



**Dupont
James Madison University**

Angler Survey

South River and Upper South Fork Shenandoah River

April – October 2005



Billy Flint and Pete Barlow survey the South River

Purpose

- Capture river use info – angling and other
- Gauge angler knowledge of consumption advisory
- Gather angling statistics – effort, catch, harvest
- This is the first survey of this kind for South River

Methods

- A stratified “roving” angler survey was selected due to access point limitations
- Non-uniform probabilities were assigned to river reaches, time of day, days of week...then selected randomly to determine the sample schedule
- Plus to roving survey: more remote contacts; Drawback: incomplete trips

Methods

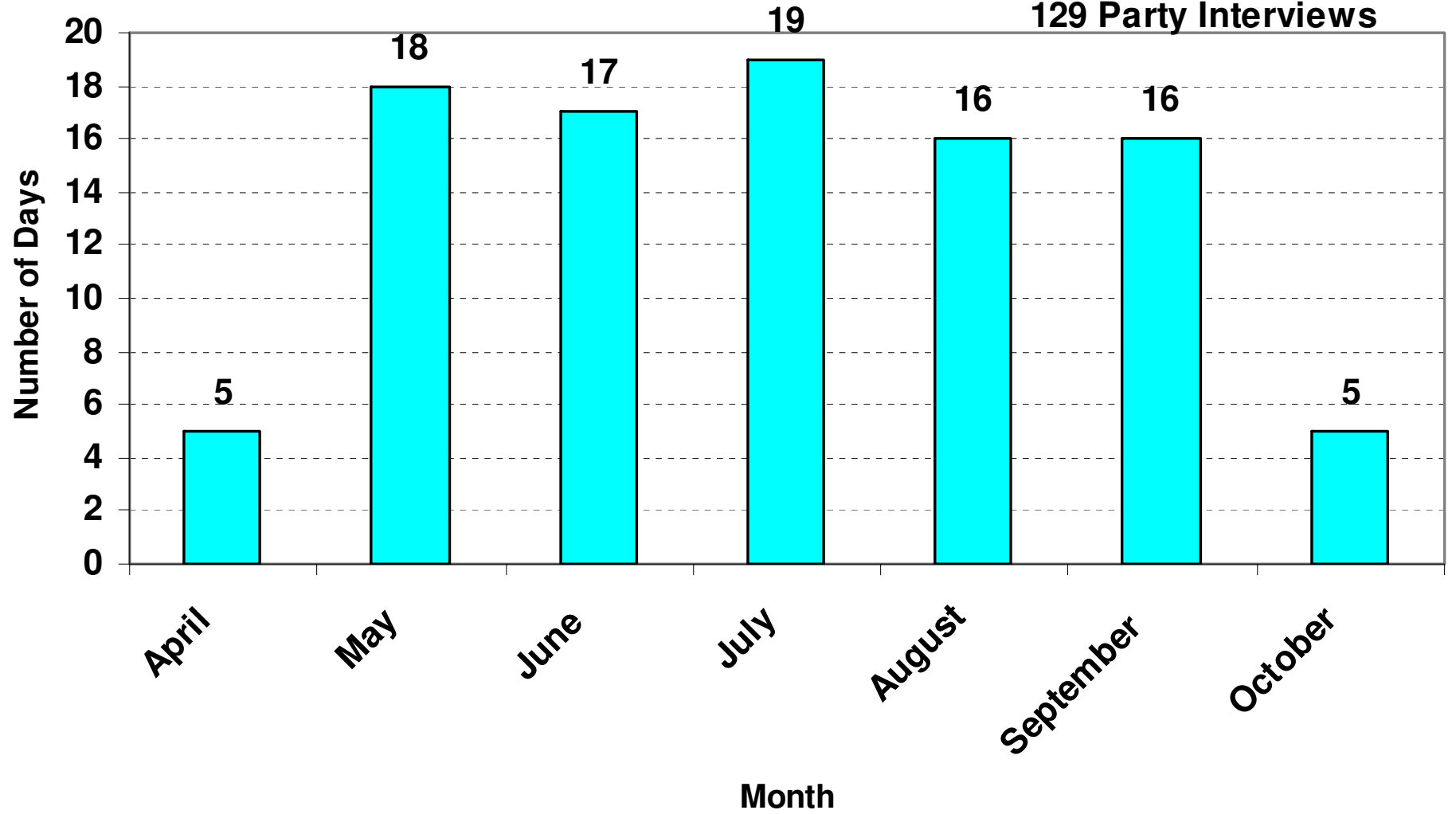
- Two JMU students were trained how to interview constituents and how to safely handle kayaks
- Clerks would launch at assigned time and place, float until encountering a fishing or rec party, conduct the interview, and continue to endpoint

Figure 2

Days on the Water

469 Individuals

129 Party Interviews





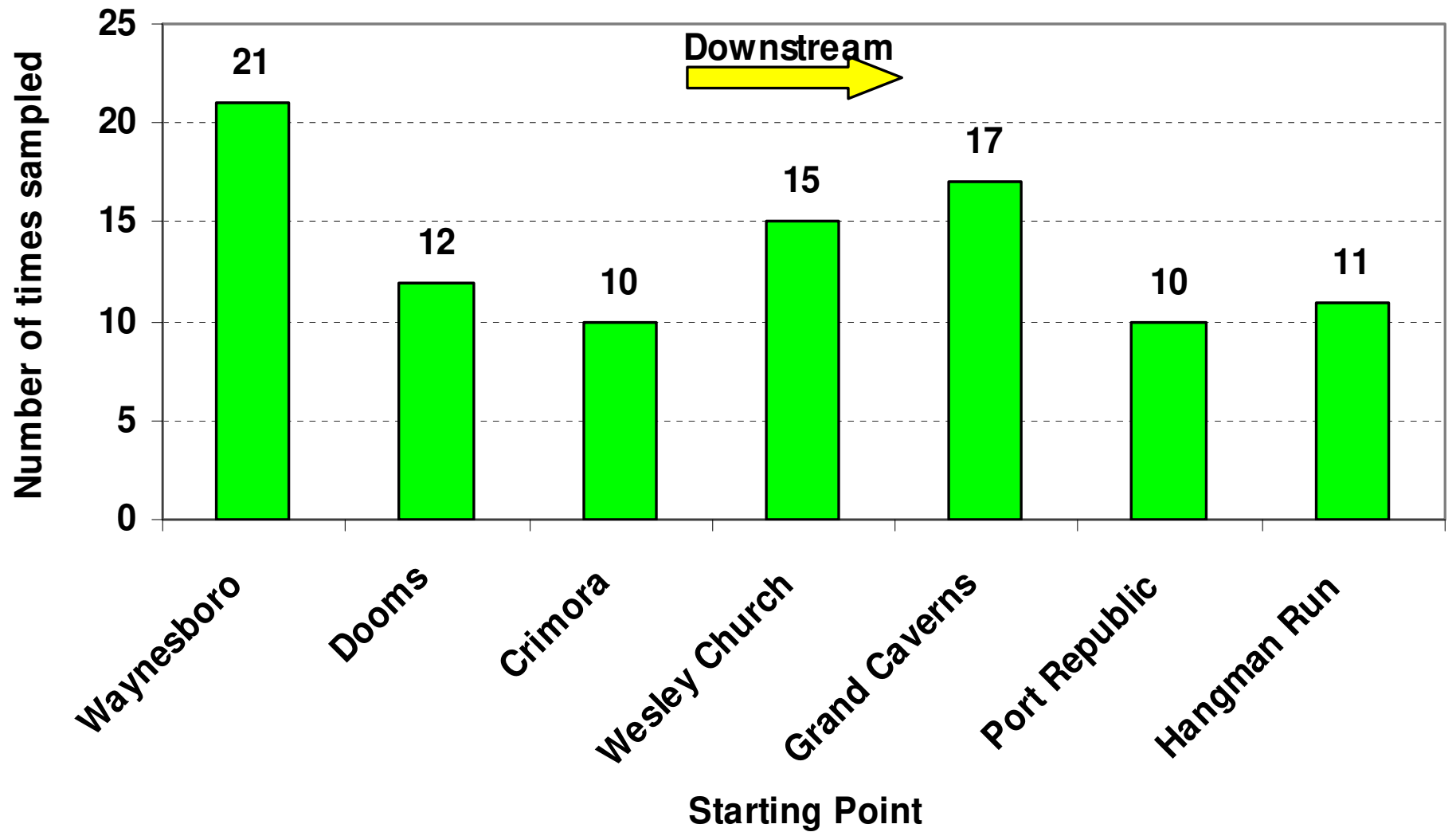
Conducting an angler interview

Location

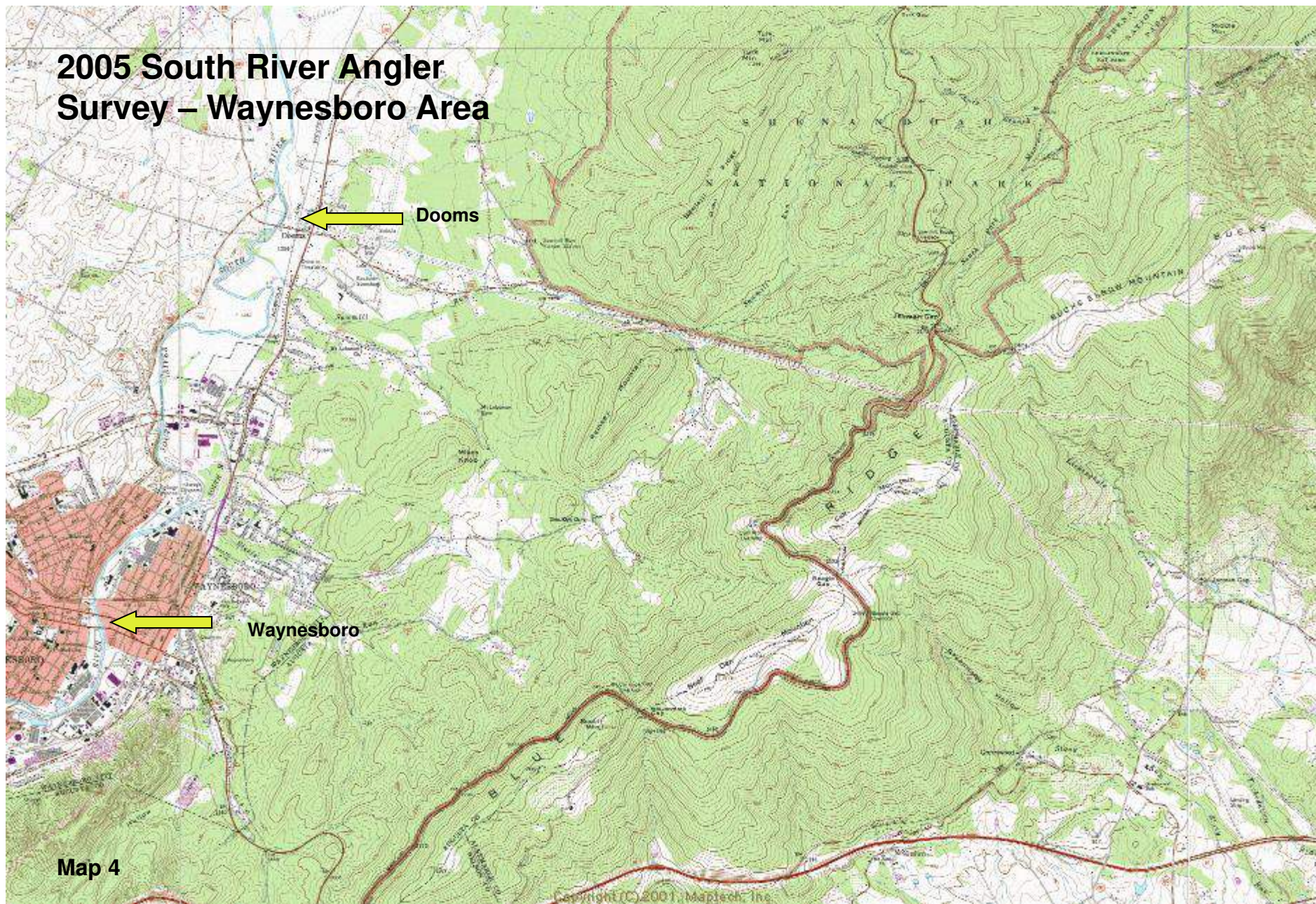
- Waynesboro to Island Ford – 34 river miles
- South River – 25 river miles
- Upper South Fork Shen River – 19 river mi
- Seven reaches sampled
- Average reach length – 4.8 miles

Figure 3

River Reaches Sampled



2005 South River Angler Survey – Waynesboro Area



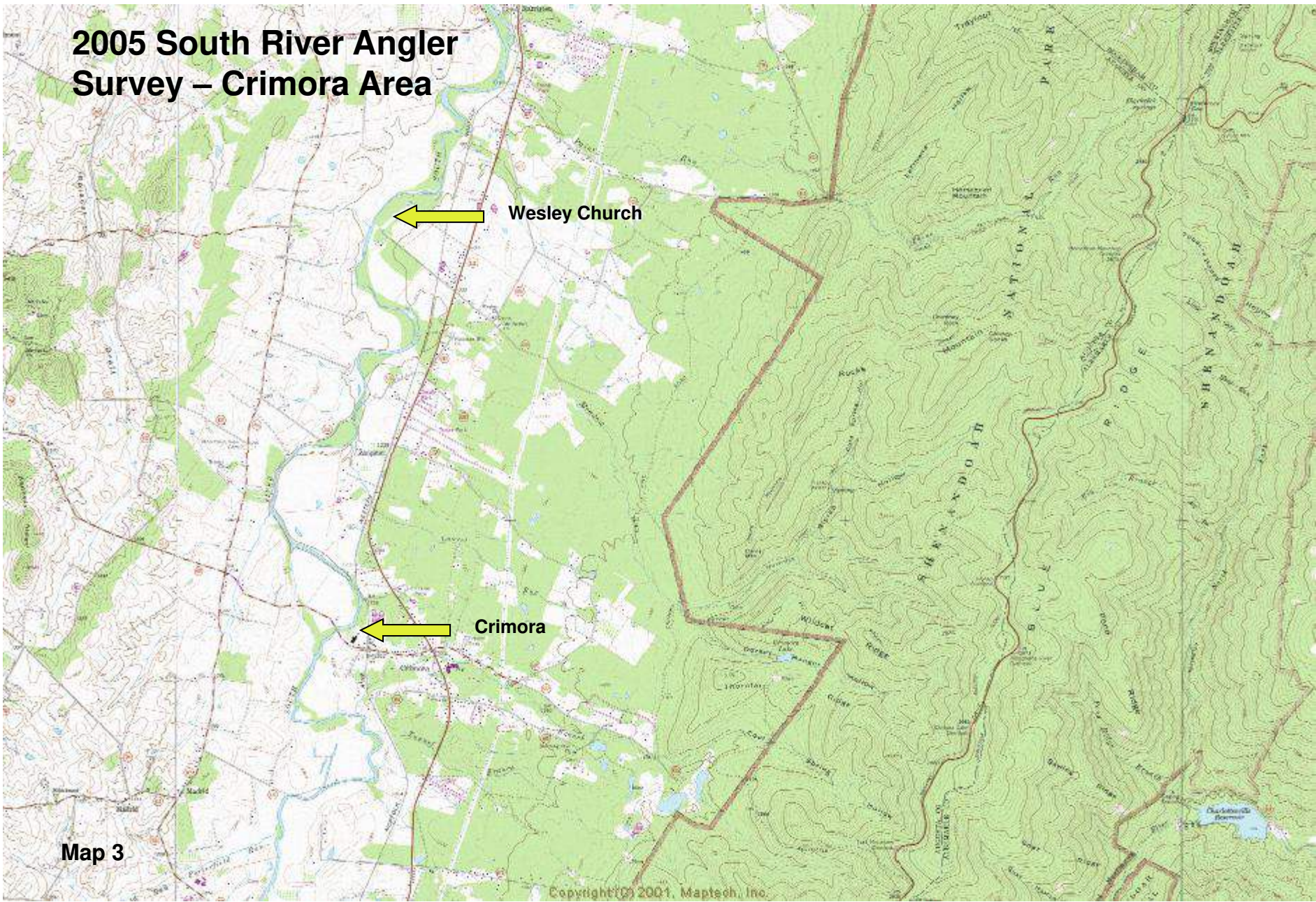
Map 4

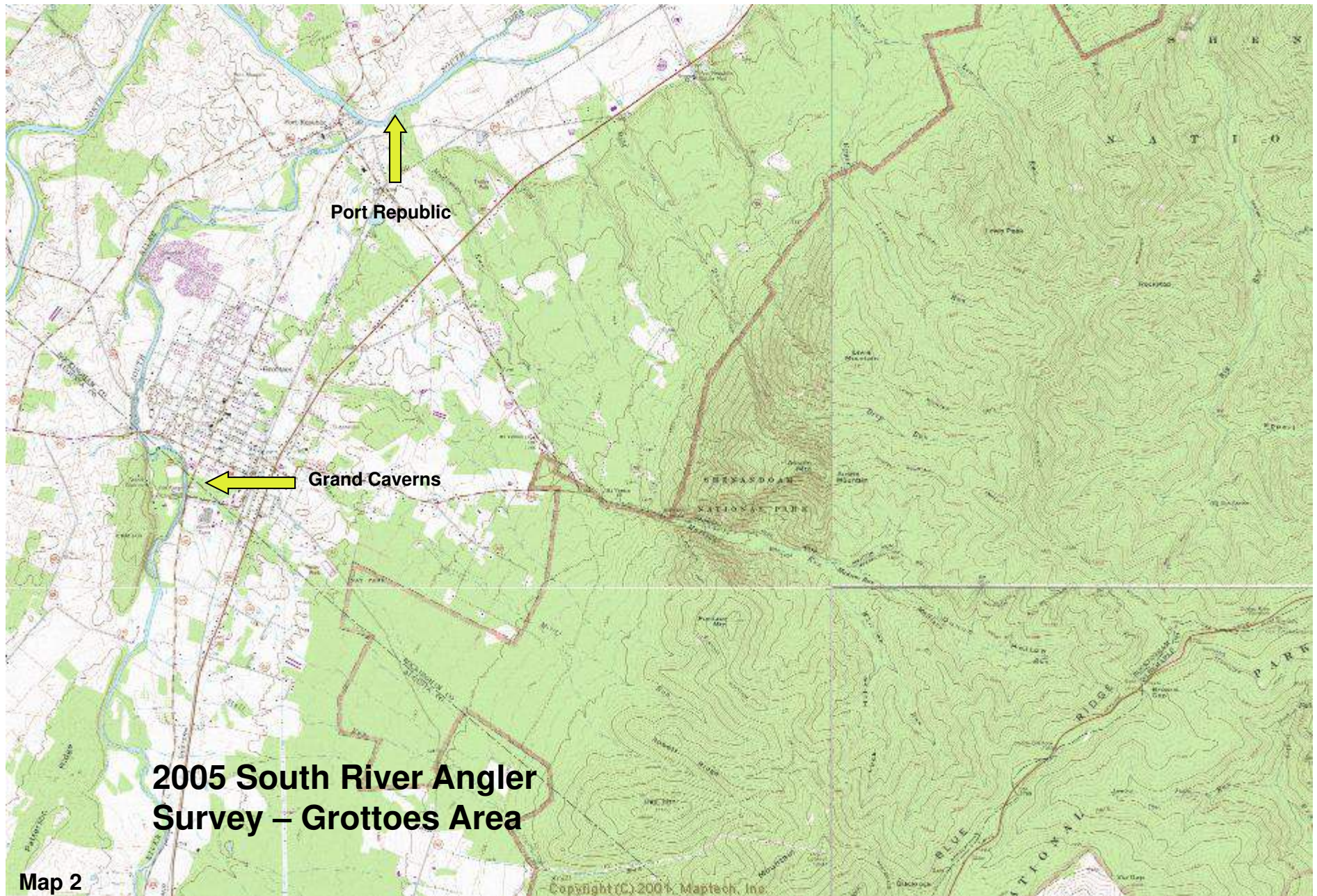
2005 South River Angler Survey – Crimora Area

← Wesley Church

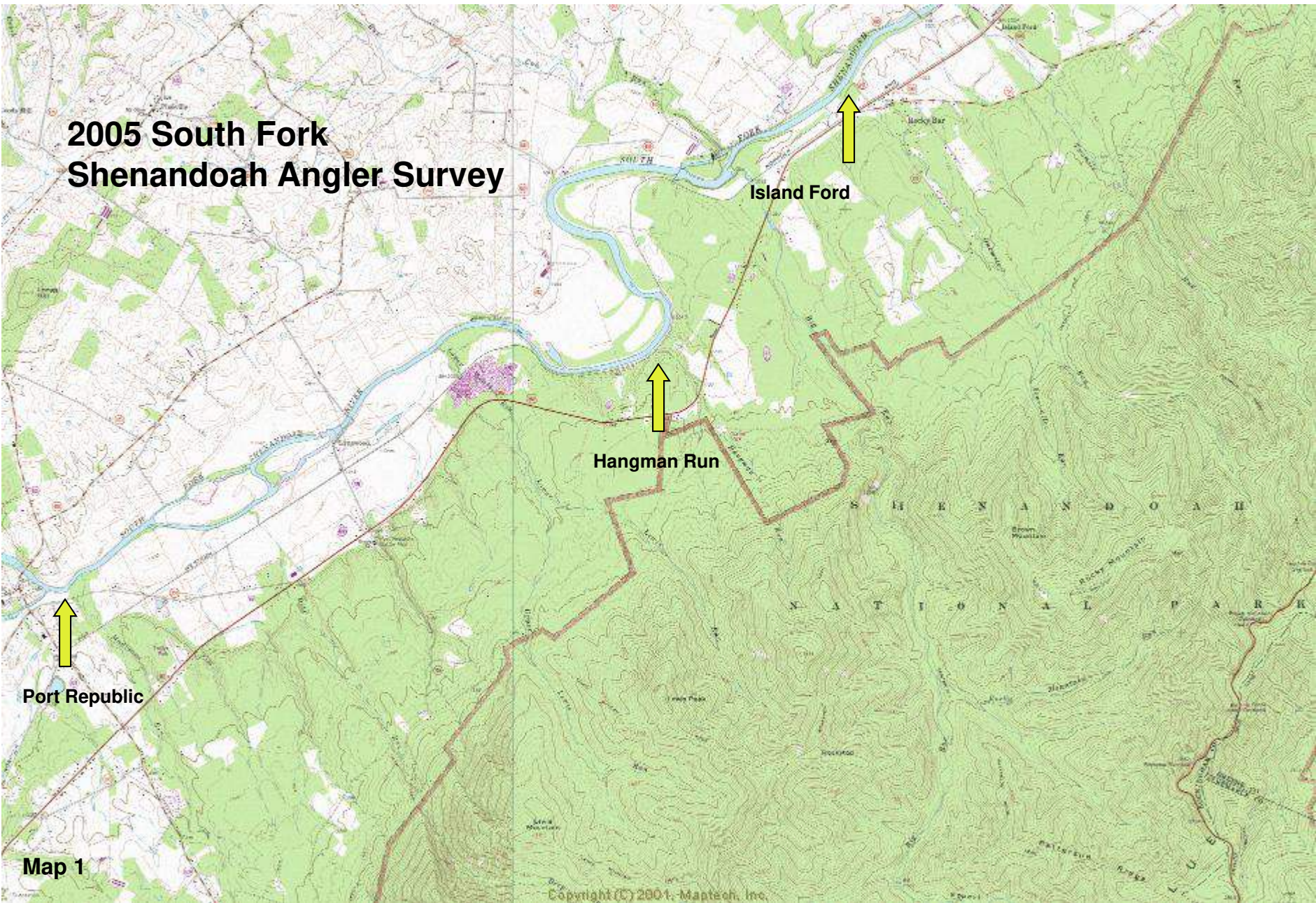
← Crimora

Map 3





2005 South Fork Shenandoah Angler Survey



Port Republic

Island Ford

Hangman Run

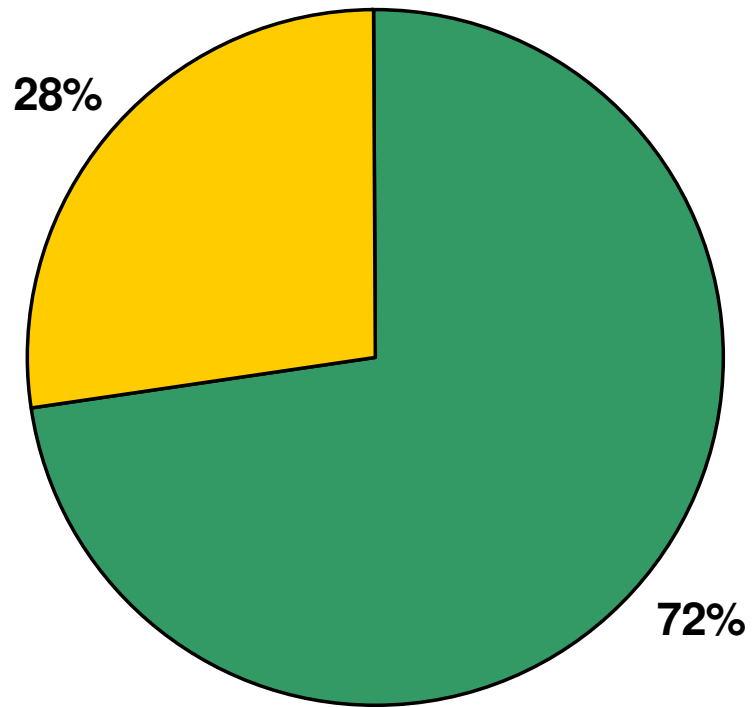
Map 1



Results

Angler Characteristics

Gender



■ Male ■ Female

Race

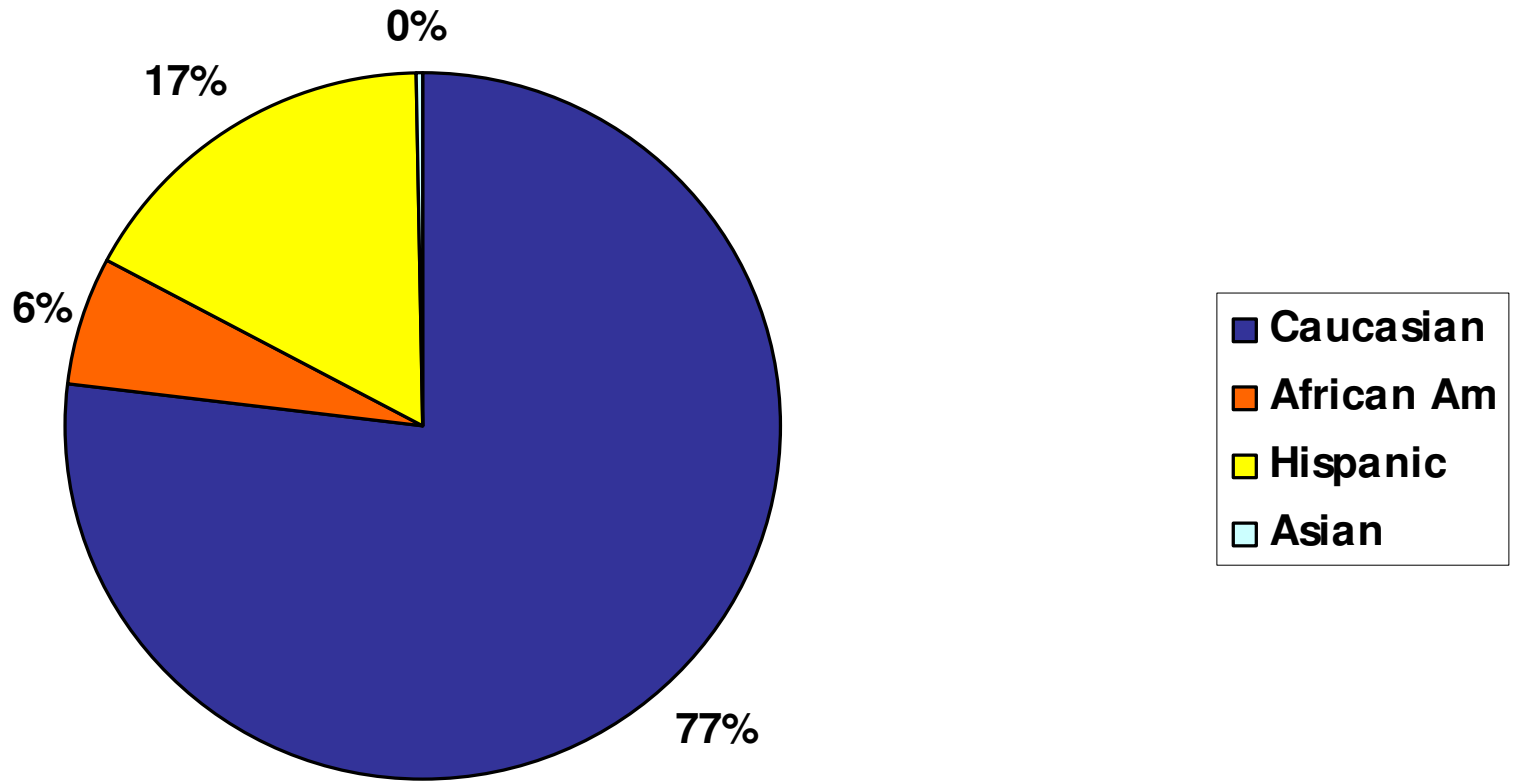
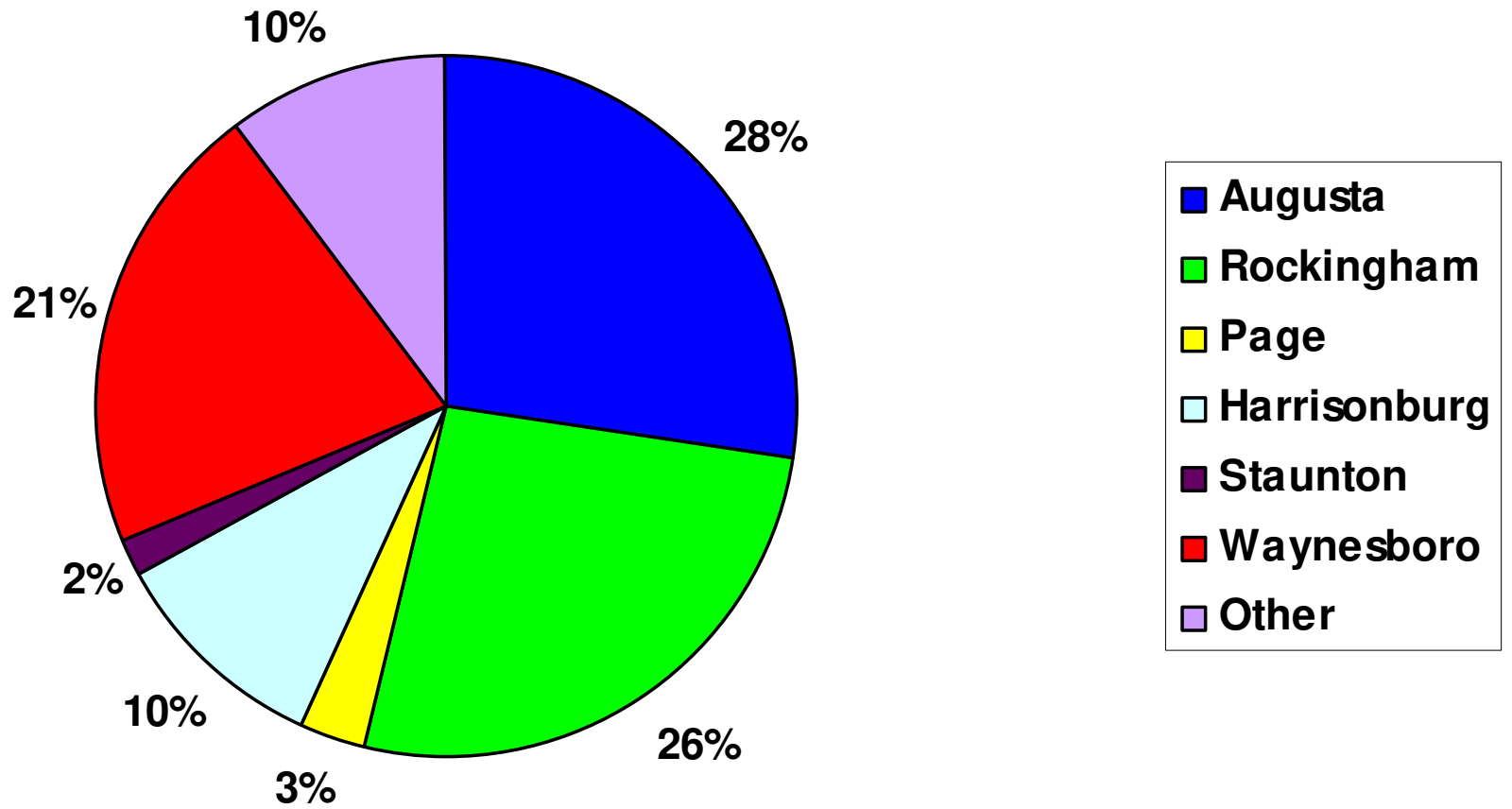
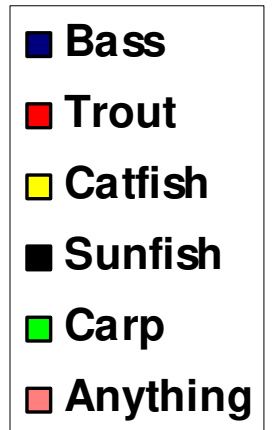
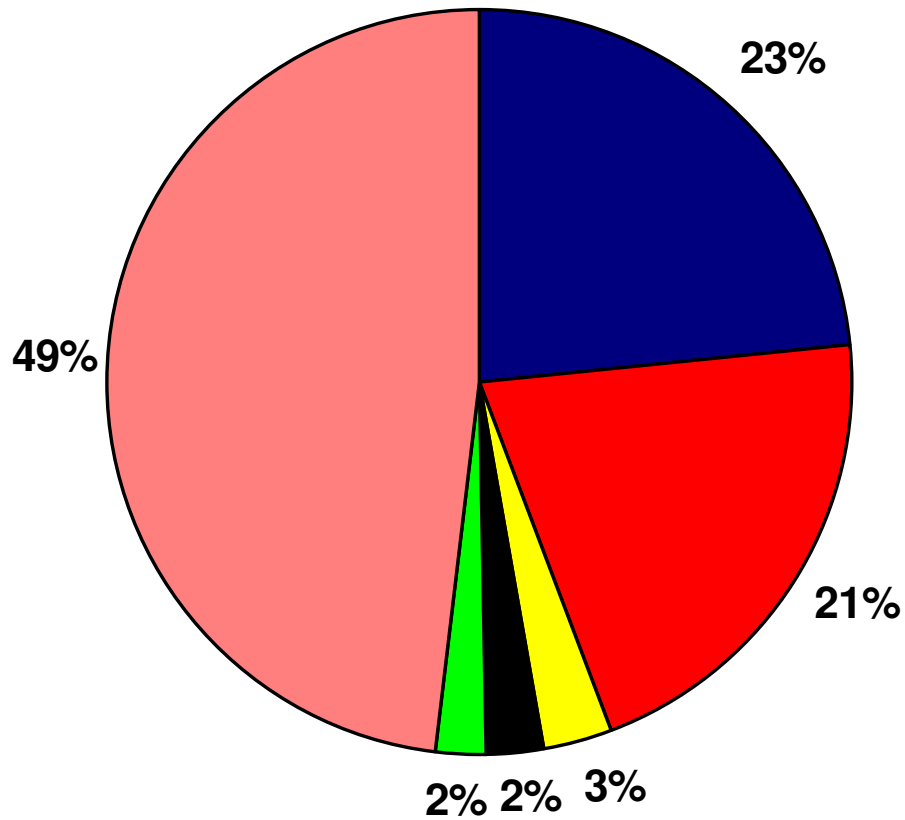


Figure 4

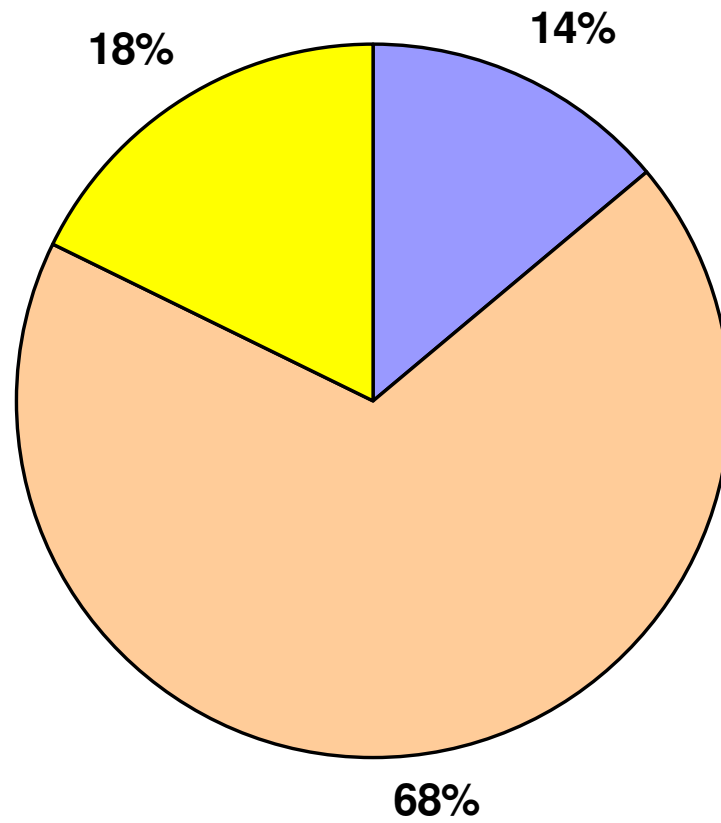
Where are you from?



What are you fishing for?



Do you fish from...?



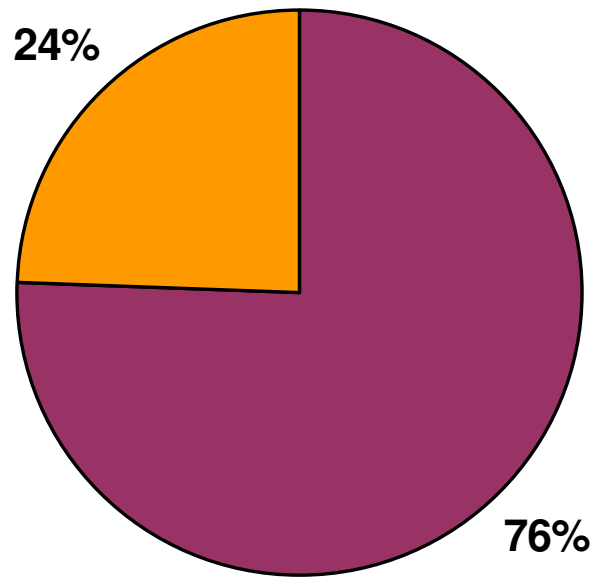
■ Boat ■ Bank ■ Wade



Results

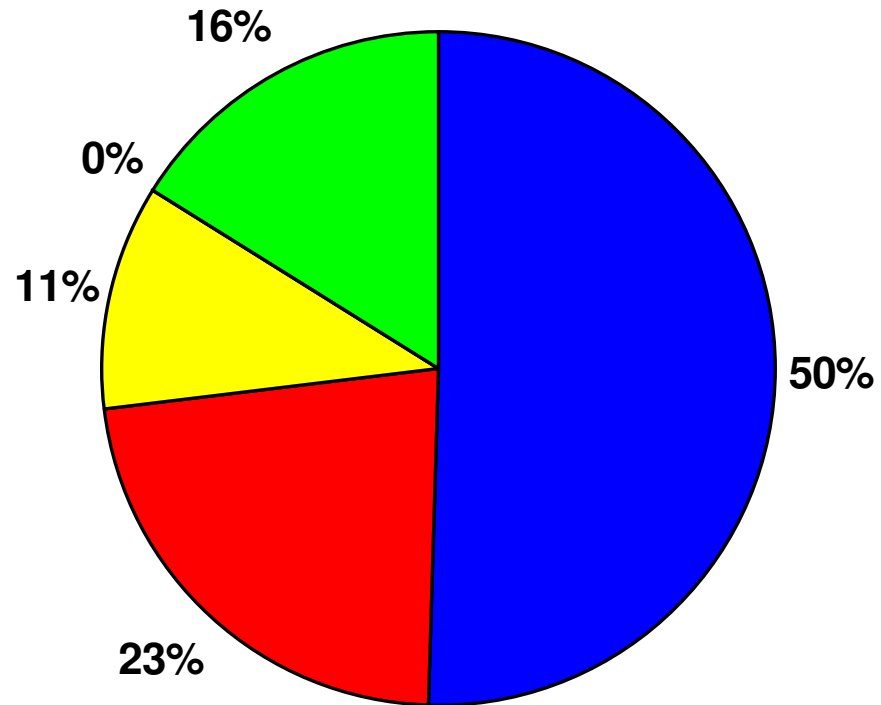
Consumption Advisory

Do you know about the advisory?



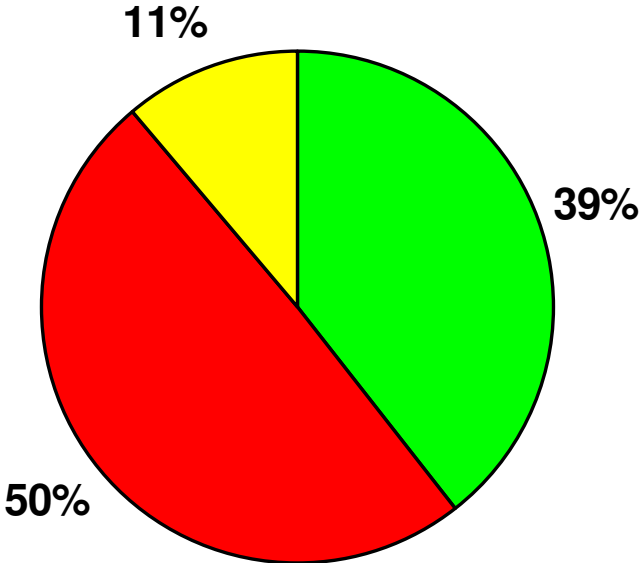
■ Yes ■ No

How do you know about the advisory?



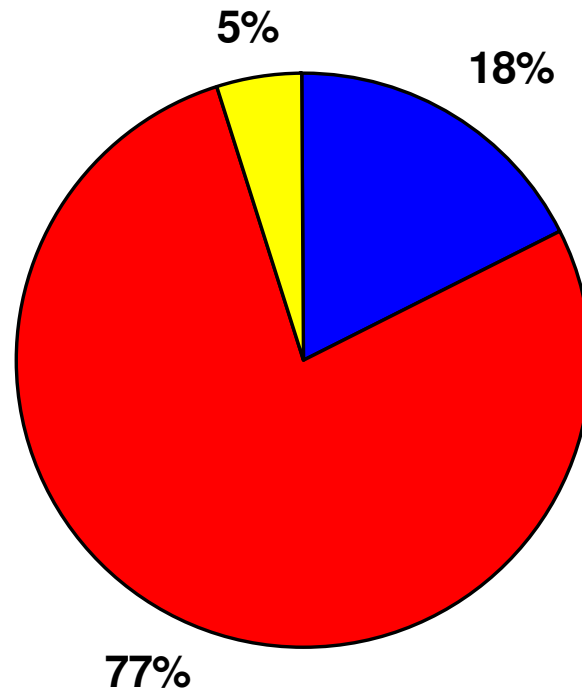
■ Signs ■ Word of Mouth ■ Newspaper ■ Radio ■ Other

Answered advisory question correctly?



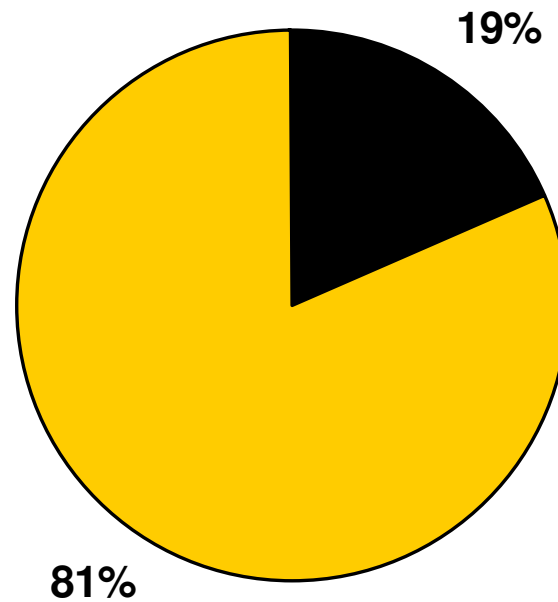
■ Correctly ■ Incorrectly ■ Unknown

Do you keep fish from South River?



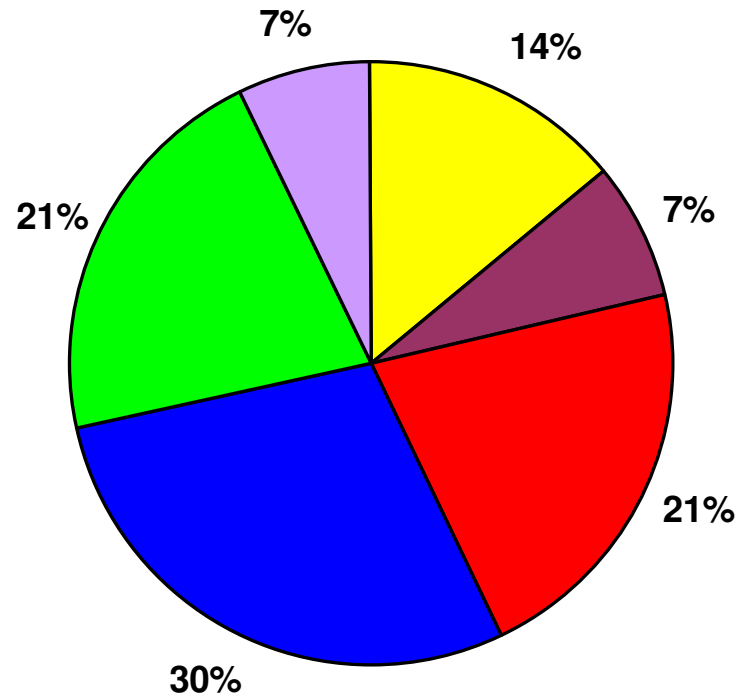
■ Keep ■ Release ■ Both

Do you eat fish from South River?



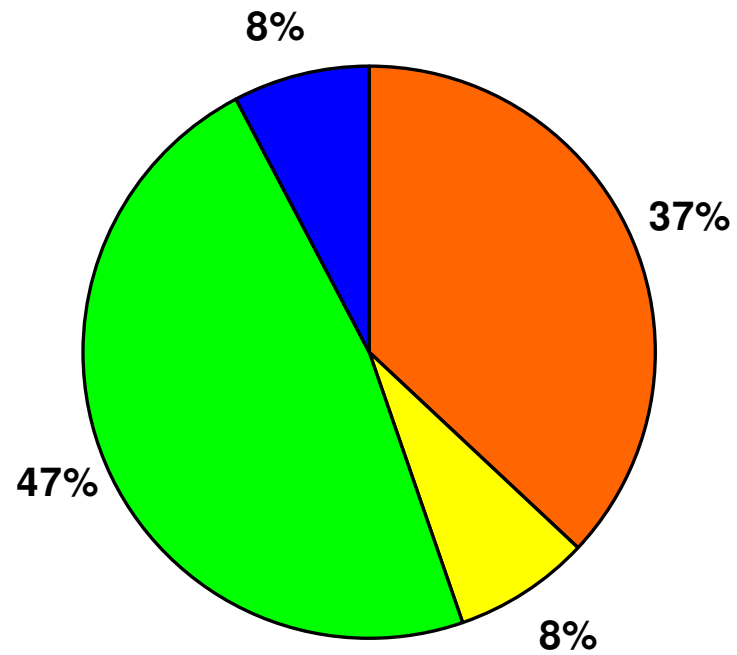
■ Yes ■ No

Recreational activities other than fishing



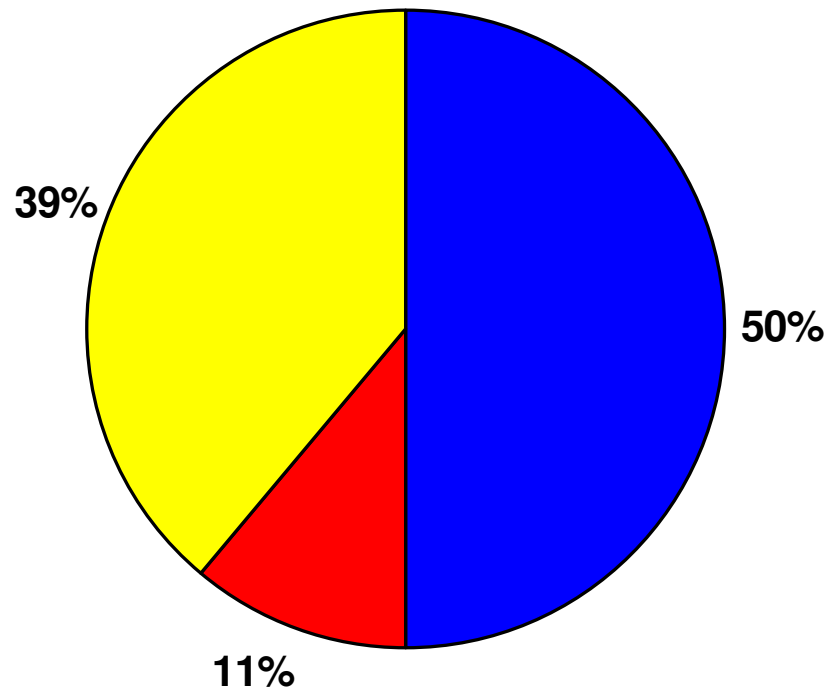
■ Wildlife Watching ■ Canoeing ■ Kayaking ■ Swimming ■ Tubing ■ Other

Why do you recreate here?



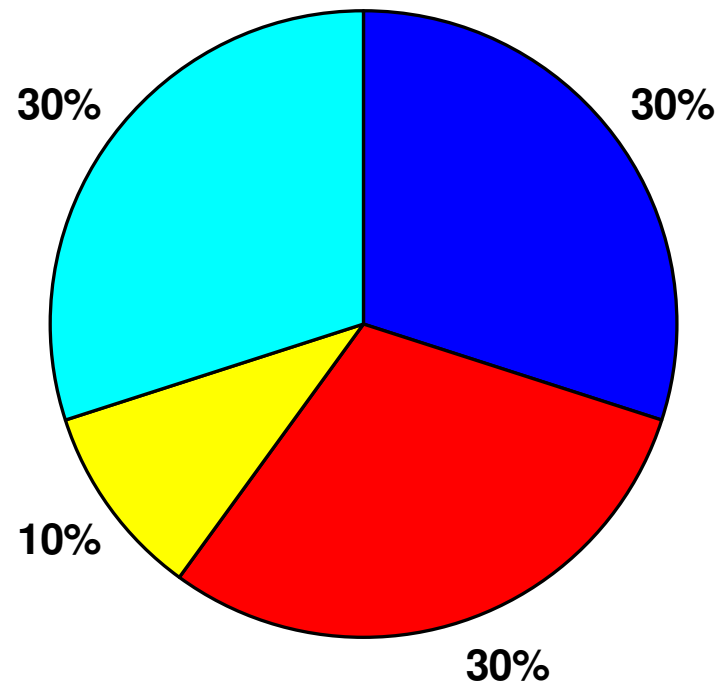
Close to home Scenery Both Other

What do you not like about South River?



■ Pollution ■ Litter ■ Other

How many times do you visit the river?



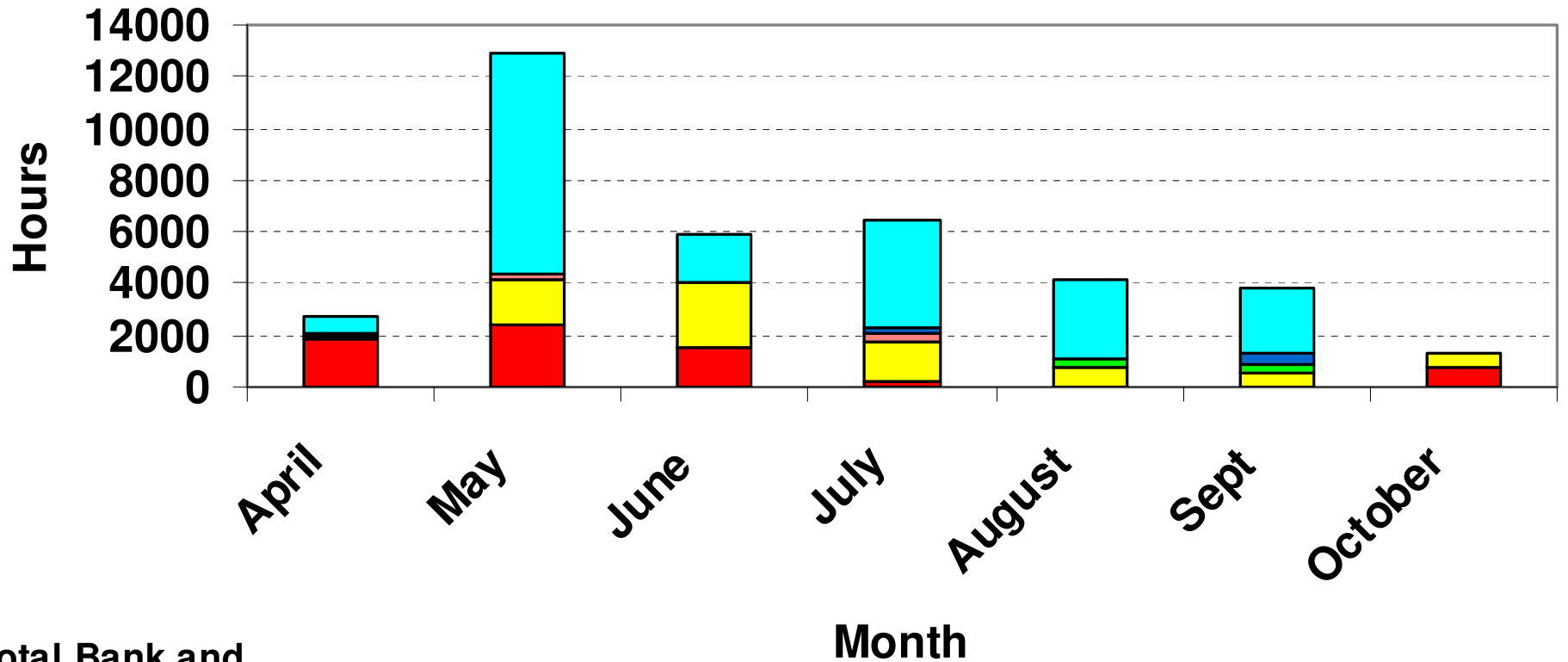
■ 1 to 5 ■ 6 to 10 ■ 11 to 20 ■ >20

Angling effort, catch, and harvest



AUG 23 2006

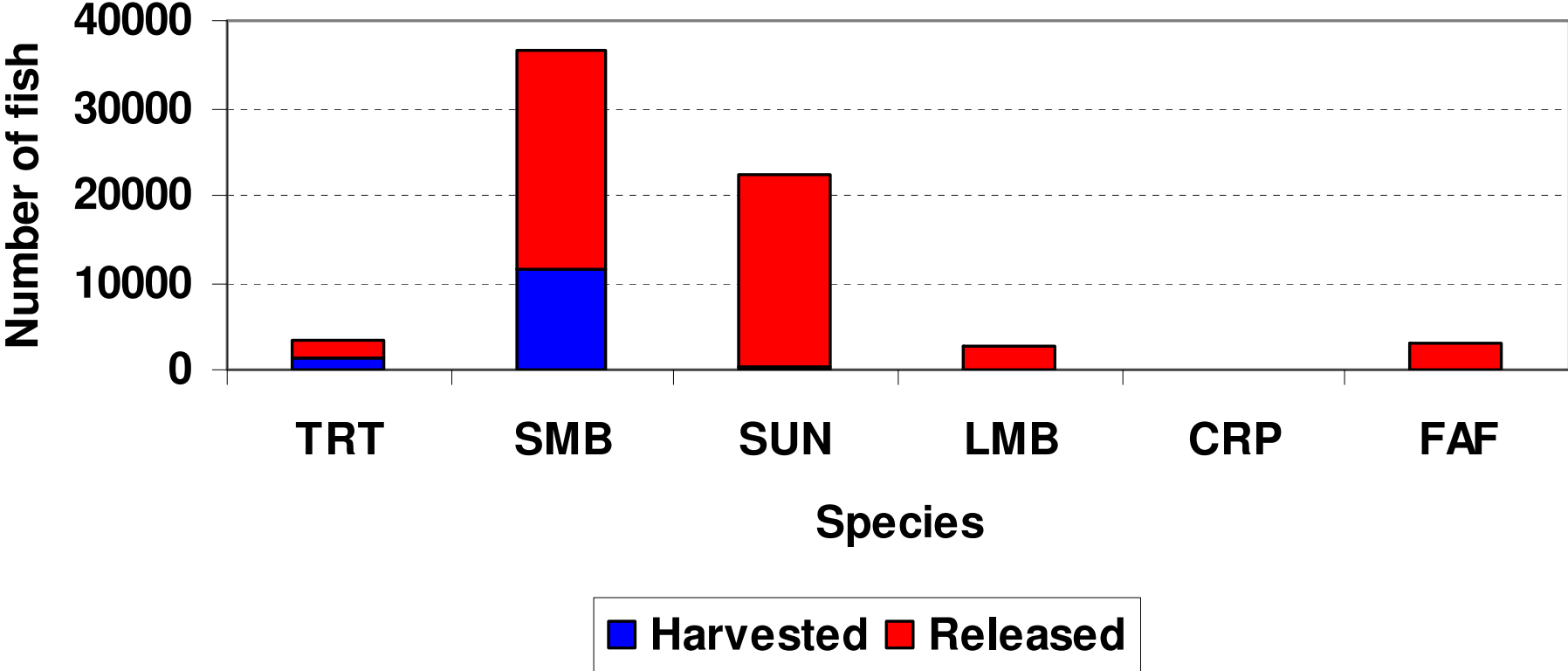
Fishing Pressure South River 2005



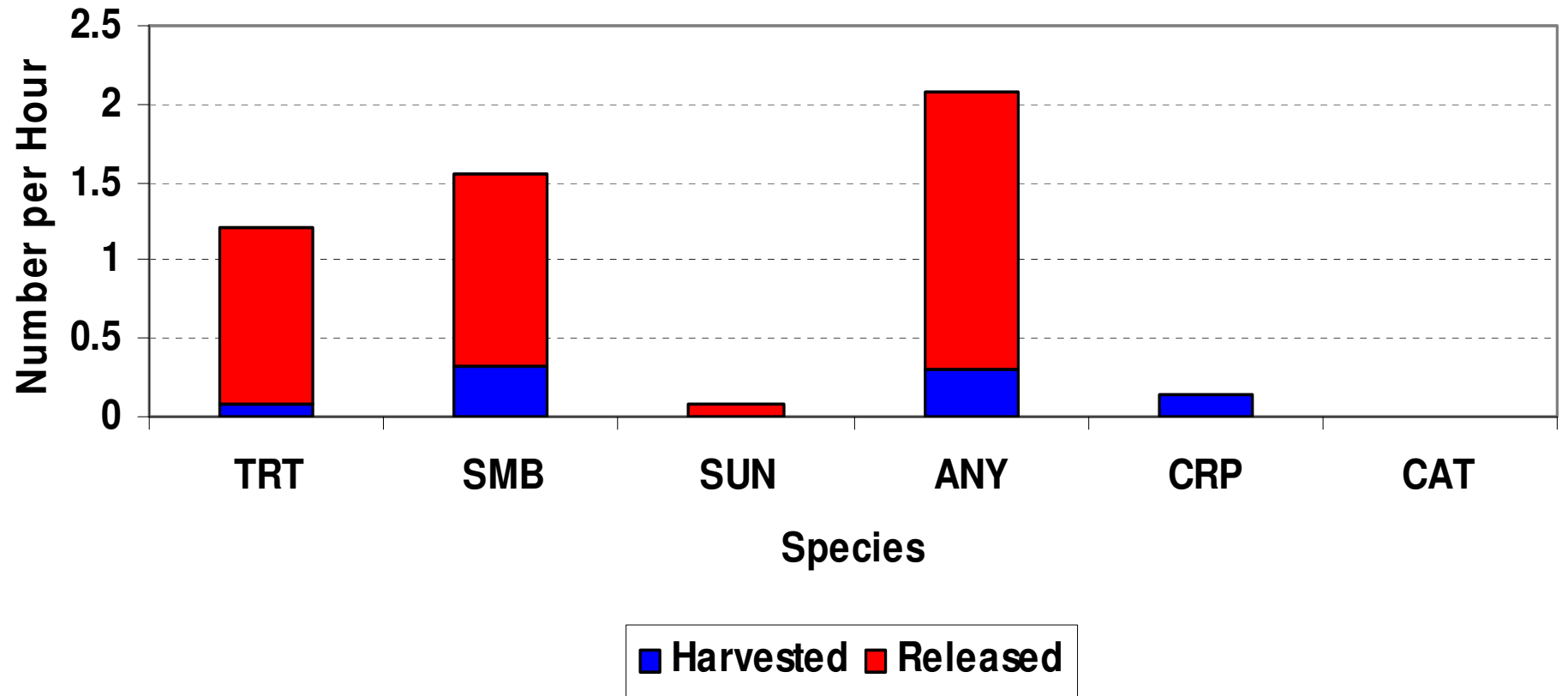
Total Bank and
Boat Effort =
36,345 hours

TRT SMB SUN CRP CAT ANY

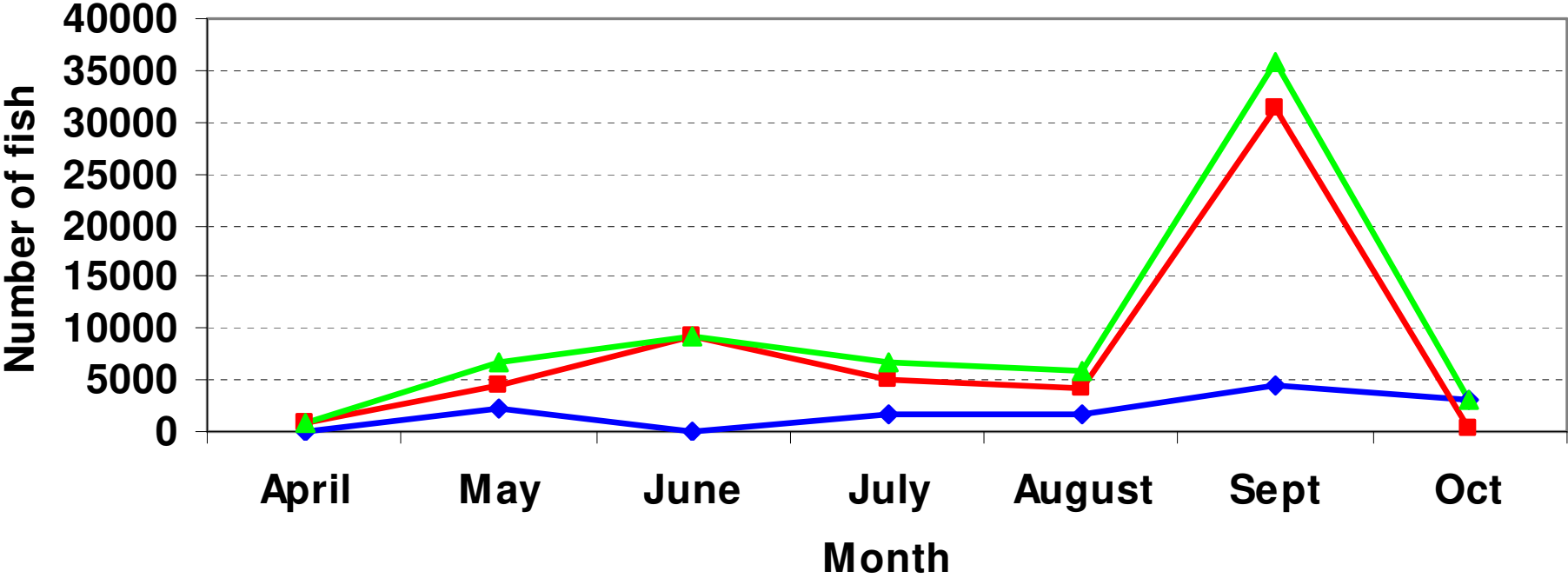
Catch and Harvest By Species South R 2005



Catch Rates by Species South R 2005



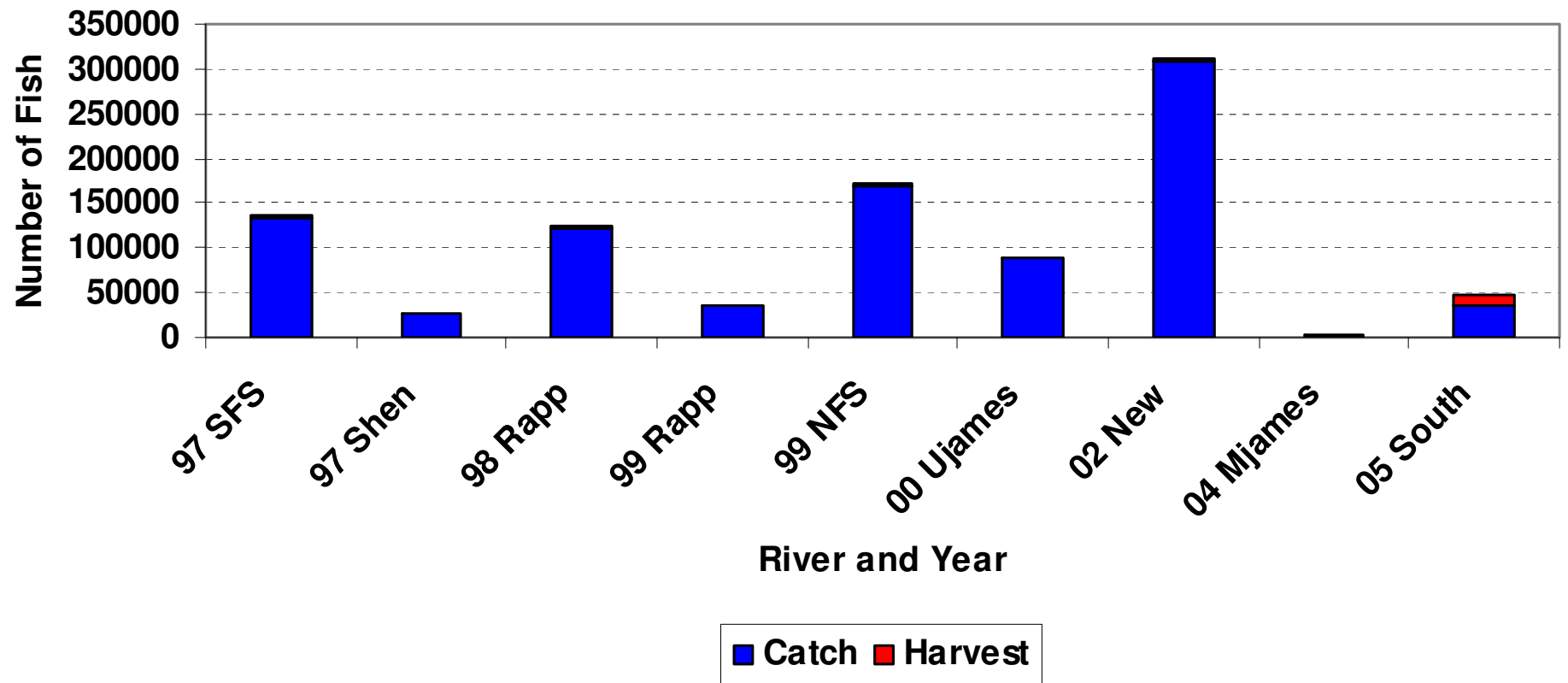
Catch and Harvest By Month South R 2005



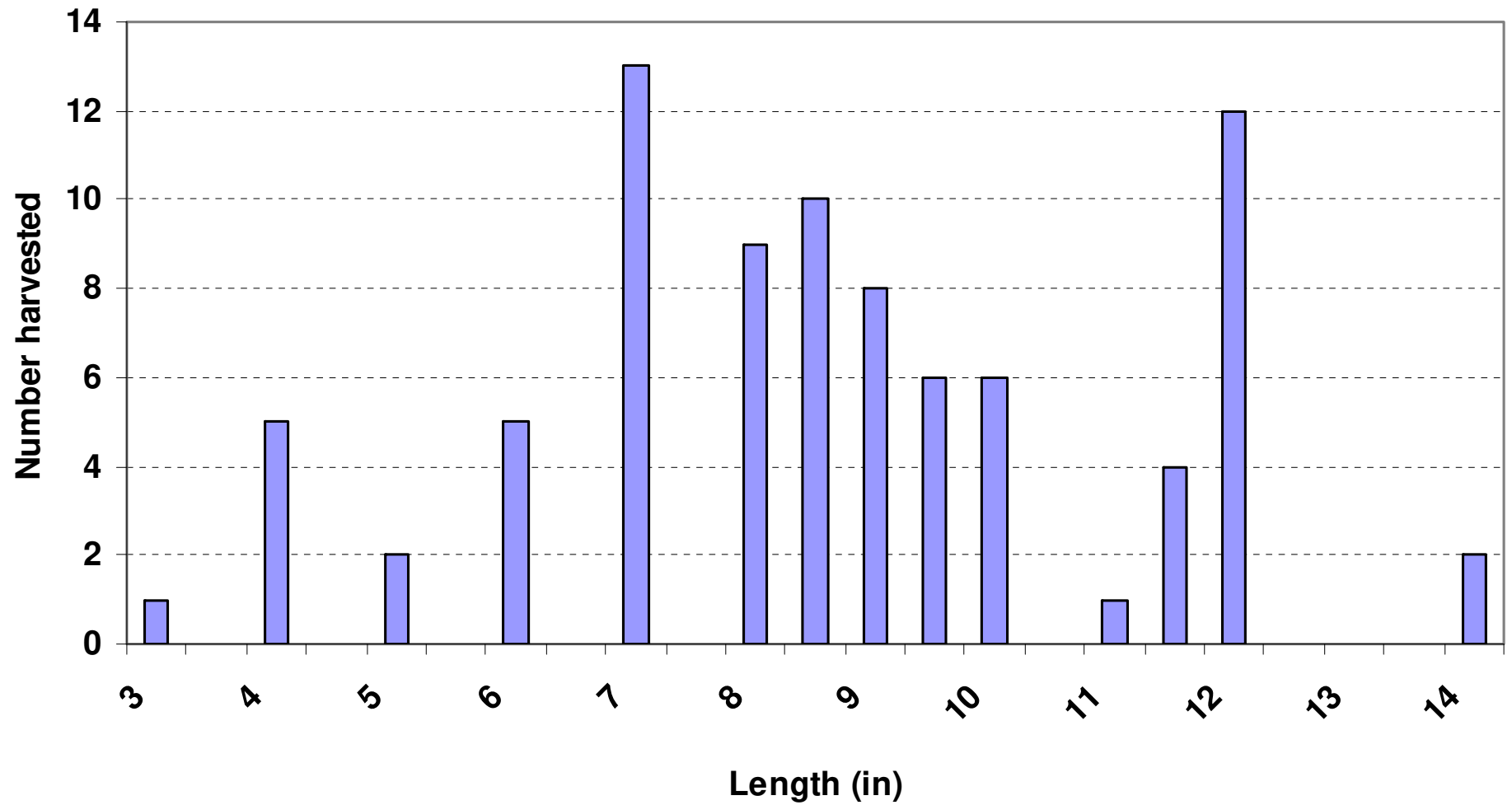
Bank and Boat



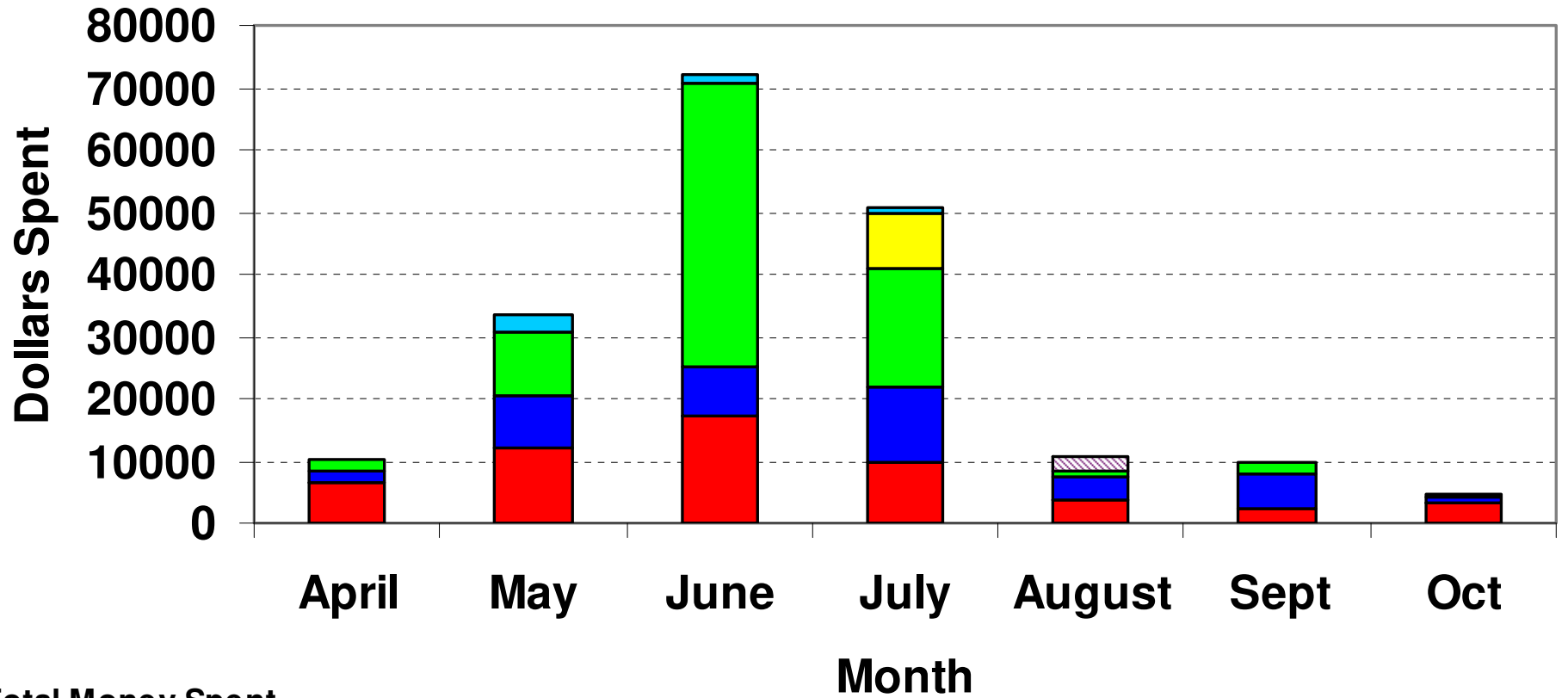
SMB Catch and Harvest Virginia Rivers



SMB Harvest Length Freq. Distribution



Angler Expenditures by Month South R 2005



Total Money Spent
Fishing in 2005 =
\$191,508

■ Gas ■ Food ■ Bait ■ Lodging ■ Equip Rent ■ Other



Summary

- This is a localized fishery that is moderately used
- SR Anglers contribute financially to local economy (\$200,000)
- SR Anglers are generalists and 75% release their catch (C&R ethic)
- Harvest of SMB is greater in SR than in other Virginia rivers
- Trout harvest rate is 37%

Summary

- Three of four anglers knew of the advisory, but less than half could correctly state it
- The advisory signs are working well
- Roughly 20% of anglers still eat fish in South River and Upper S. Fork Shen
- Water contact recreation amounts to over 50% of non-fishing use (\$2,415 spent)