

LAKE SURVEY DATA

SURVEYED BY: E.H. Vernon. DATE SURVEYED: July 19, 1951

NAME: QUAMICHAN LAKE. MAP REF. CODE NO. 92B/13

DATA ON FILE:

Physical Data	<input checked="" type="checkbox"/>	Fish Samples	<input checked="" type="checkbox"/>
Geography	<input checked="" type="checkbox"/>	Stomach Analysis	<input checked="" type="checkbox"/>
Chemical	<input checked="" type="checkbox"/>	Scale Reading	<input checked="" type="checkbox"/>
Flora	<input checked="" type="checkbox"/>	Resort & Campsite	<input type="checkbox"/>
Invertebrates	<input checked="" type="checkbox"/>	Habitation	<input type="checkbox"/>
Temperature Series	<input checked="" type="checkbox"/>	Access	<input type="checkbox"/>
Obstructions & Pollutions	<input type="checkbox"/>	Oxygen	<input checked="" type="checkbox"/>
Stocking	<input checked="" type="checkbox"/>	Photography	<input checked="" type="checkbox"/>
General Information	<input checked="" type="checkbox"/>	Rehabilitation	<input type="checkbox"/> Year <u> </u>
Miscellaneous	<input type="checkbox"/>		

(1 mile)

LOCATION: Vancouver Island, /N.E. of Duncan,

Latitude, Longitude 48° 123° N.W.

Drainage System Outlet Cr. - Cowichan R. - Cowichan Bay.

Elevation 101'

PHYSICAL DATA:

Surface Area	<u>754 acres.</u>	Volume	<u>31,062'</u>
Shoreline Development	<u>13.7</u>	Shoreline Perimeter	<u>31,062'</u>
Maximum Depth	<u>26'</u>	Mean Depth	<u>3.5'</u>
Total Dissolved Solids	<u>60 PPM.</u>	Secchi's Disc	<u>3.5'</u>

GEOGRAPHY:

Local Geography:

Lake Drainage: Inlet Creek - Completely choked with rooted aquatic vegetation, mud bottom, no year-round flow.

Outlet Creek - 10' falls $\frac{1}{2}$ mile from lake, first $\frac{1}{4}$ mile from lake marshy, mud bottom, next $\frac{1}{4}$ mile has some suitable spawning gravel, stream at present, dry. Dominion Fisheries Officer Sherman reports that cut-throat, formerly spawned in outlet creek in January.

LAKE: . . . QUAMICHAN

TEMPERATURE: July 19/51, 1200 hrs., A.T., 70°F., 0.-7.m.,

LIGHT PENETRATION: . . . Secchi's = 1 m., 1230 hrs., 0/10 O.C., slight chop, July 19/51

OXYGEN: . . . July 19/51, 1.m., 6.m.,

DISSOLVED SOLIDS:

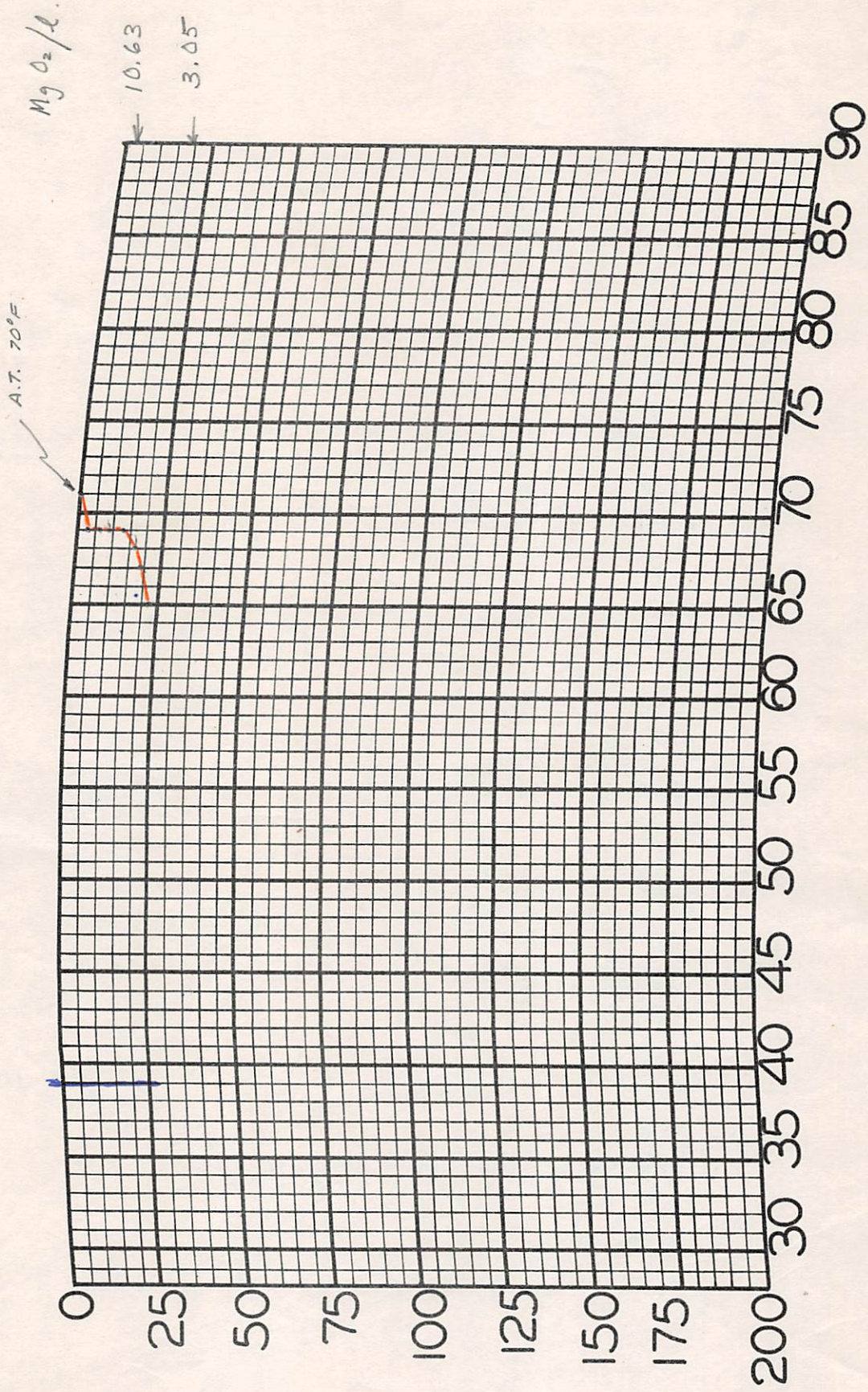
DATE July 19/51	T.D.S.		BREAKDOWN	
	60	P.P.M.	In P.P.M.	
			Ca	31.7
			SO ₄	8.6
			Cl	4.3
			Fe	0
			Mg	2.1
			K	2.8
			Na	6.0

SP. COND.
@ 18°C = 0.95×10^{-4}

MISCELLANEOUS:



QUAMICHAN LAKE. JULY 19/51.



QUAMICHAN LAKE

FLORA AND INVERTEBRATE FAUNA

MACROFLORA ANACHARIS (CANADENSIS ?)
POTEMOGETON PUSILLUS Var.?

PLANKTON

Date, station	T.V. 10	T.V. 20	S.T. 10	S.T. 20
July 19, 1951.	2.4cc. 7 M. Rivularia sp. Anabaena sp. (2) *Unid. Blue-Greens Asterionella sp. Unid. Diatoms (1) Tribonema sp. (Bumilleria?) Anuraea sp. Asplanchna sp. Daphnia sp. Cyclops sp. Bosmina so. Nauplii	1.8cc. 7 M. Ceratium sp. Anabaena sp. Tribonema sp. Unid. Blue Greens Unid. Diatoms Asplanchna sp. Anuraea sp. Polyarthra sp. Notholca sp. Unid. Rotifers Bosmina sp. Cyclops sp. Nauplii	6.5cc. 3 min. Rivularia sp. *Unid. Blue greens Anabaena sp. Asplanchna sp. Daphnia sp. Cyclops sp. * + 75% tot. Vol.	

BOTTOM FAUNA

* very abundant.

Date	Depth	Substrata	Organisms
July 19, 1951.	shore coll'n.	boulders	Unid. Planarian. Limnea so. Planorbis sp. Unid. Leeches, Physa sp. Sphaerium sp. Hyallella sp. Damselfly Nymphs. Chironomus sp.
"	3 M.		Caddisfly Larvae, Dragonfly nymphs. No organisms.
"	7 M.		Sphaerium sp. Chironomus sp.

CHECKING LIST OF SPECIES

QUAMICHAN

LAKE

TROUT, CHAR

		SPECIMENS	SCALES	STOMACHS	RECORD ONLY
Lake Trout	Savlelinus namaycush				
Dolly Varden	S. alpinus				
Brook Trout	S. fontinalis				
Brown Trout	Salmo trutta				
Cutthroat	S. clarki		✓		
Steelhead	S. gairdneri		✓	✓	

WHITEFISH

Round	Prosopium cylindraceum				
Mountain	P. williamsoni				
Pygmy	P. coulteri				
Lake	Coregonus clupeaformis				
Broad	C. nasus				
Least Cisco	C. sardinella				
Inconnu	Stenodus leucichthys nelma				

GRAYLING

Arctic	Thymallus arcticus				
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SUCKERS

Coarse Scale	Catostomus macrocheilus				
White	C. commersoni				
Longnose	C. catostomus				
Bridgelip	C. columbianus				
Northern Mountain	Pantosteus jordani				

MINNOW

Carp	Cyprinus carpio				
Goldfish	Carassius auratus				
Tench	Tinca tinca				
Redside Shiner	Richardsonius balteatus				
Squawfish	Ptychocheilus oregonense				
Northern Pearl Dace	Margariscus margarita nachtriebi				
Peamouth Chub	Mylocheilus caurinum				
Northern Redbelly Dace	Chrosomus eos				
Finescale Dace	Pfrittle neogoea				
Chiselmouth	Acrocheilus alutaceum				
Flathead Chub	Platygobio gracilis				
Lake Chub	Couesius plumbeus				
Speckled	Rhinichthys osculus				
Leopard Dace	R. falcatus				
Longnose Dace	R. cataractoe				
Brassy Minnow	Hybognathus hankinsoni				

SCULPINS

Prickly	Cottus asper	✓			
Aleutian	C. aleuticus				
Spoonhead	C. ricei				
Torrent	C. rhotheus				
Slimy	C. cognatus				
Columbia	C. hubbsi				

BASS

Smallmouth	Micropterus dolomieu				
Largemouth	M. salmoides				
Pumpkinseed	Lepomis gibbosus				
Black Crappie	Pomoxis nigromaculatus				

Locality QUAMICHAN LAKE Date July, 1951 Method of Capture Gillnet

DATE	SPECIES	LENGTH	WEIGHT	SEX	COND.	AGE	STOMACH CONTENTS					REMARKS	
							Total Volume	Bottom Organisms	Plankton	Terr. Insects	Fish		
July 19/51 2 ¹ / ₂ net 1	Kamloops	18.5	65	F	Imm.	2+	0.7	0.7				+plant life, chiron. pupae	
2	"	23.5	180	M	"	2+	0.3				0.3		
3	"	24	150	M	"	2+	0						
2 ¹ / ₂ net 4	"	28	240	M	2+	0.2	Unidentifiable						
3 ¹ / ₂ net 5	"	26	210	M	"	2+	+	Unidentifiable					
7	"	39	600	M	"	3+	+				+		
8	"	41	750	F	"	3sp	4.0				4.0		
9	"	38	800	F	"	3sp	0.7				0.7		
10	"	39	675	F	"	3+	2.7				2.7		
11	"	45	1025	F	spent	3sp	3.5				3.5		
12	"	41	700	F	Imm.	3sp	1.0				1.0		
13	"	50	1075	F	spent	4sp	0						
14	"	41	775	F	Imm.	3+	0.5						
15	"	40	675	F	"	3sp	+	+				corethra	
16	"	49	950	F	Mat.	4sp	0					fish was egg-bound	
17	"	42	700	F	spent	4sp	+	Unidentifiable					
18	"	48	1100	F	Mat.	4sp	1.3			+	1.3	fish was egg-bound	
2 ¹ / ₂ net 4	Cutthroat	27.5	220	F	Imm.	2+	0						
	Kamloops	45.5	775	F	sp.	4sp	Not taken						
Seine Haul July 19/51	10 C. Asper	2-4 cm.											
	30 G. Aculeatus	1.5 cm.											
	G. Aculeatus	5-6 cm.											

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JULY 19/51.

STOMACH ANALYSIS

NO. & SPECIES OF FISH	Average standard length	<u>33.8 cm.</u>
17 KAMLOOPS TROUT	Average forked length	<u>37.3 cm.</u>
	Average volume of stomach contents	<u>0.88 cc.</u>
	Total volume of stomach contents	<u>14.9 cc.</u>
	<u>4.7</u> % Bottom Organisms	
	<u>0</u> % Plankton	
	<u>0</u> % Terrestrial Insects	
	<u>94.0</u> % Fish	
	<u>1.3</u> % Others	

12 fish imm., 2 fish mat., 3 fish spent.

LAKE: QUAMICHAN LAKE.

STOMACH ANALYSIS

NO. & SPECIES OF FISH	Average standard length	<u>25</u> <i>cm.</i>
1 CUT-THROAT	Average forked length	<u>27.5</u> <i>cm.</i>
	Average volume of stomach contents	_____
	Total volume of stomach contents	_____
	_____ % Bottom Organisms	
	_____ % Plankton	
	_____ % Terrestrial Insects	
	_____ % Fish	
	_____ % Others	

Stomach empty fish immature.