Table . Physical characteristics of "Upper Didrickson" Lake.

Lake area 22.1 ha (54.6 acres) Lake elevation 93 m

Lake volume 2.64×10^6 m^3 (2.14×10^3 acre-feet)

Maximum depth 22 m Mean depth 11.9

Shoreline length 3,315 m Shoreline development 1.98

Watershed area 420 ha Volume development 1.6

Ratio of lake area to watershed area 1:19

Littoral development (area <10 m) 40.3%

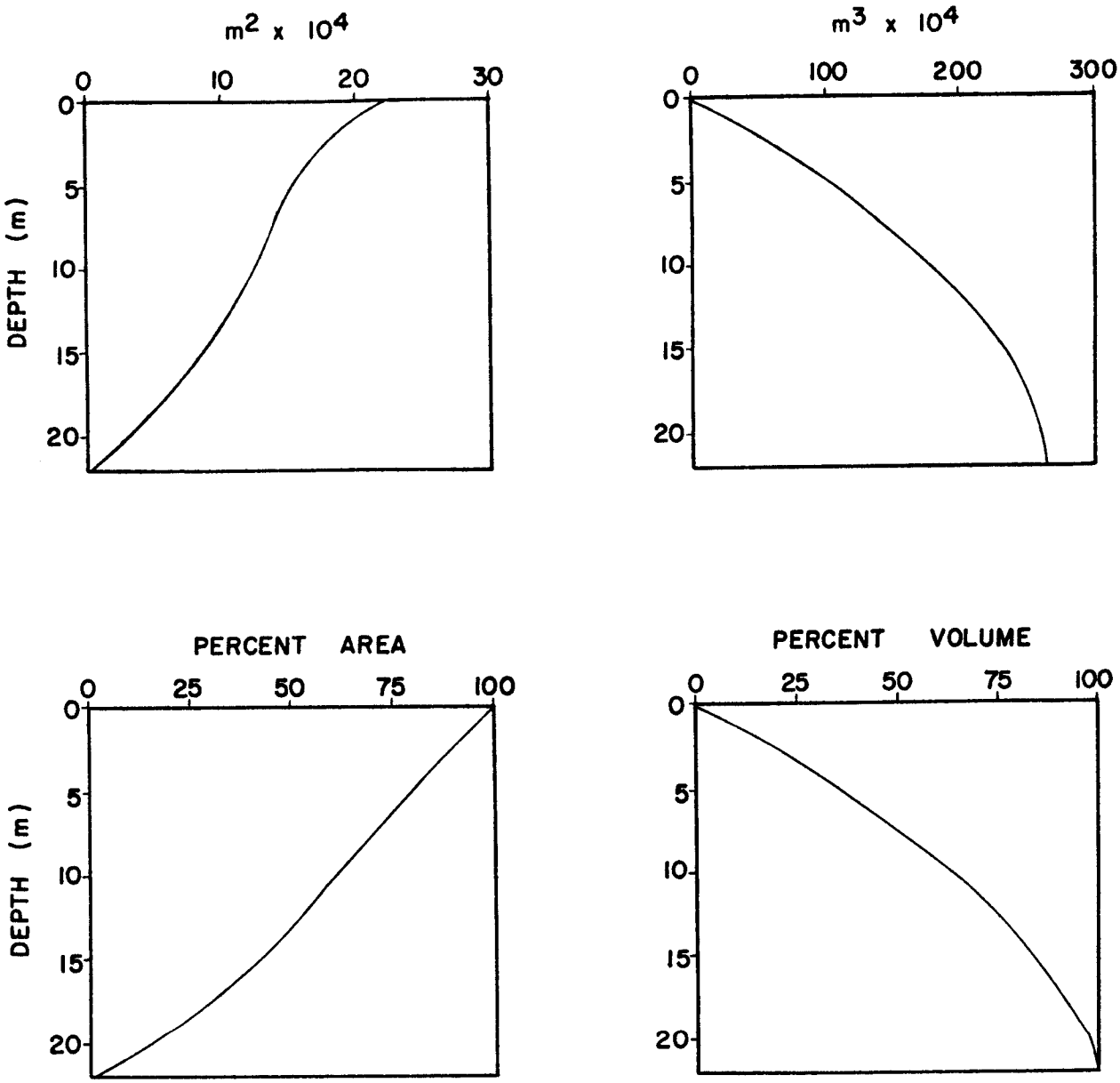
Basin slope (0-5 m) W 38%, E 33%; (5-10 m) W 35%, E 29%;

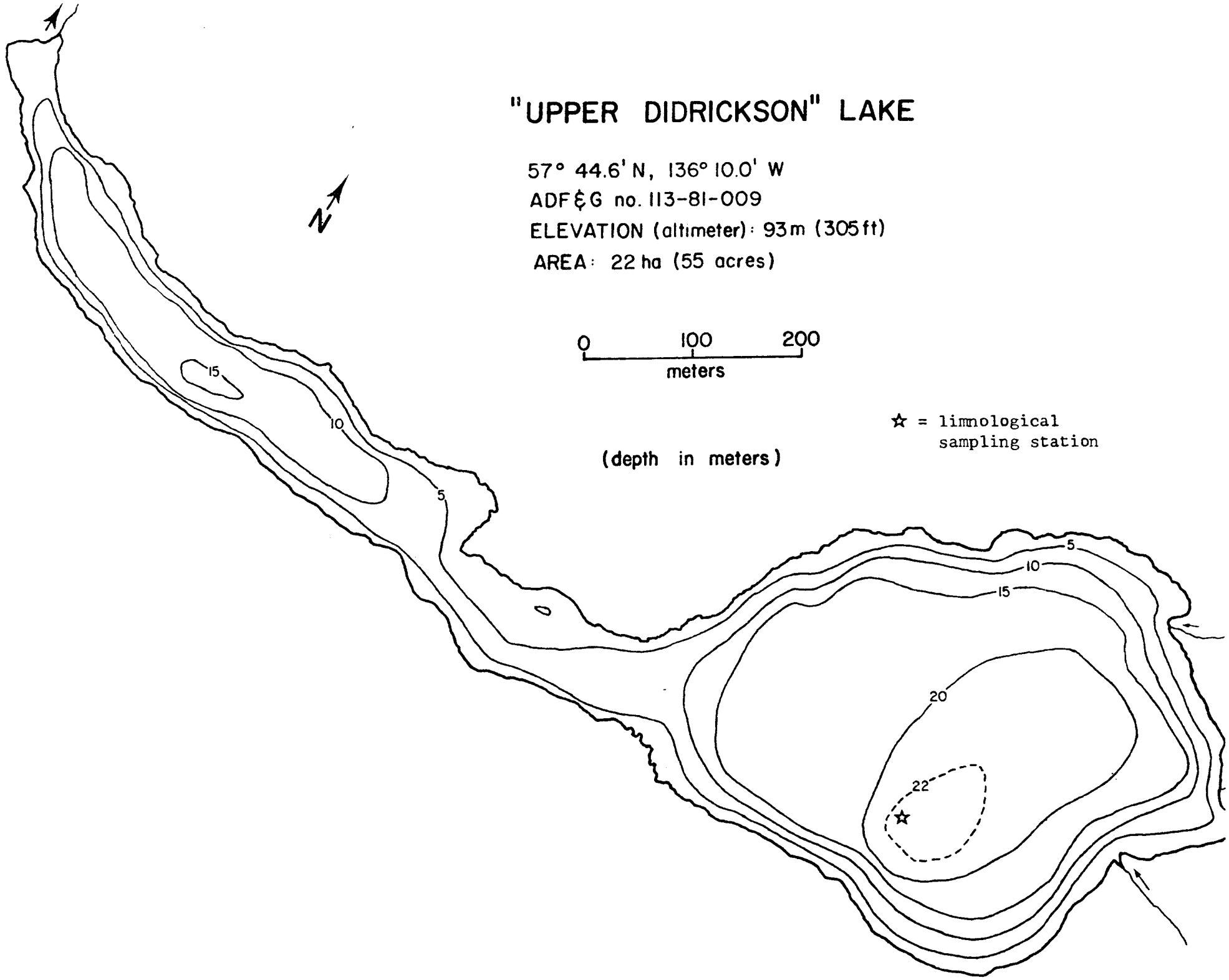
(10-15 m) W 13%, E 36%; (15-22 m) E 6%

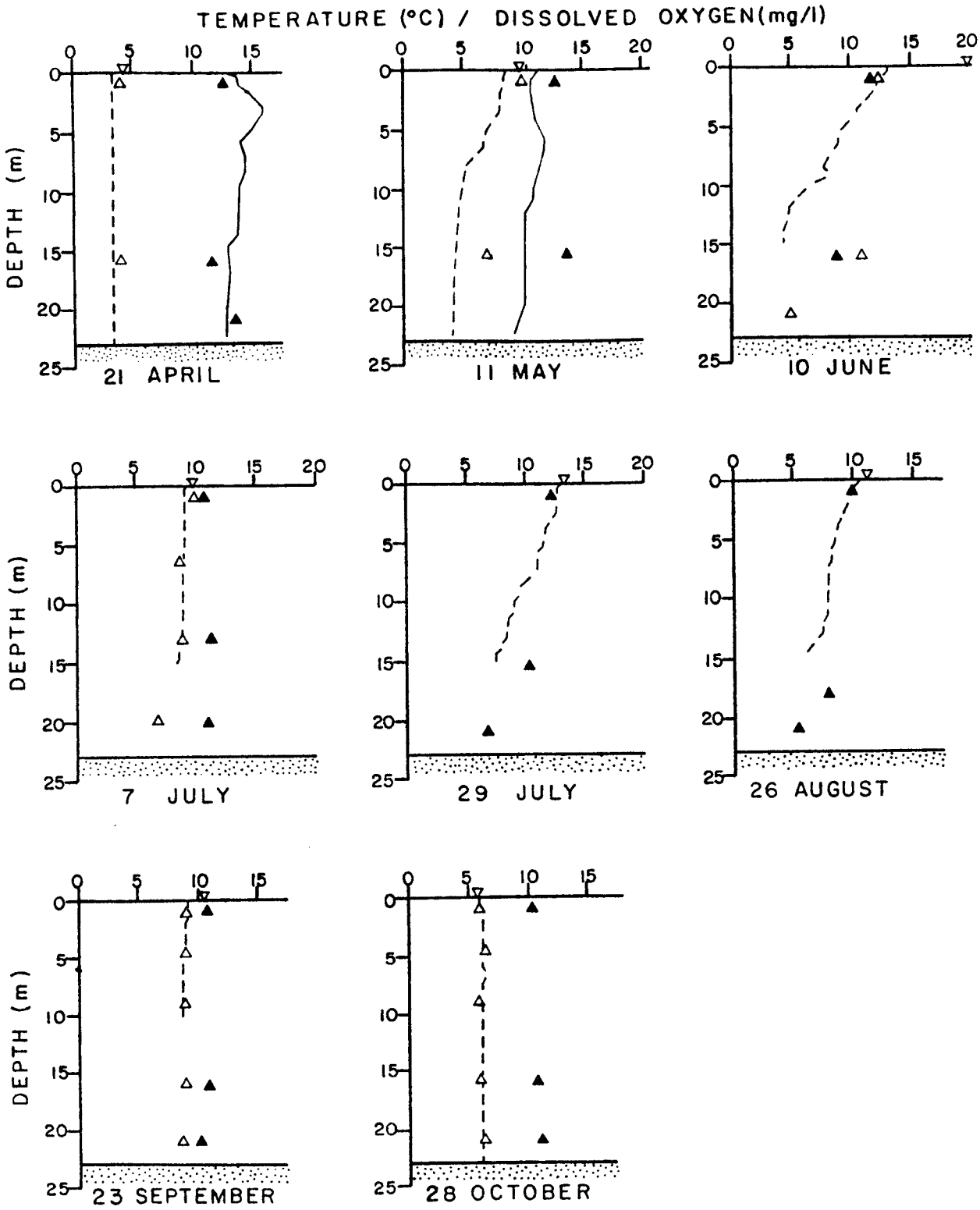
Mean annual outlet flow 0.42 m^3/s Mean annual precipitation 380 cm

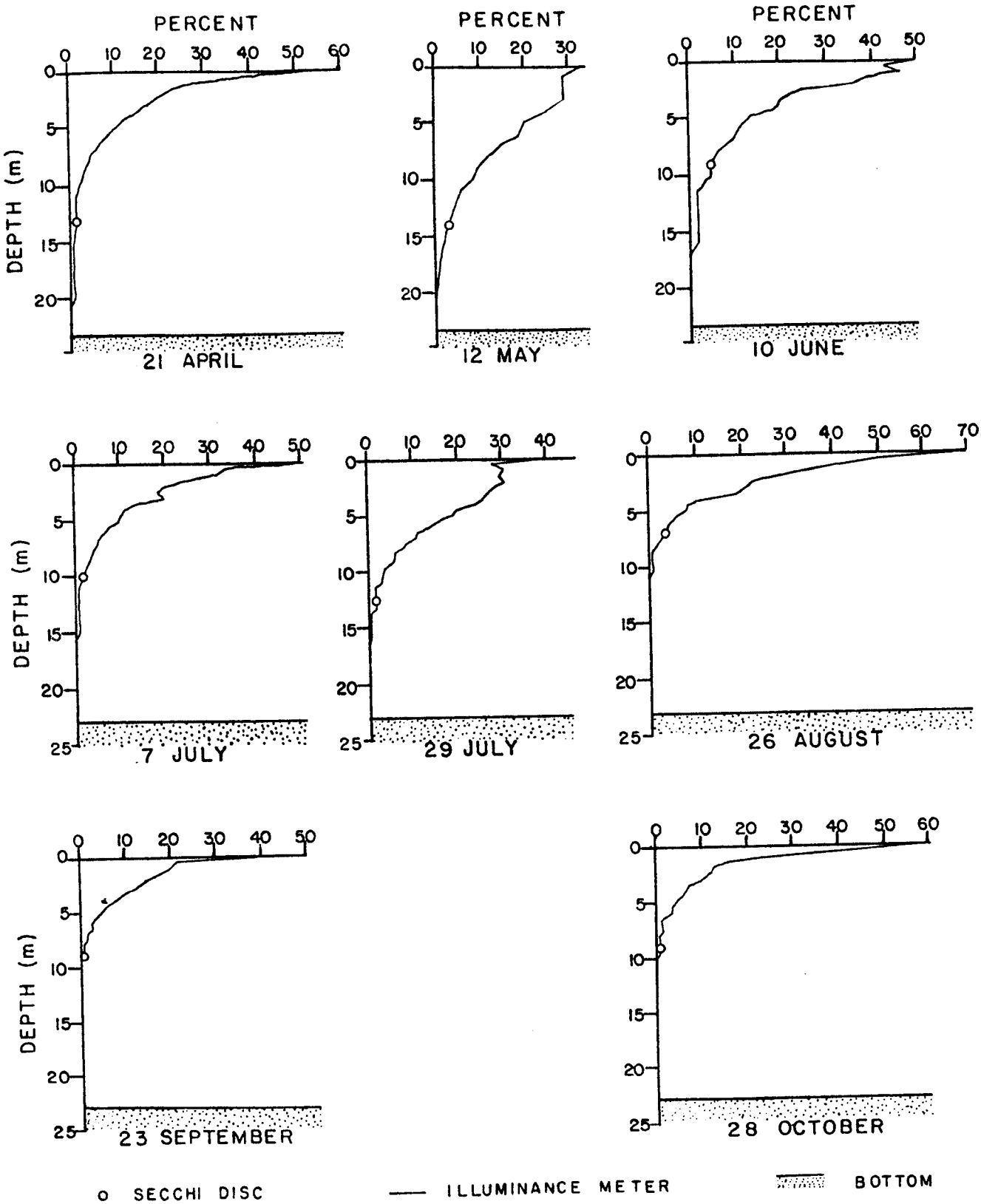
Theoretical water residence time 0.20 years

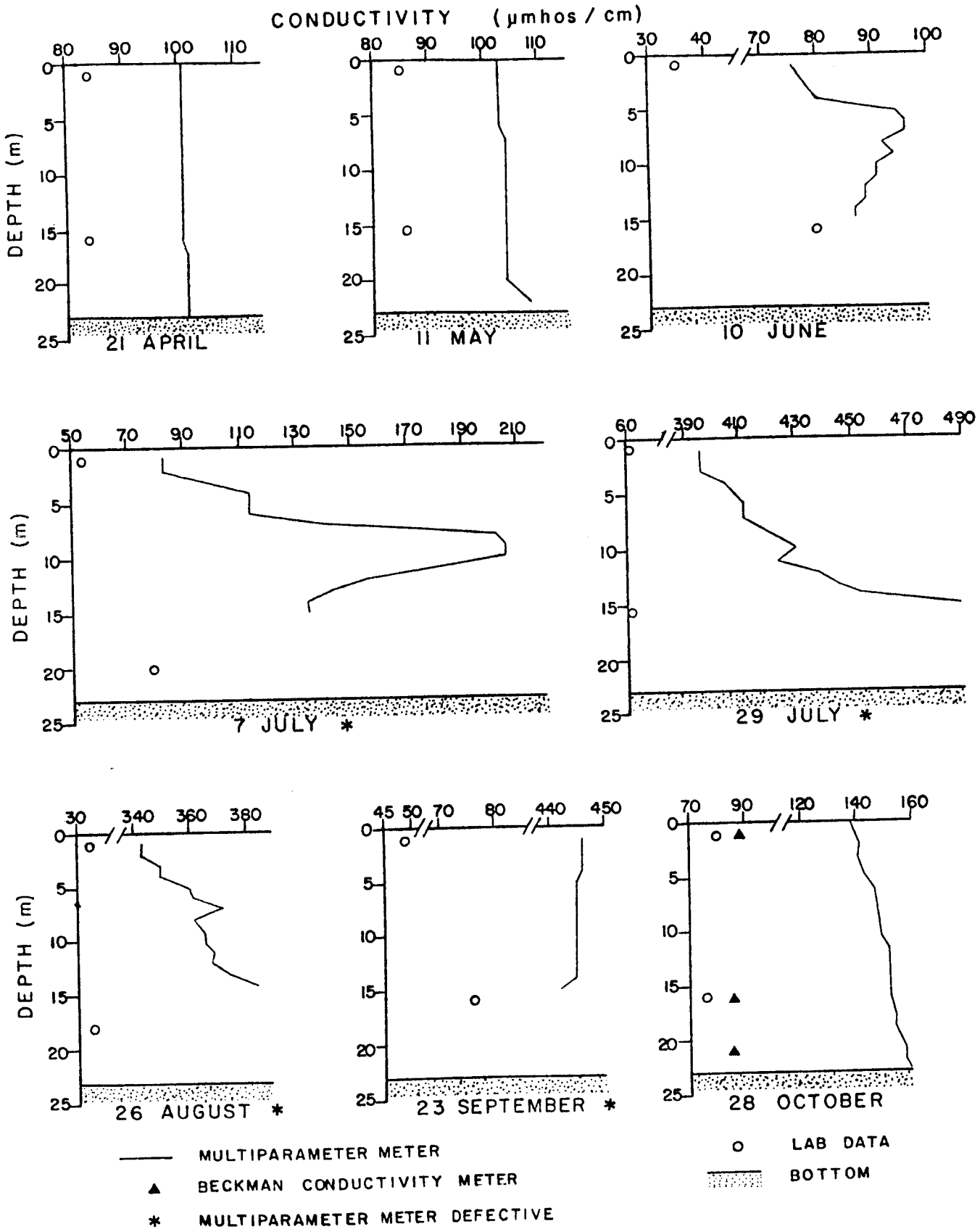
Depth strata (m)	Area of strata as a percentage of total area	Volume of strata as a percentage of total area
0- 5	21.2	35.5
5- 10	19.1	27.5
10- 15	18.4	20.0
15- 20	26.2	15.6
20- 22	12.8	1.4
22	2.3	----

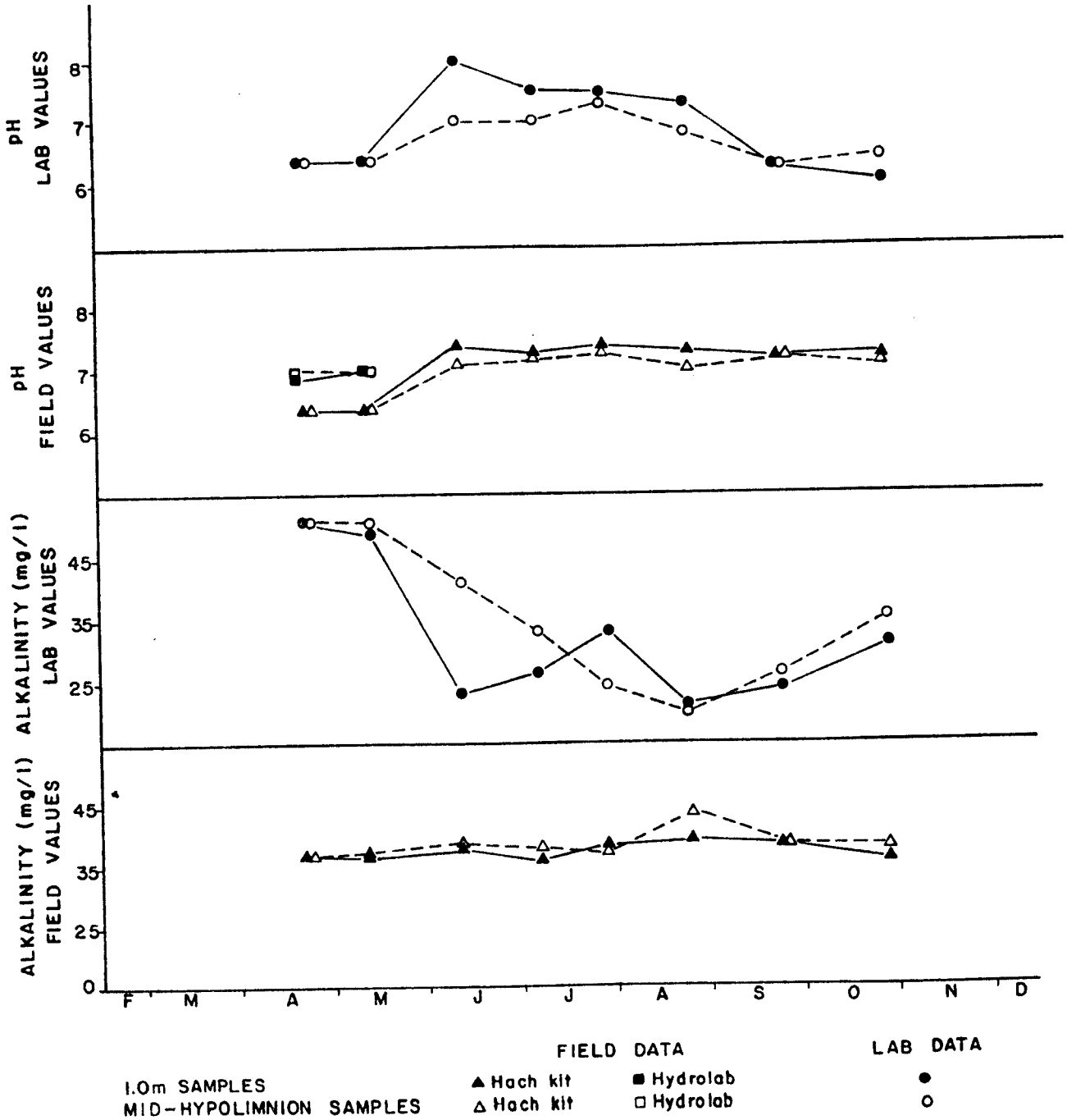

m2 x 10^4
0
10
20
30
DEPTH (m)
0
5
10
15
20
m3 x 10^4
0
100
200
300
PERCENT AREA
0
25
50
75
100
PERCENT VOLUME

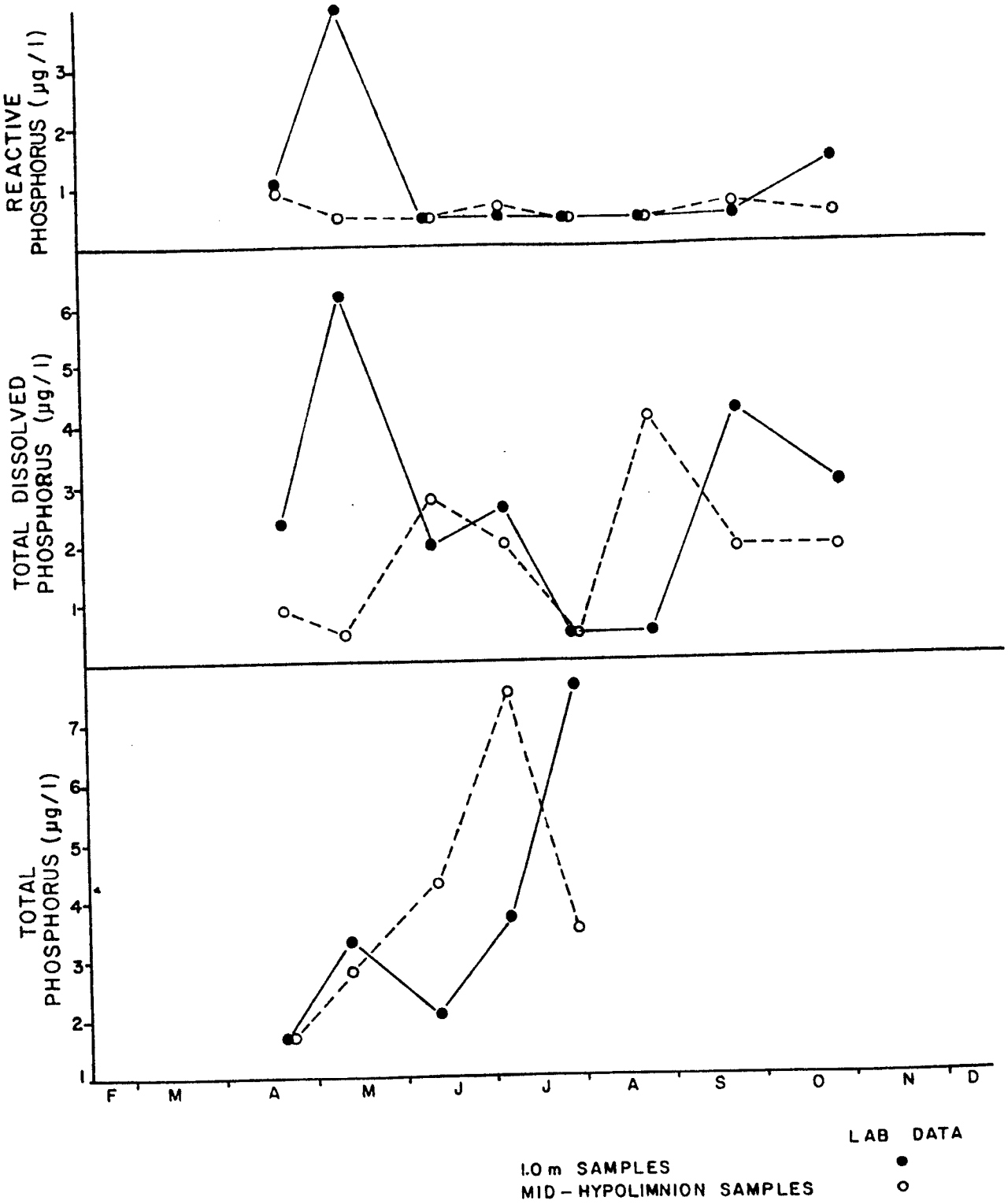

"UPPER DIDRICKSON" LAKE
57° 44.6' N, 136° 10.0' W
ADF&G no. 113-81-009
ELEVATION (altimeter): 93m (305ft)
AREA: 22 ha (55 acres)
0 100 200
meters
☆ = limnological sampling station
(depth in meters)
N
15
10
5
5
10
15
20
22

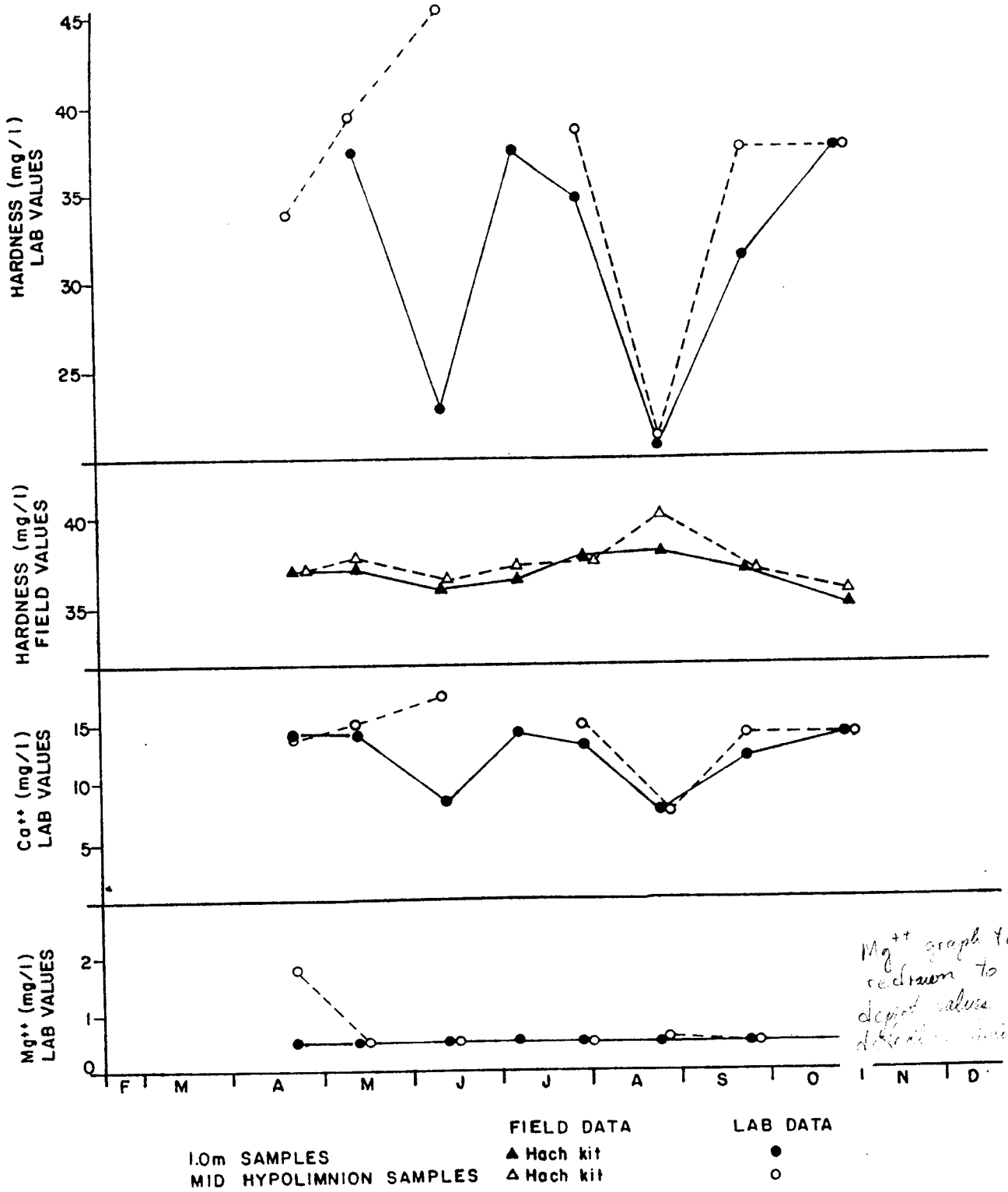

TEMPERATURE (°C) / DISSOLVED OXYGEN(mg/l)
DEPTH (m)
21 APRIL
11 MAY
10 JUNE
7 JULY
29 JULY
26 AUGUST
23 SEPTEMBER
28 OCTOBER
TEMPERATURE
DISSOLVED OXYGEN
Thermister thermometer
Multiparameter meter
Lake bottom at sampling station
Rod thermometer
Winkler method
Air


PERCENT
DEPTH (m)
21 APRIL
12 MAY
10 JUNE
7 JULY
29 JULY
26 AUGUST
23 SEPTEMBER
28 OCTOBER
o SECCHI DISC
ILLUMINANCE METER
BOTTOM

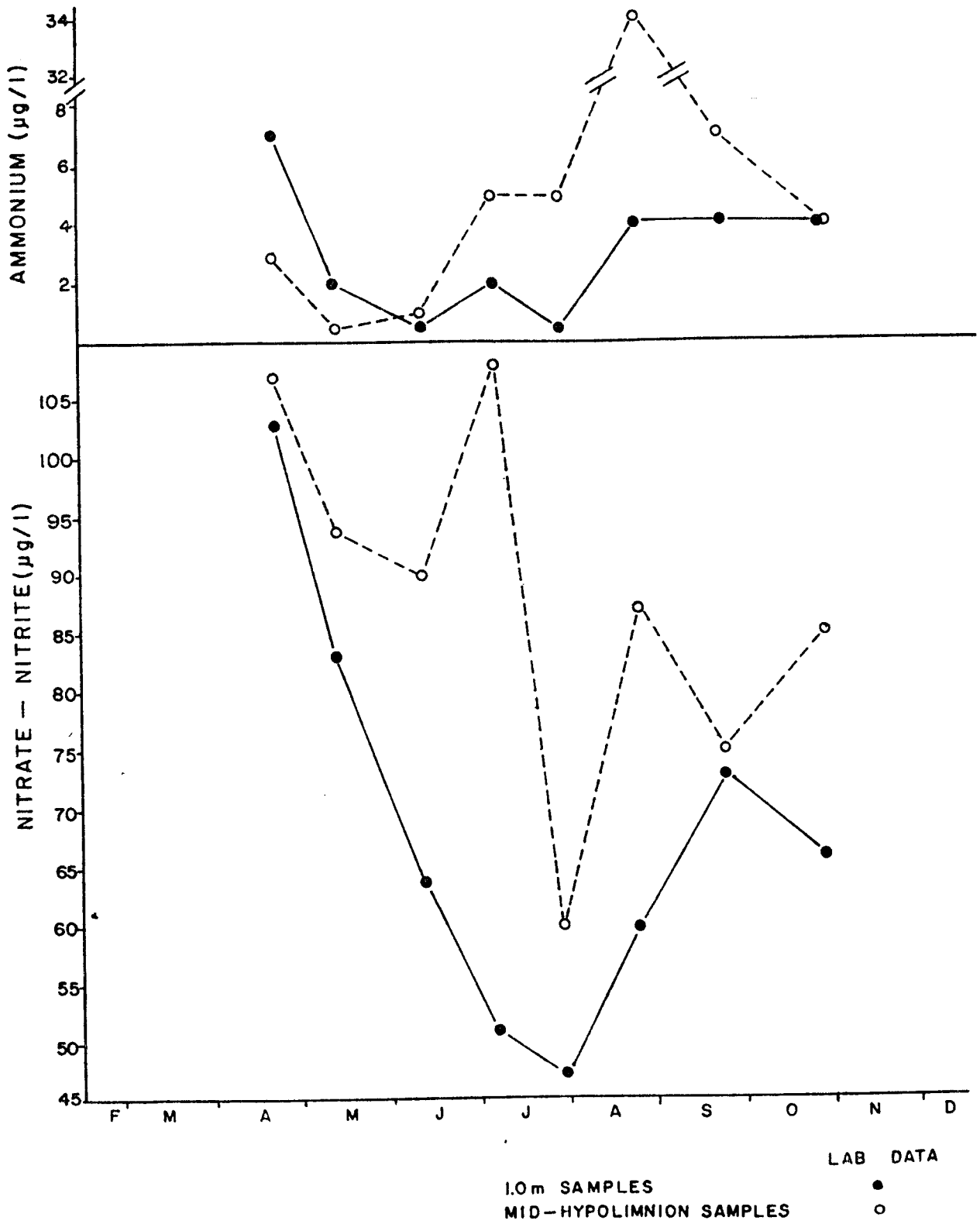

CONDUCTIVITY (µmhos / cm)
DEPTH (m)
21 APRIL
11 MAY
10 JUNE
7 JULY *
29 JULY *
26 AUGUST *
23 SEPTEMBER *
28 OCTOBER
MULTIPARAMETER METER
BECKMAN CONDUCTIVITY METER
MULTIPARAMETER METER DEFECTIVE
LAB DATA
BOTTOM

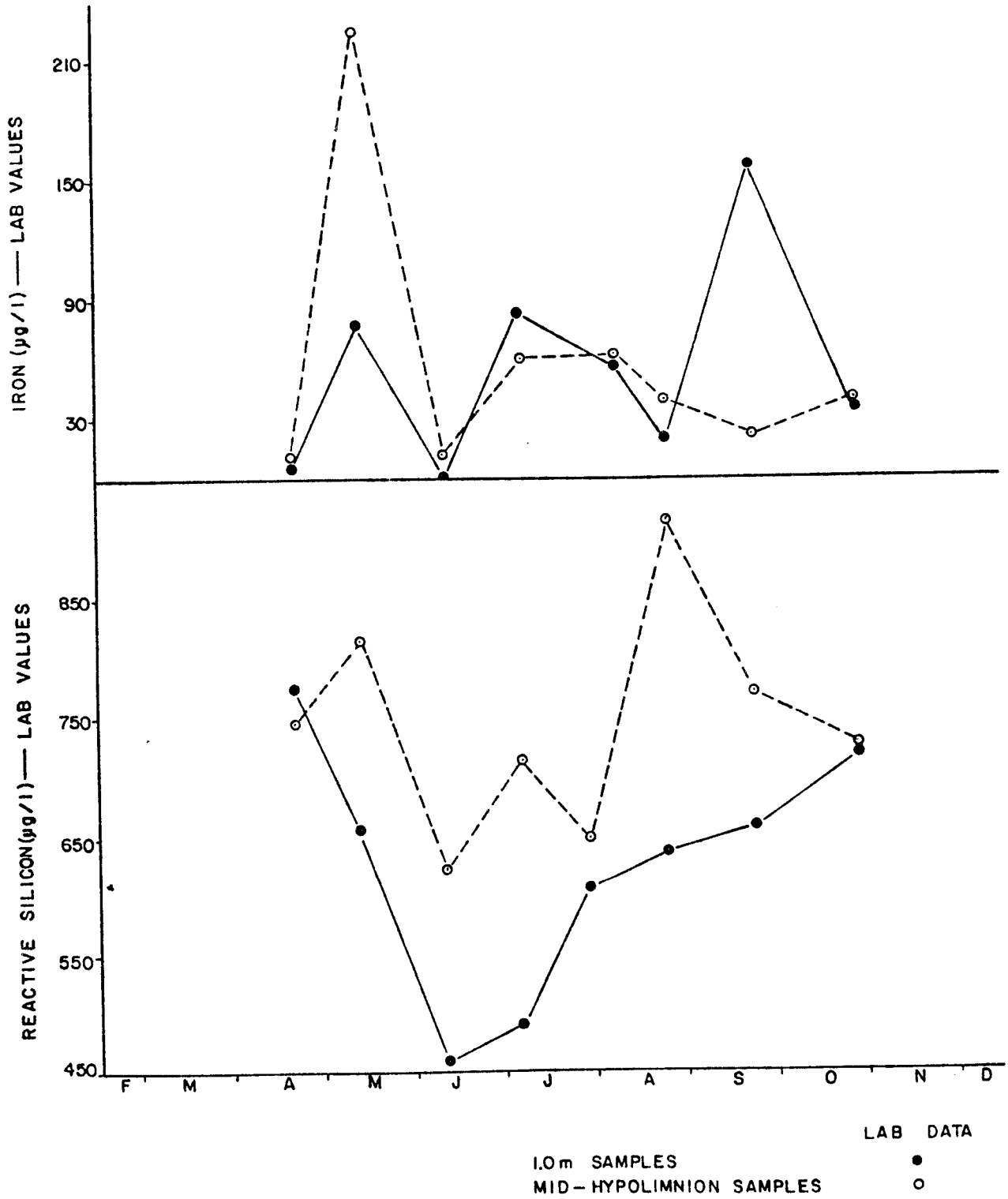

pH
LAB VALUES
8
7
6
pH
FIELD VALUES
8
7
6
ALKALINITY (mg/l)
LAB VALUES
45
35
25
ALKALINITY (mg/l)
FIELD VALUES
45
35
25
0
F
M
A
M
J
J
A
S
O
N
D
FIELD DATA
LAB DATA
1.0m SAMPLES
MID-HYPOLIMNION SAMPLES
▲ Hach kit
△ Hach kit
■ Hydrolab
□ Hydrolab
●
○


REACTIVE PHOSPHORUS (µg/l)
TOTAL DISSOLVED PHOSPHORUS (µg/l)
TOTAL PHOSPHORUS (µg/l)
F
M
A
M
J
J
A
S
O
N
D
LAB DATA
1.0 m SAMPLES
MID-HYPOLIMNION SAMPLES

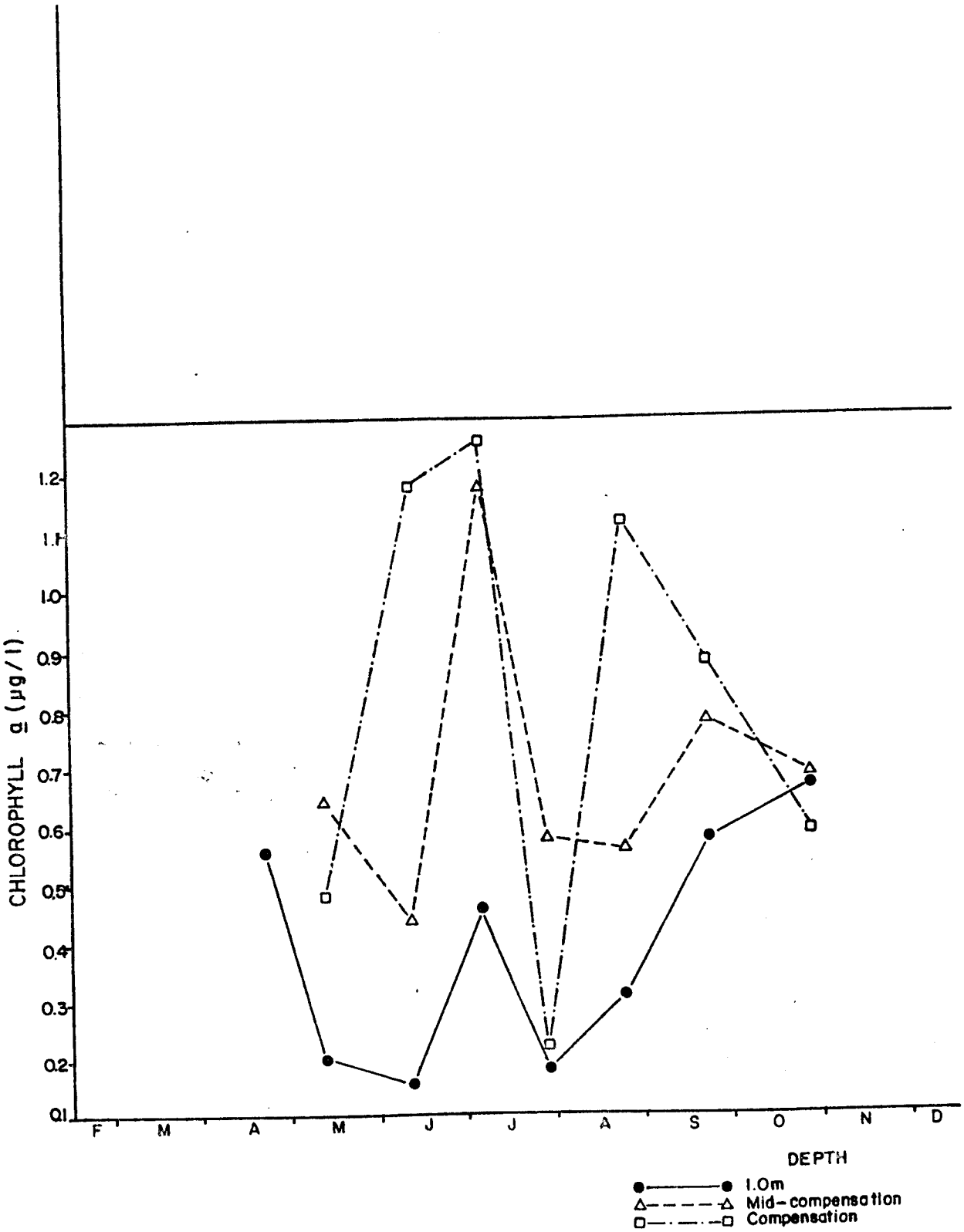


Mg++ graph to be redrawn to properly depict values below detection limit


AMMONIUM (µg/l)
34
32
8
6
4
2
NITRATE – NITRITE (µg/l)
105
100
95
90
85
80
75
70
65
60
55
50
45
F
M
A
M
J
J
A
S
O
N
D
LAB DATA
1.0m SAMPLES
MID-HYPOLIMNION SAMPLES



[illegible] Dickinson [illegible], sampling [illegible], 1981.


CHLOROPHYLL a (µg/l)
1.2
1.1
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
F
M
A
M
J
J
A
S
O
N
D
DEPTH
1.0m
Mid-compensation
Compensation

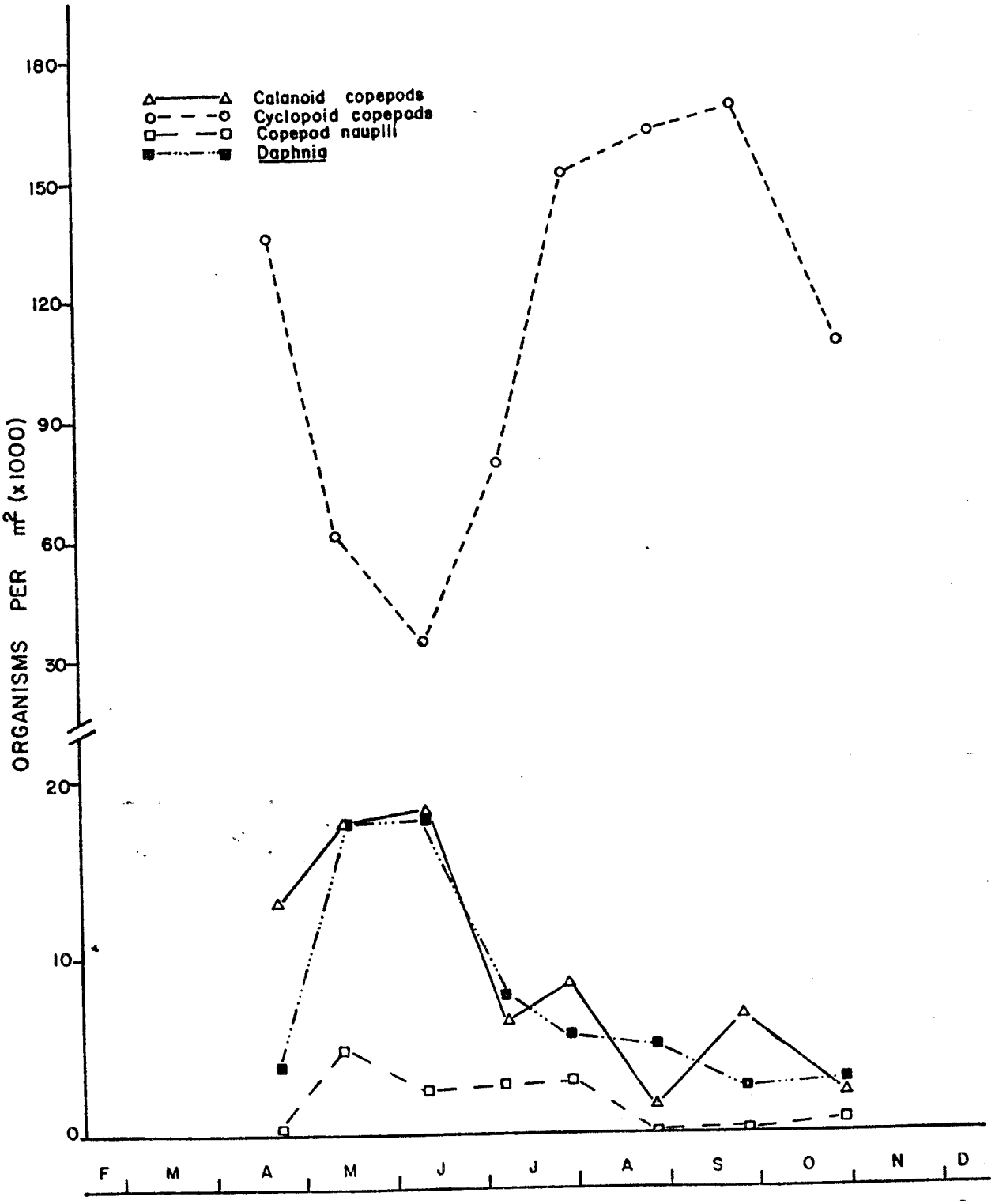

Calanoid copepods
Cyclopoid copepods
Copepod nauplii
Daphnia
ORGANISMS PER m² (x1000)
180
150
120
90
60
30
20
10
0
F
M
A
M
J
J
A
S
O
N
D

Table 5. Zooplankton density in "Upper Didrickson" Lake in terms of number per m^2 and (per m^3) as estimated from vertical-tow samples, 1981.

Sample date	Tow Depth (m)	Sum of large and preferred zooplankters	Amphipoda	Copepoda			Cladocera
			Gammaridae	Calanoida	Cyclopoida	Nauplii	Daphnia
21 Apr	20.0	16,979 (849)	0 (0)	13,158 (658)	135,848 (6,792)	423 (21)	3,821 (191)
12 May	20.0	34,814 (1,741)	0 (0)	17,407 (870)	61,131 (3,057)	4,671 (234)	17,407 (870)
10 June	19.0	36,123 (1,901)	41 (2)	18,253 (961)	34,386 (1,810)	2,547 (134)	17,830 (938)
6 July	20.0	14,361 (718)	97 (5)	6,454 (323)	79,129 (3,956)	2,715 (136)	7,809 (390)
29 July	20.0	14,554 (728)	117 (6)	8,492 (425)	151,554 (7,578)	2,970 (148)	5,945 (297)
25 Aug	20.0	6,866 (343)	76 (4)	1,696 (85)	163,016 (8,151)	0 (0)	5,094 (255)
24 Sept	21.0	9,435 (449)	97 (5)	6,791 (323)	169,384 (8,066)	423 (20)	2,547 (121)
29 Oct	21.0	5,385 (256)	36 (2)	2,292 (109)	110,377 (5,256)	851 (41)	3,057 (146)