

**The Ecology of the Japanese Shore Crab  
(*Hemigrapsus sanguineus* de Haan) and its niche  
relationship to the Green Crab (*Carcinus maenas*) along  
the Coast of Connecticut, U.S.A.**

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Part 2 - Tables + Figures

**Outer Island 10/18/98 Green Crab Totals**

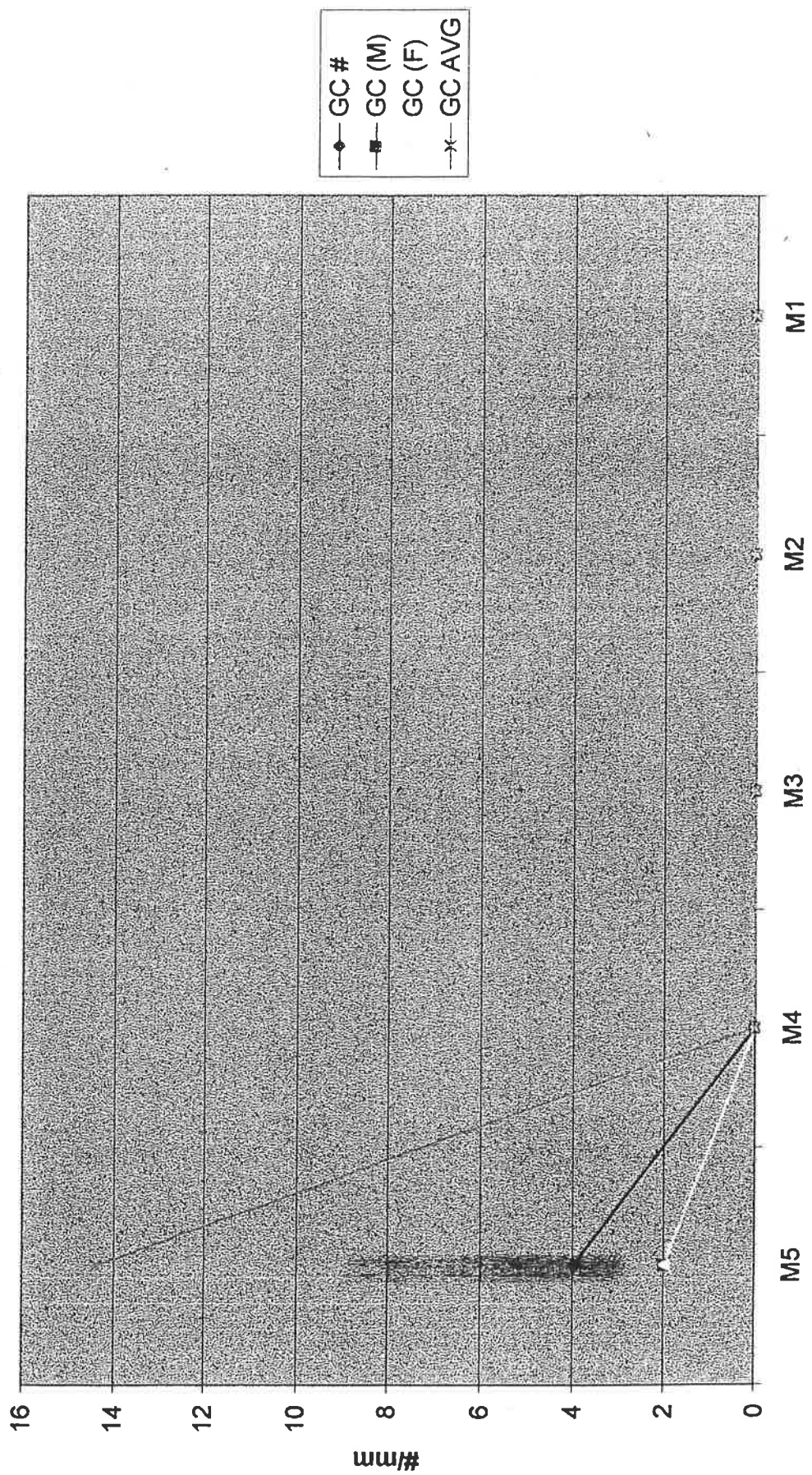
<u>Quadrant</u>	<u>GC #</u>	<u>GC (M)</u>	<u>GC (F)</u>	<u>GC AVG</u>
H5	0	0	0	0
H4	0	0	0	0
H3	0	0	0	0
H2	0	0	0	0
H1	0	0	0	0
<b>Total</b>				

<u>Quadrant</u>	<u>GC #</u>	<u>GC (M)</u>	<u>GC (F)</u>	<u>GC AVG</u>
M5	4	2	2	14.38
M4	0	0	0	0
M3	0	0	0	0
M2	0	0	0	0
M1	0	0	0	0
<b>Total</b>				

<u>Quadrant</u>	<u>GC #</u>	<u>GC (M)</u>	<u>GC (F)</u>	<u>GC AVG</u>
L5	0	0	0	0
L4	0	0	0	0
L3	0	0	0	0
L2	0	0	0	0
L1	0	0	0	0
<b>Total</b>				

Table 5

Outer Island 10/18/98 Green Crab Totals - Mid Tide



Quadrant

**Outer Island 10/18/98 Japanese Shore Crab vs. Green Crab Totals**

<u>Quadrant</u>	<u>JSC #</u>	<u>JSC (M)</u>	<u>JSC (F)</u>	<u>JSC AVG</u>	<u>GC #</u>	<u>GC (M)</u>	<u>GC (F)</u>	<u>GC AVG</u>
H5	90	32	58	9.11	0	0	0	0
H4	47	20	27	7.82	0	0	0	0
H3	26	13	13	10.7	0	0	0	0
H2	3	0	0	6.6	0	0	0	0
H1	1	0	0	4	0	0	0	0
<b>Total</b>	<b>167</b>							

<u>Quadrant</u>	<u>JSC #</u>	<u>JSC (M)</u>	<u>JSC (F)</u>	<u>JSC AVG</u>	<u>GC #</u>	<u>GC (M)</u>	<u>GC (F)</u>	<u>GC AVG</u>
M5	58	23	35	7.8	4	2	2	14.38
M4	174	96	78	6.78	0	0	0	0
M3	154	87	67	5.75	0	0	0	0
M2	152	68	84	5.43	0	0	0	0
M1	39	38	1	5.88	0	0	0	0
<b>Total</b>	<b>577</b>							

<u>Quadrant</u>	<u>JSC #</u>	<u>JSC (M)</u>	<u>JSC (F)</u>	<u>JSC AVG</u>	<u>GC #</u>	<u>GC (M)</u>	<u>GC (F)</u>	<u>GC AVG</u>
L5	10	10	0	8	0	0	0	0
L4	90	23	67	9.42	0	0	0	0
L3	65	58	7	5.55	0	0	0	0
L2	47	39	8	7.28	0	0	0	0
L1	66	40	26	8.28	0	0	0	0
<b>Total</b>	<b>278</b>							

Table 6

# Outer Island 10/18/98 High Tide - Japanese Shore Crabs vs Green Crabs

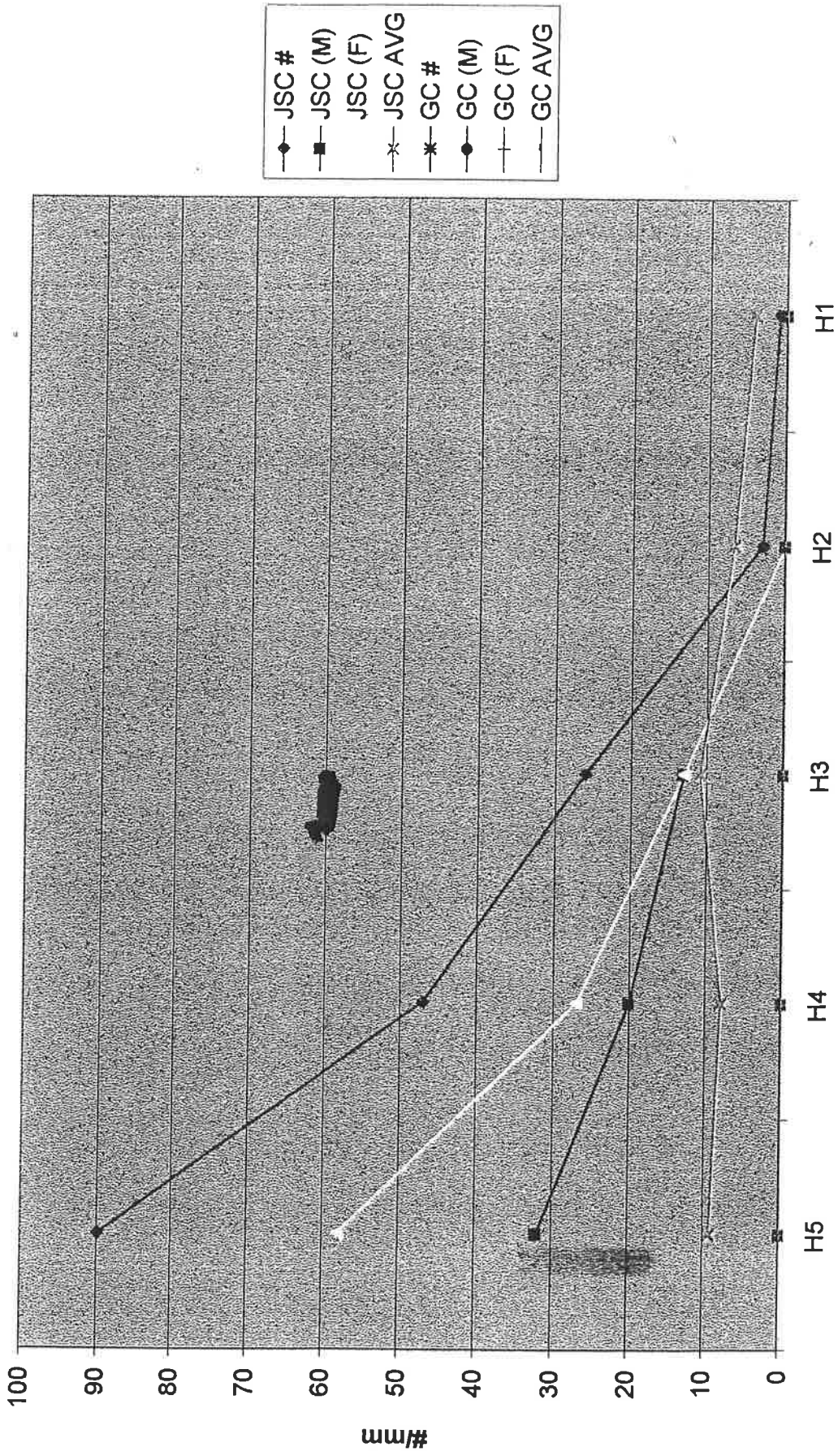


Chart 17

# Outer Island 10/18/98 Mid Tide - Japanese Shore Crabs vs Green Crabs

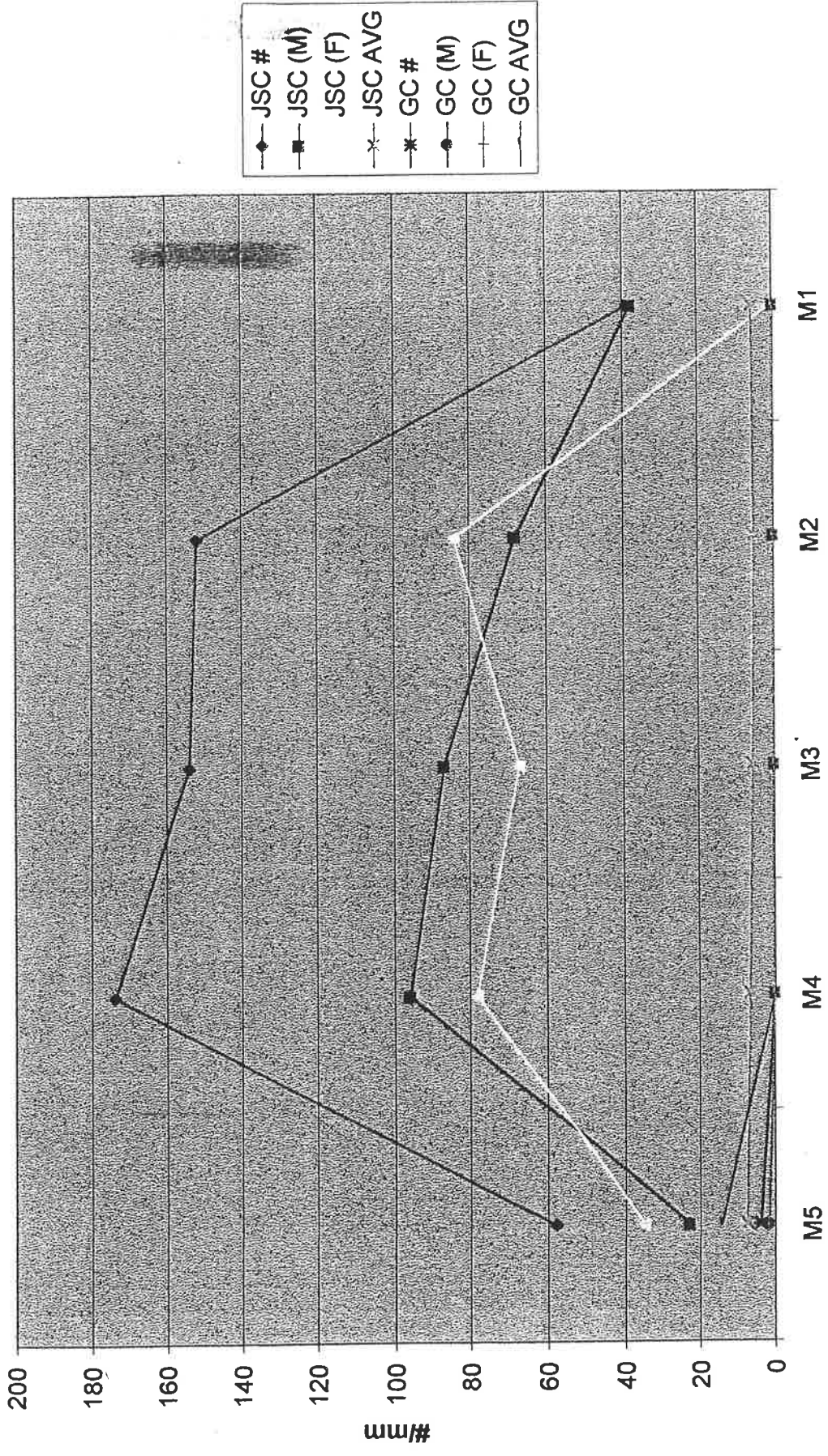
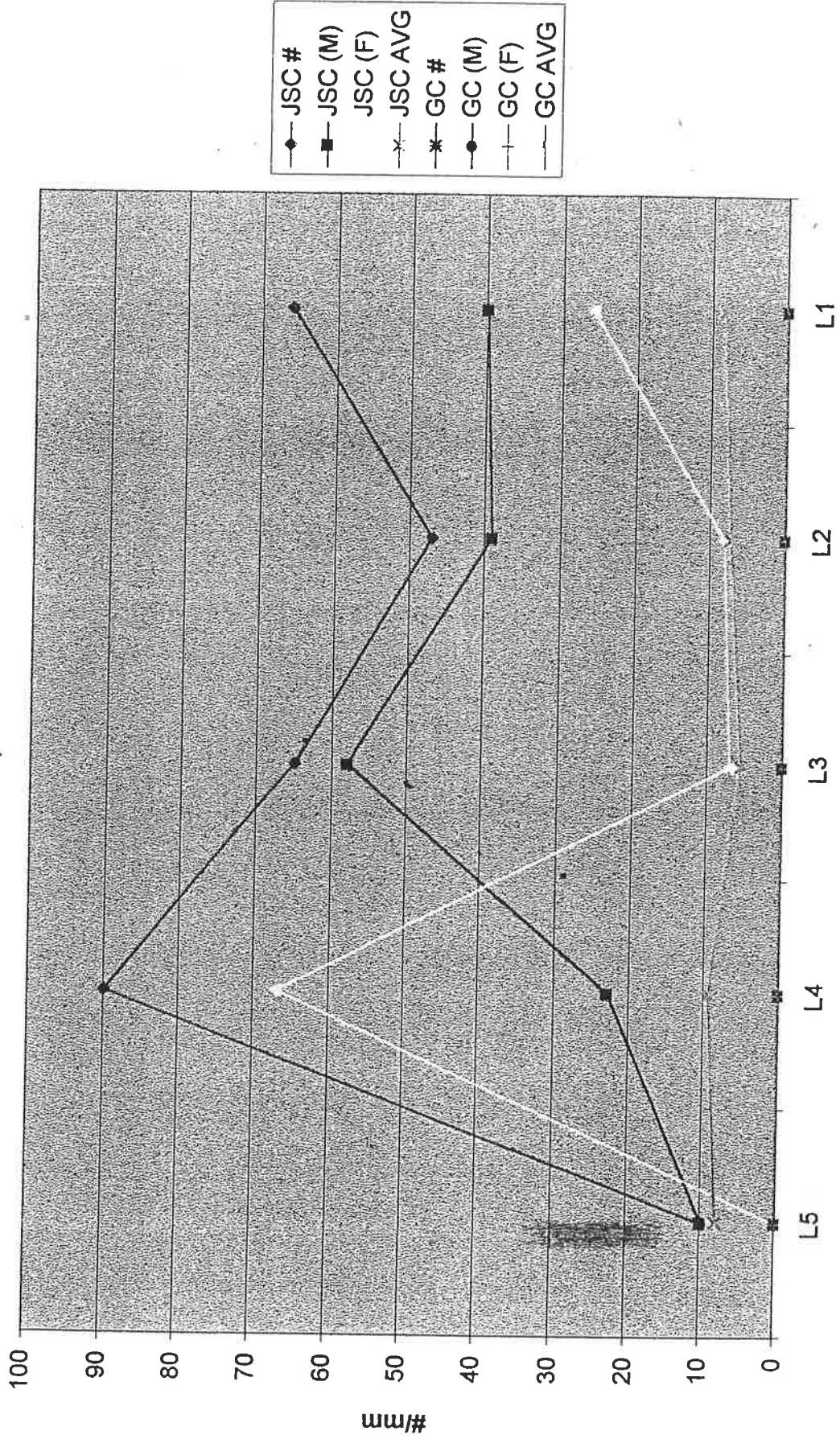
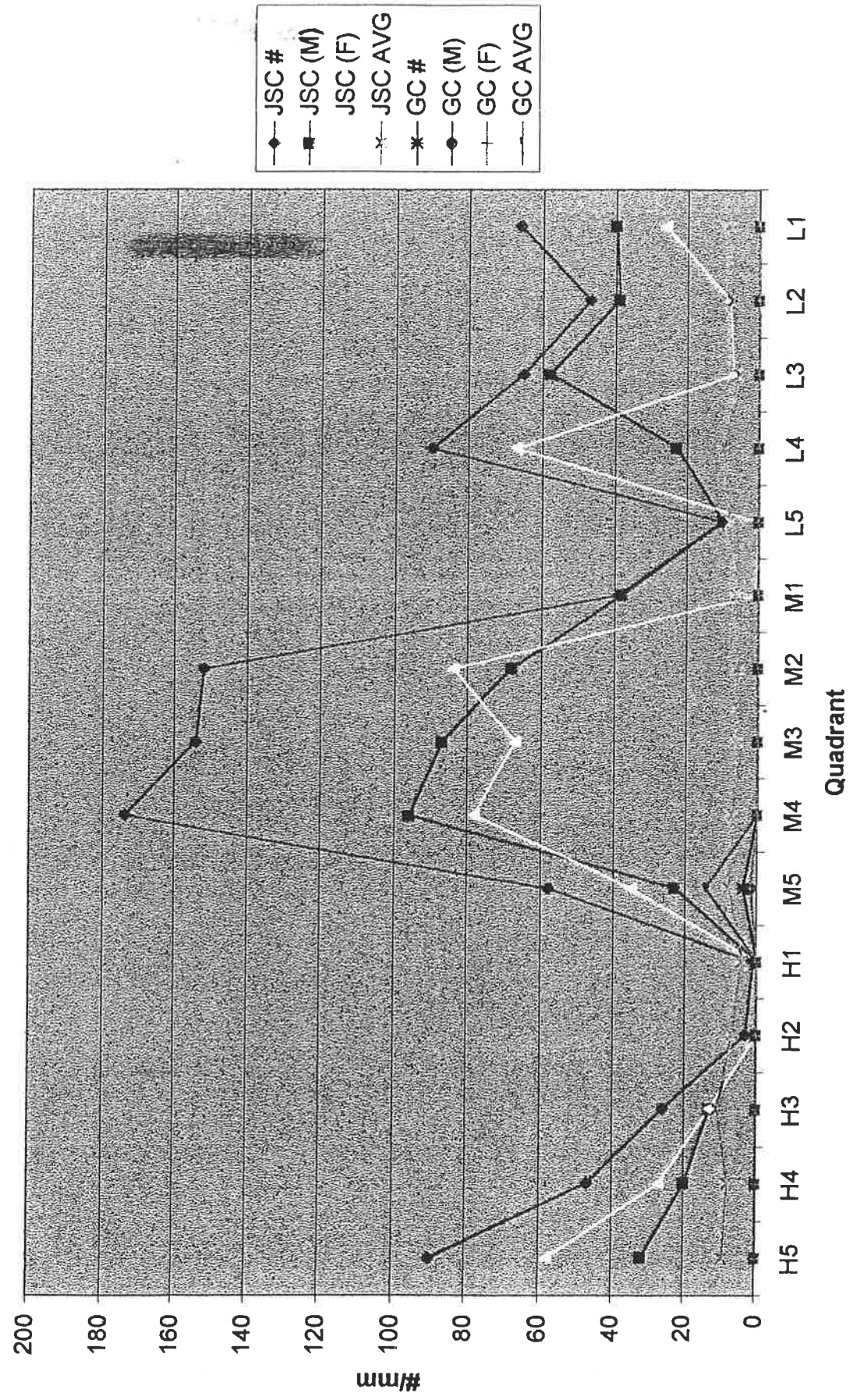


Chart 18

# Outer Island 10/18/98 Low Tide - Japanese Shore Crabs vs Green Crabs



# Outer Island 10/18/98 Japanese Crabs vs Green Crabs





**Outer Island 8/21/98 Japanese Shore Crab Size Class Distribution**

	M(0-9.0)MM	M(9.1-18.0)MM	M(18.0+)	F(0-9.0)MM	F(9.1-18.0)MM	F(18.0+)MM
L1	11	10	0	0	3	0
L2	20	30	2	1	18	1
L3	65	19	1	5	8	0
L4	64	37	5	3	41	3
L5	0	0	0	0	0	0
M1	49	0	0	12	0	0
M2	46	31	1	3	9	1
M3	57	10	0	2	3	0
M4	77	21	3	4	11	1
M5	79	32	4	6	27	0
H1	0	0	0	0	0	0
H2	0	0	0	0	0	0
H3	4	3	0	0	4	0
H4	0	0	0	0	0	0
H5	2	6	0	1	2	0

Table 7

**Outer Island 10/18/98 Japanese Shore Crab Size Class Distribution**

	M(0-9.0)MM	M(9.1-18.0)MM	M(18.0+)	F(0-9.0)MM	F(9.1-18.0)MM	F(18.0+)MM
L1	27	13	0	19	7	0
L2	36	3	0	5	3	0
L3	56	2	0	7	0	0
L4	47	17	3	8	14	1
L5	5	5	0	0	0	0
M1	38	1	0	0	0	0
M2	64	4	0	82	2	0
M3	76	9	2	60	7	0
M4	70	25	1	66	12	0
M5	18	4	1	27	8	0
H1	1	0	0	0	0	0
H2	3	0	0	0	0	0
H3	9	4	0	0	12	1
H4	13	6	1	18	9	0
H5	15	16	1	43	15	3

Table 8

# Outer Island 8/21/98 Japanese Shore Crab Size Distribution

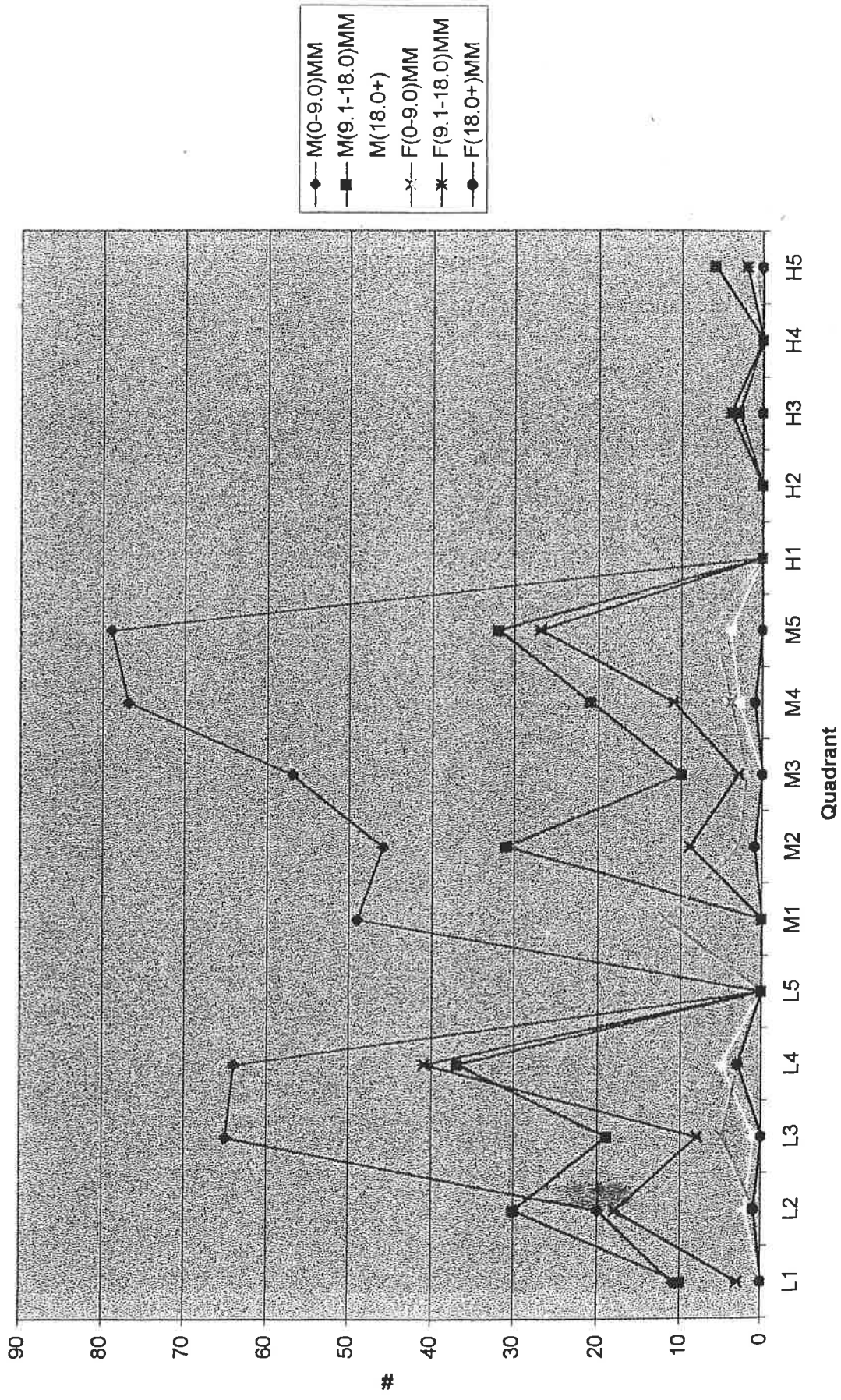


Chart 21

Outer Island 10/18/98 Japanese Shore Crab Size Class Distribution

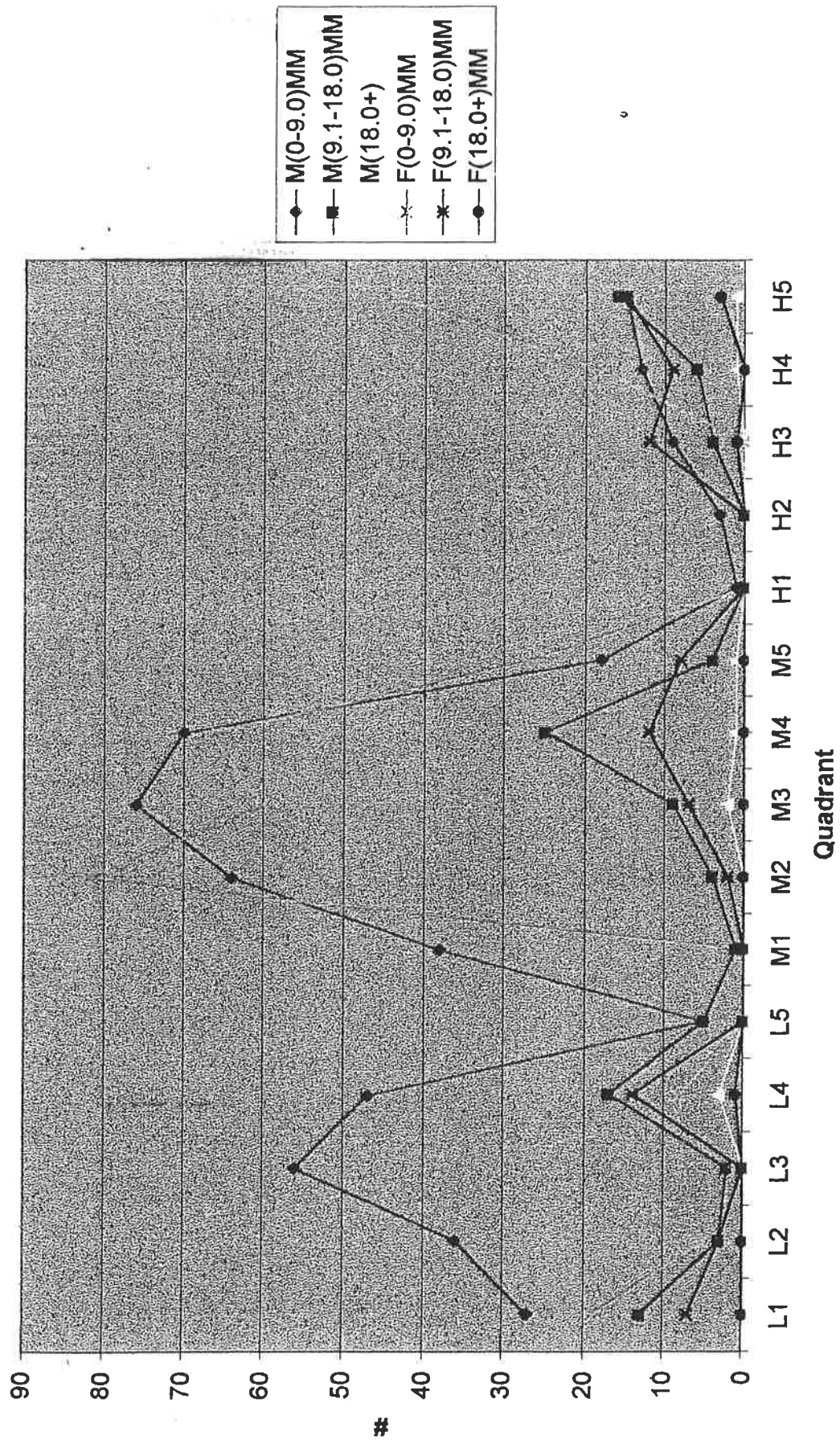


Chart 22

**Hammonasset 9/27/98**

<u>Quadrant</u>	<u>JSC #</u>	<u>JSC (M)</u>	<u>JSC (F)</u>	<u>JSC (U)</u>	<u>JSC AVG</u>
H9	23	6	9	8	9.46
H7	48	12	27	9	10.73
H5	40	12	17	11	11.22
H3	66	20	21	25	8.16
H1	29	4	17	8	10.32
<b>Total</b>	<b>206</b>				

<u>Quadrant</u>	<u>JSC #</u>	<u>JSC (M)</u>	<u>JSC (F)</u>	<u>JSC (U)</u>	<u>JSC AVG</u>
M9	85	27	23	35	8.89
M7	80	24	23	33	9.41
M5	105	33	32	40	10.06
M3	86	17	13	56	6.41
M1	166	40	30	96	7.27
<b>Total</b>	<b>442</b>				

<u>Quadrant</u>	<u>JSC#</u>	<u>JSC (M)</u>	<u>JSC (F)</u>	<u>JSC (U)</u>	<u>JSC AVG</u>
L9	61	15	32	14	6.7
L7	104	45	38	21	8.5
L5	74	24	38	12	7.8
L3	72	32	28	12	12.4
L1	106	36	41	29	10.9
<b>Total</b>	<b>417</b>				

Table 9

# Hammonasset 9/27/98 Japanese Shore Crabs-High Tide

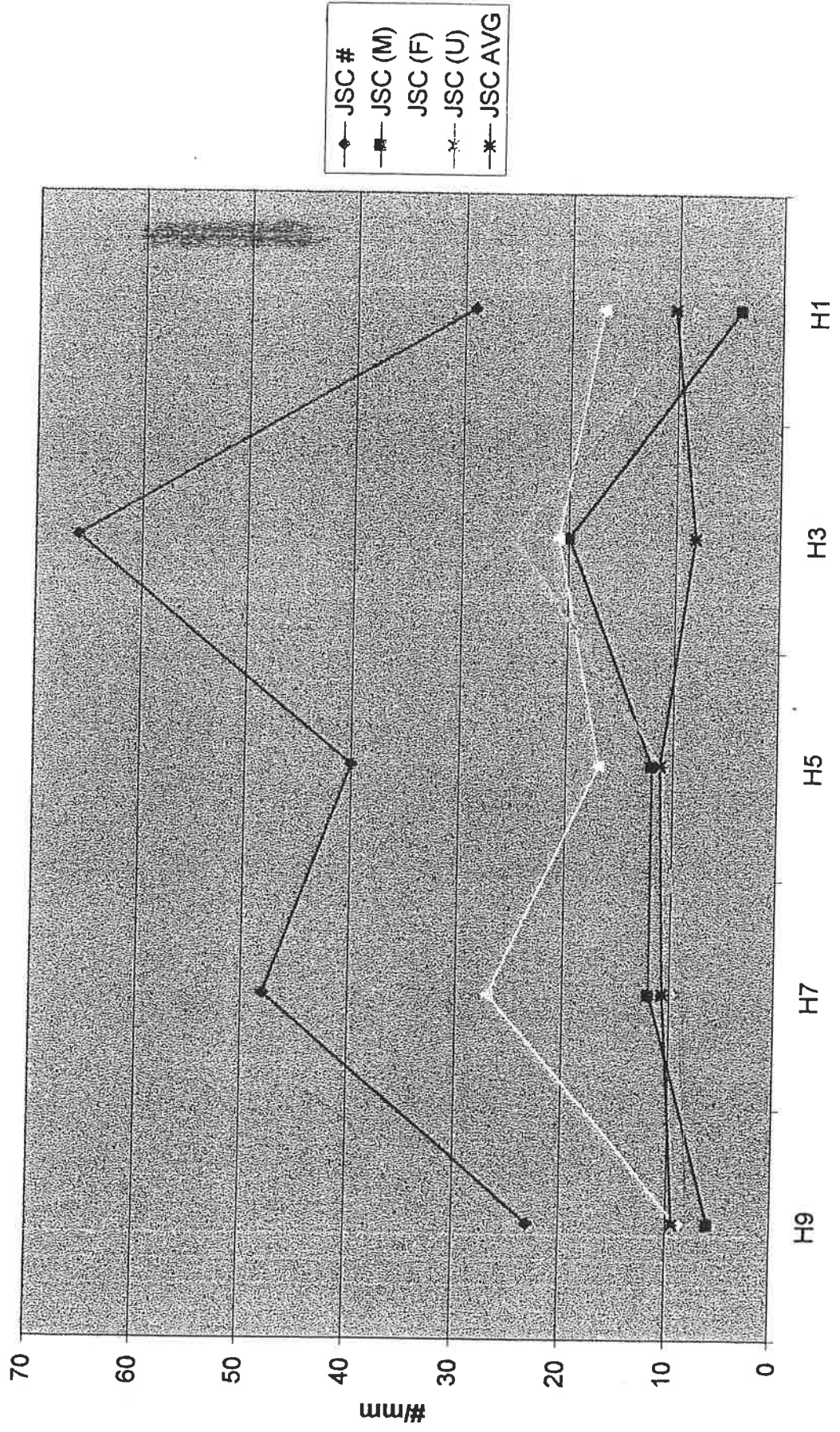
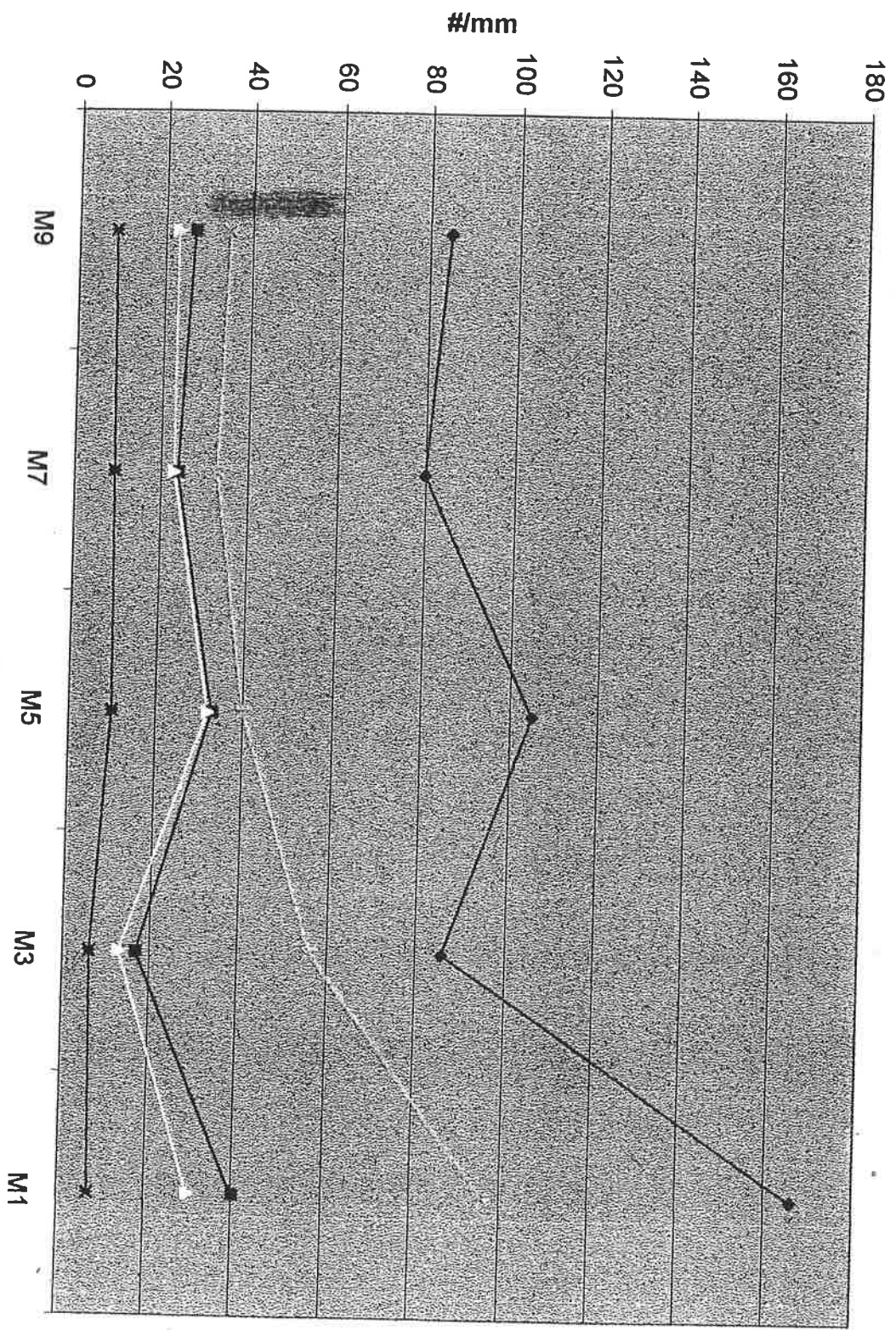


Chart 23

# Hammonasset 9/27/98 Japanese Shore Crabs-Mid Tide



- ◆ JSC #
- JSC (M)
- JSC (F)
- JSC (U)
- \* JSC AVG

Chart 24

# Hammonasset 9/27/98 Japanese Shore Crabs-Low Tide

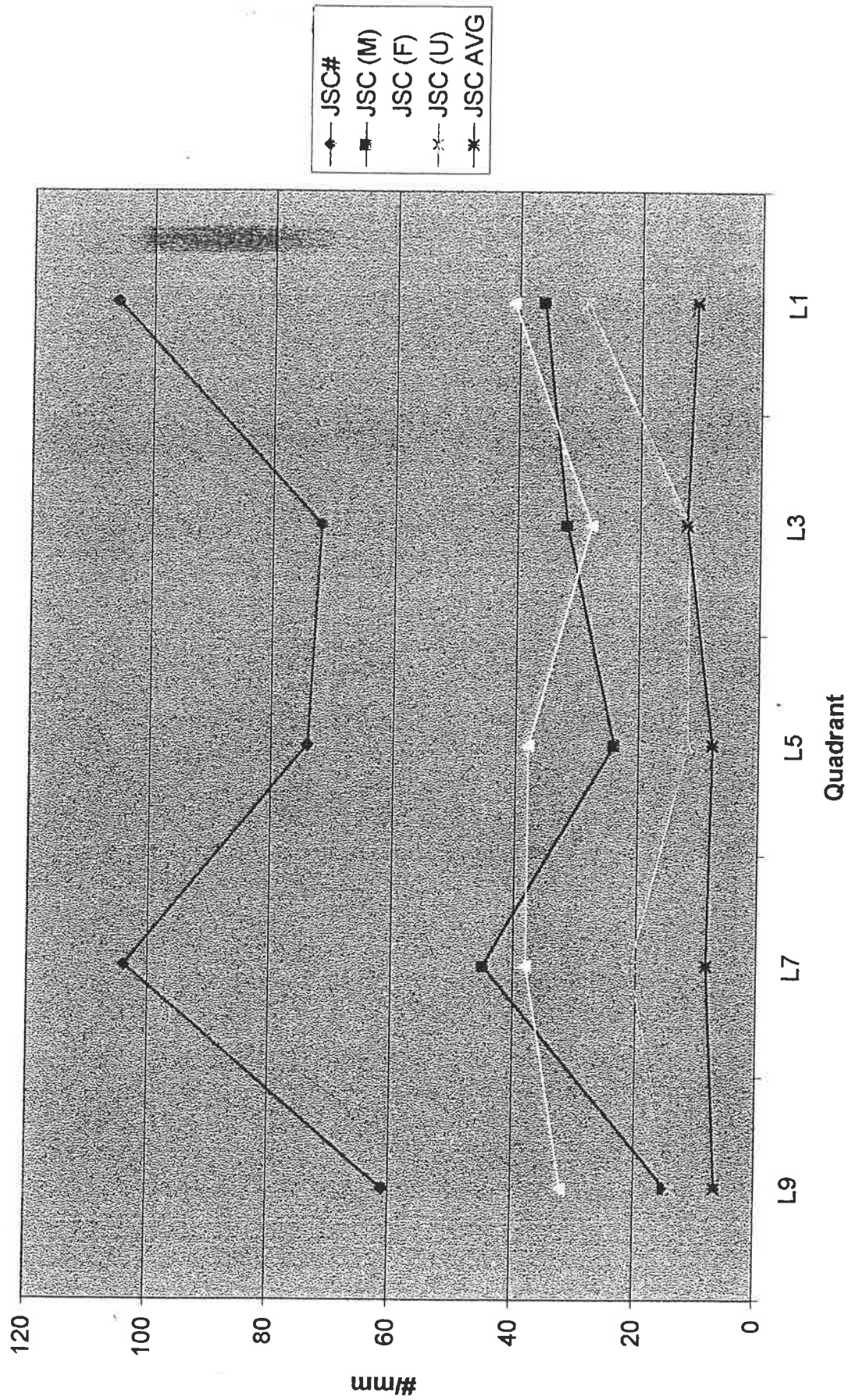
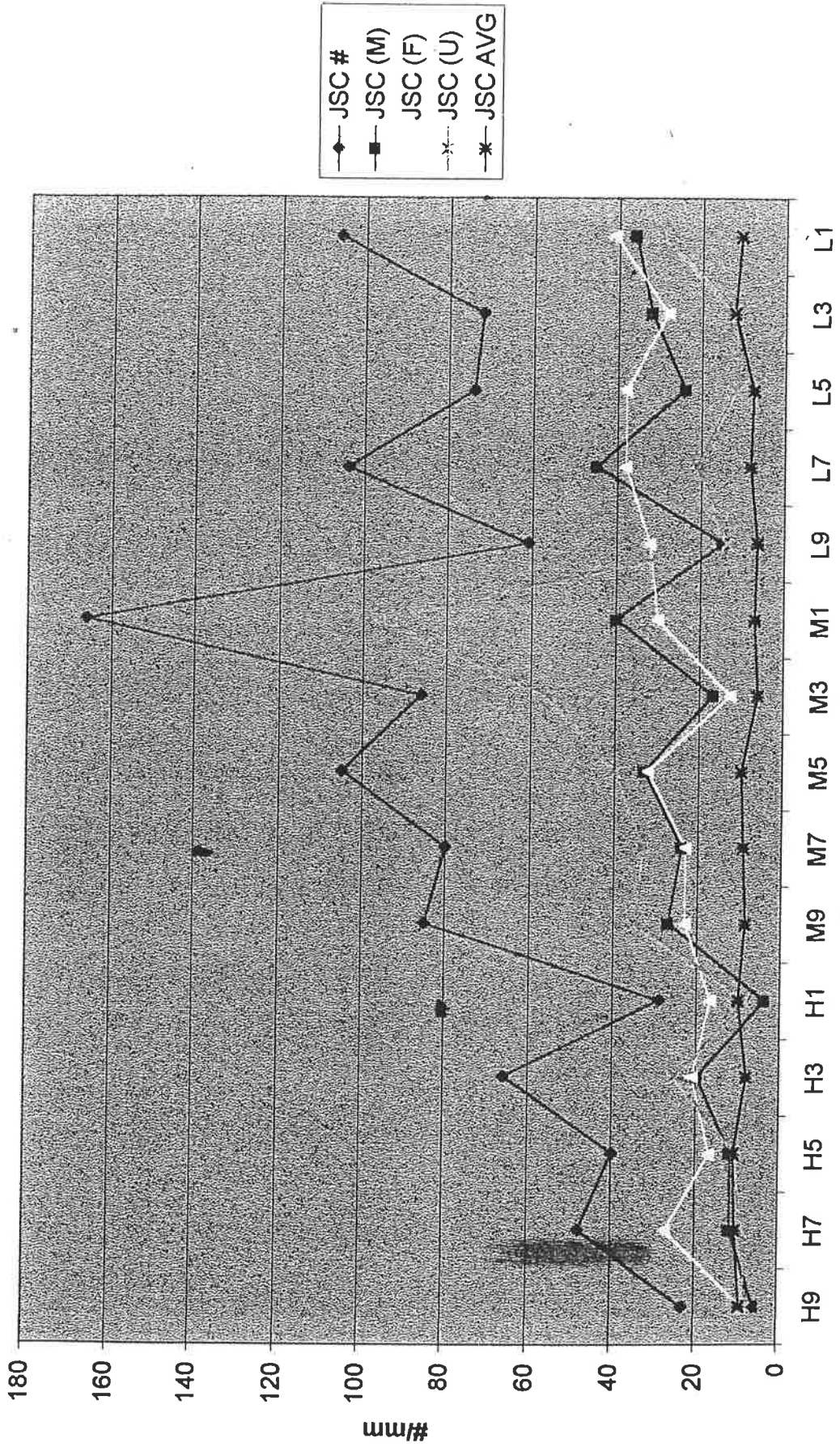


Chart 25



# Hammonasset 9/27/98 Japanese Shore Crabs



**Hammonasset 11/25/98**

<u>Quadrant</u>	<u>JSC #</u>	<u>JSC (M)</u>	<u>JSC (F)</u>	<u>JSC (U)</u>	<u>JSC AVG</u>
H9	1	0	0	1	3.4
H7	26	1	0	25	3.77
H5	32	2	5	25	5.98
H3	14	3	1	10	5.79
H1	14	0	1	13	4.77
<b>Total</b>	<b>87</b>				

<u>Quadrant</u>	<u>JSC #</u>	<u>JSC (M)</u>	<u>JSC (F)</u>	<u>JSC (U)</u>	<u>JSC AVG</u>
M9	119	19	23	77	8.19
M7	112	6	10	96	7.79
M5	141	30	32	79	8.29
M3	189	33	39	117	8.37
M1	75	7	15	53	7.33
<b>Total</b>	<b>636</b>				

<u>Quadrant</u>	<u>JSC #</u>	<u>JSC (M)</u>	<u>JSC (F)</u>	<u>JSC (U)</u>	<u>JSC AVG</u>
L9	35	14	10	11	11.75
L7	79	30	31	18	14.32
L4	77	21	22	34	11.95
L3	30	13	11	6	16.37
L1	62	14	29	19	16.7
<b>Total</b>	<b>283</b>				

Table 10

# Hammonasset 11/25/98 Japanese Shore Crabs-High Tide

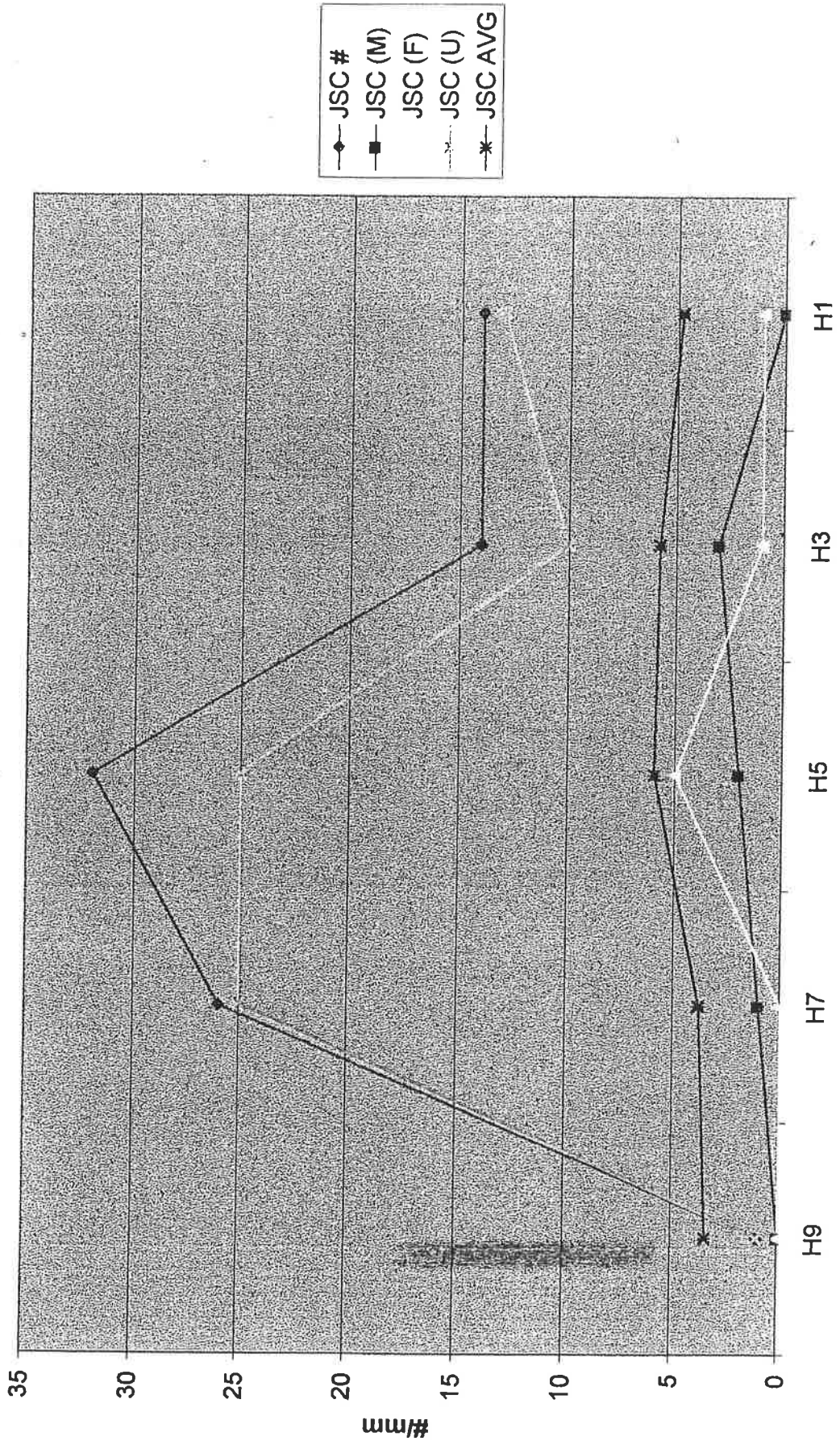


Chart 27

# Hammonasset 11/25/98 Japanese Shore Crabs-Mid Tide

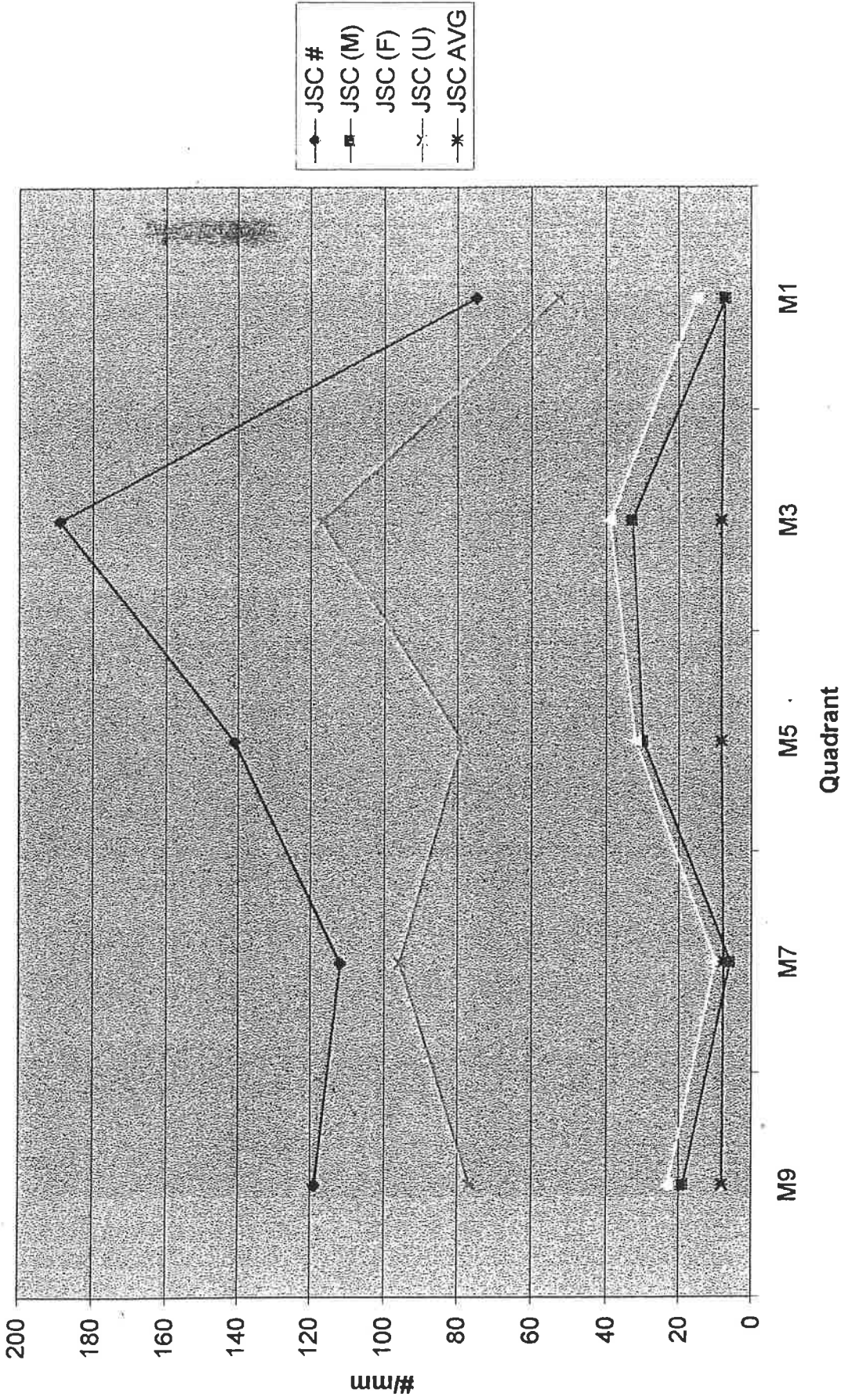


Chart 28

# Hammonasset 11/25/98 Japanese Shore Crabs-Low Tide

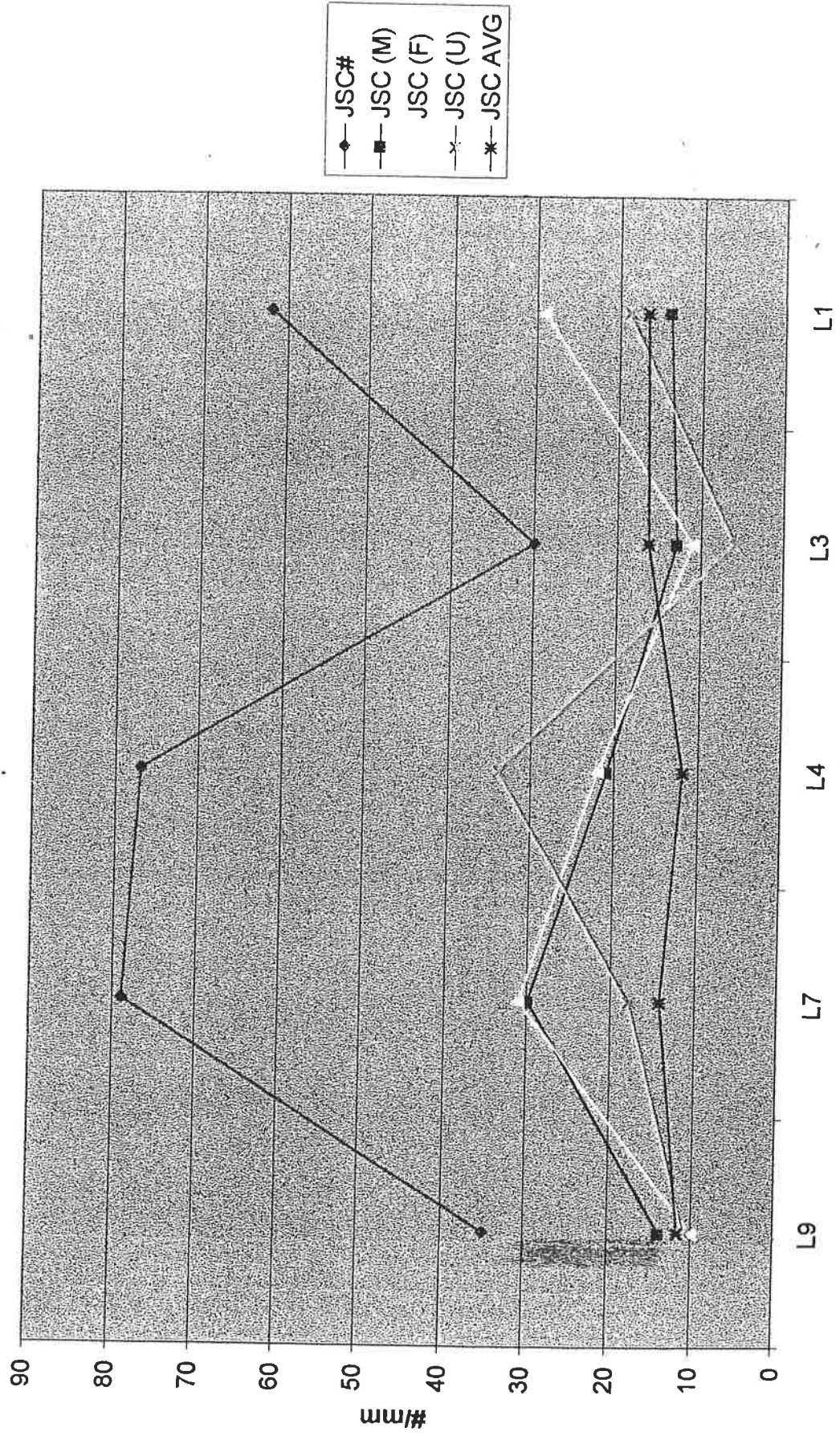


Chart 29

# Hammonasset 11/25/98 Japanese Shore Crabs

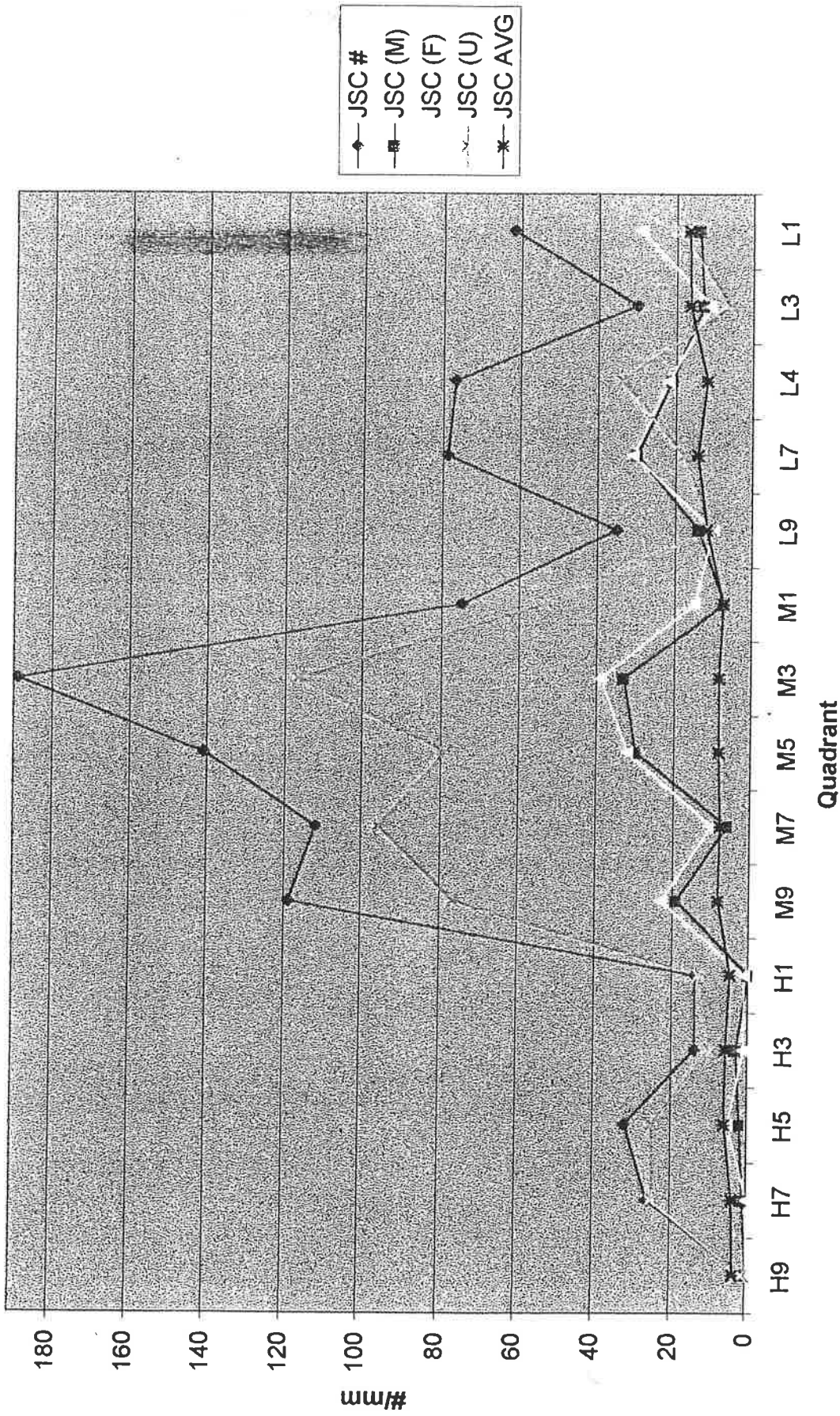


Chart 30

**Hammonasset 9/27/98 Japanese Shore Crab Size Class Distribution**

	M(0-9.0)MM	M(9.1-18.0)MM	M(18.0+)	F(0-9.0)MM	F(9.1-18.0)MM	F(18.0+)MM
L1	18	17	1	26	15	0
L3	17	15	0	23	4	1
L5	6	18	0	21	11	6
L7	27	15	3	19	15	4
L9	7	8	0	17	14	1
M1	16	22	2	15	13	2
M3	9	7	1	5	5	3
M5	8	20	5	10	14	8
M7	11	8	5	11	8	4
M9	11	15	1	5	13	5
H1	1	2	1	1	15	1
H3	9	8	3	11	7	3
H5	5	6	1	2	11	4
H7	3	9	0	7	16	4
H9	0	5	1	2	7	0

\* unidentified male and females were not included

Table 11

# Hammonasset 9/27/98 Japanese Shore Crab Size Distribution

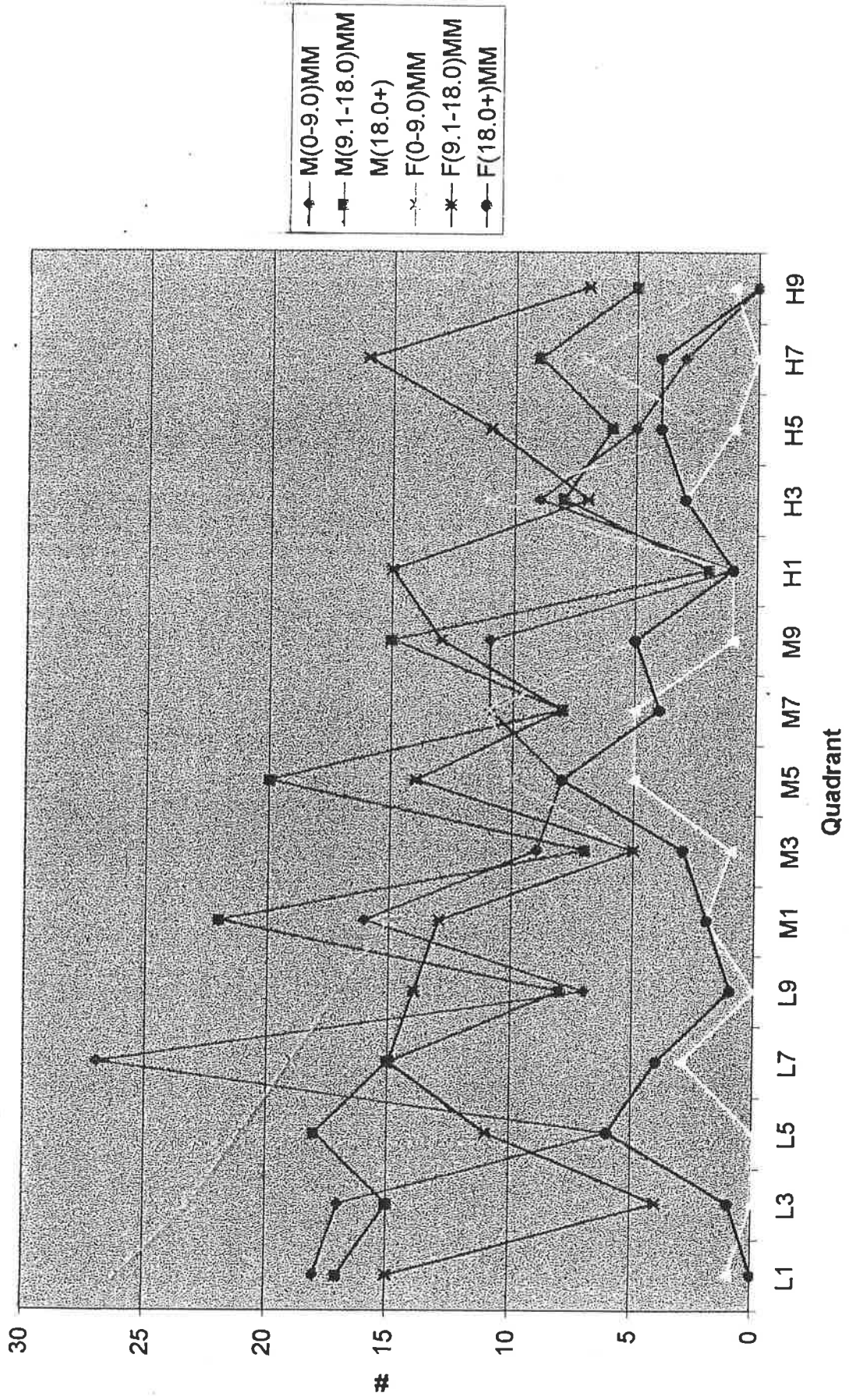


Chart 31



Hammonasset 11/25/98 Japanese Shore Crab Size Class Distribution

	M(0-9.0)MM	M(9.1-18.0)MM	M(18.0+)	F(0-9.0)MM	F(9.1-18.0)MM	F(18.0+)MM
L1	0	5	9	0	8	21
L3	0	9	4	0	7	4
L5	1	18	2	2	11	9
L7	1	18	11	3	18	10
L9	0	9	5	0	10	0
M1	1	17	1	7	14	2
M3	0	6	0	3	7	0
M5	8	22	0	7	24	1
M7	2	30	1	13	26	0
M9	1	6	0	1	14	0
H1	0	0	0	0	0	0
H3	1	0	0	0	0	0
H5	2	0	0	3	2	0
H7	3	0	0	7	0	0
H9	0	0	0	1	0	0

\* unidentified male and females for each class were not included

Table 12

# Hammonasset 11/25/98 Japanese Shore Crab Size Class Distribution

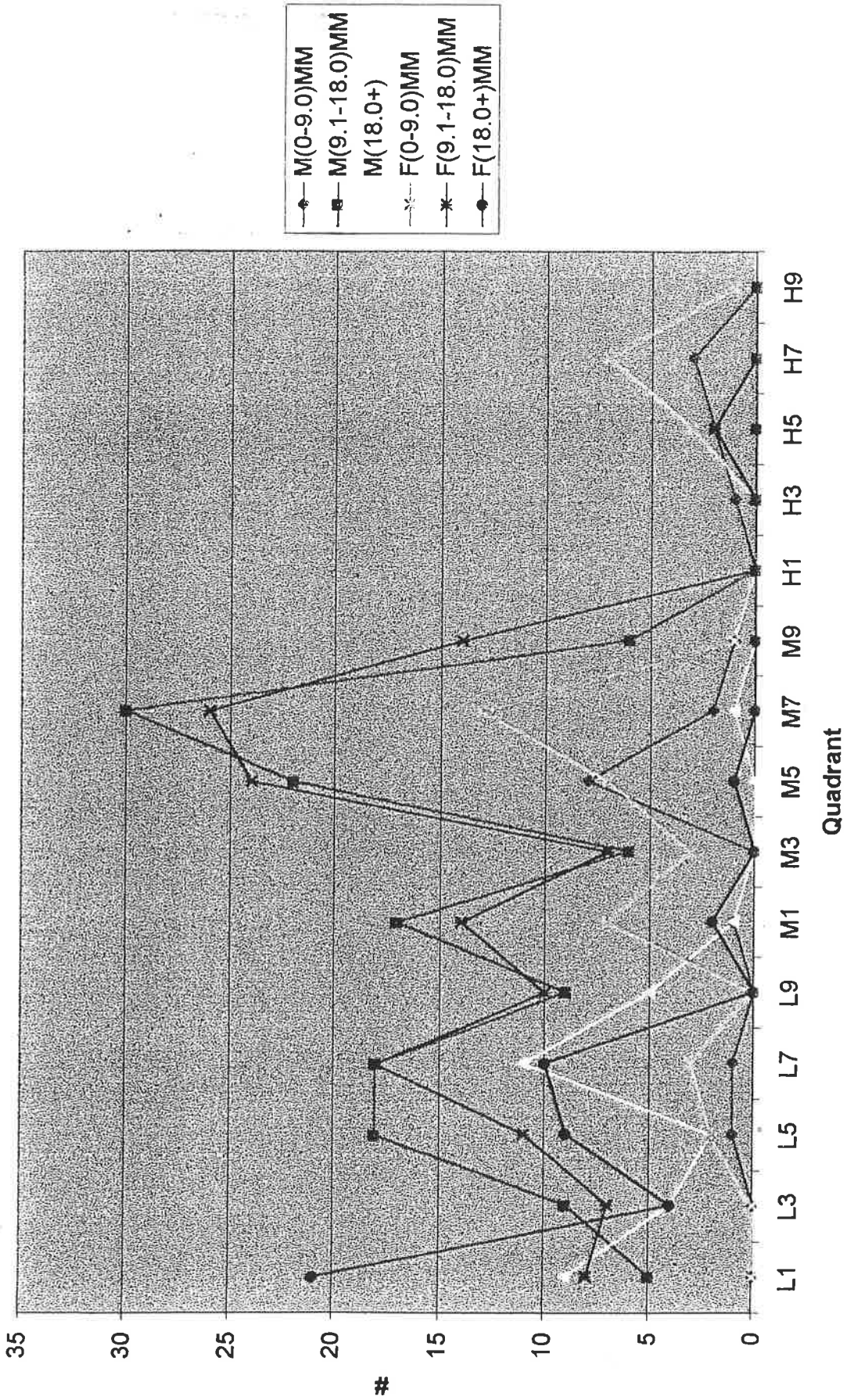
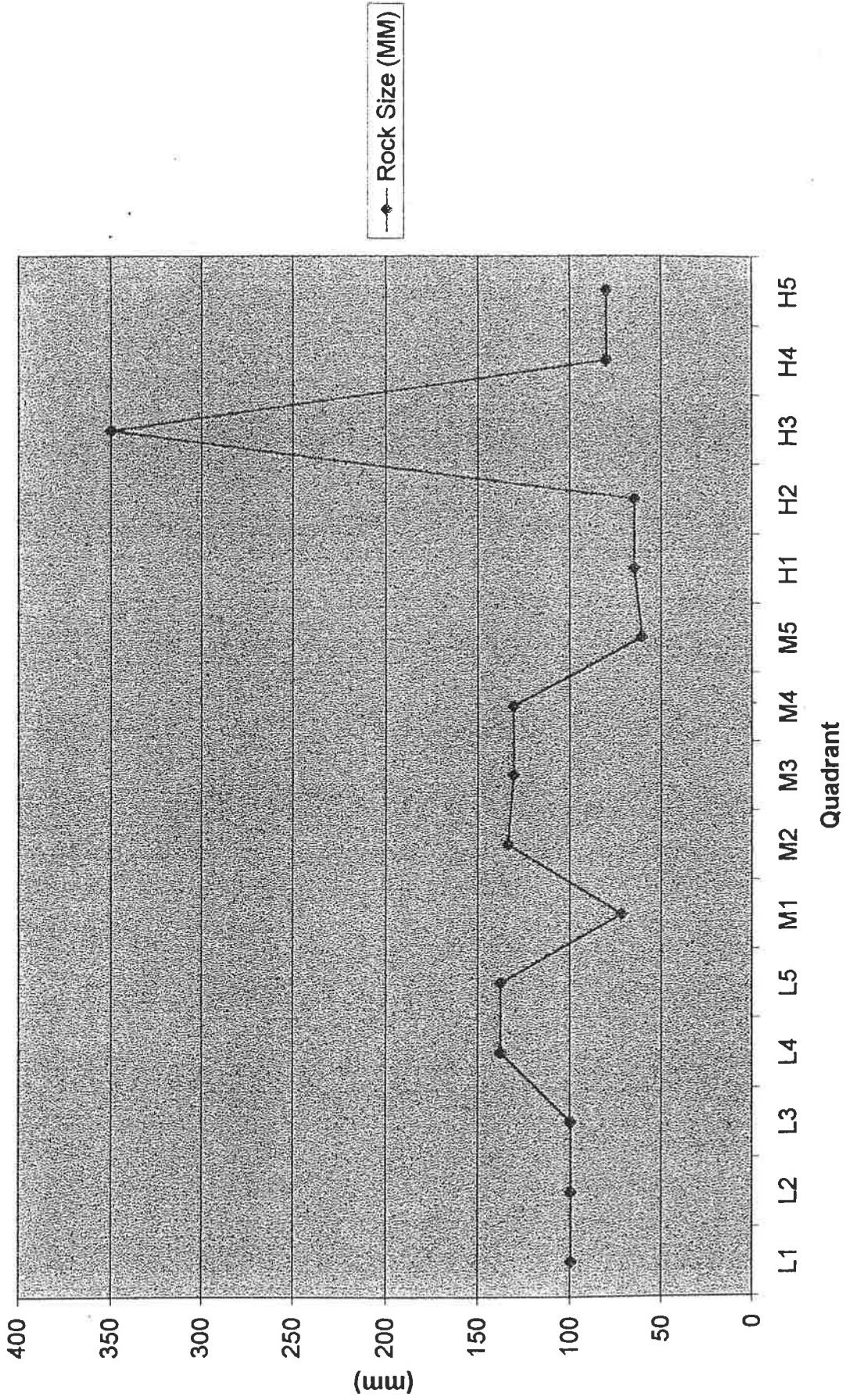


Chart 32

**Rock Size: Hammonasset vs. Outer Island**

Hammonasset	<u>Rock Size (MM)</u>	Outer Island	<u>Rock Size (MM)</u>
L1	227.1	L1	99.7
L3	227.1	L2	99.7
L5	227.1	L3	99.7
L7	775	L4	137.6
L9	775	L5	137.6
M1	133.4	M1	72.3
M3	194.3	M2	133.3
M5	257.1	M3	130.4
M7	257.1	M4	130.4
M9	167.5	M5	61
H1	268.8	H1	65.1
H3	130.6	H2	65.1
H5	210.9	H3	350
H7	210.9	H4	80.6
H9	210.9	H5	80.6

# Outer Island Average Rock Size (MM)

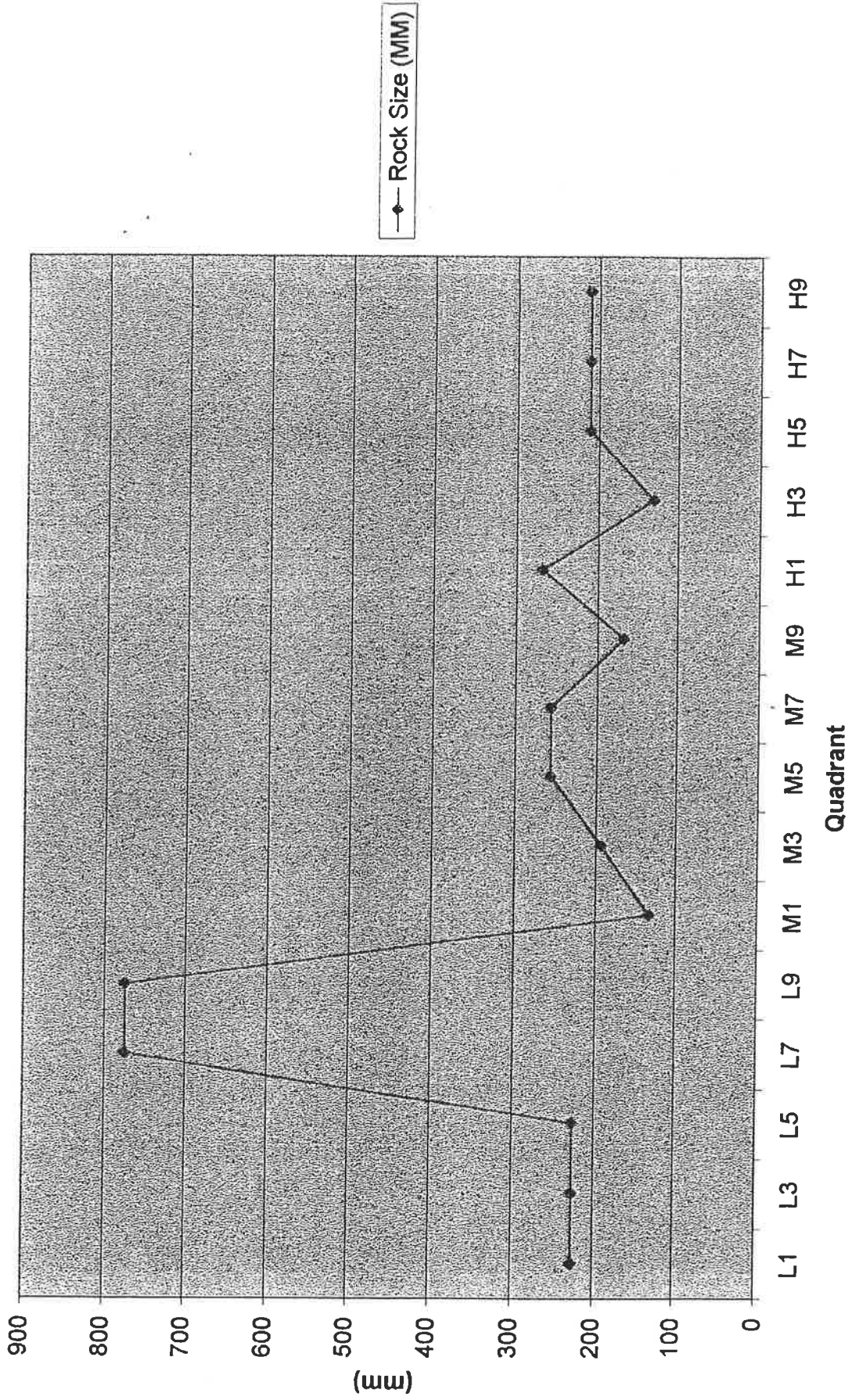


**Outer Island 8/21/98 Japanese Shore Crab Size Class Distribution vs. Average Rock Size**

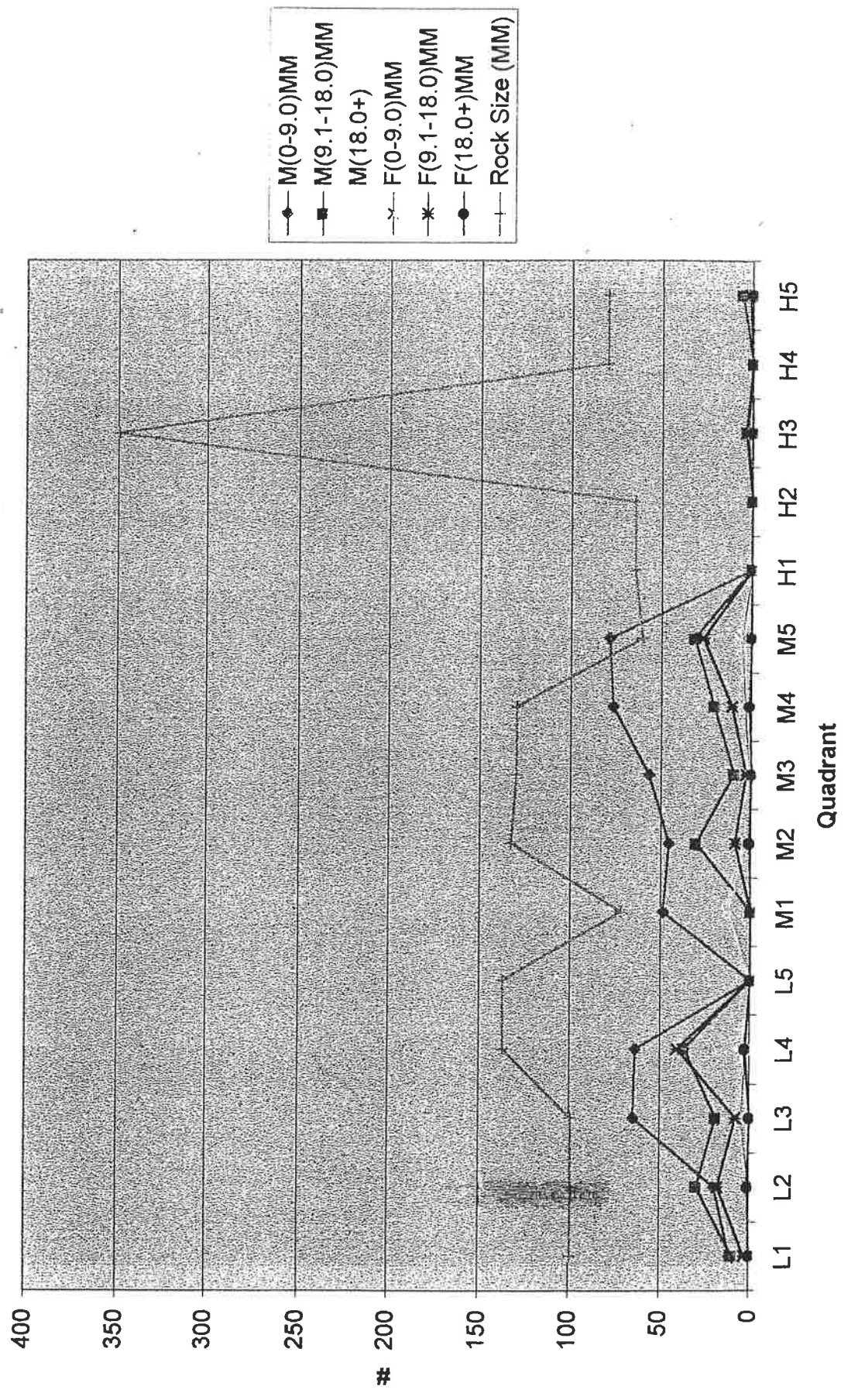
	M(0-9.0)MM	M(9.1-18.0)MM	M(18.0+)	F(0-9.0)MM	F(9.1-18.0)MM	F(18.0+)MM	Rock Size (MM)
L1	11	10	0	0	3	0	99.7
L2	20	30	2	1	18	1	99.7
L3	65	19	1	5	8	0	99.7
L4	64	37	5	3	41	3	137.6
L5	0	0	0	0	0	0	137.6
M1	49	0	0	12	0	0	72.3
M2	46	31	1	3	9	1	133.3
M3	57	10	0	2	3	0	130.4
M4	77	21	3	4	11	1	130.4
M5	79	32	4	6	27	0	61
H1	0	0	0	0	0	0	65.1
H2	0	0	0	0	0	0	65.1
H3	4	3	0	0	4	0	350
H4	0	0	0	0	0	0	80.6
H5	2	6	0	1	2	0	80.6

Table 14

# Hammonasset Average Rock Size (MM)



Outer Island 8/21/98 Japanese Shore Crab Size Class Distribution vs. Average Rock Size



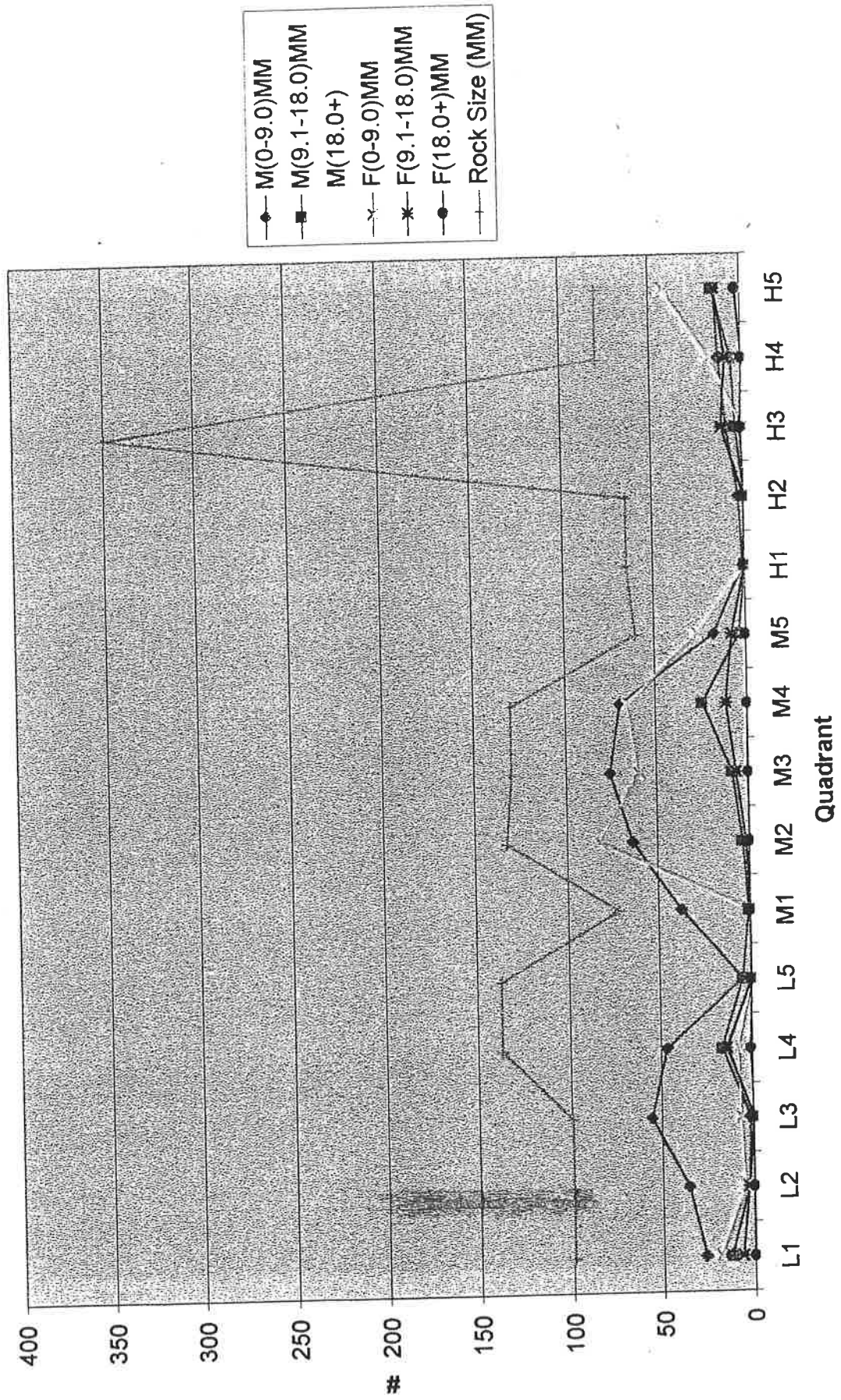
**Outer Island 10/18/98 Japanese Shore Crab Size Class Distribution vs. Average Rock Size**

	M(0-9.0)MM	M(9.1-18.0)MM	M(18.0+)	F(0-9.0)MM	F(9.1-18.0)MM	F(18.0+)MM	Rock Size (MM)
L1	27	13	0	19	7	0	99.7
L2	36	3	0	5	3	0	99.7
L3	56	2	0	7	0	0	99.7
L4	47	17	3	8	14	1	137.6
L5	5	5	0	0	0	0	137.6
M1	38	1	0	0	0	0	72.3
M2	64	4	0	82	2	0	133.3
M3	76	9	2	60	7	0	130.4
M4	70	25	1	66	12	0	130.4
M5	18	4	1	27	8	0	61
H1	1	0	0	0	0	0	65.1
H2	3	0	0	0	0	0	65.1
H3	9	4	0	0	12	1	350
H4	13	6	1	18	9	0	80.6
H5	15	16	1	43	15	3	80.6

Table 15



Outer Island 10/18/98 Japanese Shore Crab Size Class Distribution vs. Average Rock Size



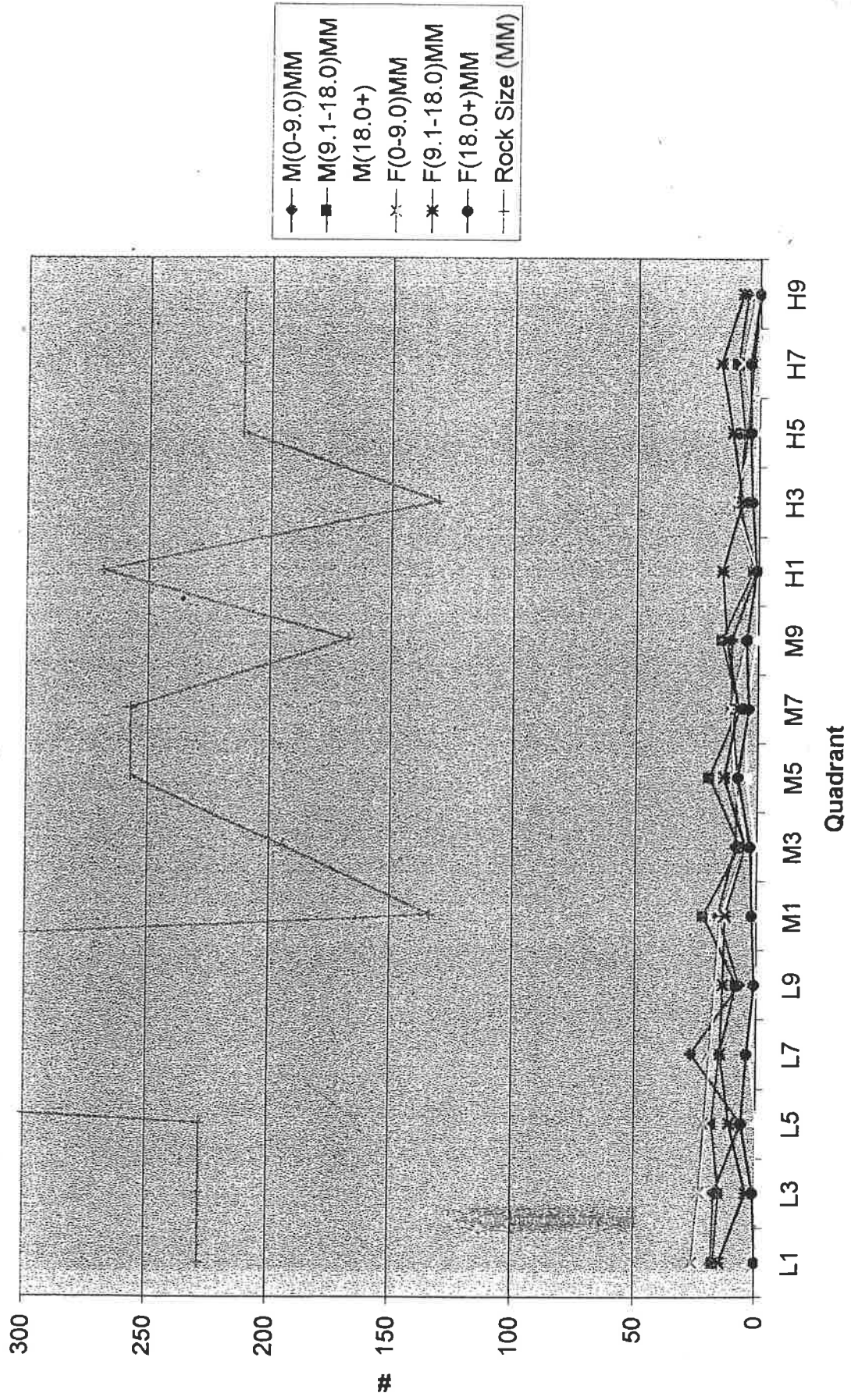
**Hammonasset 9/27/98 Japanese Shore Crab Size Class Distribution vs. Average Rock Size**

	M(0-9.0)MM	M(9.1-18.0)MM	M(18.0+)	F(0-9.0)MM	F(9.1-18.0)MM	F(18.0+)MM	Rock Size (MM)
L1	18	17	1	26	15	0	227.1
L3	17	15	0	23	4	1	227.1
L5	6	18	0	21	11	6	227.1
L7	27	15	3	19	15	4	775
L9	7	8	0	17	14	1	775
M1	16	22	2	15	13	2	133.4
M3	9	7	1	5	5	3	194.3
M5	8	20	5	10	14	8	257.1
M7	11	8	5	11	8	4	257.1
M9	11	15	1	5	13	5	167.5
H1	1	2	1	1	15	1	268.8
H3	9	8	3	11	7	3	130.6
H5	5	6	1	2	11	4	210.9
H7	3	9	0	7	16	4	210.9
H9	0	5	1	2	7	0	210.9

\* unidentified male and females were not included

Table 16

# Hammonasset 9/27/98 Japanese Shore Crab Size Class Distribution vs. Average Rock Size



Hammonasset 11/25/98 Japanese Shore Crab Size Class Distribution vs. Average Rock Size

	M(0-9.0)MM	M(9.1-18.0)MM	M(18.0+)	F(0-9.0)MM	F(9.1-18.0)MM	F(18.0+)MM	Rock Size (MM)
L1	0	5	9	0	8	21	227.1
L3	0	9	4	0	7	4	227.1
L5	1	18	2	2	11	9	227.1
L7	1	18	11	3	18	10	775
L9	0	9	5	0	10	0	775
M1	1	17	1	7	14	2	133.4
M3	0	6	0	3	7	0	194.3
M5	8	22	0	7	24	1	257.1
M7	2	30	1	13	26	0	257.1
M9	1	6	0	1	14	0	167.5
H1	0	0	0	0	0	0	268.8
H3	1	0	0	0	0	0	130.6
H5	2	0	0	3	2	0	210.9
H7	3	0	0	7	0	0	210.9
H9	0	0	0	1	0	0	210.9

\* unidentified male and females for each class were not included

Hammonasset 11/25/98 Japanese Shore Crab Size Class Distribution vs. Average Rock Size

