	*			
DEPTH FINDERS, ELECTRONICS	\$61,896	*			
CREELS, STRINGERS, NETS	\$34,904	*			
OTHER FISHING EQUIPMENT	\$102,702	*			
FLY TYING EQUIPMENT	\$175,114	*			
CLOTHING	\$294,865	*			
WADERS, BOOTS, SHOES	\$244,106	*			
LIFE JACKETS, PFDS	\$6,721	*			
TAXIDERMY	\$0	*			
BOOKS AND MAGAZINES	\$156,907	*			
COOLERS	\$29,123	*			
BOATS, CANOES, KAYAKS	\$858,501	*			
BOAT MOTORS	\$85,085	*			
TRAILERS, HITCHES, ACCESSORIES	\$680,347	*			
BOAT PARTS, ACCESSORIES	\$19,593	*			
BUG SPRAY, SUNSCREEN	\$94,209	*			
CAMERAS, BINOCULARS	\$272,694	*			
TENTS, TARPS, PACKS	\$57,813	*			
CAMPING TRAILER	\$162,914	*			
OTHER CAMPING EQUIPMENT	\$75,132	*			
TRUCKS, SUVs, RVs	\$883,825	*			
OTHER EQUIPMENT	\$0	*			
TOTAL EQUIPMENT EXPENDITURES	\$6,406,073	*			

TABLE 17. ECONOMIC SUMMARY F PIEDMONT REGION	OR HATCHERY S	SUPPORTED TROUT	T FISHING IN
TEDMONT REGION	RESIDENT ANGLERS	NONRESIDENT ANGLERS	ALL ANGLERS
MOUNTAIN TROUT ANGLERS	**	**	**
DAYS FISHED FOR MOUNTAIN TROUT	**	**	**
ANGLER PURCHASES			
LICENSES AND FEES	**	**	**
TRIP EXPENDITURES	**	**	**
EQUIPMENT EXPENDITURES	**	*	**
TOTAL DOLLARS SPENT	**	**	**
IMPACTS FROM TRIP SPENDING			
TOTAL ECONOMIC OUTPUT	**	**	**
INCOME PROVIDED	**	**	**
JOBS SUPPORTED	**	**	**
IMPACTS FROM EQUIPMENT SPENDING			
TOTAL ECONOMIC OUTPUT	\$1,635,982	*	\$1,635,982
INCOME PROVIDED	\$973,925	*	\$973,925
JOBS SUPPORTED	20	*	20
TAX REVENUES FROM ALL SPENDING			
STATE AND LOCAL	**	**	**
FEDERAL	**	**	**

<sup>\*</sup>Most equipment spending takes place where people live; nonresidents generally spend little on equipment in NC.

 $<sup>**</sup>Insufficient number of observations to provide \ reliable \ estimates.$ 

PIEDMONT REGION	RESIDENT ANGLERS	NONRESIDENT ANGLERS	ALL ANGLERS
MOUNTAIN TROUT ANGLERS	**	**	**
DAYS FISHED FOR MOUNTAIN TROUT	**	**	**
ANGLER PURCHASES			
LICENSES AND FEES	**	**	**
TRIP EXPENDITURES	**	**	**
EQUIPMENT EXPENDITURES	**	*	**
TOTAL DOLLARS SPENT	**	**	**
IMPACTS FROM TRIP SPENDING			
TOTAL ECONOMIC OUTPUT	**	**	**
INCOME PROVIDED	**	**	**
JOBS SUPPORTED	**	**	**
IMPACTS FROM EQUIPMENT SPENDING			
TOTAL ECONOMIC OUTPUT	\$1,314,977	*	\$1,314,977
INCOME PROVIDED	\$494,542	*	\$494,542
JOBS SUPPORTED	17	*	17
TAX REVENUES FROM ALL SPENDING			
STATE AND LOCAL	**	**	**
FEDERAL	**	**	**

<sup>\*</sup>Most equipment spending takes place where people live; nonresidents generally spend little on equipment in NC

<sup>\*\*</sup>Insufficient number of observations to provide reliable estimates.

	RESIDENT ANGLERS	NONRESIDENT ANGLERS	ALL ANGLERS			
MOUNTAIN TROUT ANGLERS	**	**	**			
DAYS FISHED FOR MOUNTAIN TROUT	**	**	**			
ANGLER PURCHASES						
LICENSES AND FEES	**	**	**			
TRIP EXPENDITURES	**	**	**			
EQUIPMENT EXPENDITURES	**	*	**			
TOTAL DOLLARS SPENT	**	**	**			
IMPACTS FROM TRIP SPENDING						
TOTAL ECONOMIC OUTPUT	**	**	**			
INCOME PROVIDED	**	**	**			
JOBS SUPPORTED	**	**	**			
IMPACTS FROM EQUIPMENT SPENDING						
TOTAL ECONOMIC OUTPUT	\$1,486,867	*	\$1,486,867			
INCOME PROVIDED	\$527,316	*	\$527,316			
JOBS SUPPORTED	18	*	18			
TAX REVENUES FROM ALL SPENDING						
STATE AND LOCAL	**	**	**			
FEDERAL	**	**	**			

<sup>\*</sup>Most equipment spending takes place where people live; nonresidents generally spend little on equipment in NC.

<sup>\*\*</sup>Insufficient number of observations to provide reliable estimates.

TABLE 20. AVERAGE SPENDING PER DAY: RESIDENT (STATEWIDE)						
	ALL	HATCHERY SUPPORTED	DELAYED HARVEST	WILD TROUT		
TOTAL ANGLER-DAYS IN 2008	1,274,528	549,784	343,102	381,642		
TRIP EXPENDITURES PER ANGLER-DAY						
EXPENDITURE CATEGORY	ALL	HATCHERY SUPPORTED	DELAYED HARVEST	WILD TROUT		
DAYS	16.6	14.9	18.2	18.3		
GROCERIES	\$15.78	\$15.56	\$15.81	\$16.15		
RESTAURANTS	\$7.34	\$7.01	\$8.20	\$7.18		
LODGING	\$8.49	\$8.52	\$9.52	\$7.56		
VEHICLE FUEL	\$18.55	\$17.09	\$20.54	\$19.39		
PUBLIC TRANSPORTATION	\$0.06	\$0.12	\$0.00	\$0.00		
CAR RENTALS	\$0.08	\$0.00	\$0.00	\$0.28		
GUIDE FEES	\$2.34	\$2.55	\$2.06	\$2.23		
BOAT LAUNCH/DOCKS	\$1.31	\$0.66	\$0.10	\$3.47		
ICE	\$1.50	\$1.44	\$1.72	\$1.43		
COOKING/HEATING FUEL	\$1.66	\$1.46	\$1.44	\$2.21		
EQUIPMENT RENTAL	\$0.80	\$1.07	\$0.32	\$0.72		
BAIT	\$3.53	\$4.32	\$3.18	\$2.45		
SOUVENIRS	\$1.40	\$1.44	\$2.17	\$0.66		
ENTERTAINMENT	\$2.44	\$0.90	\$1.01	\$6.38		
OTHER TRIP EXPENSES	\$0.21	\$0.12	\$0.41	\$0.19		
TOTAL	\$65.49	\$62.26	\$66.47	\$70.30		

TABLE 21. AVERAGE SPENDING PER DAY: NONRESIDENT (STATEWIDE)						
	ALL	HATCHERY SUPPORTED	DELAYED HARVEST	WILD TROUT		
TOTAL ANGLER-DAYS IN 2008	147,901	75,363	31,509	41,029		
TRIP EXPENDITURES PER ANGLER-DAY						
EXPENDITURE CATEGORY	ALL	HATCHERY SUPPORTED	DELAYED HARVEST	WILD TROUT		
DAYS	9.2	9.5	9.1	8.9		
GROCERIES	\$33.23	\$31.10	\$33.69	\$36.01		
RESTAURANTS	\$19.68	\$14.72	\$24.96	\$23.12		
LODGING	\$45.82	\$34.75	\$47.87	\$60.76		
VEHICLE FUEL	\$25.54	\$21.25	\$33.17	\$26.28		
PUBLIC TRANSPORTATION	\$2.76	\$3.06	\$2.30	\$2.66		
CAR RENTALS	\$1.20	\$1.25	\$0.37	\$1.74		
GUIDE FEES	\$9.37	\$7.05	\$6.88	\$14.61		
BOAT LAUNCH/DOCKS	\$0.01	\$0.00	\$0.00	\$0.04		
ICE	\$0.94	\$1.00	\$0.87	\$0.90		
COOKING/HEATING FUEL	\$1.39	\$0.60	\$3.99	\$0.68		
EQUIPMENT RENTAL	\$1.90	\$2.52	\$0.07	\$2.29		
BAIT	\$0.97	\$1.32	\$0.69	\$0.66		
SOUVENIRS	\$7.01	\$4.06	\$10.99	\$8.50		
ENTERTAINMENT	\$7.18	\$3.93	\$14.69	\$6.53		
OTHER TRIP EXPENSES	\$0.76	\$0.81	\$1.64	\$0.03		
TOTAL	\$157.78	\$127.44	\$182.18	\$184.79		

TABLE 22. AVERAGE ANNUAL S	TABLE 22. AVERAGE ANNUAL SPENDING: RESIDENT (STATEWIDE)					
	ALL	HATCHERY SUPPORTED	DELAYED HARVEST	WILD TROUT		
TOTAL ANGLERS IN 2008	76,761	36,857	18,864	20,887		
ANNUAL EQUIPMENT EXPENDI	TURES PER ANO	GLER				
EXPENDITURE CATEGORY	ALL	HATCHERY SUPPORTED	DELAYED HARVEST	WILD TROUT		
LICENSES	\$21.88	\$19.16	\$22.42	\$26.32		
RODS AND REELS	\$85.79	\$74.21	\$102.24	\$92.11		
LINE AND LEADERS	\$19.65	\$17.03	\$23.51	\$20.97		
LURES	\$28.07	\$23.73	\$39.14	\$26.01		
TACKLE BOXES	\$4.29	\$3.89	\$6.29	\$3.23		
HOOKS, SINKERS, SWIVELS	\$6.41	\$6.81	\$7.06	\$5.09		
DEPTH FINDERS, ELECTRONICS	\$7.85	\$11.01	\$6.12	\$3.68		
CREELS, STRINGERS, NETS	\$3.87	\$3.52	\$4.46	\$3.97		
OTHER FISHING EQUIPMENT	\$7.91	\$6.12	\$12.17	\$7.31		
FLY TYING EQUIPMENT	\$9.33	\$5.91	\$18.78	\$7.05		
CLOTHING	\$14.84	\$13.27	\$19.68	\$13.34		
WADERS, BOOTS, SHOES	\$24.30	\$21.94	\$28.44	\$24.85		
LIFE JACKETS, PFDS	\$2.19	\$2.45	\$2.56	\$1.36		
TAXIDERMY	\$8.01	\$5.43	\$15.42	\$6.03		
BOOKS AND MAGAZINES	\$9.41	\$7.35	\$11.87	\$10.94		
COOLERS	\$5.06	\$5.76	\$3.80	\$4.93		
BOATS, CANOES, KAYAKS	\$64.67	\$53.77	\$73.71	\$76.33		
BOAT MOTORS	\$7.16	\$11.50	\$2.80	\$3.19		
TRAILERS, HITCHES, ACCESSORIES	\$12.47	\$20.02	\$5.58	\$4.93		
BOAT PARTS, ACCESSORIES	\$9.34	\$12.36	\$8.76	\$4.38		
BUG SPRAY, SUNSCREEN	\$6.10	\$6.21	\$6.74	\$5.34		
CAMERAS, BINOCULARS	\$22.81	\$23.48	\$22.93	\$21.49		
TENTS, TARPS, PACKS	\$10.12	\$9.76	\$7.18	\$13.41		
CAMPING TRAILER	\$45.08	\$46.13	\$3.18	\$80.91		
OTHER CAMPING EQUIPMENT	\$7.41	\$7.92	\$7.35	\$6.53		
TRUCKS, SUVs, RVs	\$58.78	\$51.06	\$65.83	\$66.56		
OTHER EQUIPMENT	\$0.13	\$0.15	\$0.21	\$0.03		
TOTAL	\$502.92	\$469.94	\$528.23	\$540.32		

	ALL	HATCHERY SUPPORTED	DELAYED HARVEST	WILD TROUT
TOTAL ANGLERS IN 2008	16,008	7,904	3,467	4,607
ANNUAL EQUIPMENT EXPENDIT	TURES PER AN	GLER	•	
EXPENDITURE CATEGORY	ALL	HATCHERY SUPPORTED	DELAYED HARVEST	WILD TROUT
LICENSES	\$27.01	\$29.06	\$23.39	\$26.60
RODS AND REELS	*	*	*	*
LINE AND LEADERS	*	*	*	*
LURES	*	*	*	*
TACKLE BOXES	*	*	*	*
HOOKS, SINKERS, SWIVELS	*	*	*	*
DEPTH FINDERS, ELECTRONICS	*	*	*	*
CREELS, STRINGERS, NETS	*	*	*	*
OTHER FISHING EQUIPMENT	*	*	*	*
FLY TYING EQUIPMENT	*	*	*	*
CLOTHING	*	*	*	*
WADERS, BOOTS, SHOES	*	*	*	*
LIFE JACKETS, PFDS	*	*	*	*
TAXIDERMY	*	*	*	*
BOOKS AND MAGAZINES	*	*	*	*
COOLERS	*	*	*	*
BOATS, CANOES, KAYAKS	*	*	*	*
BOAT MOTORS	*	*	*	*
TRAILERS, HITCHES, ACCESSORIES	*	*	*	*
BOAT PARTS, ACCESSORIES	*	*	*	*
BUG SPRAY, SUNSCREEN	*	*	*	*
CAMERAS, BINOCULARS	*	*	*	*
TENTS, TARPS, PACKS	*	*	*	*
CAMPING TRAILER	*	*	*	*
OTHER CAMPING EQUIPMENT	*	*	*	*
TRUCKS, SUVs, RVs	*	*	*	*
OTHER EQUIPMENT	*	*	*	*
TOTAL	\$27.01	\$29.06	\$23.39	\$26.60

TABLE 24. TOTAL SPENDING: RESIDENT TRIP EXPENDITURES (STATEWIDE)					
EXPENDITURE CATEGORY	ALL	HATCHERY SUPPORTED	DELAYED HARVEST	WILD TROUT	
GROCERIES	\$20,113,788	\$8,554,907	\$5,422,875	\$6,163,247	
RESTAURANTS	\$9,355,892	\$3,854,617	\$2,814,058	\$2,738,680	
LODGING	\$10,821,770	\$4,683,829	\$3,265,388	\$2,885,391	
VEHICLE FUEL	\$23,638,112	\$9,395,727	\$7,046,963	\$7,399,729	
PUBLIC TRANSPORTATION	\$75,559	\$66,985	\$0	\$0	
CAR RENTALS	\$99,795	\$0	\$0	\$108,158	
GUIDE FEES	\$2,988,216	\$1,399,422	\$708,121	\$851,741	
BOAT LAUNCH/DOCKS	\$1,663,443	\$363,732	\$35,367	\$1,322,539	
ICE	\$1,917,642	\$793,255	\$590,314	\$545,341	
COOKING/HEATING FUEL	\$2,117,760	\$800,838	\$494,422	\$844,412	
EQUIPMENT RENTAL	\$1,013,605	\$588,934	\$108,793	\$275,544	
BAIT	\$4,501,238	\$2,374,497	\$1,089,351	\$934,527	
SOUVENIRS	\$1,786,670	\$794,344	\$744,466	\$253,394	
ENTERTAINMENT	\$3,109,496	\$492,805	\$347,890	\$2,435,458	
OTHER TRIP EXPENSES	\$265,714	\$66,721	\$139,595	\$72,070	
TOTAL TRIP EXPENDITURES	\$83,468,702	\$34,230,614	\$22,807,603	\$26,830,231	

TABLE 25. TOTAL SPENDING: NONRESIDENT TRIP EXPENDITURES (STATEWIDE)					
EXPENDITURE CATEGORY	ALL	HATCHERY SUPPORTED	DELAYED HARVEST	WILD TROUT	
GROCERIES	\$4,915,228	\$2,344,027	\$1,061,510	\$1,477,485	
RESTAURANTS	\$2,910,702	\$1,109,025	\$786,565	\$948,471	
LODGING	\$6,777,362	\$2,618,571	\$1,508,373	\$2,493,089	
VEHICLE FUEL	\$3,777,406	\$1,601,686	\$1,044,995	\$1,078,256	
PUBLIC TRANSPORTATION	\$408,446	\$230,426	\$72,401	\$109,119	
CAR RENTALS	\$178,017	\$94,430	\$11,584	\$71,200	
GUIDE FEES	\$1,386,179	\$531,336	\$216,931	\$599,248	
BOAT LAUNCH/DOCKS	\$1,638	\$0	\$0	\$1,455	
ICE	\$139,019	\$75,653	\$27,384	\$36,760	
COOKING/HEATING FUEL	\$205,913	\$45,159	\$125,591	\$27,943	
EQUIPMENT RENTAL	\$280,487	\$190,215	\$2,317	\$93,843	
BAIT	\$143,788	\$99,801	\$21,697	\$27,098	
SOUVENIRS	\$1,037,145	\$306,106	\$346,199	\$348,755	
ENTERTAINMENT	\$1,061,490	\$296,335	\$462,881	\$267,766	
OTHER TRIP EXPENSES	\$112,510	\$61,342	\$51,694	\$1,415	
TOTAL TRIP EXPENDITURES	\$23,335,331	\$9,604,112	\$5,740,122	\$7,581,903	

TABLE 26. TOTAL SPENDING: RESIDENT EQUIPMENT EXPENDITURES (STATEWIDE)					
EXPENDITURE CATEGORY	ALL	HATCHERY SUPPORTED	DELAYED HARVEST	WILD TROUT	
LICENSES	\$1,679,326	\$706,292	\$422,916	\$549,774	
RODS AND REELS	\$6,585,706	\$2,735,115	\$1,928,718	\$1,923,852	
LINE AND LEADERS	\$1,507,996	\$627,594	\$443,468	\$438,042	
LURES	\$2,154,941	\$874,641	\$738,377	\$543,282	
TACKLE BOXES	\$329,686	\$143,390	\$118,738	\$67,447	
HOOKS, SINKERS, SWIVELS	\$492,311	\$251,134	\$133,272	\$106,237	
DEPTH FINDERS, ELECTRONICS	\$602,447	\$405,873	\$115,460	\$76,951	
CREELS, STRINGERS, NETS	\$296,899	\$129,739	\$84,100	\$82,947	
OTHER FISHING EQUIPMENT	\$606,844	\$225,447	\$229,560	\$152,687	
FLY TYING EQUIPMENT	\$716,414	\$217,828	\$354,258	\$147,213	
CLOTHING	\$1,139,251	\$488,935	\$371,231	\$278,692	
WADERS, BOOTS, SHOES	\$1,864,988	\$808,575	\$536,585	\$519,140	
LIFE JACKETS, PFDS	\$167,842	\$90,440	\$48,373	\$28,490	
TAXIDERMY	\$614,591	\$200,096	\$290,835	\$125,870	
BOOKS AND MAGAZINES	\$721,953	\$270,825	\$223,936	\$228,587	
COOLERS	\$388,526	\$212,157	\$71,709	\$102,934	
BOATS, CANOES, KAYAKS	\$4,964,163	\$1,981,888	\$1,390,405	\$1,594,420	
BOAT MOTORS	\$549,429	\$423,860	\$52,780	\$66,613	
TRAILERS, HITCHES, ACCESSORIES	\$956,854	\$737,921	\$105,204	\$103,075	
BOAT PARTS, ACCESSORIES	\$717,136	\$455,408	\$165,203	\$91,468	
BUG SPRAY, SUNSCREEN	\$468,345	\$228,725	\$127,115	\$111,532	
CAMERAS, BINOCULARS	\$1,750,858	\$865,374	\$432,542	\$448,830	
TENTS, TARPS, PACKS	\$776,783	\$359,549	\$135,498	\$280,194	
CAMPING TRAILER	\$3,460,686	\$1,700,196	\$59,983	\$1,690,039	
OTHER CAMPING EQUIPMENT	\$568,643	\$291,834	\$138,687	\$136,448	
TRUCKS, SUVs, RVs	\$4,511,908	\$1,881,821	\$1,241,731	\$1,390,310	
OTHER EQUIPMENT	\$10,232	\$5,548	\$3,967	\$699	
TOTAL EQUIPMENT EXPENDITURES	\$36,925,432	\$16,613,915	\$9,541,734	\$10,735,999	

EXPENDITURE CATEGORY	ALL	HATCHERY SUPPORTED	DELAYED HARVEST	WILD TROUT
LICENSES	\$432,333	\$229,715	\$81,090	\$122,555
RODS AND REELS	*	*	*	*
LINE AND LEADERS	*	*	*	*
LURES	*	*	*	*
TACKLE BOXES	*	*	*	*
HOOKS, SINKERS, SWIVELS	*	*	*	*
DEPTH FINDERS, ELECTRONICS	*	*	*	*
CREELS, STRINGERS, NETS	*	*	*	*
OTHER FISHING EQUIPMENT	*	*	*	*
FLY TYING EQUIPMENT	*	*	*	*
CLOTHING	*	*	*	*
WADERS, BOOTS, SHOES	*	*	*	*
LIFE JACKETS, PFDS	*	*	*	*
TAXIDERMY	*	*	*	*
BOOKS AND MAGAZINES	*	*	*	*
COOLERS	*	*	*	*
BOATS, CANOES, KAYAKS	*	*	*	*
BOAT MOTORS	*	*	*	*
TRAILERS, HITCHES, ACCESSORIES	*	*	*	*
BOAT PARTS, ACCESSORIES	*	*	*	*
BUG SPRAY, SUNSCREEN	*	*	*	*
CAMERAS, BINOCULARS	*	*	*	*
TENTS, TARPS, PACKS	*	*	*	*
CAMPING TRAILER	*	*	*	*
OTHER CAMPING EQUIPMENT	*	*	*	*
TRUCKS, SUVs, RVs	*	*	*	*
OTHER EQUIPMENT	*	*	*	*
TOTAL EQUIPMENT EXPENDITURES	*	*	*	*

TABLE 28. AVERAGE SPENDING PER DAY: RESIDENT (MOUNTAIN REGION)							
	ALL	HATCHERY SUPPORTED	DELAYED HARVEST	WILD TROUT			
TOTAL ANGLER-DAYS IN 2008	1,261,681	545,065	338,383	378,233			
TRIP EXPENDITURES PER ANGL	TRIP EXPENDITURES PER ANGLER-DAY						
EXPENDITURE CATEGORY	ALL	HATCHERY SUPPORTED	DELAYED HARVEST	WILD TROUT			
DAYS	17.1	15.2	18.9	18.8			
GROCERIES	\$15.90	\$15.82	\$15.74	\$16.15			
RESTAURANTS	\$6.96	\$6.86	\$6.95	\$7.16			
LODGING	\$7.71	\$8.10	\$7.76	\$6.99			
VEHICLE FUEL	\$18.35	\$17.22	\$19.52	\$19.27			
PUBLIC TRANSPORTATION	\$0.06	\$0.13	\$0.00	\$0.00			
CAR RENTALS	\$0.08	\$0.00	\$0.00	\$0.30			
GUIDE FEES	\$1.91	\$2.00	\$2.19	\$1.51			
BOAT LAUNCH/DOCKS	\$1.19	\$0.34	\$0.10	\$3.61			
ICE	\$1.54	\$1.48	\$1.75	\$1.45			
COOKING/HEATING FUEL	\$1.70	\$1.56	\$1.39	\$2.22			
EQUIPMENT RENTAL	\$0.84	\$1.16	\$0.34	\$0.72			
BAIT	\$3.36	\$3.93	\$3.19	\$2.53			
SOUVENIRS	\$1.23	\$1.40	\$1.55	\$0.66			
ENTERTAINMENT	\$2.41	\$0.59	\$1.05	\$6.72			
OTHER TRIP EXPENSES	\$0.21	\$0.13	\$0.43	\$0.15			
TOTAL	\$63.46	\$60.72	\$61.96	\$69.45			

TABLE 29. AVERAGE SPENDING	ALL	HATCHERY SUPPORTED	DELAYED HARVEST	WILD TROUT			
TOTAL ANGLER-DAYS IN 2008	140,653	74,012	30,342	36,300			
TRIP EXPENDITURES PER ANGL	TRIP EXPENDITURES PER ANGLER-DAY						
EXPENDITURE CATEGORY	ALL	HATCHERY SUPPORTED	DELAYED HARVEST	WILD TROUT			
DAYS	9.7	15.2	18.9	18.8			
GROCERIES	\$33.27	\$15.82	\$15.74	\$16.15			
RESTAURANTS	\$19.26	\$6.86	\$6.95	\$7.16			
LODGING	\$51.45	\$8.10	\$7.76	\$6.99			
VEHICLE FUEL	\$24.08	\$17.22	\$19.52	\$19.27			
PUBLIC TRANSPORTATION	\$3.08	\$0.13	\$0.00	\$0.00			
CAR RENTALS	\$1.33	\$0.00	\$0.00	\$0.30			
GUIDE FEES	\$7.65	\$2.00	\$2.19	\$1.51			
BOAT LAUNCH/DOCKS	\$0.01	\$0.34	\$0.10	\$3.61			
ICE	\$0.99	\$1.48	\$1.75	\$1.45			
COOKING/HEATING FUEL	\$1.45	\$1.56	\$1.39	\$2.22			
EQUIPMENT RENTAL	\$1.77	\$1.16	\$0.34	\$0.72			
BAIT	\$1.09	\$3.93	\$3.19	\$2.53			
SOUVENIRS	\$6.52	\$1.40	\$1.55	\$0.66			
ENTERTAINMENT	\$8.29	\$0.59	\$1.05	\$6.72			
OTHER TRIP EXPENSES	\$0.49	\$0.13	\$0.43	\$0.15			
TOTAL	\$160.73	\$60.72	\$61.96	\$69.45			

TABLE 30. AVERAGE ANNUAL SPENDING: RESIDENT (MOUNTAIN REGION)						
	ALL	HATCHERY SUPPORTED	DELAYED HARVEST	WILD TROUT		
TOTAL ANGLERS IN 2008	61,202	29,996	14,522	16,684		
ANNUAL EQUIPMENT EXPENDITURES PER ANGLER						
EXPENDITURE CATEGORY	ALL	HATCHERY SUPPORTED	DELAYED HARVEST	WILD TROUT		
LICENSES	\$22.25	\$20.37	\$22.59	\$25.40		
RODS AND REELS	\$84.99	\$75.94	\$105.47	\$83.70		
LINE AND LEADERS	\$19.81	\$18.44	\$22.93	\$19.59		
LURES	\$28.22	\$24.90	\$40.11	\$23.85		
TACKLE BOXES	\$4.40	\$4.59	\$6.03	\$2.63		
HOOKS, SINKERS, SWIVELS	\$7.14	\$7.69	\$8.03	\$5.35		
DEPTH FINDERS, ELECTRONICS	\$8.91	\$13.93	\$4.41	\$3.73		
CREELS, STRINGERS, NETS	\$4.30	\$3.99	\$4.18	\$4.95		
OTHER FISHING EQUIPMENT	\$7.90	\$6.62	\$11.53	\$7.05		
FLY TYING EQUIPMENT	\$9.04	\$5.89	\$20.77	\$4.49		
CLOTHING	\$12.96	\$11.77	\$18.86	\$9.92		
WADERS, BOOTS, SHOES	\$25.84	\$23.72	\$30.67	\$25.48		
LIFE JACKETS, PFDS	\$2.47	\$2.97	\$2.73	\$1.32		
TAXIDERMY	\$10.11	\$6.54	\$20.28	\$7.72		
BOOKS AND MAGAZINES	\$9.07	\$6.52	\$12.59	\$10.66		
COOLERS	\$5.92	\$6.80	\$4.27	\$5.73		
BOATS, CANOES, KAYAKS	\$65.35	\$63.92	\$41.20	\$89.01		
BOAT MOTORS	\$4.95	\$8.86	\$0.91	\$1.36		
TRAILERS, HITCHES, ACCESSORIES	\$3.69	\$4.41	\$4.47	\$1.70		
BOAT PARTS, ACCESSORIES	\$11.78	\$15.15	\$10.96	\$6.31		
BUG SPRAY, SUNSCREEN	\$6.06	\$6.21	\$6.48	\$5.40		
CAMERAS, BINOCULARS	\$23.50	\$24.53	\$24.43	\$20.83		
TENTS, TARPS, PACKS	\$11.93	\$11.36	\$9.05	\$15.48		
CAMPING TRAILER	\$42.58	\$56.41	\$2.00	\$52.91		
OTHER CAMPING EQUIPMENT	\$7.43	\$7.89	\$6.24	\$7.63		
TRUCKS, SUVs, RVs	\$57.66	\$64.81	\$78.92	\$25.84		
OTHER EQUIPMENT	\$0.15	\$0.18	\$0.18	\$0.04		
TOTAL	\$498.37	\$504.42	\$520.30	\$468.09		

	ALL	HATCHERY	DELAYED	WILD		
		SUPPORTED	HARVEST	TROUT		
TOTAL ANGLERS IN 2008	8,401	4,865	1,606	1,929		
ANNUAL EQUIPMENT EXPENDITURES PER ANGLER						
EXPENDITURE CATEGORY	ALL	HATCHERY SUPPORTED	DELAYED HARVEST	WILD TROUT		
LICENSES	\$27.73	\$27.25	\$26.00	\$29.68		
RODS AND REELS	*	*	*	*		
LINE AND LEADERS	*	*	*	*		
LURES	*	*	*	*		
TACKLE BOXES	*	*	*	*		
HOOKS, SINKERS, SWIVELS	*	*	*	*		
DEPTH FINDERS, ELECTRONICS	*	*	*	*		
CREELS, STRINGERS, NETS	*	*	*	*		
OTHER FISHING EQUIPMENT	*	*	*	*		
FLY TYING EQUIPMENT	*	*	*	*		
CLOTHING	*	*	*	*		
WADERS, BOOTS, SHOES	*	*	*	*		
LIFE JACKETS, PFDS	*	*	*	*		
TAXIDERMY	*	*	*	*		
BOOKS AND MAGAZINES	*	*	*	*		
COOLERS	*	*	*	*		
BOATS, CANOES, KAYAKS	*	*	*	*		
BOAT MOTORS	*	*	*	*		
TRAILERS, HITCHES, ACCESSORIES	*	*	*	*		
BOAT PARTS, ACCESSORIES	*	*	*	*		
BUG SPRAY, SUNSCREEN	*	*	*	*		
CAMERAS, BINOCULARS	*	*	*	*		
TENTS, TARPS, PACKS	*	*	*	*		
CAMPING TRAILER	*	*	*	*		
OTHER CAMPING EQUIPMENT	*	*	*	*		
TRUCKS, SUVs, RVs	*	*	*	*		
OTHER EQUIPMENT	*	*	*	*		
TOTAL	\$27.73	\$27.25	\$26.00	\$29.68		

TABLE 32. TOTAL SPENDING: RESIDENT TRIP EXPENDITURES (MOUNTAIN REGION)				
EXPENDITURE CATEGORY	ALL	HATCHERY SUPPORTED	DELAYED HARVEST	WILD TROUT
GROCERIES	\$20,054,810	\$8,624,569	\$5,326,510	\$6,109,878
RESTAURANTS	\$8,784,278	\$3,736,880	\$2,351,336	\$2,707,590
LODGING	\$9,729,161	\$4,415,319	\$2,626,664	\$2,645,664
VEHICLE FUEL	\$23,147,025	\$9,388,465	\$6,606,781	\$7,287,325
PUBLIC TRANSPORTATION	\$79,987	\$71,683	\$0	\$0
CAR RENTALS	\$105,643	\$0	\$0	\$113,632
GUIDE FEES	\$2,408,729	\$1,091,821	\$740,284	\$570,191
BOAT LAUNCH/DOCKS	\$1,505,320	\$182,985	\$34,008	\$1,365,134
ICE	\$1,939,761	\$807,566	\$592,129	\$549,446
COOKING/HEATING FUEL	\$2,147,899	\$849,444	\$469,373	\$840,532
EQUIPMENT RENTAL	\$1,058,041	\$630,472	\$113,734	\$273,259
BAIT	\$4,242,277	\$2,140,957	\$1,078,930	\$957,578
SOUVENIRS	\$1,553,807	\$764,173	\$524,493	\$249,982
ENTERTAINMENT	\$3,039,316	\$321,223	\$356,923	\$2,541,171
OTHER TRIP EXPENSES	\$264,367	\$71,157	\$146,280	\$57,928
TOTAL TRIP EXPENDITURES	\$80,060,421	\$33,096,714	\$20,967,445	\$26,269,310

TABLE 33. TOTAL SPENDING: NONRESIDENT TRIP EXPENDITURES (MOUNTAIN REGION)					
EXPENDITURE CATEGORY	ALL	HATCHERY SUPPORTED	DELAYED HARVEST	WILD TROUT	
GROCERIES	\$4,679,037	\$1,171,088	\$477,612	\$586,372	
RESTAURANTS	\$2,708,404	\$507,413	\$210,837	\$259,851	
LODGING	\$7,237,130	\$599,535	\$235,525	\$253,908	
VEHICLE FUEL	\$3,386,399	\$1,274,814	\$592,410	\$699,374	
PUBLIC TRANSPORTATION	\$433,225	\$9,734	\$0	\$0	
CAR RENTALS	\$186,805	\$0	\$0	\$10,905	
GUIDE FEES	\$1,076,521	\$148,253	\$66,379	\$54,722	
BOAT LAUNCH/DOCKS	\$2,021	\$24,847	\$3,049	\$131,014	
ICE	\$139,204	\$109,655	\$53,094	\$52,731	
COOKING/HEATING FUEL	\$203,956	\$115,342	\$42,087	\$80,667	
EQUIPMENT RENTAL	\$248,568	\$85,609	\$10,198	\$26,225	
BAIT	\$153,993	\$290,710	\$96,744	\$91,900	
SOUVENIRS	\$917,453	\$103,763	\$47,030	\$23,991	
ENTERTAINMENT	\$1,165,766	\$43,617	\$32,004	\$243,879	
OTHER TRIP EXPENSES	\$69,048	\$9,662	\$13,116	\$5,559	
TOTAL TRIP EXPENDITURES	\$22,607,527	\$4,494,041	\$1,880,087	\$2,521,098	

TABLE 34. TOTAL SPENDING: RESIDENT EQUIPMENT EXPENDITURES (MOUNTAIN REGION)				
EXPENDITURE CATEGORY	ALL	HATCHERY SUPPORTED	DELAYED HARVEST	WILD TROUT
LICENSES	\$1,362,020	\$611,094	\$328,033	\$423,725
RODS AND REELS	\$5,201,603	\$2,277,945	\$1,531,609	\$1,396,334
LINE AND LEADERS	\$1,212,265	\$553,143	\$332,988	\$326,861
LURES	\$1,727,081	\$746,926	\$582,551	\$397,927
TACKLE BOXES	\$269,286	\$137,714	\$87,560	\$43,876
HOOKS, SINKERS, SWIVELS	\$436,988	\$230,635	\$116,547	\$89,316
DEPTH FINDERS, ELECTRONICS	\$545,035	\$417,965	\$64,090	\$62,198
CREELS, STRINGERS, NETS	\$263,017	\$119,761	\$60,747	\$82,552
OTHER FISHING EQUIPMENT	\$483,420	\$198,472	\$167,512	\$117,566
FLY TYING EQUIPMENT	\$553,197	\$176,587	\$301,627	\$74,972
CLOTHING	\$792,911	\$353,079	\$273,879	\$165,499
WADERS, BOOTS, SHOES	\$1,581,490	\$711,439	\$445,435	\$425,164
LIFE JACKETS, PFDS	\$150,980	\$89,135	\$39,616	\$22,076
TAXIDERMY	\$618,763	\$196,146	\$294,460	\$128,731
BOOKS AND MAGAZINES	\$554,824	\$195,468	\$182,865	\$177,822
COOLERS	\$362,037	\$203,996	\$62,076	\$95,641
BOATS, CANOES, KAYAKS	\$3,999,248	\$1,917,392	\$598,395	\$1,485,015
BOAT MOTORS	\$303,037	\$265,830	\$13,202	\$22,730
TRAILERS, HITCHES, ACCESSORIES	\$225,651	\$132,176	\$64,846	\$28,330
BOAT PARTS, ACCESSORIES	\$720,765	\$454,559	\$159,214	\$105,293
BUG SPRAY, SUNSCREEN	\$370,655	\$186,359	\$94,155	\$90,114
CAMERAS, BINOCULARS	\$1,438,328	\$735,708	\$354,823	\$347,550
TENTS, TARPS, PACKS	\$729,953	\$340,770	\$131,385	\$258,189
CAMPING TRAILER	\$2,605,928	\$1,691,988	\$29,045	\$882,725
OTHER CAMPING EQUIPMENT	\$454,540	\$236,518	\$90,577	\$127,326
TRUCKS, SUVs, RVs	\$3,529,123	\$1,943,973	\$1,146,095	\$431,109
OTHER EQUIPMENT	\$8,922	\$5,526	\$2,673	\$718
TOTAL EQUIPMENT EXPENDITURES	\$29,139,048	\$14,519,209	\$7,227,976	\$7,385,633

EXPENDITURE CATEGORY	ALL	HATCHERY SUPPORTED	DELAYED HARVEST	WILD TROUT
LICENSES	\$232,979	\$132,580	\$41,762	\$57,253
RODS AND REELS	*	*	*	*
LINE AND LEADERS	*	*	*	*
LURES	*	*	*	*
TACKLE BOXES	*	*	*	*
HOOKS, SINKERS, SWIVELS	*	*	*	*
DEPTH FINDERS, ELECTRONICS	*	*	*	*
CREELS, STRINGERS, NETS	*	*	*	*
OTHER FISHING EQUIPMENT	*	*	*	*
FLY TYING EQUIPMENT	*	*	*	*
CLOTHING	*	*	*	*
WADERS, BOOTS, SHOES	*	*	*	*
LIFE JACKETS, PFDS	*	*	*	*
TAXIDERMY	*	*	*	*
BOOKS AND MAGAZINES	*	*	*	*
COOLERS	*	*	*	*
BOATS, CANOES, KAYAKS	*	*	*	*
BOAT MOTORS	*	*	*	*
TRAILERS, HITCHES, ACCESSORIES	*	*	*	*
BOAT PARTS, ACCESSORIES	*	*	*	*
BUG SPRAY, SUNSCREEN	*	*	*	*
CAMERAS, BINOCULARS	*	*	*	*
TENTS, TARPS, PACKS	*	*	*	*
CAMPING TRAILER	*	*	*	*
OTHER CAMPING EQUIPMENT	*	*	*	*
TRUCKS, SUVs, RVs	*	*	*	*
OTHER EQUIPMENT	*	*	*	*
TOTAL EQUIPMENT EXPENDITURES	*	*	*	*

## **DEMOGRAPHIC DATA**

- > Three-fourths of the sample (75%) are North Carolina residents, as shown in Figure 10.
- Respondents' ages are shown. They follow a bell-curve, slightly skewed to the older age groups, as shown in Figure 11.
- ➤ The sample of anglers is overwhelmingly male (92% of resident anglers; 96% of nonresident anglers), as shown in Figure 12.

Figure 10. Residency Status of Respondents

## Q167. Is North Carolina your primary state of residence?

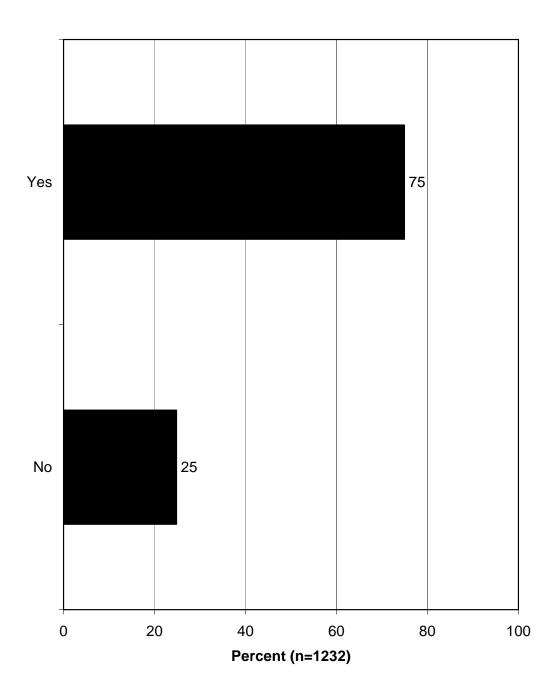


Figure 11. Ages of Respondents

## Q168. Respondent's age.

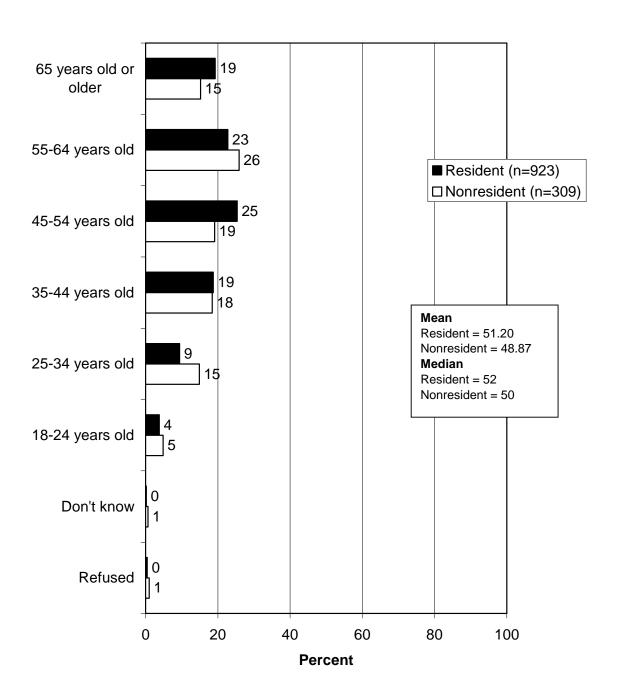


Figure 12. Gender of Respondents

## Q173. Respondent's gender (observed, not asked, by interviewer).

