

VIRGINIA

DJ GRANT F-111-R-11, PROJECT 11

SMALL IMPOUNDMENT INVESTIGATIONS: Lake Gordonsville

April 1, 2002 to March 31, 2003

KEY FINDINGS

- Sampling collected 63 bluegill and 101 bass, reverse of what was expected
- Bluegill ranged from 3 to 8 inches with a good range in sizes, but catch rate (CPUE) for stock sized bluegill was 35 (well below the statewide 25 percentile), the PSD of 51 and RSD-P of 3 were both above statewide averages
- Bass ranged from 4 to over 23-inches with most size classes well represented, catch rate (CPUE) of 43 for stock sized largemouth basically met statewide averages and rate for larger fish exceeded average
- Bass PSD of 73, RSD-P of 43, RSD-M of 9 exceeded statewide averages
- Although weedy, lake is perfect habitat for bass
- Department personnel will resample in 2007

Lake Gordonsville Fisheries Management Report – 2002

Lake Gordonsville is one of the many smaller impoundments throughout Virginia that harbor excellent warmwater fish populations. This 72-acre lake was constructed in 1970 as a future water supply source for the Town of Gordonsville, a source that has never been utilized. Now managed by the Louisa County Parks and Recreation Department, with the Department of Game & Inland Fisheries providing fisheries management, the lake provides an excellent public fishing resource. Nestled in the beautiful, gently rolling hills of the Piedmont, Lake Gordonsville can be reached by taking Rt. 623 west from Rt. 15, several miles south of the Town of Gordonsville. The only facilities are a gravel parking lot and boat ramp and these are not well developed but they do provide adequate access for anglers.

Historically the Lake Gordonsville fisheries has consisted of the traditional selection of largemouth bass, bluegill, redear sunfish, and channel catfish, with an occasional chain pickerel thrown into the pot. Largemouth bass numbers and sizes were good but the bluegill population was overpopulated and the fish stunted. There has always been a good crappie population. In 1991, walleye were stocked in an effort to control the bluegill, but with the latest changes in the Department's walleye program, walleye are no longer stocked in many lakes and reservoirs throughout Virginia, including Gordonsville. Channel catfish have been stocked every other year since 1991.

Conditions at the lake in the spring of 2002 were ideal for collecting adult largemouth. Water lily and other water weeds cover almost the entire shoreline out to 15 or 20 feet. Although the water was very clear, many large bass were off the edge of the weed cover. Bream and small bass were collected in the shallow coves when the boat was able to access the shoreline. The entire upper end of the lake is a marsh and too shallow to sample with the equipment available.

In May of 2002, the fish population in Gordonsville Lake was sampled by boat electrofisher. Unlike historically, bass collections were better than ever. One hundred and one (101) bass were collected from 3 ½-inches to 23-inches and comparisons with other lakes throughout Virginia indicated that the bass population was excellent. More bass were caught than was typical statewide and the population structure (distribution of sizes) looked very good. Twelve bass were at least 20-inches in length.

The bluegill population may have reversed itself. Only 63 fish were collected and the catch rate for all size fish were below statewide averages. The bluegill structure was, however, about average. Thirty-two fish were at least 6-inches in length but only 2 were 8-inches. The poor showing for bluegill can, in part, be attributed to the difficulty of collecting this species in this lake. Bluegill prefer shallow water during this time of year and the weed beds along the shoreline made effective sampling almost impossible.

As is normal at most impoundments in Virginia, a small number of very large carp, catfish, and American eels were sighted during the sampling. No attempt was made to collect these species – the numbers usually collected by electrofishing are too small to determine true population dynamics.

Lake Gordonsville is an excellent impoundment to visit and wet a line for a day or two throughout the year. Word of the excellent bass fishery is out among the angling community and the parking lot tends to be full to overflowing on weekends during the

spring. A word to the wise – go on a weekday and/or save Gordonsville for fall fishing to avoid the crowds. Be sure to visit, however, the time will be well spent.

District: 9

Lake: Gordonsville

Year: 2002

HISTORICAL ELECTROFISHING POPULATION STATISTICS
(Numbers in parenthesis are statewide 50th percentiles)

		CPUE			Population Indices			
	Year	Effort (hours)	Stock (106)	Quality (32)	Preferred (0)	PSD (30)	RSD-P (0)	RSD-M (0)
Bluegill	2002	1.8	35	18	1	51	3	0
	1998	1.0	73	27	5	36	7	0
	1995	1.2	70	21	0	30	0	0
	1990	0.6	104	106	3	50	3	0
	1989	1.0	46	39	0	33	2	0
	1985	1.5	79	58	0	43	7	0
Largemouth Bass	Year	Effort (hours)	Stock (49)	Quality (17)	Preferred (7)	PSD (41)	RSD-P (14)	RSD-M (1)
	2002	1.8	43	31	18	73	43	9
	1998	1.0	72	38	7	53	10	3
	1995	1.2	65	24	9	37	13	4
	1990	1.0	38	24	3	39	6	0
	1989	1.0	81	15	--	13	2	0
	1985	1.5	36	3	--	7	0	0

District: 9

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Year:
2002

Length-Frequency Data for Bluegill and Largemouth Bass

	BLG	LMB		BLG	LMB
Length	Number	Number	Length	Number	Number
8	2		36		3
9	2	7	37		4
10	3	1	38		1
11	6		39		4
12	13	2	40		2
13	3	2	41		3
14	2	3	42		
15	6	1	43		5
16	7	1	44		
17	2	1	45		1
18	6	1	46		3
19	9		47		5
20	2	3	48		
21		4	49		2
22		1	50		
23		1	51		7
24		5	52		1
25		2	53		1
26		3	54		
27		2	55		
28		5	56		1
29		3	57		
30		3	58		
31		2	59		2
32		3	60		
33		3	61		
34		2	62		
35		5	63+		
			Total #:	63	101

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CPUE Data for Largemouth Bass and Bluegill

					Deviation from State Percentiles		
	Indice	Effort/hour	Sample Size	#/hour	25%	50%	75%
Bluegill	Stock	1.78	63	35	-32	-71	-154
	Quality	1.78	32	18	3	-14	-35
	Preferred	1.78	2	1	1	1	-3
	Memorable	1.78	0	0	--	--	--
	Trophy	1.78	0	0	--	--	--
Largemouth Bass	Stock	1.78	77	43	18	-6	-24
	Quality	1.78	56	31	21	14	2
	Preferred	1.78	33	18	15	11	7
	Memorable	1.78	7	4	4	3	2
	Trophy	1.78	0	0	--	--	--

Population Indice Data for Bluegill and Largemouth Bass

				Deviation from State Percentiles		
	Indice	Sample Size	Value	25%	50%	75%
Bluegill	PSD	63	51	36	21	4
	RSD-P	2	3	3	3	0
	RSD-M	0	0	--	--	--
	RSD-T	0	0	--	--	--
Largemouth Bass	PSD	77	73	49	32	14
	RSD-P	33	43	38	29	17
	RSD-M	7	9	0	8	5
	RDS-T	0	0	--	--	--

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Wr Values Data for Largemouth Bass

				Deviation from State Average Percentiles			
		Range	Sample Size	Value	25%	50%	75%
Largemouth Bass		19 (cm)	10	92	7	3	-4
		20-29 (cm)	16	97	13	9	4
		≥ 30 (cm)	7	86	-1	-6	-12
Bluegill		0-7 (cm)	0	0	-37	-82	-101
		8-14 (cm)	19	91	5	-2	-10
		≥ 15 (cm)	22	87	1	-6	-13

Age and Growth Data for Largemouth Bass
(Frazier-Lee Method)

		Age	I	II	III	IV	V	VI	VII
Largemouth Bass	Sample Size (N)		32	21	15	12	4	2	--
	Length (mm)		117	213	259	291	305	329	--
	Deviation from State Means		-9	-26	-56	-87	-125	-143	--
Bluegill	Sample Size (N)		39	39	39	31	25	21	6
	Length (mm)		49	86	115	139	160	172	182
	Deviation from State Means		7	-2	-13	-16	-12	-13	-13