

MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS
FISHERIES DIVISION

JOB PROGRESS REPORT

STATE: Montana PROJECT: Statewide Fisheries Investigations

PROJECT NO: F-46-R-5 STUDY TITLE: Survey and Inventory of
Warmwater Lakes

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

PROJECT PERIOD: July 1, 1991 through June 30, 1992

REPORT PERIOD: April 1, 1991 through March 31, 1992

ABSTRACT

Small fishing reservoirs in 10 counties were sampled for fisheries information in 1991. A total of 50 reservoirs were sampled. Six of these had never been planted and were visited only to determine fisheries potential. Most reservoirs are maintaining significant populations of target fish species.

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. Three new ponds were added to the public fishing pond 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 1992.

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, 1/4 inch mesh bag seines 100 feet long and, in one instance, with fike nets.

RESULTS AND DISCUSSION

Survey of New Ponds

Six new ponds were surveyed to determine suitability for producing fishing (Table 1). Only the Chamberlain #3 pond was planted. The Bogar Pond was nearly full of water, but was still too shallow to winter fish. The Senner and Dukart ponds were considered suitable but the landowners decided against public fishing. The two Smith ponds could support fish if they get additional water from runoff.

Several pond owners, thought to have ponds suitable for public fishing, were contacted and offered limited financial assistance for handling public fishing. None of the landowners were willing to accept the offer.

Survey of Previously Planted Reservoirs

Carter County

The two Craft Reservoirs and Bucholtz Reservoir appear to be doing well (Table 2). Cheesman Reservoir has lost all fish and no further management will be attempted because of its shallow depth. The apparent complete failure of past bass plants at LaBree Reservoir is unexplained. Only bass from the 1991 plant were found. The lack of rainbow trout in West Plum Reservoir is also something of a mystery.

Custer County

Both young of the year and larger largemouth bass were not found at Dan Haughian Reservoir. This pond has had large bass in the past. Holmes Reservoir had age 0+ bass, but also no large ones. Fleming Reservoir seemed to have very few largemouth bass. No further planting will be done until it refills with water. Rainbow trout numbers and size look good at the Henry Haughian Reservoir.

Dawson County

Yellow perch disappeared entirely from Lindsay Reservoir, probably by winterkill. The northern pike persist and are reaching a large size (Table 2). Yellow perch have since been replanted. Rattlesnake Reservoir has become too shallow, even if full, for consideration of any further management. No fish of any kind were found.

Fallon County

Recent periodic partial winterkill at Baker Lake has kept fish numbers low enough to allow good growth of perch and bullheads (Table 2). Largemouth bass plants seem to have completely failed.

With recent annual planting of northern pike and walleye at South Sandstone Reservoir, both these species are abundant and reaching large size. Black bullheads and yellow perch are still mostly small. Largemouth bass numbers are low, but some larger individuals are now present.

Rush Hall pond is still experiencing very low survival of planted largemouth bass. A change to rainbow trout planting may be needed.

Garfield County

Only two trout ponds were sampled in 1991. Dead trout had been reported both summer and winter at Childers Reservoir, but the die-off was only partial as larger trout from 1989 or 1990 plants were present. The McRae pond was first planted in 1990, but only trout from the 1991 plant were sampled.

Several of the better-than-average bass ponds are in Garfield County. Bass at the Clark, Jarden, Saylor, Trumbo and Stanton ponds seem to be doing well.

Powder River County

Both Williams ponds were scheduled for sampling in 1991. Williams #1 was all but dry. Bass had overwintered at Williams #2 but green sunfish and goldfish are present by illegal planting. The apparent complete absence of trout at Yonkee Reservoir is unexplained.

Prairie County

The bass population at Homestead Reservoir looks healthy but for unknown reasons very few bass were found at Silvertip Reservoir. Two year classes of trout are present at Oil Pump Reservoir, but growth is slow.

Richland County

Gartside Reservoir was rebuilt in 1990 and had filled with water by early spring 1991. Largemouth bass, smallmouth bass, crappie, yellow perch and rainbow trout were all planted in spring or early summer 1991. All these species were sampled later in 1991. Green sunfish and white suckers probably entered the reservoir from the drainage upstream.

Scheetz Reservoir was managed by the Department until 1985. It was sampled at the request of the landowner, but was judged too shallow to consistently winter fish. Largemouth bass have grown well at the Kvaalen Pond.

Rosebud County

The 1991 plant of trout at Hofer Reservoir grew very well, but Black's Pond on the Custer National Forest still doesn't have enough water to winter fish. The Schlesinger bass pond continues to winter fish despite very shallow depth. The Schlesinger perch-northern pond has never had large northernns but some larger perch are present.

Wibaux County

The Bannister bass pond was very weedy and only a few feet deep, but bass were still present. Winterkill is likely . Both yellow perch and northern pike overwintered in Witkowski Reservoir following replanting in 1990 after winterkill.

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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 1991.

Pond Name	County	Location			Max Depth (ft)	Fish Species Present	Management Plan
		T	R	S			
Bogar, Cal	Dawson	19N	52E	12	7	Unknown	Don't plant
Chamberlain, Curtis Res. #3	Garfield	20N	33E	21	14	None	Plant trout
Dukart, Dan	Prairie	13N	52E	36	8	Unknown	Don't plant
Senner, Rod	Dawson	21N	54E	29	12	None	Don't plant
Smith, Dave #1	Custer	5N	54E	31	7	Unknown	Don't plant
Smith, Dave #2	Custer	4N	55E	6	8	Unknown	Don't plant

Table 2. Results of sampling previously planted reservoirs, 1991.

Pond Name	Type of Sample	Species	No. Caught	Mean Length	Mean Weight	Length Range	Weight Range
<u>Carter County</u>							
Bucholtz Res.	1 seine haul	BCr	9	229	172	222-240	140-210
		LMB	67	214	123	182-247	70-190
		LMB YOY	10	49	-	37-67	-
		CCat	2	379	400	355-403	320-480
		BBH	8	259	215	247-275	190-260
Cheesman Res	1 gill net	No fish					
Craft #1	2 seine hauls	NP	1	320	210	-	-
	2 gill nets	NP	2	527	795	525-530	780-810
Craft #2	1 seine haul	LMB YOY	221	50	-	38-78	-
	2 gill nets	SMB YOY	1	46	-	-	-
		LMB	6	309	563	170-370	90-820
Pat Labree Res.	5 seine hauls	SMB YOY	23	62	-	55-69	-
	4 gill nets	No fish					
West Plum Res	1 seine haul	FHM	300	-	-	-	-
<u>Custer County</u>							
Fleming Res	2 gill nets	LMB	1	115	-	-	-
Haughian, Dan Res.	1 seine haul	LMB	26	172	67	152-210	50-130
	3 gill nets	SMB	2	221	60	217-225	-
		LMB	35	172	67	162-190	60-90
		SMB	1	227	160	-	-
		NP	2	638	1838	590-687	1400-2180

Table 2. Continued.

Pond Name	Type of Sample	Species	No. Caught	Mean Length	Mean Weight	Length Range	Weight Range
Haughian, Henry Res	2 gill nets	RBT	11	316	579	257-457	200-1280
	1 seine haul	LMB YOY	6	44	-	38-50	-
Holmes Res.	2 gill nets	LMB	11	208	109	146-248	30-170
	<u>Dawson County</u>						
Lindsay Res	3 seine hauls	BBH	1	156	40	-	-
		Carp YOY	453	-	-	-	-
2 gill nets		BBH YOY	observed				
		NP	8	649	1874	472-943	650-5000
		BBH	21	153	50	142-164	40-70
		Carp	11	306	334	288-334	270-430
		GS	1	114	40	-	-
Rattlesnake Res.	1 seine haul	No fish					
	2 gill nets	No fish					
<u>Fallon County</u>							
Baker Lake	5 seine hauls	YP	3	140	-	127-150	-
	3 gill nets	YP	112	158	65	130-275	30-300
		NP	1	415	500	-	-
		BBH	3	273	470	270-280	400-530
Maier Res	1 seine haul	BCR	5	174	80	145-226	40-160
		Cr YOY	86	45	-	33-55	-
		YP	20	104	-	79-123	-
		YP YOY	5	46	-	45-48	-
		LMB YOY	1	44	-	-	-

Table 2. Continued.

Pond Name	Type of Sample	Species	No. Caught	Mean Length	Mean Weight	Length Range	Weight Range
Maier Res	2 gill nets	LMB	3	240	280	170-356	60-700
		BCR	10	152	53	125-244	20-210
		WCR	1	145	40	-	-
		Carp	12	337	515	313-367	430-700
McKay Ranch Res	1 seine haul	LMB	27	152	51	106-260	15-230
		LMB YOY	17	58	-	50-71	-
		LMB	17	178	83	138-250	40-190
Rush Hall	2 seine hauls 4 gill nets	FHM	1000	-	-	-	-
		LMB	1	215	230	-	-
		WSU	1	376	560	-	-
South Sandstone	5 seine hauls	YP	284	113	-	87-128	-
		YP YOY	277	47	-	44-51	-
		WE	1	163	30	-	-
	3 gill nets	BBH	21	192	107	182-202	90-140
		BCr	1	196	110	-	-
		WE	13	478	1242	300-640	230-2650
		NP	6	605	1618	538-810	1100-3420
		YP	21	155	50	127-239	20-200
		BBH	18	199	120	182-217	70-190
		WE	19	525	1693	290-694	180-3200
		NP	72	672	2027	467-870	630-4350
Fike nets	LMB	5	305	470	252-360	200-840	
	BCR	11	213	132	147-240	40-200	

Table 2. Continued.

Pond Name	Type of Sample	Species	No. Caught	Mean Length	Mean Weight	Length Range	Weight Range
<u>Garfield County</u>							
Chamberlain, Curtis (bass)	1 seine haul 2 gill nets	LMB YOY LMB	14 19	54 228	- 160	48-62 166-277	- 60-270
Chamberlain, Curtis (perch)	Observed YP YOY near shoreline						
Childers, Ross (Trout)	2 gill nets	Rbt	26	249	268	190-427	100-1140
Clark, Emmett Bass	1 seine haul 2 gill nets	LMB YOY LMB	66 10	76 274	- 291	65-96 246-290	- 200-370
Engdahl Cottonwood	1 seine haul 2 gill nets	LMB YOY YP LMB YP Carp WSU	8 8 1 70 8 1	76 127 314 168 317 317	- 16 440 43 384 360	64-87 98-150 - 145-200 283-376 -	- 5-30 - 30-70 280-690 -
Jarden Bass	2 gill nets	LMB Rbt	3 1	326 468	517 1300	236-392 -	200-1000 -
McRae Bass	2 gill nets	LMB	2	248	250	247-249	-
McRae Trout	2 gill nets	Rbt	12	254	260	244-267	230-280
Saylor Bass	1 seine haul 2 gill nets	LMB YOY LMB	152 6	45 271	- 277	29-65 232-308	- 140-400

Table 2. Continued.

Pond Name	Type of Sample	Species	No. Caught	Mean Length	Mean Weight	Length Range	Weight Range	
Stanton, Ron Bass	2 gill nets	LMB	10	311	481	293-325	380-560	
Trumbo Res	1 seine haul	LMB	4	268	318	165-317	50-450	
		LMB YOY	123	49	-	40-68	-	
		YP YOY	3	67	-	66-70	-	
		LMB	7	300	373	286-308	320-400	
Whitesides	1 seine haul	YP	10	242	273	150-325	40-550	
		Saug	1	455	860	-	-	
Williams #2	1 seine haul	YP	230	105	-	83-146	-	
		GS	9	57	-	42-94	-	
		WSU	1	408	810	-	-	
		WE	23	332	343	227-388	200-590	
		YP	2	181	60	176-186	50-70	
Yonkee Res	1 gill net	WSU	2	341	555	330-353	510-600	
		<u>Powder River County</u>						
		LMB	132	144	39	109-196	10-100	
Homestead Res	3 seine hauls	GS	9	80	-	55-87	-	
		Goldfish observed						
		LMB	1	148	40	-	-	
Prairie County	1 seine haul	No fish						
		No fish						
Yonkee Res	1 gill net	LMB	7	231	264	146-350	40-650	
		LMB	312	74	-	60-86	-	

Table 2. Continued.

Pond Name	Type of Sample	Species	No. Caught	Mean Length	Mean Weight	Length Range	Weight Range
Oil Pump Res	2 gill nets	Rbt	24	236	167	157-315	40-330
Silvertip	2 seine hauls	FHM	1000	-	-	-	-
	3 gill nets	LMB	3	265	337	248-280	270-410
		SMB	1	247	260	-	-
<u>Richland County</u>							
Gartside	3 seine hauls	LMB	3	99	-	85-107	-
		SMB	58	65	-	53-77	-
		YP	2	179	70	173-185	-
		YP YOY	118	82	-	74-104	-
		Cr YOY	206	65	-	48-80	-
		GS	1	53	-	-	-
		WSU	1	133	-	-	-
		YP	190	191	107	162-284	60-350
		Rbt	2	182	75	171-194	70-80
		Wsu	4	353	510	315-395	320-710
Kvaalen Res	1 seine haul	LMB YOY	420	55	-	39-76	-
		Wsu	2	190	55	183-198	50-60
	2 gill nets	LMB	9	279	388	250-380	230-1150
		BBH	19	219	147	187-245	80-220
		WSU	241	207	87	178-293	50-230
Scheetz Res	1 seine haul	YP	1	180	-	-	-
	2 gill nets	BBH	8	202	149	114-230	120-210
		YP	2	157	45	151-163	40-50

Table 2. Continued.

Pond Name	Type of Sample	Species	No. Caught	Mean Length	Mean Weight	Length Range	Weight Range
<u>Rosebud County</u>							
Blacks Sawmill	1 gill net	Rbt	3	160	40	-	-
Hofer Res	1 gill net	Rbt	22	278	301	210-314	110-410
Schlesinger #1	2 gill nets	YP	11	223	182	184-266	80-320
		NP	3	422	490	380-465	380-630
Schlesinger #2	1 seine haul 2 gill nets	LMB	14	201	96	187-250	80-190
		LMB	29	206	115	145-267	40-270
<u>Wibaux County</u>							
Bannister Bass	1 seine haul	No fish	-	-	-	-	-
Witkowski	1 seine haul	YP	13	170	75	150-195	20-110
		NP	3	187	53	181-195	50-60