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A FIVE-YEAR FISH DISTRIBUTION AND MANAGEMENT PLAN
1947 - 1951

BIG TIMBER HATCHERY UNIT - MONTANA

By

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UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
REGION ONE
IN COOPERATION WITH
STATE OF MONTANA
FISH AND GAME DEPARTMENT

Approved by
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Table 8. Management data on streams recommended for planting in the Big Timber Hatchery district

Name of stream	Miles fishing water	Width in feet	Number tributaries	Temperature degrees Fahrenheit*	Food condition	Amount of fishing**	Species fish present	List barriers in stream or rearing pond possibilities
Yellowstone Drainage								
✓ Yellowstone River, from mouth of Shields River to mouth Bighorn River	180	150	4 main rivers		fair	very heavy	Ct, LL, Eb, Rb, S, Gr, Cat, Perch, Bass, Carp, Wf	
✓ Broadwater Cr.	5	10			good	medium	LL, Rb	
✓ Danford Drain	7	10			"	"	LL, Rb	
Yellowstone River (South Side)								
Upper Deer Cr.	8	8	2		"	small	Ct, Rb, LL, Eb	
E. Fk. Upper Deer Cr.	9	6			"	"	Ct, Rb, LL, Eb	
W. Fk. Upper Deer Cr.	6	5			"	"	Ct, Rb, LL, Eb	
Tributaries of Yellowstone River (North Side)								
Swamp Cr.	11	10	2		"	medium	Eb, Ct	Beaver dams 10 mi. from mouth
N. Fk. Swamp Cr.	4	6			"	"	Eb	
S. Fk. Swamp Cr.	5	8			"	"	Eb	
Big Timber Cr.	20	20	5		"	heavy	Eb, LL, Ct, Rb	50' falls and fast rapids 17 mi. from mouth
S. Fk. Big Timber Cr.	9	15	1		"	medium	Rb, Eb	
Sweetgrass Cr.	55	40	7		"	heavy	Eb, LL, Ct, Rb	Sinks for 2 mi. between Brannin ranch and the series of falls
N. Fk. Sweetgrass Cr.	3	10			"	none	Ct ?	
Mid. Fk. Sweetgrass Cr.	4	20	1		"	medium	Ct, Rb	Series of falls 1 mi. from mouth
S. Fk. Sweetgrass Cr.	3	12			"	none	none	Series of falls near mouth
Basin Cr.	6	6			"	small	Eb	Dam and irrigation reservoir 2 mi. from mouth

* Temperatures during July and August to be entered as records become available.

**Light fishing, 0-300 man-days' use; medium fishing, 300-1000 man-days' use; heavy fishing, 1000-3000 man-days' use; very heavy fishing, more than 3000 man-days' use.

Table 8. Management data on streams recommended for planting in the Big Timber Hatchery district (cont.)

Name of stream	Miles fishing water	Width in feet	Number tributaries	Temperature degrees Fahrenheit*	Food condition	Amount of fishing**	Species fish present	List barriers in stream or rearing pond possibilities
Main Boulder River	63	50	30		good	heavy	Ct, Rb, Eb, LL, S, Wf	30' falls 28 mi. from mouth falls in Box Canyon
East Boulder River	20	25	5		"	medium	Ct, Rb, Eb	35' falls 15 mi. from mouth; used for irrigation; upper 10 mi. closed to fishing
Elk Cr.	9	10			"	light	Ct, Rb, Eb	Fast rapids 18 mi. from mouth
West Boulder River	32	30	12		"	medium	Ct, Rb, Eb, LL	Series of falls $\frac{1}{2}$ mi. from mouth
Falls Cr.	5	7			"	none	Rb ?	
Davis Cr.	8	7	3		"	"	Ct, Rb	
Stillwater Drainage	65	40	40		"	very heavy	Ct, Rb, Gr, S, Wf, LL, Eb	Series of falls $\frac{1}{2}$ mi. above mouth of Cathedral Cr.
Stillwater River	24	20	13		"	heavy	Ct, Rb, Eb (Ct, Rb only above falls)	
W. Fk. Stillwater River	30	25	15		"	"	Ct, Rb, Eb, LL	Dam 150' high at lower end of Mystic Lake, falls above Silver Lake
W. Fk. Rosebud Cr.	33	20	11		"	medium	Ct, Rb, LL, S, Wf, Eb	
E. Rosebud Cr.	7	8			"	"	Eb, Rb	Series of falls 3 mi. from mouth
Phantom Cr.								

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Table 8. Management data on streams recommended for planting in the Big Timber Hatchery district (cont.)

Name of stream	Miles fishing water	Width in feet	Number tributaries	Temperature degrees Fahrenheit*	Food condition	Amount of fishing**	Species fish present	List barriers in stream or rearing pond possibilities
Clark Fork Drainage								
Clark Fork of Yellowstone River	60	75	25		poor	heavy	Ct,Rb,LL,S,Wf, Bream,Cat,Eels	Open to fishing yearlong
Bluewater Cr.	12	6			good	light	Eb,Ct	Bluewater Spring recommended for fish hatchery and rearing pond site
Pryor Cr. (head only)	15	20	3		fair	medium	Rb,Ct,Eb	
E. Fk. Pryor Cr.	22	10	1		"	"	Rb,Ct,Eb	
Hay Cr.	12	6			"	"	Rb,Ct,Eb	
Rock Creek Drainage								
Rock Cr.	57	30	20		good	very heavy	Rb,Ct,Eb	Some simple stream improvements desirable
Alkali or Clear Cr.	14	6	1		"	light	Rb,Ct,S	
Lake Cr.	8	12	6		"	medium	Rb,Ct,Eb	
W. Fk. Rock Cr.	18	14	11		"	"	Rb,Ct,Eb	Lower 7 mi. closed to fishing. Sentinel Falls 12' high. Fish planted above falls
Red Lodge Cr.	40	10	10		fair	"	Ct,Rb,Eb,S	
Thiel Cr.	8	5			"	light	Ct,Rb,Eb,S	
Hogan Cr.	3	5			"	"	Ct,Rb,Eb,S	
Harney Cr.	6	5			"	"	Ct,Rb,Eb,S	
Willow Cr.	25	6	3		"	"	Ct,Rb,Eb,S	

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**Light fishing, 0-300 man-days' use; medium fishing, 300-1000 man-days' use; heavy fishing, 1000-3000 man-days' use; very heavy fishing, more than 3000 man-days' use.

Table 8. Management data on streams recommended for planting in the Big Timber Hatchery district (cont.)

Name of stream	Miles fishing water	Width in feet	Number tributaries	Temperature degrees Fahrenheit*	Food condition	Amount of fishing**	Species fish present	List barriers in stream or rearing pond possibilities
Tributaries Bighorn River	85	100	10		fair	heavy	Pike, Cat, S, Carp, Ling, Bass, Eels, Sturgeon, Shad	
Bighorn River	62	50	8		"	"	Ct, Rb, Ll, Eb, Bass, Wf, Pike, S, Carp, Ling, Eels, Cat, Gr	10' dam at Crow Agency used for irrigation
Little Bighorn River	28	16	4		good	"	Rb, Eb, S	
Lodgegrass Cr.	27	10	2		"	"	Rb, Ll, S	
Rottengrass Cr.	18	20	3		"	light	Rb, Ct, Eb, S	Falls 16 mi. above mouth
Soap Cr.	23	25			"	medium	Ct, Rb, Eb	
Black Canyon Cr.	13	20			"	"	Rb, Ct, Eb, S	
West Pass Cr.	2	100			"	"	Rb, Ct, Eb, S, Bass, Cat, Crappie, Perch	
Warren's Slough	12	6			fair	light	Ct	
Sage Cr. (head only)	10	4			"	"	Ct	
Crooked Cr. (head only)	16	8			good	"	Ct	
Dry Head Cr. (head only)								

* Temperatures during July and August to be entered as records become available.

**Light fishing, 0-300 man-days' use; medium fishing, 300-1000 man-days' use; heavy fishing, 1000-3000 man-days' use; very heavy fishing, more than 3000 man-days' use.

Table 9. Management data on lakes recommended for stocking in the Big Timber Hatchery district

Name of lake	Acre- age	Temper- ature degrees F.	Food condition	Species fish present	Percent of area under 30 feet in depth	Percent of area over 100 feet in depth	Amount of vegeta- tion present	Principal type of shore line; mud, gravel, rock, etc.	Drains into
Yellowstone River (North Side)									
Swamp Lake	28		very good	Eb, Ct	30		large	rock	Swamp Cr.
Fish Lake	7		fair	Ct	50		none	"	"
Upper Glass Lindsey	650		good	LL, Rb, Ct, Eb	50		medium	mud, rock	Lower Glass Lindsey Lake
Lower Glass Lindsey	1200		fair	Eb, LL, Rb, Ct, Perch, Bass	50		small	"	No drainage - used for irrigation
West Rosebud Drainage									
Mystic Lake	700		good	Rb	40	50	large	mud, sand, rock	West Rosebud
Island Lake	100		"	Rb	70	30	"	mud, rock	"
Silver Lake	60		"	Ct, Rb	30	10	"	mud, rock, gravel	"
East Rosebud Drainage									
Rimrock Lake	20		"	Rb	10		medium	rock, gravel	East Rosebud
Elk Lake	40		"	Rb	25		"	"	"
East Rosebud Lake	160		"	Rb, Ct, Eb, S	25	25	large	mud, rock, gravel	"

Table 11. Lakes in the Big Timber Hatchery district in which no planting is recommended

Name of lake	Acre- age	Species fish present	Reason for not planting					Other
			Too warm	Undesirable fish present	Too shallow	Inadequate food	Needs inves- tigation	
Yellowstone River (North Side)								
Crazy Mountains	12	Ct, Rb						Closed by private posting
Lower Crazy Lake	16	Ct, Rb						Overstocked
Upper Crazy Lake	7	Rb						Closed by private posting
Thunder Lake	19	Rb						Overstocked
Granite Lake	15	Rb						"
Blue Lake	15	Rb						"
Timberline or	15	Rb						"
Druckemiller Lake	38	Rb						"
Pear Lake	20	Ct, Rb						Inaccessible
Twin Lakes	15	none					x	
Glacier Lake	13	"						Overstocked
Diamond Lake	8	Gr						"
Cascade Lake	15	Rb						
Cave Lake	15	Ct, Rb						Closed by private posting
Moose Lake	31	Ct, Rb						Overstocked
Campfire or Hindu Lake	18	Ct						"
Sunlight Lake								
Boulder River Drainage								
Angle Lake	5						x	
Horseshoe Lakes	40						x	
Unnamed lake 3/4 mi.								
southeast of Horseshoe	15						x	
Mirror Lake	30						x	
3 unnamed lakes east of								
Upper Rainbow	25						x	
Burnt Gulch Lake	10						x	
Lake Columbine	5						x	
Blue Lake	5						x	
Elk Lake	10						x	
Bridge Lake	20						x	

Table 11. Lakes in the Big Timber Hatchery district in which no planting is recommended (cont.)

Name of lake	Acre- age	Species fish present	Reason for not planting				Other	
			Too warm	Undesirable fish present	Too shallow	Inadequate food		Needs inves- tigation
Boulder River Drainage (Cont.)								
2 unnamed lakes head of Great Falls Cr.	6						x	
Lake McKnight	20						x	
Blacktail Lake	5						x	
Camp Lake	3	Ct or Rb						Adequately stocked
4 unnamed lakes head of Hawley Cr.	80	none						
Trout Lake	2	"					x	Inaccessible
Emerald Lake	4	"					x	"
Upper Rainbow	40	Ct						Adequately stocked
Middle Rainbow	18	Ct, Rb						"
Lower Rainbow	15	Ct, Rb						"
2 unnamed lakes in N. Fk. Upsidedown Cr.	7	none						Inaccessible
Fish Lake	15	Ct						Adequately stocked
Unnamed lakes ½ mi. southeast of Fish Lake	5	none					x	
Lake Kathleen	3	"				x		
Silver Lake	15	Rb						Overstocked at present
2 unnamed lakes above Silver Lake	15	none					x	Inaccessible
4 unnamed lakes head of Bramble Cr.	20	"					x	"
Speculator Lake	15	"						"
4 unnamed lakes head of Weasel Cr.	15	"						"
Unnamed lake head of Great Falls Cr.	2	Rb						Adequately stocked
2 unnamed lakes in Falls Cr.	5	none						Hard to plant

Table 11. Lakes in the Big Timber Hatchery district in which no planting is recommended (cont.)

Name of lake	Acre- age	Species fish present	Reason for not planting				Other
			Too warm	Undesirable fish present	Too shallow	Inadequate food	
Boulder River Drainage (Cont.)							
4 unnamed lakes in Froze-to-Death Cr. Meeker's or Nurses' Lake	5 3	none "	x		x		Inaccessible Silver salmon planted 1938, none survived
West Boulder Drainage							
West Boulder Lake	160	Rb					Adequately stocked
Alpine Lake	15	none					Inaccessible
Stillwater River Drainage							
Goose Lake	40	Ct					Adequately stocked
Horseshoe Lake	10	Ct					"
Lake Wilderness	30	none					Inaccessible
2 unnamed lakes on S. Fk. of Wounded Man	30	"				x	Adequately stocked at present
Crazy Mule Lake	30	Ct					"
2 unnamed lakes above Crazy Mule Lake	20 15	Ct Ct					"
Gordon Lake							
2 unnamed lakes above Gordon Lake	30	none				x	Overstocked at present
Barrier Lake	40	Rb				x	"
Wounded Man Lake	45	Rb				x	"
Big Fish Lake	15	Rb				x	"
3 unnamed lakes in main Wounded Man drainage	20 70	Rb Ct, Golden (1946 report)					Adequately stocked at present Golden trout planted 1938
Lake Pinchot							
Cimmerian, Spectator and 16 unnamed lakes in Flood Cr. drainage	185	none				x	Inaccessible
Mountain View Lake	8	"			?	x	Apparently stagnant

Table 11. Lakes in the Big Timber Hatchery district in which no planting is recommended (cont.)

Name of lake	Acre- age	Species fish present	Reason for not planting				Other	
			Too warm	Undesirable fish present	Too shallow	Inadequate food		Needs inves- tigation
<u>West Fork of Stillwater River</u>								
6 unnamed lakes in Saderbalm Cr.	30	none					x	Inaccessible
3 unnamed lakes in Tumble Cr.	50	"					x	"
Unnamed lake in Lightning Cr. drainage	70	"					x	"
2 unnamed lakes in Picket Pin drainage	10	Ct						Adequately stocked
<u>West Rosebud Drainage</u>								
Lilypad Lake	15	Ct, Rb, S						"
Crater Lake	10	Ct, Rb, S						"
Peaves Lake	8							Almost goes dry
Emerald Lake	10	Ct, Rb, Eb, LL, Gr, Wf, S						No planting in lake - plant in West Rosebud Cr.
West Rosebud Lake	5	do						Same as above
4 unnamed lakes above Silver Lake	100	Ct, Rb						Adequately stocked
Unnamed lake at head of Huckleberry Cr.	10	none						
Chicken Lake	30	"						
Chrome Lake	5	Rb						
<u>East Rosebud Drainage</u>								
Sylvan Lake	20	Golden						"
Crow Lake	25	Rb, Eb						"
Rainbow Lake	50	Rb						"
13 unnamed lakes above Rainbow Lake	150	none						Inaccessible
Shadow Lake	15	Rb						Adequately stocked
6 unnamed lakes head of Phantom Cr.	60	none						Inaccessible

Table 11. Lakes in the Big Timber Hatchery district in which no planting is recommended (cont.)

Name of lake	Acre- age	Species fish present	Reason for not planting				Other
			Too warm	Undesirable fish present	Too shallow	Inadequate food	
Clark Fork of the Yellowstone Drainage							
Line Lake	20	Rb					Adequately stocked
Rock Creek Drainage							
Cooney Dam Lake	1000	Eb, Rb, Ct, S					No planting in main lake - plant in streams above lake
Glacier Lake	160	Eb					Adequately stocked
Crescent Lake	10	Eb					"
Hellroaring Lakes (6)	65	Ct, Eb - planted 1933					Overstocked
Broadwater Lake	5	Ct, Rb, Eb				x	Stream planting adequate for stocking lake
Lost Lake	10	Eb					Adequately stocked
First Rock Creek Lake	20	Ct, Eb - planted 1939					"
Second Rock Creek Lake	20	Ct, Eb					"
Black Canyon Lake	100	Eb					"
Keyser Brown Lake	30	Ct, Eb					"
September Morn Lake	5	Eb					"
Basin Creek Lakes	25	Eb					"
Slough Lake	15	Eb					"
Tributary to West Fork Rock Creek Drainage							
Timberline Lake	40	Eb					"
Gertrude Lake	50	Eb					"
Ship Lake	40	Eb					"
Dude Lake	10	Eb					"
Mary Lake	40	Eb					"
Tributary to Little Bighorn Drainage							
Willow Creek Dam	860	Ct, Rb, Eb, S					Built in 1942 - to be planted from Lodge Grass Cr. - no planting in lake

Table 12. Species of fishes and their distribution in the main streams and lakes of the Big Timber Hatchery district

River or lake	Species of fish															
	Trout					Other fish										
	Cutthroat	Rainbow	Eastern brook	Loch Leven	Golden trout	Grayling	Whitefish	Suckers	Perch	Bass	Carp	Pike	Bluegill (bream)	Ling	Catfish	Eels
<u>Rivers</u>																
Bighorn							x		x	x	x		x	x	x	
Boulder, below falls	x	x	x	x		x										
Boulder, above falls	x	x														
Clark Fork of Yellowstone	x	x	x	x		x	x	x	x	x		x	x	x	x	
East Rosebud	x	x	x	x		x	x									
Little Bighorn	x	x	x	x		x	x		x	x	x		x	x	x	
Lower Deer, below falls	x	x														
Lower Deer, above falls						x										
Red Lodge	x	x	x				x									
Rock	x	x	x				x									
Stillwater	x	x	x	x		x	x	x								
West Rosebud	x	x	x	x		x	x	x								
West Fork Stillwater	x	x	x	x												
West Fork Stillwater, above falls	x	x														
Yellowstone	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x
<u>Lakes</u>																
Barrier		x														
Big Fish		x														
Black Canyon			x													
Blue		x														
Bridge	?	?														
Campfire or Hindu	x	x														
Cascade						x										
Cave		x														
Chrome		x														
Cooney Dam	x	x	x				x									
Crazy Mule		x														
Crow			x													
Emerald	x	x	x	x		x	x	x								
Fish	x															
Glacier			x													
Goose	x															
Gordon	x															
Granite		x														
Hellroaring Lakes			x													
Horseshoe	x															
Ingle		x														
Island		x														

Table 12. Species of fishes and their distribution in the main streams and lakes of the Big Timber Hatchery district (cont.)

River or lake	Species of fish															
	Trout					Other fish										
	Cutthroat	Rainbow	Eastern brook	Loch Leven	Golden trout	Grayling	Whitefish	Suckers	Perch	Bass	Carp	Pike	Bluegill (bream)	Ling	Catfish	Eels
<u>Lakes (cont.)</u>																
Keyser Brown	x	x	x													
Lilypad	x	x	x					x								
Lower Crazy	x	x														
Lower Glass Lindsey	x	x	x	x		x			x							
Lake McKnight	?	?														
Mystic		x														
Moose	x	x														
Pear		x														
Picket Pin	x															
Pinchot					?											
Rainbow		x														
Roosevelt	x															
Silver	x	x														
Sunlight	x															
Swamp	x		x													
Sylvan					x											
Thunder		x														
Twin Lakes	x	x														
Timberline		x														
Upper Crazy	x	x														
Upper Glass Lindsey	x	x	x	x		x			x							
Wounded Man		x														
Species native to unit	x						x	x						x		x
Introduced species		x	x	x	x	x	x		x	x	x	x	x		x	