

MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS
FISHERIES DIVISION

JOB PROGRESS REPORT

STATE: Montana PROJECT: Statewide Fisheries Investigation

PROJECT NO: F-46-R-6 STUDY TITLE: Survey and Inventory of
Warmwater Lake

JOB NO: IV-D JOB TITLE: Southeast Montana Warmwater
Lakes Investigations

PROJECT PERIOD: July 1, 1992 through June 30, 1993

REPORT PERIOD: April 1, 1992 through March 31, 1993

ABSTRACT

Small fishing reservoirs in 10 counties were sampled for fisheries information in 1992. A total of 46 reservoirs were sampled. Four of these had never been planted and were visited only to determine fisheries potential. Most reservoirs are maintaining significant populations of target fish species, although water levels are very low in some reservoirs because of lack of runoff and winterkill is likely.

OBJECTIVES AND DEGREE OF ATTAINMENT

1. To maintain fishing for suitable species in the 84 small reservoirs presently under management and new reservoirs added. This objective was met, as evidenced by fish populations sampled. Results are shown in Table 2 of the RESULTS AND DISCUSSION section.
2. To add 40 new reservoirs to the number of ponds supplying public fishing. Two new ponds were added to the public fishing booklet during the report period.
3. To keep the angling public informed of pond fishing opportunities. Two thousand five hundred copies of an updated booklet for public distribution were printed in March 1993.

PROCEDURES

Pond depths were determined by sounding with a calibrated rope and a weight. Fish populations were sampled with 125 feet long sinking experimental gill nets and a 1/4 inch mesh bag seine of 100 feet length.

RESULTS AND DISCUSSION

Survey of New Ponds

Four new ponds were surveyed to determine suitability for producing fishing (Table 1). The Burgess and Williams ponds were too shallow to winter fish. Largemouth bass were planted at the Boggs and Singleton ponds in 1992.

Survey of Previously Planted Reservoirs

Carter County

Relatively few trout were sampled at Gardner #1 Reservoir, but green sunfish remain abundant. Fish were first planted at Gardner #2 Reservoir in 1991. Bass growth has been fair, but perch have grown well and seem to be present in good numbers. Smallmouth bass overwintered at LaBree Reservoir, but growth was only fair. Few trout were sampled at Sidney Reservoir, but some are reaching a large size. Perch are abundant, but relatively small at Talcott Reservoir. This pond is low and a perch winterkill is likely.

Custer County

Pat Beardsley Reservoir is continuing to grow large trout and this BLM reservoir remains popular with anglers. Only small largemouth bass were sampled at Dan Haughian Reservoir, but northernns were larger. Trout are doing well and reaching a large size at the Haughian trout pond. Only seine haul samples were collected at Spotted Eagle Reservoir. Several species of interest to anglers are present, but most fish are small.

Dawson County

Two size class of rainbow trout, from spring 1991 and 1992 plants, were present at Burman Reservoir. River fish have been present in Hollecker Pond since 1986 when it was refilled with Yellowstone River water obtained from the adjacent irrigation ditch. Desired species are small and not abundant. I've discussed, with the Hollecker Pond Board, the possibility of a fall draw-down to kill existing fish and the need to refill the pond with tight screening to prevent entrance of undesired fish species. Lindsay Reservoir again has large perch following replanting, but winterkill is a continuing possibility at this shallow reservoir.

Fallon County

Largemouth bass seem to have completely failed at Baker Lake and no further plants are planned. Yellow perch and bullheads are still reaching good size. South Sandstone has good numbers of larger walleye and northern pike, but most perch are too small to interest anglers. The shoreline growth of aquatic plants has become very

heavy by mid-summer, making shore fishing almost impossible. Meccage Reservoir now has yellow perch from an unknown source. No trout from 1991 or 1992 plants were found. Trout from the 1992 plant only was found at Pinnow Reservoir and it is probably too shallow to winter fish. Rush Hall Reservoir seems to have bass only from the 1992 plant. This pond is very low. I plan to plant rainbow trout in 1993.

Garfield County

The following trout ponds are doing well, all having larger, overwintered trout. L.C. Brooks, Ralph Clark, Rod Coulter, Norman Olson, Smith Cattle Trout and Doug Watt. Trout from only the 1992 plant were found in Ray Beecher Reservoir, suggesting winterkill in early 1992. Largemouth bass are persisting at both the Smith Cattle and Harbaugh bass ponds, but larger bass were not sampled.

Powder River County

Only Yonkee Reservoir was sampled. Despite fingerling rainbow trout plants in 1991 and 1992, no fish were sampled. Spring trout plants seem to be dying before mid-summer, but there is no obvious explanation.

Prairie County

Green sunfish are persisting at Clark Reservoir and trout growth is poor. The spring 1992 trout plant either failed to survive or was still too small to be collected by the smallest mesh in the gill net on July 15. Overwintered trout were not as large as in previous years. This pond is in need of rehab. Harms Reservoir failed to overwinter any trout from 1991, only the 1992 plant was present.

Richland County

Gartside Reservoir has performed well following initial fish planting in 1991. Growth of all planted fish has been good. Green sunfish, channel catfish and white suckers were not planted but probably entered the reservoir from the drainage upstream. Forage will probably be sufficient to support some northern pike and walleye by 1993.

Larger bluegills seem to no longer be present at Upper Lone Tree Reservoir, but walleye are abundant. Some are larger than 1000 grams.

Yellow perch were not found at Walter Buxbaum Reservoir, but will be replanted in 1993 if the water level rises significantly. Trout

growth is poor at Wilmer Buxbaum Reservoir and Wicks Reservoir because of illegally planted yellow perch. Largemouth bass, from a previous plant, were not found at Cayko Reservoir, but will be replanted in 1993.

Rosebud County

Castle Rock Reservoir continues to maintain excellent fish populations. Significant numbers of bluegill exceed 200 mm length and 200 grams in weight. Abundant, stunted northern pike may be an important factor in maintaining bluegill size. Walleye, smallmouth bass and largemouth bass are also abundant.

Largemouth bass from the 1991 plant at the two Lee Reservoirs survived the first winter and grew quite well. Rainbow trout were not sampled at Zemple Reservoir and largemouth bass are present from an unknown source.

Only one of the two Hook Reservoirs overwintered trout.

Wibaux County

Bannister Reservoir still has largemouth bass but will probably not winter fish again without an increase in water level. Houck Reservoir now has a fairly long history of failure to winter fish and will not be replanted.

Prepared by: Phillip A. Stewart

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Waters referred to:

Baker Lake	21-1778
Castle Rock Lake	21-2527
South Sandstone Reservoir	21-8775

Keywords

small reservoirs	yellow perch
largemouth bass	black bullhead
smallmouth bass	northern pike
rainbow trout	walleye

Table 1. Results of new pond surveys in 1992.

Pond Name	County	Location			Max. Depth (Feet)	Fish Species Present	Management Plan
		T	R	S			
Burgess, Dan	Garfield	20N	41E	4	6	walleye yellow perch fathead minnow	Don't plant
Boggs, Jeff	Rosebud	5N	44E	4	18	None	Plant large- mouth bass
Singleton, Doug	Custer	9N	52E	10	20	None	Plant large- mouth bass
Williams, Bud	Powder River	2S	50E	33	6	None	Don't plant

Table 2. Results of sampling previously planted reservoirs, 1992.

Pond Name	Type of Sample	Species	No. Caught	Mean Length (mm)	Mean Weight (gm)	Length Range (mm)	Weight Range (gm)
<u>CARTER COUNTY</u>							
Gardner #1	1 gill net	RBT	2	246	200	172-321	40-360
		GS	82	125	35	105-176	20-110
Gardner #2	2 seine hauls	LMB	6	180	75	156-200	50-100
		SMB YOY	1	64	-	-	-
	2 gill nets	YP	236	205	120	155-263	40-240
		LMB	6	189	88	165-202	60-110
Pat LaBree Res	2 gill nets	SMB	13	157	56	136-171	35-75
Sidney Res	1 gill net	RBT	4	391	1013	238-496	215-1690
Talcott Res	1 seine haul	YP	433	128	24	95-210	10-80
		YPYOY	9	55	-	47-60	-
	2 gill nets	NP	5	645	1908	530-753	1000-3050
		YP	245	176	64	143-242	30-160
<u>CUSTER COUNTY</u>							
Pat Beardsly	1 seine haul	RBT	1	410	1380	-	-
	2 gill nets	RBT	35	282	396	200-534	120-2930
Dan Haughian Bass	2 seine hauls	LMB	19	195	112	112-235	15-170
	3 gill nets	LMB	20	197	95	123-237	20-160
		NP	2	699	2385	646-752	1850-2920

Table 2. Continued.

Pond Name	Type of Sample	Species	No. Caught	Mean Length (mm)	Mean Weight (gm)	Length Range (mm)	Weight Range (gm)
Henry Haughian Trout	2 seine hauls	RBT	1	216	110	-	-
		FHM present					
	2 gill nets	RBT	46	243	304	153-549	30-2200
Spotted Eagle	4 seine hauls	YP	41	126	21	68-145	5-40
		SMB	1	308	400	-	-
		LMB	3	172	70	165-185	50-100
		WCr	4	153	45	135-177	30-60
		BCr	1	262	290	-	-
		BG	1	152	80	-	-
		BG YOY	2	32	-	31-33	-
		RHsu	2	165	50	160-171	40-60
		Carp	5	-	-	-	-
		BMBuff	1	-	15 lbs	-	-
<u>Dawson County</u>							
Marvin Burman	1 gill net	RBT	47	237	203	163-395	50-720
Hollecker Pond	2 seine hauls	YP	3	95	-	93-97	-
		YP YOY	3	46	-	45-48	-
		LMB YOY	25	30	-	24-34	-
		LMBuff	1	370	3360	-	-
		P Seed	1	47	-	-	-
	2 gill nets	WCr	3	112	20	109-113	-
		WE	1	303	250	-	-
		SMBuff	1	398	910	-	-

Table 2. Continued.

Pond Name	Type of Sample	Species	No. Caught	Mean Length (mm)	Mean Weight (gm)	Length Range (mm)	Weight Range (gm)	
Lindsay Res	1 seine haul	YP YOY	2	45	-	37-53	-	
		BBH	1	170	-	-	-	
		Carp	1	296	-	-	-	
		Carp YOY	68	78	-	59-101	-	
		FHM	30	-	-	-	-	
	2 gill nets	NP	8	740	2998	655-855	2070-4750	
		YP	12	208	135	149-320	40-520	
		YBH	21	160	51	143-177	30-80	
		Carp	5	323	418	280-363	280-640	
<u>Fallon County</u>								
Baker Lake	5 seine hauls	YP	16	62	-	53-71	-	
		BBH	7	186	80	160-200	40-120	
		NP	1	203	50	-	-	
		SMB	1	175	75	-	-	
		YP	61	232	209	202-274	140-330	
	3 gill nets	BBH	396	188	159	121-309	20-590	
Mecage Res	1 gill net	YP	120	191	105	143-274	40-310	
Pinnow Trout	1 seine haul	RBT	7	196	104	185-217	80-140	
	2 gill nets	RBT	47	211	140	163-237	60-210	
Rush Hall	2 seine nets	LMB YOY	4	45	-	34-50	-	
		FHM	300	-	-	-	-	
	4 gill nets	Sticklebacks	100	-	-	-	-	
		WSu	1	358	520	-	-	

Table 2. Continued.

Pond Name	Type of Sample	Species	No. Caught	Mean Length (mm)	Mean Weight (gm)	Length Range (mm)	Weight Range (gm)
S. Sandstone	4 seine hauls	YP	213	110	-	87-156	-
		YP YOY	5	44	-	42-45	-
		Cr	6	118	-	84-196	-
		NP	1	721	2100	-	-
		GS/PS	2	54	-	54-55	-
	3 gill nets	YP	77	164	-	140-310	-
		BBH	52	223	159	203-242	100-220
		NP	27	600	1612	402-925	380-5250
		WE	6	454	1118	328-690	310-3360
		BCr	2	232	200	187-276	100-300
		SMB	1	245	170	-	-
		CCat	1	515	1550	-	-
		<u>Garfield County</u>					
Ray Beecher Trout	1 gill net	RBT	82	260	227	193-291	100-300
L.C.Brooks Trout	1 gill net	RBT	9	451	1187	428-475	940-1440
Dan Burgess	1 seine haul	YP	76	124	26	111-202	15-100
		YP YOY	26	78	-	68-84	-
		FHM	300	-	-	-	-
		YP	2	257	240	200-315	85-395
Ralph Clark Trout	1 gill net	WE	1	493	1140	-	-
		RBT	14	248	240	166-427	50-900
Rod Coulter Trout	1 gill net	RBT	13	323	475	237-394	160-755

Table 2. Continued.

Pond Name	Type of Sample	Species	No. Caught	Mean Length (mm)	Mean Weight (gm)	Length Range (mm)	Weight Range (gm)
Harbaugh Bass	1 seine haul	LMB	7	202	124	184-215	90-150
		LMB YOY	6	87	-	42-102	-
Norman Olson	1 seine haul	RBT	3	185	72	139-209	25-110
	1 gill net	RBT	6	318	480	205-427	100-940
Smith Cattle Bass	1 seine haul	LMB	5	220	128	213-232	110-160
Smith Cattle Trout	1 seine haul	No fish					
	1 gill net	RBT	15	293	296	218-346	120-470
Doug Watt	1 gill net	RBT	24	256	233	153-365	40-515
		Lake Chub	8	164	49	156-172	45-55
POWDER RIVER COUNTY							
Yonkee	1 gill net	No fish					
PRAIRIE COUNTY							
Clark Res.	1 seine haul	GS	22	71	-	40-100	-
		FHM	200	-	-	-	-
	2 gill nets	RBT	13	329	376	277-373	220-550
		GS	36	132	43	101-163	20-90
Harris Res.	1 seine haul	RBT	4	204	88	194-214	80-100
	1 gill net	RBT	20	204	95	180-228	70-130

Table 2. Continued.

Pond Name	Type of Sample	Species	No. Caught	Mean Length (mm)	Mean Weight (gm)	Length Range (mm)	Weight Range (gm)
RICHLAND COUNTY							
Walter Buxbaum Perch	2 gill nets	NP	1	595	1150	-	-
Wilmer Buxbaum Trout	1 gill net	RBT	4	171	50	164-177	40-60
		YP	38	195	92	146-282	20-280
Cayko Res	1 seine haul	YP	20	69	-	62-85	-
	3 gill nets	FHM	200	-	-	-	-
		No fish					
Gartside Res	3 seine hauls	YP	107	136	-	115-255	-
		SMB	27	122	-	105-165	-
		LMB	1	183	80	-	-
		WCr	2	105	-	100-110	-
	3 gill nets	WCr	23	154	89	101-328	15-580
		BCr	16	109	16	104-116	10-20
		YP	117	188	99	135-277	30-320
		LMB	13	239	228	201-275	100-360
		RBT	1	427	880	-	-
		GS	1	105	20	-	-
		CCat	1	320	250	-	-
		WSu	58	297	309	192-390	200-650
Upper Lone Tree	3 seine hauls	LMB	11	177	99	120-275	20-300
		LMB YOY	6	28	-	21-41	-
		BG	90	87	-	42-164	-
		WSu	1	225	100	-	-
	3 gill nets	WE	22	352	467	234-572	80-1860
		LMB	4	197	110	183-210	90-130
		BG	5	118	25	103-133	10-40
		WSu	113	369	685	272-450	240-1260

Table 2. Continued.

Pond Name	Type of Sample	Species	No. Caught	Mean Length (mm)	Mean Weight (gm)	Length Range (mm)	Weight Range (gm)
Wicks Res	2 gill nets	RBT	16	265	259	222-294	160-350
		YP	24	246	210	218-270	110-290
		WSu	6	236	168	227-247	150-190
ROSEBUD COUNTY							
Castle Rock	4 seine hauls	NP	1	372	270	-	-
		NP YOY	8	109	-	93-122	-
		LMB	42	157	-	112-185	-
		LMB YOY	7	47	-	36-54	-
		SMB	17	150	-	122-200	-
		Cr	50	99	-	85-111	-
		Cr YOY	121	38	-	35-42	-
		BG	211	125	-	62-206	-
		WE	11	408	757	237-668	100-2870
	3 gill nets	NP	11	476	660	372-562	260-1100
		LMB	2	225	225	170-280	80-370
		BCr	3	135	-	105-183	-
		BG	11	162	110	115-232	35-310
		CCat	1	685	4400+	-	-
Hook #1	1 gill net	RBT	10	189	84	165-221	50-130
Hook #2	2 gill nets	RBT	25	356	630	188-467	90-1260
Lee #2	1 gill net	LMB	40	210	137	177-228	80-190
Lee #3	1 seine haul	LMB	13	191	101	175-208	70-130
		BCr	5	177	102	95-204	10-140

Table 2. Continued.

Pond Name	Type of Sample	Species	No. Caught	Mean Length (mm)	Mean Weight (gm)	Length Range (mm)	Weight Range (gm)
Zemples	1 seine haul 2 gill nets	No fish LMB	71	219	169	155-268	50-310
WIBUAX COUNTY							
Bannister Bass	1 seine haul	LMB	1	318	580	-	-

