Montana Department of Fish, Wildlife and Parks Fisheries Division

Job Progress Report

STATE: Montana PROJECT: Statewide Fisheries Investigations

PROJECT NO. F-78-R-2 STUDY TITLE: Survey and Inventory of Warmwater Lakes

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

PROJECT PERIOD: July 1, 1995 through June 30, 1996

REPORT PERIOD: April 1, 1995 through March 32, 1996

ABSTRACT

Small fishing reservoirs in 10 counties were sampled to obtain fisheries information in 1995. A total of 50 reservoirs were sampled. Nine of these had never been planted or had not been planted in recent years. They were visited to determine fisheries potential. Five of these were determined to have sufficient potential that a fish plant was warranted. Of the remaining 41 reservoirs nine were found to be devoid of fish, probably from lack of water or winterkill. Thirty-two reservoirs had fishable populations of target fish species.

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PROCEDURES

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

RESULTS AND DISCUSSION Survey of New Ponds

Eight new ponds were surveyed to determine suitibility for producing fish (Table 1). The two Garber ponds were considered to shallow to dependably winter fish. The Newman pond was to inaccessable and the Grebe pond has had several failed plants in the past. The Smith Cattle Trail Creek and the two Murnion ponds were planted with rainbow trout. The Fitzgerald pond was planted one time only with rainbow trout to provide fishing until largemouth bass are of catchable size. The Buxbaum pond was planted with largemouth and smallmouth bass.

Survey of Previously Planted Reservoirs

Carter County

Sampling at the Pat LaBree Reservoir showed rainbow trout to be abundant (Table 2). No fish were collected at West Plum Reservoir. This pond is marginal in depth and likely winterkilled but this years rainbow trout plant should be there. Rainbow trout are doing well in Gardner Trout Reservoir and no green sunfish were sampled this year. Sampling at Gardner Reservoir #2 produced yellow perch, largemouth and smallmouth bass and white and black crappie. Bucholtz Reservoir, a small Forest Service pond near the South Dakota boarder, was found to have black bullheads up to one pound.

Custer County

Young-of-the-year largemouth bass were observed at Holmes Reservoir and three adults were sampled. Owner states that bass are not growing well.

Dawson County

Hollecker Reservoir was rehabed in 1994 to remove rough fish and replanted with rainbow trout. Sampling in 1995 produced rainbow trout but river carpsuckers, sauger and creek chubs are also present. Trangmoe Pond has a variety of game and rough fish (Table 2) with white crappie, channel catfish and northern pike worth fishing for.

Fallon County

Yellow perch are small but abundant in South Sandstone Reservoir (Table 2), but large walleye and northern pike are present. Bass and crappie are not abundant. The average weight of black bullheads in Baker Lake increased to 300 grams in 1995 from 191 grams in 1994. Northern pike, yellow perch and white crappie are scarce. The McKay Ranch and Pinnow #3 Reservoirs have largemouth bass present that are provididing fishing. Management of Meccage Resevoir was switched from rainbow trout to yellow perch. Perch have grown to seven inches since being transplanted. Rainbow trout are doing well at Rush Hall Reservoir

Garfield County

Rainbow trout are doing well at Chamberlain #3 and Helm resservoirs and getting large at Childer's Reservoir (Table 2). Yellow perch approaching one pound were sampled from Chamberlain #2 Reservoir. Largemouth bass in Chamberlain #1 Reservoir have not grown as well Smallmouth bass are not numerous. as hoped but are abundant. Jarden #1 Reservoir was restocked with largemouth bass in 1994 after winterkilling and 1995 sampling showed growth to be about average. Largemouth bass continue to do well in Saylor Reservoir. Few yellow perch were sampled from Trumbo Reservoir, the walleye sampled averaged 590 grams and while no adult largemouth bass were sampled, young-of-the-year bass were present. Engdahl Cottonwood Reservoir stays turbid probably due to carp being present and yellow perch, largemouth and smallmouth bass do not grow well. game fish were sampled from Hofla and Stanton reservoirs and these pounds will not be replanted.

Powder River County

Williams #1, #2 and #3 reservoirs were found to have no fish except for fathead minnows in #2. Pond #1 and #2 had good depth and will be replanted with largemouth bass in 1996. Pond #3 lacks adequate depth and will not be replanted. No fish were sampled from Yonkee Reservoir. For some unknown reason rainbow trout have failed to survive here in recent years.

Prairie County

Ayers Trout Reservoir should have been planted with rainbow trout for the first time in 1994, but sampling in 1995 found only a few channel catfish present. Sampling of Ayers Bass Reservoir found largemouth bass displaying good growth as well as trout. The trout had been planted in the wrong reservoir and steps have been taken to correct this problem. Clark Reservoir was rehabed in 1988 and 1993 to eliminate green sunfish without success. Since rainbow trout do not grow well in this reservoir with sunfish present

management effort will shift to largemouth bass in 1996. Rainbow trout were present in South Fork Reservoir when sampled but water level was low and winter survival is unlikely. No fish were sampled at Singleton Reservoir likely due to winterkill. This reservoir will be replanted with largemouth bass in 1996.

Richland County

Sampling at Gartside Reservoir found seven fish species present (Table 2). The average weight of Northern pike in 1995 was more than double that of 1994. Fewer Crappie and yellow perch were seen in 1995 perhaps due to a severe accidental winter draw down which occurred when the drain gate stuck open. Smallmouth bass and walleye planted in 1994 and 1995 were not sampled and will be replanted in 1996.

Rosebud County

Walleye averaging two pounds were the most abundant fish in gill net catches at Castle Rock Reservoir (Table 2). Large bluegill continue to be the mainstay of the fishery but northern pike, largemouth and smallmouth bass are also doing well. Bluegill are present in Lee Pit #2 and northern pike and yellow perch are present in Schlesinger #1 Reservoir. Schlesinger #2 Reservoir was dry and will not be replanted. Blacks Pond on the Custer National Forest has rainbow trout.

Wibaux County

Largemouth bass are displaying good growth in Banister Reservoir since being restocked in 1994 following winterkill.

Prepared by: Phillip A. Stewart

Date: February 13,1996

Water referred to:

Baker Lake South Sandstone Res.	21-1778 21-8775
Gartside Reservoir	21-3250
Castle Rock Lake	21-2527

Keywords

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Small reservoirs	yellow perch
largemouth bass	crappie
smallmouth bass	northern pike
rainbow trout	

Table 1. Results of new pond surveys in 1995.

					May Digh	4			
		Loc	Location	-		Species	Management	ment	
Pond Name	County	F	æ	დ	(ft.)	Present	Plan		1
4 0 C C C C C C C C C C C C C C C C C C	Custer	N6	548,	40	O	None	Don't	plant	
	Custer	N6	54E	03	ιΛ	None	Don't	plant	
A++16	Custer	SN	54E	31	16	None	Plant	RBT	
Fom For	Garfield	17N,	34E,	30	15	None	Plant	RBT &	
			•				LMB	•	
Whithion, Fred #1	Garfield	15N,	42E,	32	11	None	Plant	RBT	
	Garfield	14N,	41E,	12	17	None	Plant	RBT	
Alber	Garfield	14N.	33图,	23	12	None	Don't	plant	
Darrel	Richland	21N.	60区	31	FI FI	Sticklebacks	backs	ì	
	i		•				Plant	LMB &	
			٠				SMB		
*Grebe, Ed #3	Rosebud	12N,	32E,	33	12	None	Don't	plant	
									1

Pond has been planted in the past but has history of not holding water.

Table 2. Results of sampling previously planted reservoirs, 1995.

	Type			Mean	Mean	Length	Weight
	Of		No.	Length	Weight	Range	Range
Pond Name	Sample	Species	Caught	(明)	(ag)	(шш)	(da)
		CARTER	ER COUNTY				With the second
Pat LaBree	2 gill nets	RBT	40(99)	278	360	165-417	60-800
Bucholtz		BBH	ω	296	391	270-310	300-450
West Plum	gi11	No fish	collected				
Gardiner #1	2 gill nets	RBT	40 (54)	282	365	138-475	30-1070
Gardiner #2		ΥP	4	157	1	127-240	i
		YPYOY	22 (86)	75	ı	33-94	1
	2 gill nets	Υ₽	25(110)	219	139	148-284	40-300
-	1	IMB	0	242	260	172-312	70-450
		SMB	11	299	344	216-398	270-410
,		WCR	01	236	175	227-245	160-190
		BCR	r-i	223	170	ı	1
r		CUSTER	ER COUNTY				
Holmes	2 gill nets	LMB	m	243	207	218-275	140-280
		DAWS	DAWSON COUNTY				
Hollecker	2 seine hauls	RBT	7	143	25	130-155	20-30
	2 qill nets	RBT	14	173	99	147-313	30-320
		RCSU	16	243	182	195-337	150-220
		SAUG	н	335	360	ı	ı
		CK CHUB	-	190	70	ı	ľ

Table 2. Continued.

Pond Name	of Bample	Species	No. Caught	rean Length (mm)	Mean Weight (gm)	Lengtn Range (mm)	Weight Range (gm)
	1	NAWSON COU	DAWSON COUNTY CONTINUED	UED			
Trangmoe	1 seine haul	WCR	15	144	ı	106-173	1
1		CCAT	਼ਜ	113	į	ı	1
		GB	8	68	1	63-72	
		CARP	H	1	ı	ı	ı
		BH YOY	Observed	Swimming			
	1 gill net	WCR	20(24)	164	75	120-345	20-650
		BBH	20 (36)	179	99	165-193	50-90
		CCAT	4(5)	287	155	267-320	90-220
		NP	-1	530	3680	J	ı
		FHC	3(10)	167	50	161-175	40-60
		CARP	3 (4)	429	937	426-435	850-1000
		WSU	-	390	009	1	1
		RHSU	ਜ	475	980	ı	•
		FALLO	FALLON COUNTY				
South Sandstone	3 seine hauls	Υ₽	06	Counted only	only		
		YP YOY	650	1	1	40-50	1
			200	ı	1	25-35	ı
		LMB YOY	H	20	ı	•	ı
	3 gill nets	ХЪ	20(190)	177	71	148-204	40-110
	·	BBH	20	265	297	223-290	210-380
,		NP	10	572	1481	320-723	420-2750
		ME	3 (4)	491	1210	295-656	200-188(

Table 2. Continued.

Semple Species Caught Weight	**************************************	Type			Mean	Mean	Length	Weight
Sample Species Caught (mm) (gm) Species Caught (mm) (gm)		ч • О •		No.	Length	Weight	Range	Range
2 seine hauls	Pond Name	Sample	Species	Caught	(mm)	(mb)	(mm)	(mb)
2 seine hauls YP 1 215 170 BBH 1 273 320 BBH YOY 100 Counted only 2 413 220 37 YP 2 413 220 37 YP 1 244 230 WCR 1 133 30 22 2 seine hauls No fish collected 1 gill net YP 6 170 80 1 1 seine haul No fish collected 1 gill net LMB 20(45) 225 198 1 seine haul FHM 10 2 qill nets RBT 1 245 160 1 seine haul FHM 10 3 4 gill nets RBT 1 258 253 4 gill nets RBT 1 258 253 4 gill nets RBT 1 258 253			FALLON COU	NTY CONTIN	<u>aso</u>			
BBH YOY 100 Counted only YP 2 413 220 37 YP 1 244 230 WCR 1 133 30 2 seine hauls No fish collected	Baker Lake	2 seine hauls	ΥÞ	н	215	170	ı	1
#3 1 seine haul RHM 10			BBH	н		320	ı	ı
2 gill nets BBH 20(151) 272 300 2. YP 1 244 220 3 YP 1 244 230 3. WCR 1 133 30 2. WCR 1 133 30 2. WCR 1 133 30 30 1				100		only		
YP		2 dill nets	BBH	20(151)		300	232-382	210-430
#3 1 seine haul			ďN	7	413	220	370-455	130-310
#3 1 seine haul No fish collected			ΥP	H	244	230	1	,
2 seine hauls No fish collected 1 gill net			WCR	4	133	30	1	1
#3 1 seine haul No fish collected 150 160 1 1 gill net LMB 20(45) 225 198 1 1 seine haul Stickleback 1	Meccade			cted				
1 seine haul No fish collected 1 gill net LMB 20(45) 225 198 1 seine haul EHM 10 -				9	170	80	158-182	60-100
1 seine haul No fish collected 1 gill net LMB 20(45) 225 198 1 seine haul FHM 10		•	RBT	-	245	160	t	ı
1 gill net LMB 20(45) 225 198 1 seine haul FHM 10	Pinnow #3	1 seine haul	No fish	collected				
1 seine haul FHM 10		1 gill net	LMB	20 (45)	225	198	203-255	130-360
Stickleback 1	Rush Hall		FHM		ı	•	ı	•
4 gill nets RBT 18(30) 268 253			Stickleback		1	1	1	ı
1 seine haul LMB YOY 6 57		4 gill nets	RBT		268	253	150-352	50-480
	Mackay Ranch	1 seine haul		9	57	ı	34-75	1

Table 2. Continued.

Pond Name	Type of Sample	Species	No. Caught	Mean Length (mm)	Mean Weight (gm)	Length Range (mm)	Weight Range (gm)
		GARFIELD	ELD COUNTY				
Chamberlain #1	2 gill nets	LMB	20 (32)	233	162 105	156-295 187-197	30-260 100-110
Chamberlain #2	2 gill nets	ΧÞ	25(30)	245	203	155-326	40-420
Chamberlain #3	1 seine haul 2 gill nets	No fish RBT	collected 11(14)	197	111	151-314	40-330
Childer's Trout	2 gill nets	RBT	23	299	531	167-453	70-1270
Jarden #1	2 gill nets	LMB	1.4	196	125	164-244	70-270
Hafla	Nearly dry -	did not	sample				
Saylor	1 seine haul 1 gill net	No fish LMB	collected 15	227	214	203-251	150-300
нелш	1 gill net	RBT	14	216	156	133-318	30-360
Stanton	1 seine haul 2 gill nets	FHM No fish	100 collected	ı	ı	1	1
Trumbo	1 seine haul	YP YOY	φ	09	ı	55-64	ı
	1 dill net	LMB YOY	20 (52) 5	38.4 4.4	590	41-77	210-1130
	i i	Υ₽	· 0	173	09	172-173	ı

Table 2. Continued.

		Туре			Mean	Mean	Length	Weight
Pond Name		or Sample	Species	No. Caught	Lengtn (mm)	(dm)	Kange (mm)	(gm)
			GARFIELD COUNTY CONTINUED	UNTY CONTI	NUED			
Engdahl, Cottonwood	ottonwo	ođ						
1		1 seine haul	YP	H	137	20	ı	
			YP YOY	20(111)	59	1	33-72	1
			LMB YOY	20 (34)	55	ı	45-66	ı
		,	SMB	r-I	227	20	ı	ı
		2 qill nets	ΥP	ហ	193	72	157-208	3090
	-	ı	CARP	v	280	223	245-348	180-320
			WBU	in.	285	236	278-294	220-260
			POWDER R	POWDER RIVER COUNTY	,			
Williams	eri ##:	1 seine haul 1 gill net	No fish o	collected				
Williams 4	#2	1 seine haul	FHM	100		1	1	
Williams	en 非	1 seine haul 1 gill net	No fish o	collected				,
Yonkee		1 gill net	No fish	collected				

Pond Name	Type of Sample	Species	No. Caught	Mean Length (mm)	Mean Weight (gm)	Length Range (mm)	Weight Range (gm)
		PRAIRIE	IE COUNTY			,	
Ayer's Bass	1 gill net	LMB	~	207	130	203-210	120-140
		RBT	27 (65)	245	169	65-3	50-300
		GB	8(10)	131	4 8	127-138	40-60
Ayer's Trout	1 gill net	CCAT	₩	414	835	385-432	620-1000
Clark	1 seine haul	FHW	100			ı	
		RBT	н	125	1	ı	1
		GB	12	47	ı	35-64	ı
	2 gill nets	RBT	22 (29)	319	330	280-353	210-460
	ı	GB	_	116	41	102-188	15-160
South Fork	1 seine haul	RBT	m	202	123	150-285	40-280
Singleton	1 gill net	No fish o	fish collected				
		RICHLA	RICHLAND COUNTY				
Gartside	3 seine hauls	BCR	89	172	09	155-190	40-80
		WCR	73	174	55	170-178	20-60
		CR YOY	19	43	1	40-47	1
		LMB YOY	ო	55	ı	50-65	1
		ΥP	σ	193	79	178-208	60-110
	2 gill nets	an	ĸ	587	1378	457-694	420-2270
		ΚÞ	20 (29)	184	72	160-200	50-90
		BCR	4	173	70	160-193	50-100
		WCR	r-i	175	09	1	1
		CCAT	н	464	980	1	ı
		LMB	r-f	274	290	1	1
		WSU	7	426	865	425-427	840-890

Table 2. Continued.

Castle Rock 3 seine hauls BG 28 (353) 119 52 73-213 5-250 BG YOY 20 178 100 166-190 70-130 LMB YOY 22 (223) 59 100 166-190 70-130 LMB YOY 22 (223) 59 100 166-190 70-130 RMP YOY 2 (23) 111	Pond Name	Type of Sample	Species	No. Caught	Mean Length (mm)	Mean Weight (gm)	Length Range (mm)	Weight Range (gm)
## 3 seine hauls BG	erine meneral de la companya de la c		ROSEI	BUD COUNTY				
BG YOY 20 51 616-190 IMB YOY 22 (223) 59 66-190 IMB YOY 7 111 6-190 IMB YOY 7 111 6-190 SUNFISH YOY 5 (200) 26 6-5 163-172 GS H	Castle Rock		BG	28 (353)	119	52	73-213	5-250
NAME			BG YOY	50	51	ı	40-65	1
NP YOY 111 - 97 128 128 128 128 137 138 137 138 137 138 137 138 137 138 137 138 137 139 137 139			LMB	~	178	100	166-190	70-130
NP VOY 111 - 97-128			LMB YOY	22 (223)	59	1	42-97	ı
SMB 2 168 65 163-172 SMB XOX 2 53 - 52-55 BCRB YOX 5(200) 26 - 52-55 BCR 4 62 - 52-72 GS 4 62 - 52-72 GB 19 165 190-711 BCB 19 165 190-711 BCB 1 224 175 182-266 LMB 1 200 140 - 52-72 BCR 1 125 20 - 192-266 - FHA 50 Counted 175 19-62 - 19-62 - FFH 50 Counted 01Y 6 - 19-62 - 19-62 - 19-62 - - 19-62 - - 19-62 - - 19-62 - - 19-62 - - 19-62 - - 19-62 - - 19-62 - - 19-62 - -			NP YOY	7	111	t	97-128	1
## Solution			SMB	7	168	65	163-172	60-70
BCR 2 (3) 137 35 133-140 BCR 5 (200) 26 - 25-27 BUNFISH YOY 5 (200) 26 - 25-27 BG 4 62 - 52-27 1 (21) 495 900 375-742 BG 19 165 109 95-240 BCR 1 2 20 (420) 44 - 19 BG YOY 20 (420) 44 - 19 BG YOY 20 (420) 44 - 19-62 BCR 1 1 gill net NP 5 478 748 385-735 Sk's Pond 1 seine haul RBT 1 20 100 69 143-222 BCR 2 (420) 44 - 19-62 BCR 2 (420) 44 - 19-62 BCR 3 3 192 186 170-222 BCR 2 (420) 44 - 19-62 BCR 2 (420) 44 - 19-62 BCR 2 (420) 44 - 19-62 BCR 3 3 192 186 170-222 BCR 1 1 25 186 170-222 BCR 2 100 375-742 BCR 2 100 140 - 19-62 BCR 3 3 192 180 385-735 BCR 2 10 100 1 20 100 1 20 100 100 100 100		-		~	53	ı	52-55	ı
BUNFISH YOY 5(200) 26 - 25-72 GS 4 62 - 52-72 GS 4 15 958 190-711 GS 19 165 109 95-240 BG 19 165 109 95-240 BCR 1 1 gill net NP 50 Counted only GS 190-735 esinger #2			BCR	2(3)	137	35	133-140	30-40
State Stat				5 (200)	26	ı	25-27	1
## Signification of the control of t		ia	GB	₩.	62	ı	52-72	i
NP 6(7) 495 900 375-742 186 199 165 109 95-240 186 182-266 140 186 175 182-266 140 186 170-222 186 170-222 186 170-222 186 170-222 186 170-222 186 170-222 186 170-222 186 170-222 186 170-222 186 170-222 186 170-222 186 170-222 186 170-222 186 170-222 186 180-62 190 190-62 180 1		gill	MM	21(24)	415	958	7	30-3580
BG		1	NP	6(7)	495	006	~	300-2800
Pit #2 Seine haul BG Seine haul			BG	19	165	109	7	10-280
Pit #2 1 seine haul EMB 1 bg 3 bg YOY 192 bg 186 bg 170-222 bg Pit #2 1 seine haul BG YOY 20(420) 44 bg - 19-62 bg - 19-62 bg - 19-62 bg Sesinger #1 1 gill net NP 50 counted only fg - 19-62 bg - 19-62 bg - 19-62 bg Sesinger #1 1 gill net NP 5 fg 478 bg 748 bg 385-735 bg Sk's Pond 1 seine haul RBT 1 bid not sample. - 100 bg - 143-222 bg			BMB	~	224	175	N	50-300
Pit #2 1 seine haul BG 3 192 186 170-222 FHM 20(420) 44 - 19-62 FHM 50 Counted only GB - - esinger #1 1 gill net NP 5 478 748 385-735 esinger #2 Nearly dry. Did not sample. - - :k*s Pond 1 seine haul RBT 1 202 100 - 2 gill nets RBT 1 202 100 -			LMB	H	200	140	ı	1
Pit #2 1 seine haul BG YOX 20(420) 44 - 19-62 Sesinger #2 1 seine haul Nearly dry. Did not sample. 748 748 19-62 Sesinger #2 Nearly dry. Did not sample. 1 202 100 - Sk's Pond 1 seine haul RBT 1 202 100 - 2 gill nets RBT 20(38) 180 69 143-222			BCR	Ħ	125	20	ı	ı
esinger #1 1 gill net NP 50 Counted only 60 - 19-62 esinger #1 1 gill net NP 5 478 748 385-735 esinger #2 Nearly dry. Did not sample. ik's Pond 1 seine haul RBT 1 20(38) 180 69 143-222	Pit	seine	BG	ო	192	186	170-222	130-280
#1 1 gill net NP 50 Counted only 60 - #1 1 gill net NP 5 478 748 385-735 #2 A 78 748 385-735 #2 A 78 A 78 A 78 B A 78 A 78 A 78 A 78 A			BG YOY	20 (420)	44	ı	19-62	. 1
#1 1 gill net NP 5 478 748 385-735 YP 1 235 190 - A 1 Seine haul RBT 1 20(38) 180 69 143-222			FHM			X		
#1 1 gill net NP 5 478 748 385-735			GB	H	140	09	ı	1 .
#2 Nearly dry. Did not sample. d 1 seine haul RBT 1 202 100 - 2 gill nets RBT 20(38) 180 69 143-222		1 qill	NP	ហ	478	748	385-735	280-2240
#2 Nearly dry. Did not sample. 1 1 seine haul RBT 1 202 100 2 gill nets RBT 20(38) 180 69 143-222			Ϋ́₽	Ħ	235	190	1	1.
1 seine haul RBT 1 202 100 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			Nearly dry.		mple.			
2 gill nets RBT 20(38) 180 69 143-222	Black's Pond		RBT	H	202	100	1	1
			RBT	20 (38)	180	69	143-222	30-120

Table 2. Continued.

Pond Name	Type of Sample	Species	No. Caught	Mean Length (mm)	Mean Weight (gm)	Length Range (mm)	Weight Range (gm)
		WIBA	WIBAUX COUNRY				·
Banister	2 gill nets	LMB RHSU	12	196	114	160-250	60-180

() Indicates total number of fish sampled.