

Moore, Philip

From: John Odenkirk [OdenkirkJ@dgif.state.va.us]
Sent: Tuesday, April 15, 2003 4:41 PM
To: Moore, Philip
Subject: Re: North Anna River below the dam

That is a good summary. There is a hard core group that fishes it pretty hard and at least one guide. The SMB are less abundant, but the size structure has been reported as excellent. We surveyed the NAR last summer at two sites and found good populations of SMB and LMB - more of the latter than we expected. Forage was limited. I would classify the fishing pressure as moderate, although I have no firm estimate.

>>> "Moore, Philip" <MooreP@ttnus.com> 04/15/03 11:12AM >>>
John,

Can you tell me anything about how heavily fished the North Anna River is below the Lake Anna dam? Based on my conversations with the Dominion guys, it is lightly used, by locals fishing from shore and canoes/kayaks. I've been told the locals use light tackle and fish for whatever takes their small spinners and baits --- smallmouth, largemouth, and redbreast being most important.

Does this sound like an accurate portrayal of the recreational fishery?

Do you do any managing of this fishery?

Thanks again for all your help,

Philip Moore

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Moore, Philip

From: Moore, Philip
Sent: Thursday, April 17, 2003 5:14 PM
To: Patterson, Karen
Cc: Oliver, James
Subject: FW: Lake Anna strippers

KP,

Item 1. Glenn forwarded the email below to Bob Graham, who called me today with his thoughts on the matter. He said that based on his experience (as a biologist and fisherman), Lake Anna striped bass in late summer tend to move to the area uplake of the plant and downlake of the "splits," which is actually the Upper Mid-Lake and Lower-Upper Lake, which is basically the areas of the reservoir into which Sturgeon Cr.-Contrary Cr.-Pigeon Cr flow.

Bob also advised me not to overestimate the influence of the North Anna R and Pamunkey Cr inflows at the head of the reservoir, said they dont influence the reservoir's thermal regimes as much as we probably think. He said they arent cool mountain streams flowing into the reservoir or anything like that. They are warm, turbid streams that flow into the shallowest part of the reservoir and mix quickly with the reservoir water. I think I had a mistaken notion that they were cool Piedmont streams, markedly cooler than water in the reservoir, and had more of an influence on conditions in the reservoir.

Item 2. Jim and I talked to Glenn Bishop today about Corbicula in the lower North Anna R. He said they were common in the river, but he was reluctant to make any sweeping statements about densities upstream vs downstream. He directed me to the old 316a study, which has good info, but unfortunately has ~~some~~ graphics on benthos abundance that I cant decipher. Nor can Mr Oliver. I did my best to interpret them.

We also talked to Cliff, Ping, Wang, Chang, Jud White, Bill Bolin, Tony Banks and others at various times today. But that's another story.

Phil M

-----Original Message-----

From: Moore, Philip
Sent: Wednesday, March 26, 2003 9:50 AM
To: 'Glenn Bishop'; 'Glenn_Bishop@dom.com'
Subject: Lake Anna strippers

Glenn,

Thanks for your telephonic support yesterday. I have been looking at the old NAPS 316a study, particularly the temp/DO profiles from 1984 and 1985 in Volume 2. I was kinda surprised to see that the stations/areas most likely to have some DO at mid-depths (I think it was 11 meters) in July and August were the mid-lake (HWY 208/Contrary Cr) stations rather than the more uplake stations where the streams enter the reservoir. So there's more here than meets the eye.

Does this square with your observations and experience? If so, would you care to speculate why?

Mr Odenkirk told me that the mid-lake area tended to show a more "classic" thermal stratification than the lower lake and upper lake but didnt really explain the significance of this vis-a-vis the strippers. I just took him to mean that stratification in the lower lake is disrupted by plant ops (intake and discharge) and stratification in the upper lake is disrupted by the stream inflows.

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Pulling these two strings, should I be thinking in terms of the mid-lake rather than the upper lake holding the stripers in late summer?

Any insights or theories you might have would be appreciated.

Phil Moore

Moore, Philip

From: John Odenkirk [OdenkirkJ@dgif.state.va.us]
Sent: Thursday, February 20, 2003 8:55 AM
To: Moore, Philip
Subject: RE: FW: Commercial fishing in Lake Anna and North Anna R.

I think the answer is "both". Heated mixing wanes as one travels upstream, and the two primary tributaries influence water quality around the splits. The stratification has always seemed to be a bit whacky there...I guess due to the above reasons. But, the most "classic" or stable profiles seem to be midlake (just below the splits to the plant), and that area usually holds summer habitat that, while not really good for adult STB, gets them over the hump.

>>> "Moore, Philip" <MooreP@ttnus.com> 02/19/03 04:15PM >>>
 Thanks, John. I guess as long as there's somewhere to retreat to, even if marginal habitat, they can make it. Do you think the uplake area provides acceptable year-round habitat because its outside of the influence of the heated discharge or because of Pamunkey Cr/North Anna R inflows? Both? Neither? If memory serves, it gets pretty dadgummed hot up there as well, if only because its shallower.

Thanks again.

Phil M.

-----Original Message-----

From: John Odenkirk [mailto:OdenkirkJ@dgif.state.va.us]
Sent: Wednesday, February 19, 2003 3:11 PM
To: Moore, Phillip
Subject: RE: FW: Commercial fishing in Lake Anna and North Anna R.

The sites that, for sure, did not have STB habitat during August 2002 were the dam and power plant. However, during this period; there was acceptable habitat uplake. I believe that this was similar to earlier years. To my knowledge, Anna has never had a STB die-off due to the ole' thermal/oxygen squeeze syndrome. The habitat is overall fair to good (just not great, hence no real trophy fishery).

>>> "Moore, Philip" <MooreP@ttnus.com> 02/13/03 03:27PM >>>
 Mr Odenkirk,

Perusing your large impoundment management reports for Lake Anna, I noticed (in the 1998 report) your intention to "evaluate summer striped bass habitat."

In your D-J report for April 2000 through March 31, 2001 you noted that "Acceptable striped bass habitat did not exist at several sites in July and August."

Could you, at least in general terms, tell me the areas of the lake that are problematic and the areas that appear to be OK? Have you defined or identified any thermal refuges? Have you seen any die-offs? Any insights you might be able to provide with respect to Lake Anna striped bass would be greatly appreciated. We (Tetra Tech) are assisting Dominion in the preparation of an environmental report for North Anna Power Station, and your management reports have been very helpful. <I know your next big (comprehensive) report is due out this spring, and Jim Oliver of our office has already asked you to send him a copy.>

When I worked for South Carolina Electric & Gas Co as a biologist (in the 1980s), we had terrible problems with late-summer striped bass die-offs in Lake Murray, a 50,000 acre impoundment near Columbia, SC. The thing that was so depressing was that the larger, older fish were the ones most

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affected, and the lakeshore was sometimes littered with carcasses of 20-30 pound stripers. I'm sure you know that loss of striped bass habitat in late summer is a fairly common problem in our neck of the woods (in the Carolinas and Georgia), even in reservoirs with no thermal (powerplant) inputs.

Thanks again for sending the various Lake Anna fisheries management reports.

If you would prefer to discuss this, my phone number is 803-649-7963 (X317).

Thanks,

Philip Moore
Tetra Tech NUS
Aiken, SC

-----Original Message-----

From: John Odenkirk [mailto:jodenkirk@dgif.state.va.us]
<mailto:jodenkirk@dgif.state.va.us>
Sent: Monday, January 13, 2003 9:47 AM
To: Oliver, James
Cc: bill_bolin@dom.com; jan_bateman@dom.com; Tony_Banks@dom.com; Moore, Philip
Subject: Re: FW: Commercial fishing in Lake Anna and North Anna R.

I believe that Phil's assessment is correct - no commercial fishing in Lake Anna or the NAR.

>>> "Oliver, James" <OliverJ@ttnus.com> 01/11/03 12:28PM >>>
This is a follow up to our phone call on December 20, 2002 regarding fishery data for Lake Anna. As I said, we (Tetra Tech NUS) are working with Dominion on some environmental reports for the North Anna Nuclear Station and I have had one of our biologists (Phil Moore) ask a question regarding commercial fishing. That was one topic we did not discuss in our phone call. I have attached his question below and would like to get your input.

Thanks again for the info you previously sent and when you complete your other larger report, I would appreciate receiving a copy.

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> -----Original Message-----
> From: Moore, Philip
> Sent: Friday, January 10, 2003 3:37 PM

- > To: Oliver, James
- > Subject: Commercial fishing in Lake Anna and North Anna R.
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- > Jim,
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- > All the biologists at Virginia Power (=Dominion) and everyone I've talked
- > to have assured me that there are no commercial fishing operations in Lake
- > Anna or downstream of the Lake Anna dam in the North Anna River.
- >
- > I presume you'd have to get pretty far downstream, probably to the
- > Pamunkey, before you find any commercial fishing operations. It's my
- > understanding that the Pamunkey Fish Hatchery, operated by the Pamunkey
- > Indians, raises and releases American shad in the Pamunkey River. I know
- > the Indians harvest these shad, but I don't know about non-Indians. I
- > presume this would be considered a "commercial" operation.
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- > Could you please ask Mr Odenkirk to verify that there are no commercial
- > fishermen working in Lake Anna or the North Anna River?
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- > Thanks,
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- > Phil
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