III. LAKES: PHYSIO-CHEMICAL DATA

Date: 6-3-82
Time: _____
Location Index: _____
Lake Name: Jatahmund

Investigator Stearns Breeser

Weather conditions: Circle appropriate letter
(a.) fair b. partly cloudy c. overcast d. rain e. snow

Air temperature: Circle appropriate letter
a. 0°F b. 0 to 32°F (c.) 33 to 50°F d. 51 to 70°F
e. 70°F

		Surface	Bottom
1.	Dissolved oxygen (mg/l)		
2.	pH	7.5	
3.	Total alkalinity (mg/l)	29 gr./gal	
4.	Total hardness (mg/l)	29 gr./gal	
5.	Water temperature °C or °F	43° F	
6.	Conductivity (micromhos/cm)		
7.	Secchi transparency (ft.)		

8. Maximum depth _____ ft.
9. Ice thickness _____ ft.
10. Snow cover _____ ft.
11. Predominant lake shore vegetation: circle appropriate one(s)
(a.) Forest b. brush c. bog d. meadows e. moist tundra
f. dry tundra g. barren
12. Aquatic vegetation coverage 0 %
13. Major aquatic plant taxa

TAXA	% Composition

Comments

Free Acidity = 0
Total Acidity = .33 gr/gal
phen Alkalinity = 0
CO_2 = 5 mg./l

IV. FISH SAMPLE DATA

Date: 6/3/92 Investigator Brosen Simons

Location Index No: ~~Jotahnund Stream~~

Stream or Lake Name: Jotahnund lake

SAMPLINE GEAR AND EFFORT

Gear Code	Gear Type	Effort	Total Number of Fish Captured
EF	Electrofishing	____ minutes	
E 125	2 Experimental Gill Net-~~125~~ 100'	24 net-hrs	2 LKT, 2 N Pike
E 30	Experimental Gill Net-30'	____ net-hrs	
S 10	Seine: 10' Fry	____ hauls	
S 25	Seine: 25'	____ auls	
MTB	Minnow Trap: Baited	____ trap-hrs	
MTU	Minnow Trap: Unbaited	____ trap-hrs	
A	Angling:	____ hrs	
O	Observation - list species below and indicate fry, juvenile, or adult in length column.		

FISH SAMPLE

	Species	Fork Length(mm)	Weight (gms)	Scale Sample (X)	Gear Code
Sex (1)	LK TROUT	54.5	1240	Yes	EGN
(2)	" "	56.0	1320	No	"
(3) Ripe F	N Pike	56.5	1200	Yes	"
(4) empty stomach spent	" "	64.0	1600	"	"
(5)					
(6) 3 sculpin in stomach					
U	N Pike	18.0	15	Yes	"

Species	Fork Length(mm)	Weight (gms)	Scale Sample (X)	Gear Code

Comments on reverse side.

deep water off S end of Island.

NORTHER PIKE

JAHTA MUND

SCALE AGE	NO.	$\bar{x}$ F. LENGTH
I+	2	184.0
II+	8	299.8
III+	2	395.0
IV+	4	463.3
V+	2	543.5
VI+	1	562.0
VII+	0	—
VIII+	1	620.0
IX+	2	659.0

CLIETHRA AGE	NO.	$\bar{x}$ F. LENGTH
I+	3	171.0
II+	8	299.8
III+	3	414.6
IV+	3	475.6
V+	2	529.5
VI+	1	569.0
VII+	3	610.7
VIII+	2	637.0

* Cliethra age SEEMS TO BE A BETTER METHOD

* could not age Lake trout and Longnose sucker

year suckers; few larval and adult caddisflies seen; northern red backed voles were snap trapped; other wildlife included a cow moose, pair of common loons, ruby crowned kinglet, flicker, boreal chickadees, Swainson's thrush, robin, Canada jays, mew gull, kingfisher and tree swallows.

Deeper Lake - 3a; July 2-5; U.S.G.S. topo. - Nabesna C-3; R16E; T10N; Sec. 11 and 14.

Less than 400 acres with maximum depth of 60 feet and steep shorelines generally; rocky bottom with clear but heavily stained water; white spruce type terrestrial vegetation with some willow and alder ringing the lake; sedge and Equisetum (horsetail) along shoreline with pond lily, pondweed and Sparganium (burreed) as submergents; only grayling were captured; some larval and adult caddisflies; northern red backed vole snap trapped; other wildlife observed were 2 goshawks, common goldeneyes, common merganser, red throated loon, arctic loons, mew gulls, spotted sandpiper, kingfisher, Swainson's thrush and tree sparrow.

Jatahmund Lake - 3b (highland, isolated); July 5-10 and July 19-23; U.S.G.S. topo. - Nabesna C-2; R18E; T10N; Sec. 23, 26 and 35 and Nabesna C-3; R18E; T10N; Sec. 16, 20, 21, 22, 27, 28, 33 and 34 and R18E; T9N; Sec. 4.

Greater than 2000 acres with maximum depth of

90 feet, gently sloping shoreline with rock and sandy patches on bottom; clear unstained water (except for cove at far south-eastern end); terrestrial vegetation of white spruce type; sedge, horsetail and Eleocharis (spike rush) as emergents and sparse pond lily and pondweed as submergents... very little submergent vegetation in clear water area... much more in stained area; pike of all size classes was the most captured fish; 2 least ciscoes (whitefish) and 3 lake trout were also sampled with the lake trout being of the same length as all lake trout recorded in the refuge cabin logbook; small sculpins were found in the stomachs of the pike; larval caddisflies, dragonflies and aquatic beetles were seen in stomach samples of all fish examined; northern red backed voles were snap trapped; other wildlife were surf scoters, a pair of common loons with one young, green wing teal, red necked grebes, an adult and immature bald eagle, herring gull, mew gulls, bonapartes gulls, spotted sandpiper, least sandpiper, semi-palmated plover, lesser yellowlegs, arctic terns, flickers, white crowned sparrows, ruby crowned kinglet, yellow rumped warblers, boreal chickadees, Swainson's thrushes, rusty blackbirds, dark eyed juncos, robins, and 3-toed woodpeckers.

Heavy weather and the size of the lake caused many delays in the daily routine which demanded a return trip to finish mapping when the fathometer became waterlogged.

Cisco Lake (named because all pike sampled had least ciscoes

Jatamund 10 N 18 E Sec. 28
Tetlin NWR Nabesna C-2, C-3

Tatahmund elevation 2177'

max depth 90'

