Table . Physical characteristics of Brentwood Lake.

Lake area 67.5 ha (166.8 acres) Lake elevation 180 m

Lake volume 2.52×10^7 m^3 (2.04×10^4 acre-feet)

Maximum depth 98 m Mean depth 37.3 m

Shoreline length 4,800 m Shoreline development 1.65

Watershed area 1,725 ha Volume development 1.14

Ratio of lake area to watershed area 1:26

Littoral development (area <10 m) 25.6%

Basin slope (0-10 m) 25%, (10-98 m) 38%

Mean annual outlet flow 3.92 m^3/s Mean annual precipitation 760 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	15.8	12.3
5- 10	9.7	10.6
10- 20	10.7	18.5
20- 30	13.0	15.3
30- 40	8.2	12.8
40- 50	10.5	10.0
50- 60	9.3	6.7
60- 70	4.4	5.5
70- 80	3.9	4.4
80- 90	8.2	3.0
90- 98	5.0	0.9
98	1.4	---

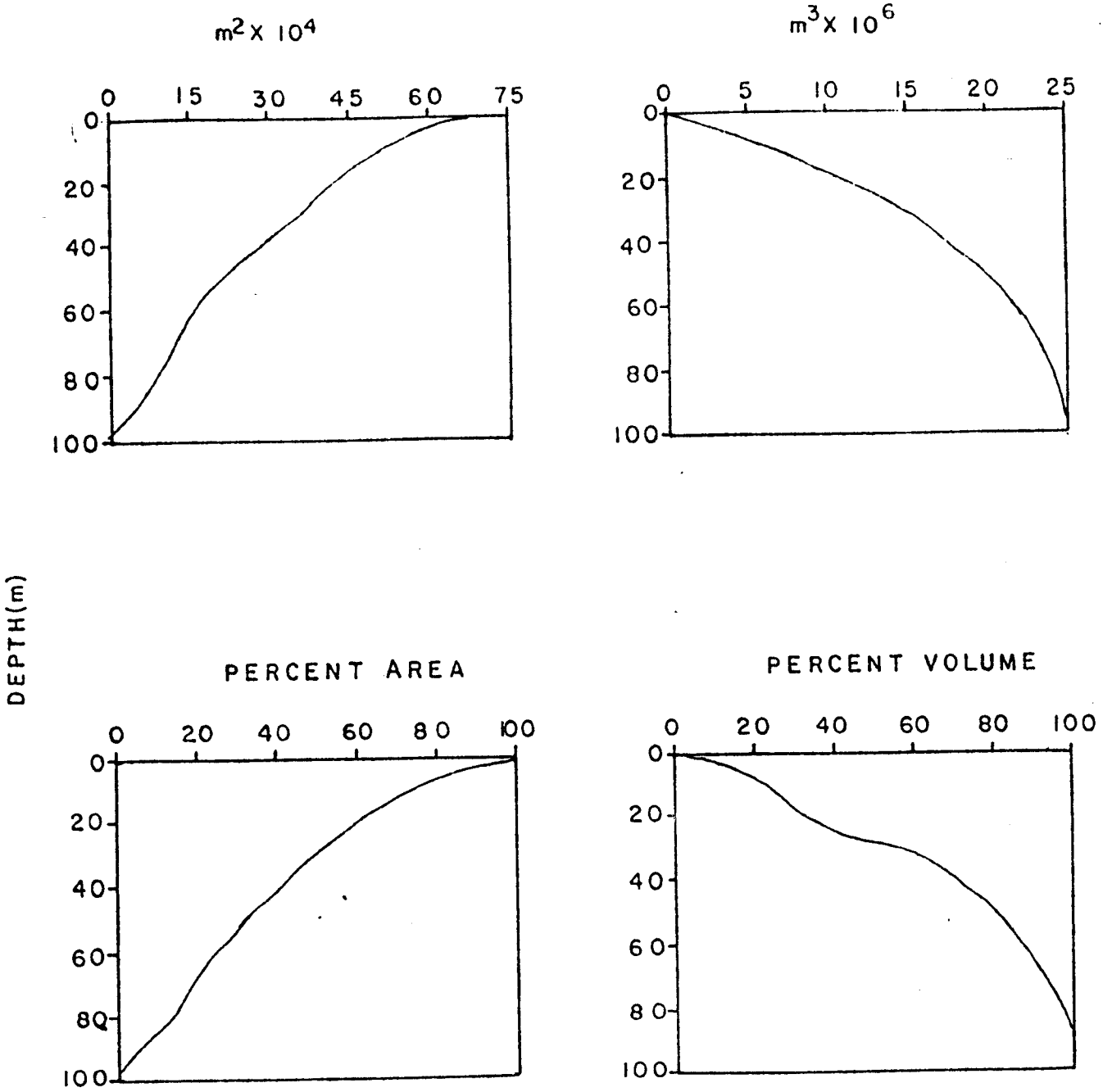
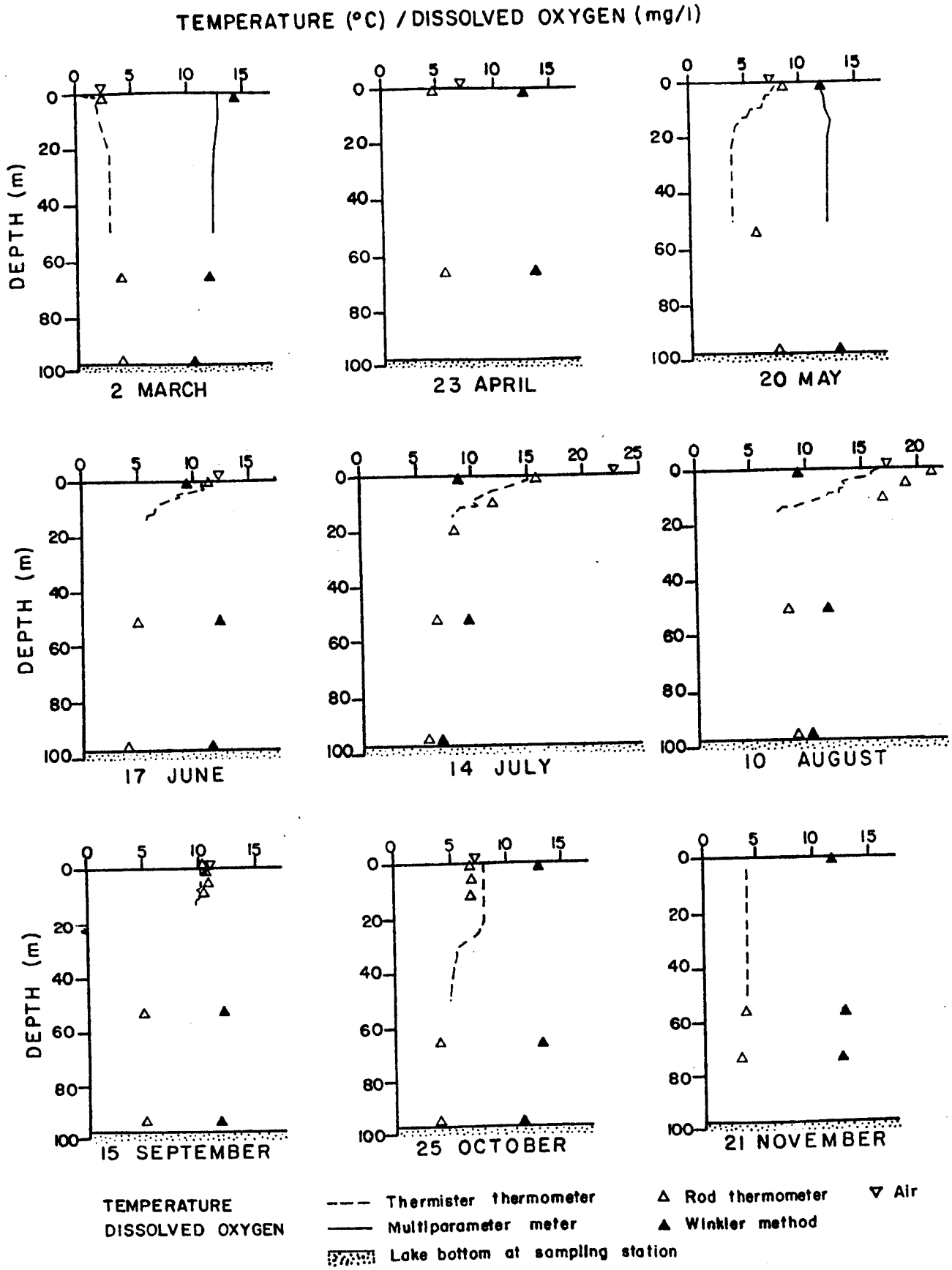
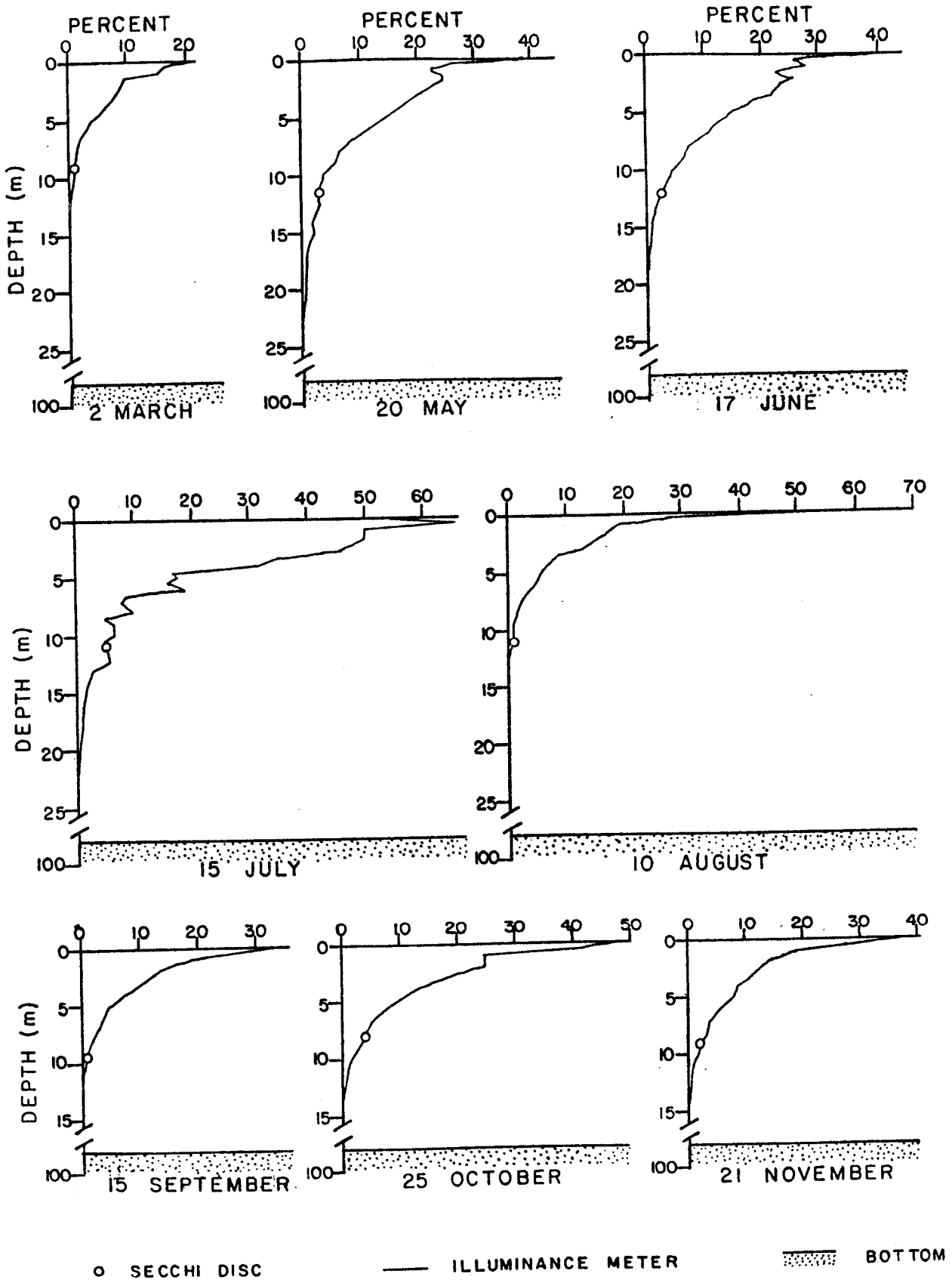


Figure 39. Hypsographic (depth-area) curves and depth-volume curves of Brentwood Lake.



Brentwood Lake; [illegible] 1981


PERCENT
DEPTH (m)
2 MARCH
20 MAY
17 JUNE
15 JULY
10 AUGUST
15 SEPTEMBER
25 OCTOBER
21 NOVEMBER
SECCHI DISC
ILLUMINANCE METER
BOTTOM

[illegible] Lake [illegible] 1981.

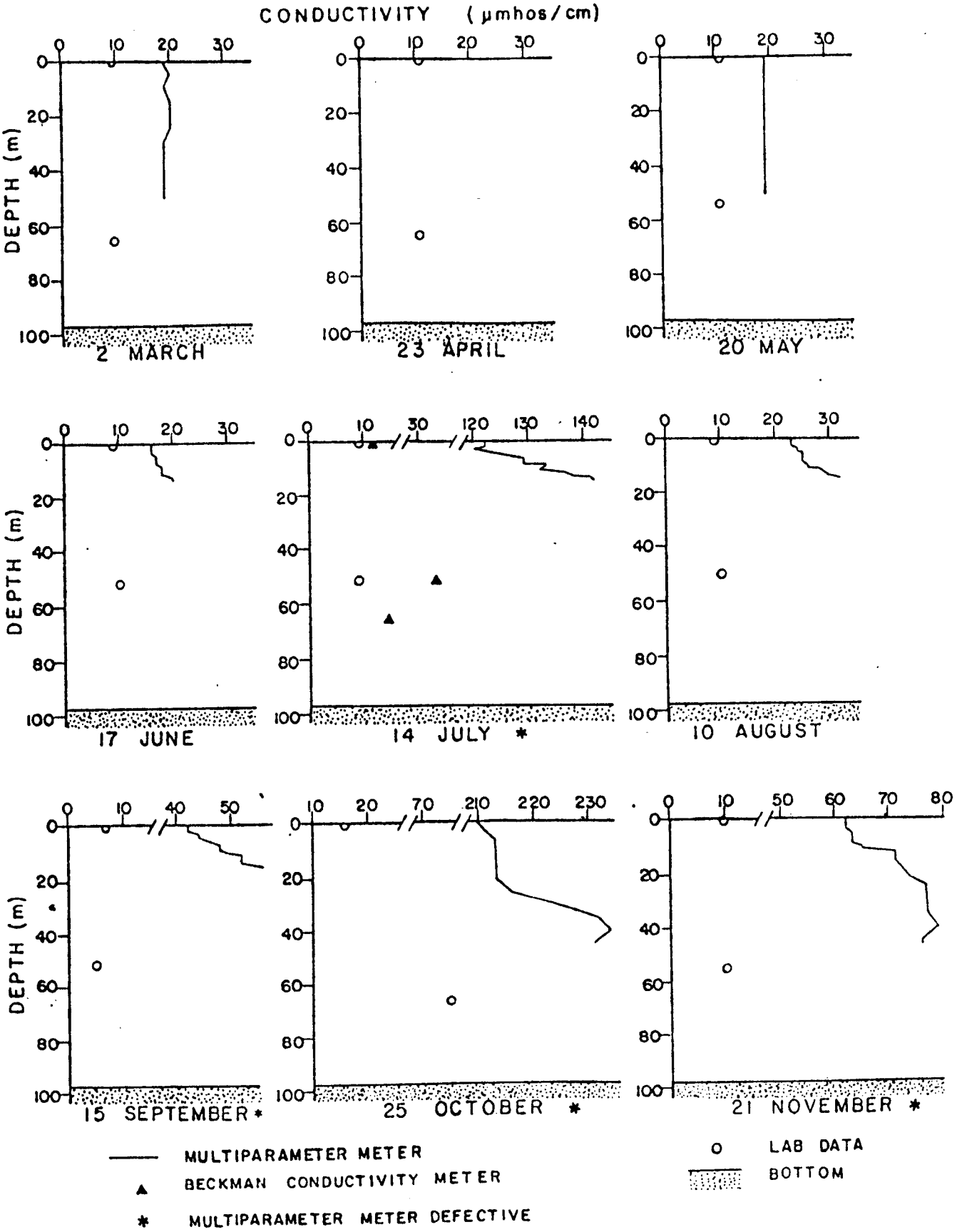
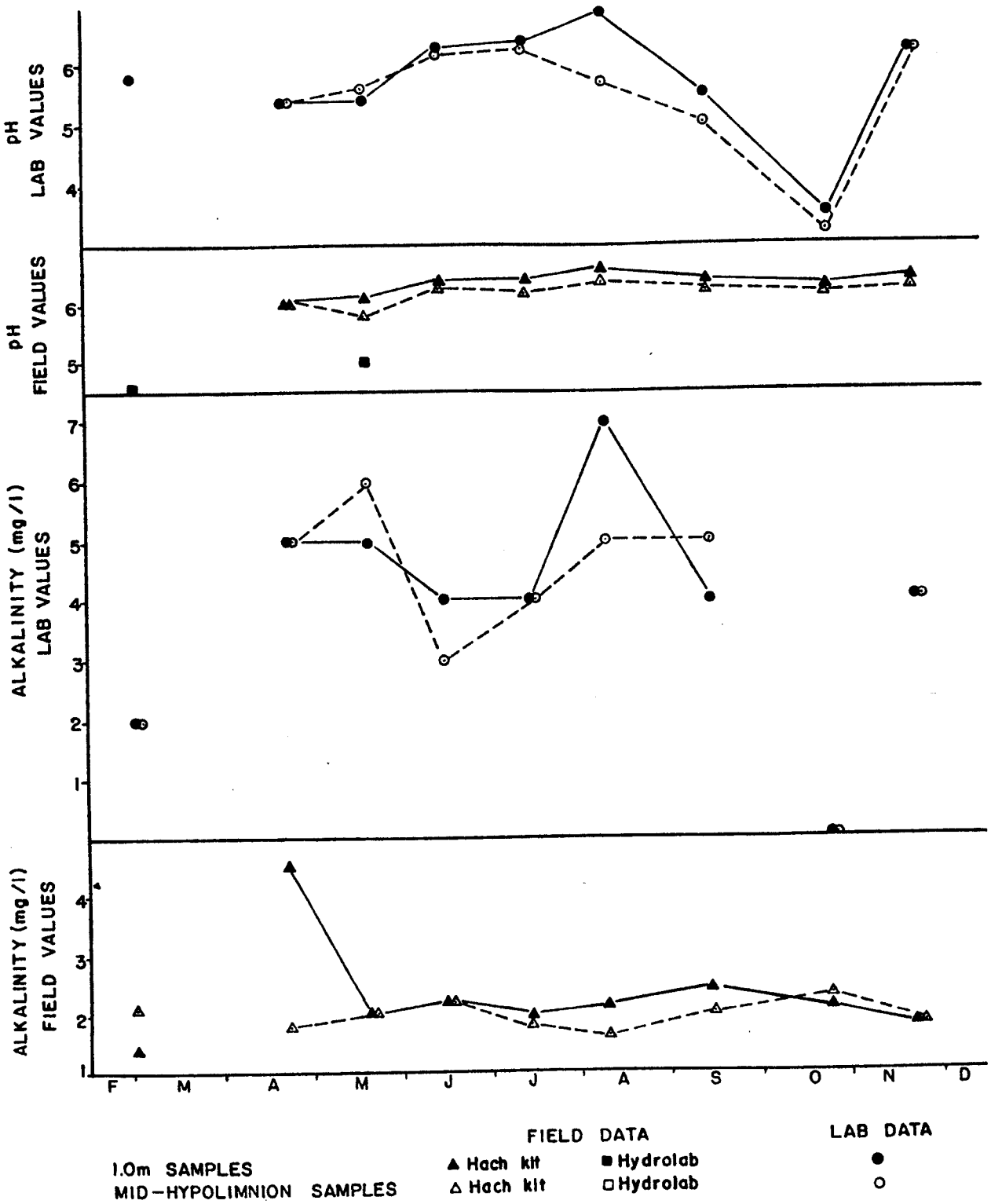
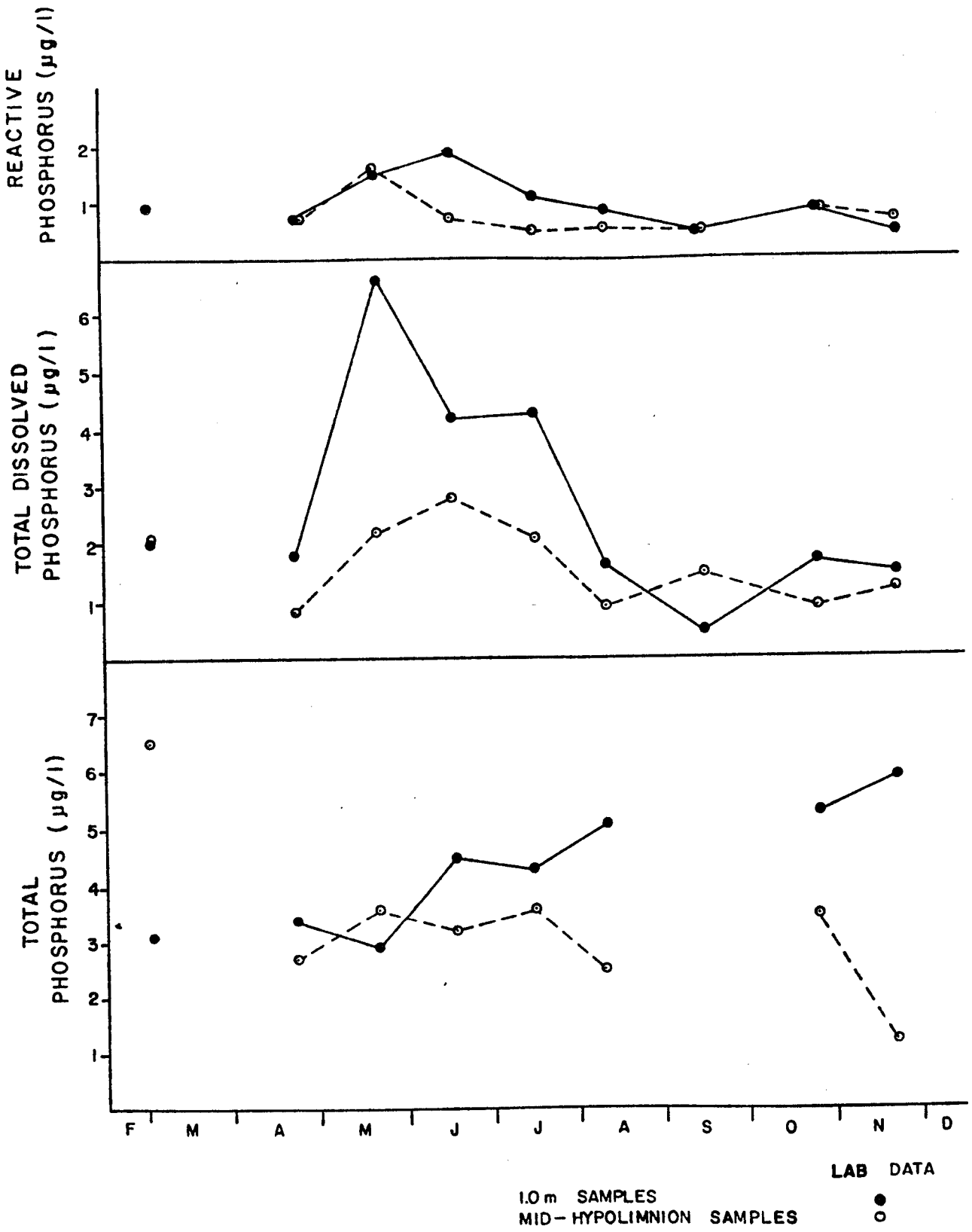


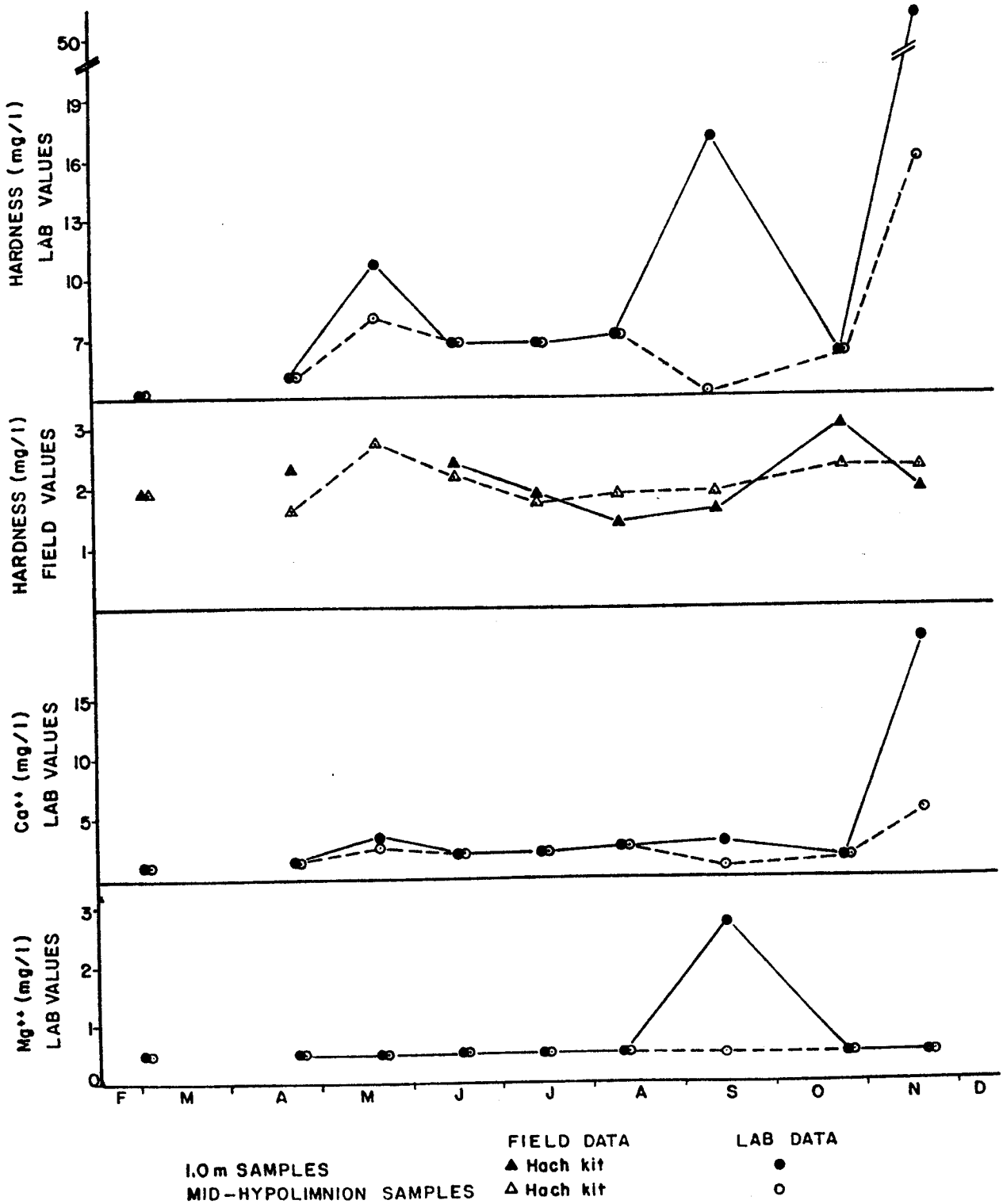
Figure 43. Vertical profiles of conductivity measured at the limnological sampling station on Brentwood Lake, 1981.

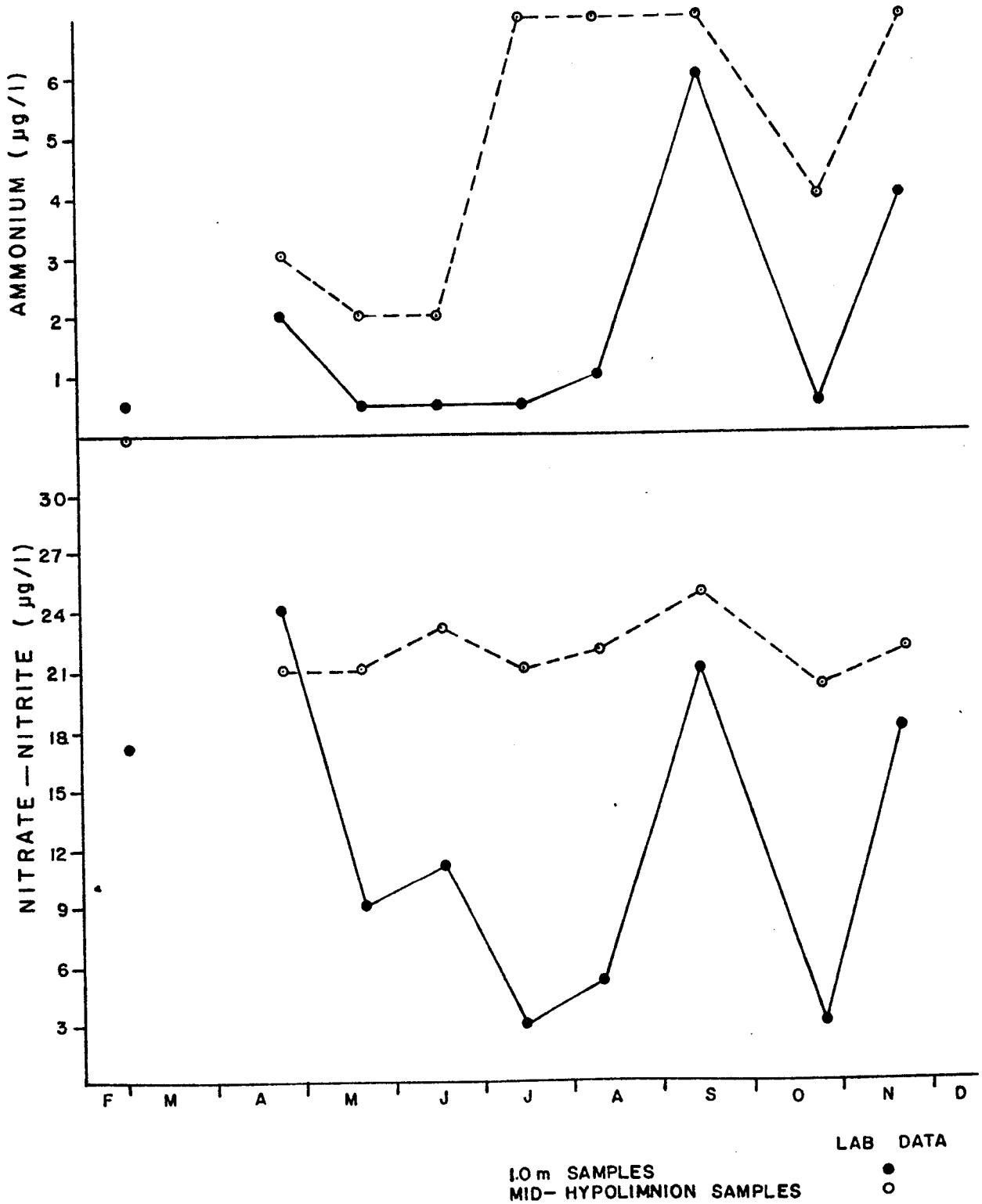


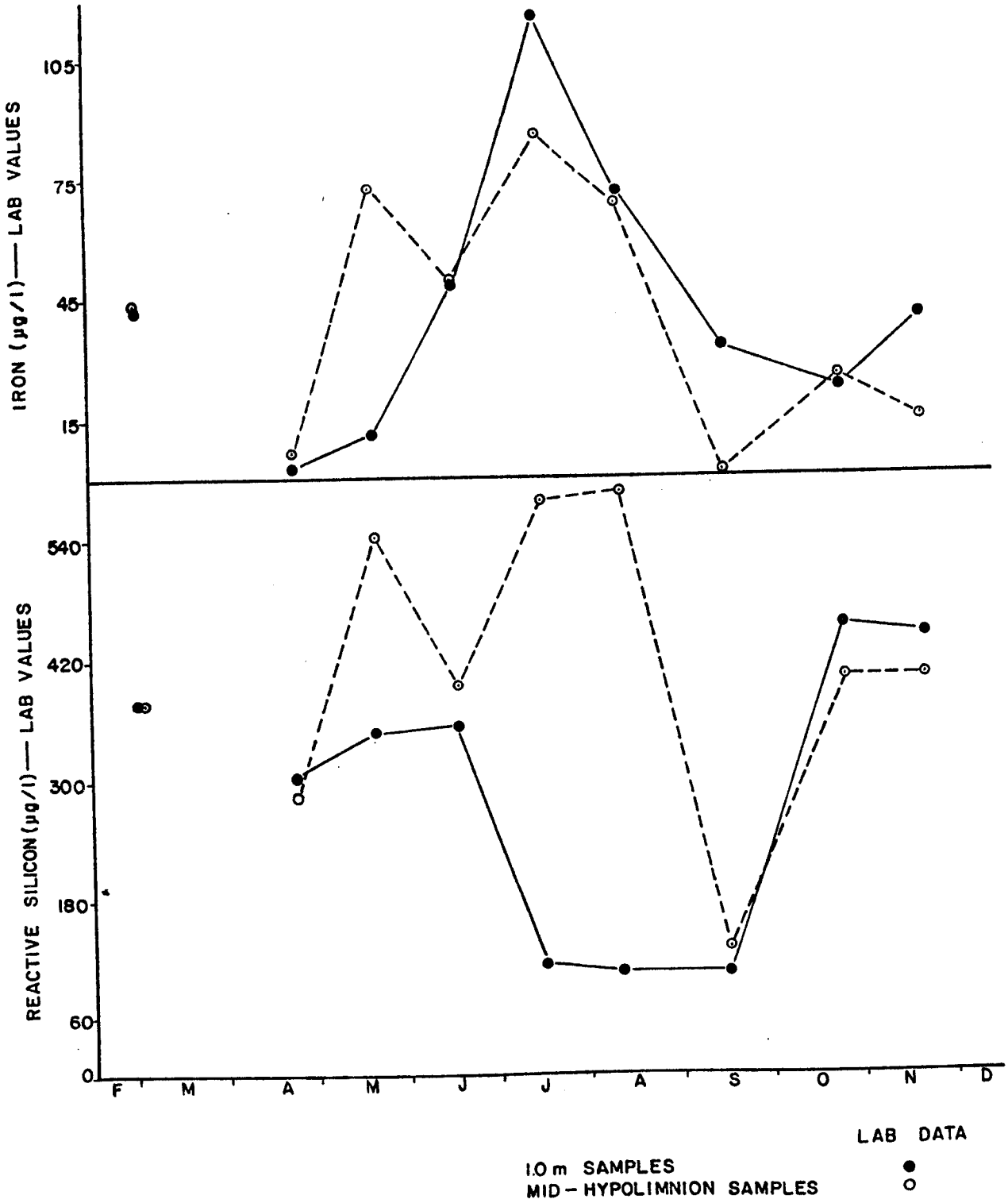
Brentwood Lake, [illegible] 1981.

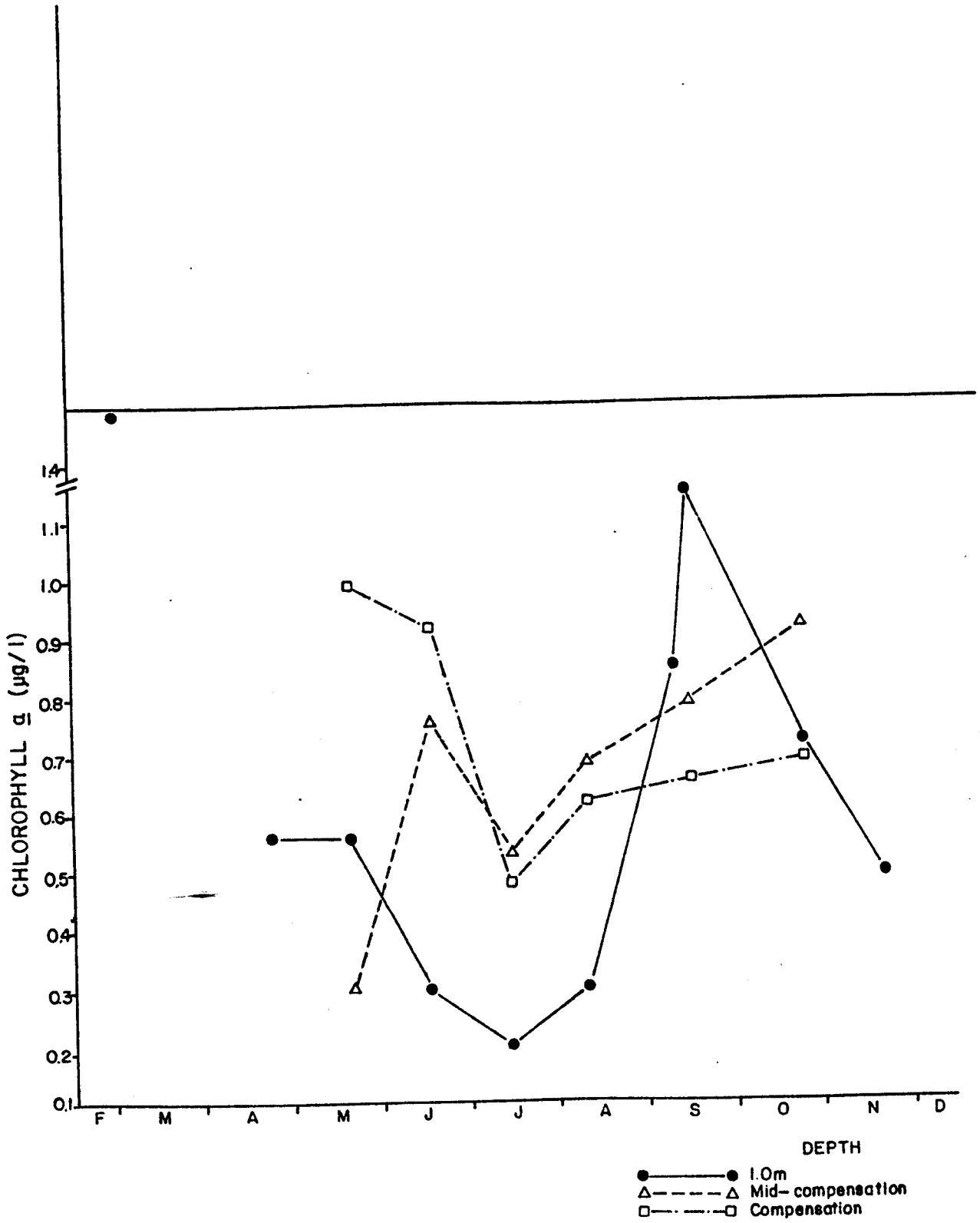


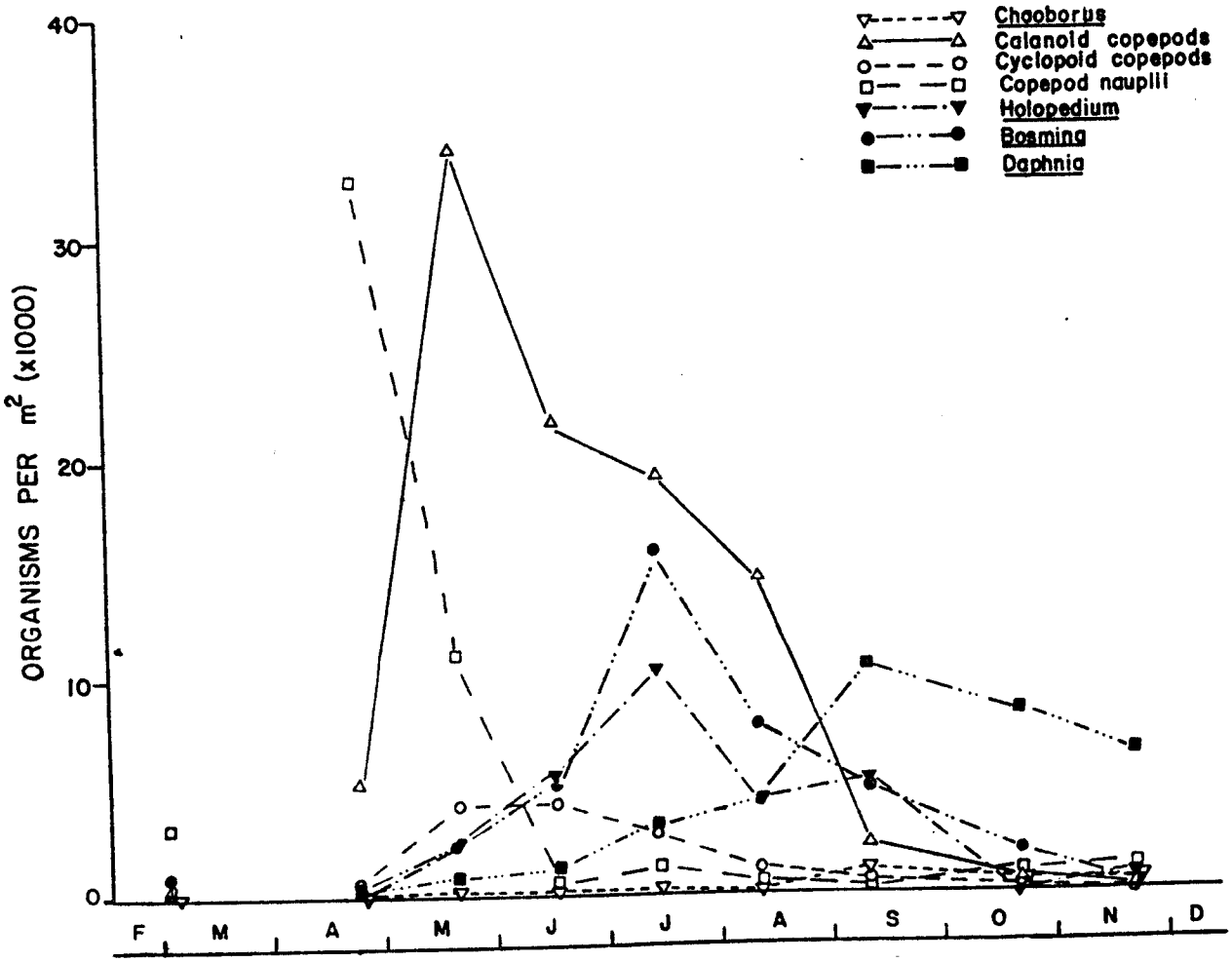
Ernestwood Lake 1981


HARDNESS (mg/l)
LAB VALUES
50
19
16
13
10
7
HARDNESS (mg/l)
FIELD VALUES
3
2
1
Ca++ (mg/l)
LAB VALUES
15
10
5
Mg++ (mg/l)
LAB VALUES
3
2
1
0
F
M
A
M
J
J
A
S
O
N
D
FIELD DATA
LAB DATA
1.0 m SAMPLES
▲ Hach kit
●
MID-HYPOLIMNION SAMPLES
△ Hach kit
○


AMMONIUM (µg/l)
6
5
4
3
2
1
NITRATE—NITRITE (µg/l)
30
27
24
21
18
15
12
9
6
3
F
M
A
M
J
J
A
S
O
N
D
LAB DATA
1.0 m SAMPLES
MID- HYPOLIMNION SAMPLES


IRON (µg/l) — LAB VALUES
105
75
45
15
REACTIVE SILICON (µg/l) — LAB VALUES
540
420
300
180
60
0
F
M
A
M
J
J
A
S
O
N
D
LAB DATA
1.0 m SAMPLES
MID – HYPOLIMNION SAMPLES


CHLOROPHYLL a (µg/l)
1.4
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


Chaoborus
Calanoid copepods
Cyclopoid copepods
Copepod nauplii
Holopedium
Bosmina
Daphnia
ORGANISMS PER m2 (x1000)
40
30
20
10
0
F
M
A
M
J
J
A
S
O
N
D

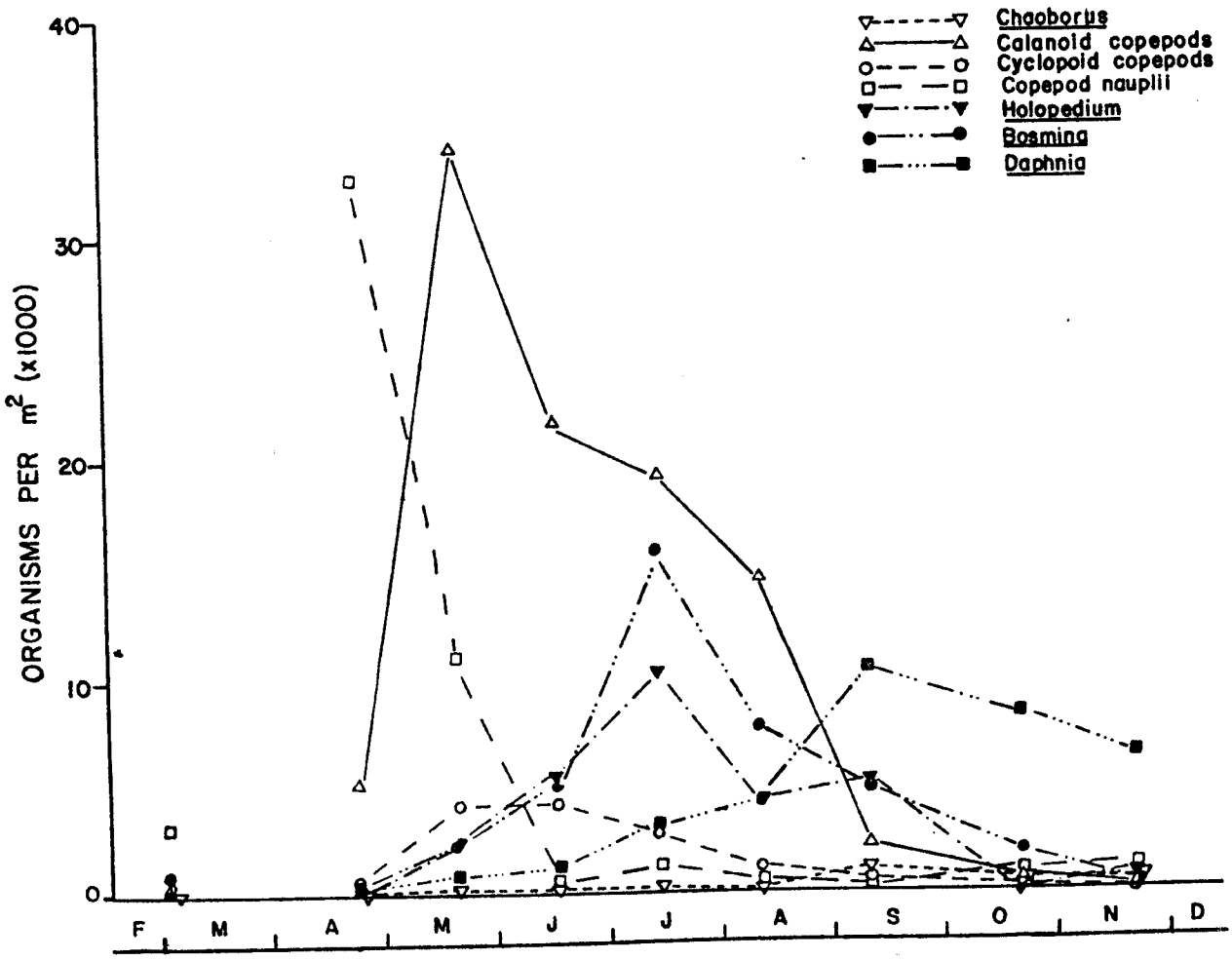

Chaoborus
Calanoid copepods
Cyclopoid copepods
Copepod nauplii
Holopedium
Bosmina
Daphnia
ORGANISMS PER m2 (x1000)
40
30
20
10
0
F
M
A
M
J
J
A
S
O
N
D

Table 9. Zooplankton density in Brentwood 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[2]	Diptera	Copepoda			Cladocera				
			Chaoborus[2]	Calanoida	Cyclopoida	Nauplii	Daphnia	Bosmina	Holopedium	Polyphemus	Chydorus
2 Mar[1]	50.0	671 (13)	34 (<1)	408 (8)	356 (8)	3,044 (61)	229 (5)	802 (16)	0 (0)	0 (0)	0 (0)
23 Apr	50.0	5,282 (106)	20 (<1)	5,094 (102)	596 (12)	32,348 (647)	168 (3)	255 (5)	0 (0)	0 (0)	0 (0)
20 May	50.0	34,814 (696)	173 (3)	33,877 (678)	4,075 (82)	10,953 (219)	764 (15)	2,292 (46)	2,292 (46)	0 (0)	0 (0)
16 June	50.0	23,001 (460)	76 (2)	21,651 (433)	4,075 (82)	509 (10)	1,274 (25)	5,094 (102)	5,349 (107)	0 (0)	0 (0)
14 July	50.0	22,201 (444)	41 (<1)	19,103 (382)	2,802 (56)	1,274 (25)	3,057 (61)	15,792 (316)	10,188 (204)	255 (5)	0 (0)
11 Aug	50.0	14,580 (292)	61 (1)	9,934 (199)	1,019 (20)	509 (10)	4,585 (92)	7,641 (153)	4,330 (87)	255 (5)	0 (0)
10 Sept	50.0	13,428 (269)	183 (4)	2,292 (46)	509 (10)	255 (5)	10,953 (219)	4,585 (92)	5,349 (107)	255 (5)	0 (0)
22 Oct	50.0	9,246 (185)	499 (10)	596 (12)	341 (7)	932 (19)	8,151 (163)	1,783 (36)	87 (2)	0 (0)	0 (0)
21 Nov	50.0	7,162 (143)	713 (14)	168 (3)	87 (2)	1,105 (22)	6,281 (126)	168 (3)	509 (10)	0 (0)	87 (2)

1/ Mean of two samples.

2/ Density values exclude early instar Chaoborus. Recounts and reestimates of Chaoborus densities, including early instars, are being made.