

METRIDIUM SENILE STUDY AT RACE ROCKS ECOLOGICAL RESERVE

1982 - LESTER B. PEARSON COLLEGE

HANS GUTTMAN - coordinator.

Race Rocks

Ref. No.:

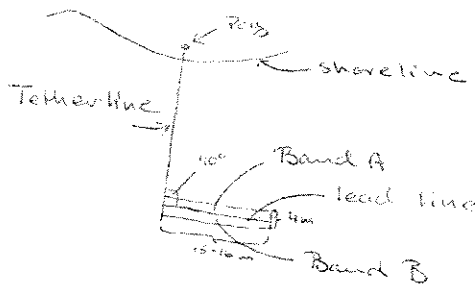
277

ECOLOGICAL RESERVES COLLECTION
GOVERNMENT OF BRITISH COLUMBIA
VICTORIA, B.C.
V8V 1X4

Each transect sheet represents a transect consisting of 15-16 1m x 2m rectangles on each side of the transect line. The depth of the site is recorded in the far left column.

Information concerning species, position, date, divers etc is presented in the top part of the paper.

Band A and B refer to inner and outer part of the transect line if nothing else is noted down.

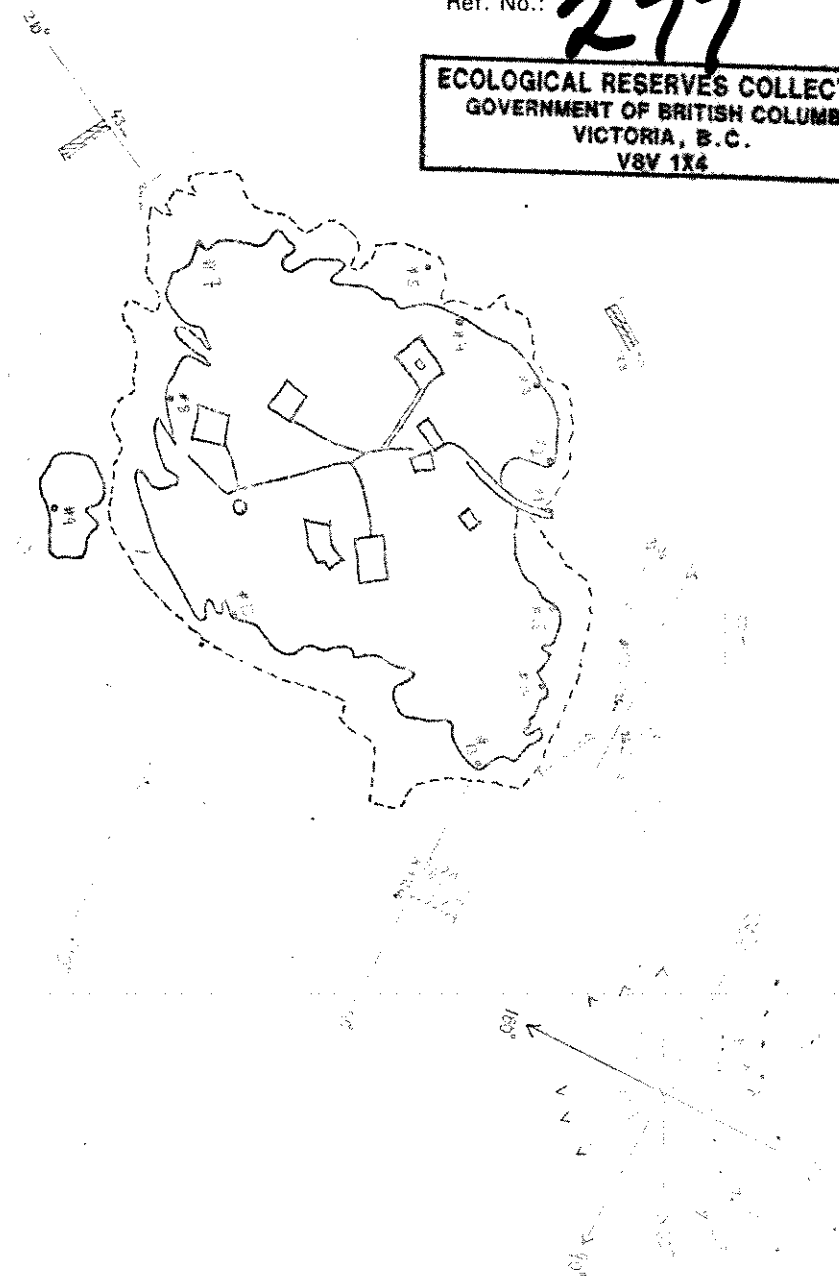


A total and grand total are presented in the right part respectively in the lower right hand corner.

The map illustrates approximate positions of the pegs and area covered by transect measurements, the small number being the length from the peg and the number in the end the compass bearing of the tether line. The bearings are readings to magnetic north magnetic.

Metridium Study.

Scale
1:1800



transect sand type

Species: Murchisonia

Location, peg #: Straight off the docks Peg 1

Bearing feather line: 0° lead: 90°

Rope length to lead line: 36 m

Divers: Carol and Dave

Key: Loose rocky bottom R
 Gravel G
 Rock shelf RS
 Crevice C

Date: 14-03-82

Time: 14:00

Tide: Slack

Current: Slack

Nearer Docks

Farther Docks

Depth	Band A	Comments	Band B	Comments	Total
13m	74*	R	29	R	103
	44	R	7	R	51
	22	R	5	R	27
	22	"	36	"	58
	22	"	30	"	52
	50*	"	35	"	85
	72*	"	42	"	124
	55*	"	47	"	61
	30	"	6	"	36
	2	"	6	"	5
	1	"	3	"	1
	0	"	0	"	0
	0	"	0	"	1
	0	" painted totia	1	"	2
	0	"	2	"	0
7m	0	"	0	"	0
Grand total					611

No molluscs were seen in this zone.

4 with large shells seen in this zone in intertidal zone.

transect sand type

Species: Murchisonia

Location, peg #: 1

Bearing feather line: 0° lead: 90°

Rope length to lead line: 45 m

Divers: Paula, Henry

Key: Loose rocky bottom R
 Gravel G
 Rock shelf RS
 Crevice C

Date: 14-03-82

Time: 14:00

Tide: Slack

Current: Slack

← more

Depth	Band A	Comments	Band B	Comments	Total
	43	R Murchisonia	9	R Murchisonia	52
	33	"	7	"	40
	19	"	0	"	19
	16	"	0	"	16
	15	"	7	"	22
	4	"	10	"	14
	3	"	11	"	14
	4	"	4	"	8
	16	"	5	"	21
	3	"	3	"	6
	2	"	17	"	19
	6	"	3	"	7
	6	"	5	"	11
	0	"	0	"	0
	4	"	2	"	6
	0	"	6	"	6
Grand total					281

transect Band type

Species: netridium

Location, peg #: Straight off docks #1

Bearing feather line: 0° lead: 90°

Rope length to leadline: 32 m

Divers: Susan + Pado

Key: Lose rocky bottom R
 Gravel G
 Rock shelf RS
 Crevice C

Date: 14/03/82

Time: 1400

Tide: slack low

Current: Slack

Depth	Band A	Comments	Band B	Comments	Total
1	0		5		5
2	0		5		5
3	0		10		10
4	0		20		20
5	12		25		37
6	10		40		50
7	16		30		46
8	14		20		34
9	10		15		25
10	0		12		12
11	0		4		4
12	0		0		0
13	1		3		4
14	0		1		1
15	0		1		1
16	0		0		0
Grand total					265

transect Band type

Species: Netridium

Location, peg #: 3

Bearing feather line: 310° lead: 240°

Rope length to leadline: 28 m

Divers: Rick Hengel; Svetlana

Key: Lose rocky bottom R
 Gravel G
 Rock shelf RS
 Crevice C

closest to shore

Date: March 16/1981

Time: 15:15

Tide: low

Current: slow ebb

Depth	Band A	Comments	Band B	Comments	Total
12m 0-1	0	R, G ↓	0		0
1-2	1	"	10		11
2-3	6	"	0		6
3-4	1	"	0		1
4-5	0	"	0		0
5-6	0	"	3		3
6-7	4	"	1		5
7-8	0	"	4		4
8-9	0	"	2		2
9-10	0	"	20		20
10-11	20	"	23		43
11-12	45	many young	55		100
12-13	12	R, G	31		43
13-14	20	"	20		40
14-15	25	"	12		37
15-16	20	"	32		52
Grand total					373

feather line

island →

transect Band type

Species: Melridium

Location, peg #: 3

Bearing feather line: 310° lead: 220°

Rope length to lead line: 30 m

Divers: Hans Soren

Key: Lose rocky bottom (R)
Gravel (G)
Rock shelf (RS)
Crevice (C)

closest to shore, and there is an error in the measurement in

Band B # = 4 Date: 3/4 - 82

Time:

Tide: high

Current: strong

OBSERVE

↑ small number = big metridium
↓ large number = small size metridium

Depth	Band A	Comments	Band B	Comments	Total
12m	1	0	R		
	2	0	"		
	3	0	"		
	4	1	"		
	5	2	"	5	7
	6	12	"	7	19
	7	5 100	"	14	19 100
	8	7 10	"	18	25 10
	9	6 50	"	2	8 50
	10	12 100	"	3 60	15 160
	11	14 75	"	2 20	16 95
	12	12 10	"	4 30	24 40
	13	8 100	"	2 40	10 140
	14	1 150	"	1 80	2 230
	15	6 200	"	5 30	11 230
	16				
Grand total					183 1055

shore
Error
E
E
E

transect Band type

Species: Melridium

Location, peg #: 7

Bearing feather line: 210° lead: 300°

Rope length to lead line: 24 m

Divers: David & Sam

Key: Lose rocky bottom (R)
Gravel (G)
Rock shelf (RS)
Crevice (C)

not the transects
not 2m² but 4m²
Note: this is just one band

Date: 82-01-16

Time: 15³⁰-16⁰⁰

Tide: _____

Current: Slack

Depth	Band A	Comments	Band B	Comments	Total
1m	1				
	2	1			1
2.5m	3				
	4	1			1
1.5m	5				
	6	0			0
2m	7				
	8	0			0
2m	9				
	10	0			0
2m	11				
	12	0			0
3m	13				
	14	0			0
3m	15				
	16	0			0
Grand total					2

Transect Band type

Species: Metridium

Location, peg #: Race Rocks # 7

Bearing feather line: 210° lead: 120°

Rope length to lead line: 43 m

Divers: Paul G. Izan

Key: Loose rocks bottom R
Gravel G
Rock shelf RS
Crevice C

Date: 82-03-08

Time: 15⁰⁰

Tide: High

Current: slack

Depth		Band A	Comments	Band B	Comments	Total
8m	1	0	R	0	R	0
	2	0	R	0	R	0
	3	0	R	0	R	0
	4	0	R	0	R	0
	5	0	R	0	R	0
	6	0	R	0	R	0
	7	0	R	0	R	0
	8	0	R	0	R	0
	9	0	R	0	R	0
	10	0	R	0	R	0
	11	0	R	0	R	0
	12	0	R, C	0	R, C	0
	13	0	R, C	0	R, C	0
↓	14	0	R, C	0	R, C	0
9m	15	0		0		0
	16					

Transect Band type

Species: Metridium

Location, peg #: 10

Bearing feather line: 90° lead: 0°

Rope length to lead line: 56 m

Divers: Bengt & Sue

Key: Loose rocks bottom R
Gravel G
Rock shelf RS
Crevice C

Date: 82-03-27

Time: 12³⁰

Tide: Low

Current: Ebbing

Depth		Band A	Comments	Band B	Comments	Total
9m	1	0	R	0	R	0
	2	0		0		0
	3	0		0		0
	4	0		0		0
	5	0		0		0
	6	0		0		0
	7	0		0		0
	8	0		0		0
	9	0		0		0
	10	0		0		0
	11	0		0		0
	12	0		0		0
	13	0		0		0
↓	14	0	↓	0	↓	0
9m	15	0	R	0	R	0
	16					

Transect Band type

Species: Melobidium

Location, peg #: 10

Bearing feather line: 90 ° lead: 0 °

Rope length to leadline: 60 m

Divers: Norm Reed G

Key: Loose rocky bottom R
 Gravel G
 Rock shelf RS
 Crevice C

Date: 27-03-82

Time: 12³⁰

Tide: ~~High~~ low

Current: Ebb

Depth		Band A	Comments	Band B	Comments	Total
9m	1	0	R	0	R	0
	2	0	R	0	R	0
	3	0	R	0	R	0
	4	0	R	0	R	0
	5	0	R	0	R	0
	6	0	R	0	R	0
	7	0	R	0	R	0
	8	0	R	0	R	0
	9	0	R	0	R	0
	10	0	R	0	R	0
	11	0	R	0	R	0
	12	0	R	0	R	0
	13	0	R	0	R	0
	14	0	R	0	R	0
	15	0	R	0	R	0
9m	16	0	R	0	R	0

Transect Band type

Species: Melobidium

Location, peg #: 13

Bearing feather line: 90 ° lead: 0 °

Rope length to leadline: 4 m

Divers: Jimmy + Martin

Key: Loose rocky bottom R
 Gravel G
 Rock shelf RS
 Crevice C

Date: 15-03-82

Time: _____

Tide: Low

Current: 0

Depth		Band A	Comments	Band B	Comments	Total
5m	1	0	RRS	0	RRS	0
	2	1	"	0	"	1
	3	0	"	0	"	0
	4	0	"	0	"	0
	5	0	"	1	"	1
	6	0	"	0	"	0
	7	1	"	1	"	2
	8	1	"	1	"	2
	9	0	"	0	"	0
	10					
	11					
	12					
	13					
	14					
	15					
	16					

Grand total 6

Transect Band type

Species: Metridium
 Location, peg #: 13th
 Bearing teather line: 90° lead: 0°
 Rope length to leadline: 42 m
 Divers: Lori Vivian

Key: Loose rocky bottom R
 Gravel G
 Rock shelf RS
 Crevice C

Date: 15/3/82
 Time: 1500 hrs
 Tide: Slack/low
 Current: Slack

Note: Band B is closest to shore.

Transect Band type

Species: Metridium
 Location, peg #: 13
 Bearing teather line: 90° lead: 0°
 Rope length to leadline: 46 m
 Divers: Bengt + Paul + Stewart

Key: Loose rocky bottom R
 Gravel G
 Rock shelf RS
 Crevice C

Date: 15/03/82
 Time: App 1515
 Tide: low
 Current: Slack

Comments: app 50 meters tether line is a circular patch (4m x 4m) with about 30 metridiums.

Depth		Band A	Comments	Band B	Comments	Total
6m	1	0	R	0	R	0
6m	2	3	C	2	C	5
6m	3	2	R	2	R	4
6m	4	2	"	2	"	4
6m	5	0	"	1	"	1
6m	6	1	"	0	"	1
6m	7	1	"	1	"	2
6m	8	0	"	0	"	0
6m	9	2	"	0	"	2
6m	10	0	"	1	"	1
6m	11	1	"	2	"	3
6m	12	0	"	0	"	0
7m	13	0	"	0	"	0
7m	14	0	"	0	"	0
7m	15	0	"	0	"	0
7m	16	0	"	0	"	0

Grand total: 72

Other Species

Abundant anemones
 Many small anemones
 urchins
 stars
 Very beautiful area
 Much life
 giant red + purple sea urchins
 Sea Slugs
 Equatorial Stars
 Several other species

Depth		Band A	Comments	Band B	Comments	Total
7m	1	0	C, RS	0		C
	2	0	C, RS	1		1
	3	0	C, RS	1		1
	4	1	C, RS	7		8
	5	0	C, RS	0		0
	6	0	C, RS	1		1
	7	0	C, RS	0		0
	8	0	C, RS	0		0
	9	0	C, RS	0		0
	10	0	C, RS	1		1
	11	1	C, RS	0		1
	12	1	C, RS	0		1
	13	0	R	0		0
	14	2	R	0		2
	15	2	R	0		2
7m	16	1	R	0		1

Grand total: 19

Transect Band type

Species: *Metridium*

Location, peg #: Great Sand Bay, #13

Bearing feather line: 90° lead: 0°

Rope length to leadline: 38 m

Divers: [unclear]

Key: Lose rocky bottom R
Gravel G
Rock shelf RS
Crevice C

Date: 10/11/80

Time: 7:00

Tide: slack

Current: none

Depth	Band A	Comments	Band B	Comments	Total
1	0		1	R	1
2	1		0	R	0
3	0	sea urchin	3	sea urchin	0
4	0		4		0
5	1		5		0
6	0		6		0
7	1		7		0
8	0		8		0
9	0		9		0
10	0	algae growing	10	algae growing	0
11	0		11		0
12	0	R	12		0
13	0	R	13	R	0
14	0	R	14	R	0
15	0	R	15	R	0
16	0	R	16	R	0

Transect Band type

Species: *Metridium*

Location, peg #: 14

Bearing feather line: 330° lead: 240°

Rope length to leadline: 26 m

Divers: [unclear]

Key: Lose rocky bottom R
Gravel G
Rock shelf RS
Crevice C

Date: April 1980

Time: 3:00

Tide: ebb

Current: [unclear]

1m X 2m

Depth	Band A	Comments	Band B	Comments	Total
1m	1	R	0	R	1
2m	2	R	1	R	2
3m	3	R	0	R	0
4m	4	RS	14	R	14
5m	5	RS	1	RS	1
6m	6	RS	2	RS	2
7m	7	RS	4	R	4
8m	8	RS	2	RS	2
9m	9	RS	4	R	5
10m	10	RS	4	R	6
11m	11	RS	9	R	10
12m	12	R	10	R	17
13m	13	R	3	RS	7
14m	14	R	0	RS	6
15m	15	RS	4	RS	6
16m	16	RS	4	RS	4

Grand total 07

Transect Band type

Species: Mollusca

Location, peg #: 4

Bearing feather line: 0 ° lead 190 °

Rope length to lead line: 26 m

Divers: Paul Henry

Key: Lose rocky bottom R
 Gravel G
 Rock shelf RS
 Crevice C

Date: 8/2/80

Time: ± 15:25 → 16:

Tide: Fair

Current: 0.5 m/s

Depth		Band A	Comments	Band B	Comments	Total
5m	1	2	Yanky R.	1		3
	2	2		0		2
	3	0		0		0
	4	0		0		0
	5	0		0		0
	6	0		0		0
	7	0		0		0
	8	0		0		0
	9	0		0		0
	10	0		0		0
	11	0		0		0
	12	0		0		0
	13	0		0		0
↓	14	0	25 and R.	0		0
↓	15	0		0		0
8m	16	0		0		0

Transect Band type

Species: Mollusca

Location, peg #: 4

Bearing feather line: 0 ° lead 172 °

Rope length to lead line: 26 m

Divers: Paul Henry

Key: Lose rocky bottom R
 Gravel G
 Rock shelf RS
 Crevice C

Date: 8/2/80

Time: ± 10:25 → 11:00

Tide: Fair

Current: 0.5 m/s

Depth		Band A	Comments	Band B	Comments	Total
8m	1	1	Yanky R.	1	R	2
	2	0		0		0
	3	0		0		0
	4	0		0		0
	5	0		0		0
	6	0		0		0
	7	0		0		0
	8	1		2		3
	9	0		0		0
	10	1		1		2
	11	0		0		0
	12	0		0		0
	13	1		1		2
↓	14	0		0		0
	15	0		0	↓	0
8m	16	0	R	0	R	2

Transect Band type

Species: Metridium

Location, peg #: 14

Bearing teather line: 0 ° lead: 90 °

Rope length to leadline: 33 m

Divers: Uwe S. Pinner

Key: Lose rocky bottom R
 Gravel G
 Rock shelf RS
 Crevice C

Date: 30-02-82

Time: 15:25 → 16:00

Tide: Flooding

Current: weak

Depth		Band A	Comments	Band B	Comments	Total
9m	1	/	R with G below	/	R with G below	0
	2	/		/		0
	3	/		/		0
	4	/		/		0
	5	/		/		0
	6	/		/		0
	7	/		/		0
	8	/		/		0
	9	/		/		0
	10	/		/		0
	11	/		/		0
	12	/		/		0
	13	/		/		0
	14	/		/		0
10m	15	/		/		0
	16	/	R, G	/	R, G	0

Grand total

Transect Band type

Species: Metridium

Location, peg #: 14

Bearing teather line: 30 ° lead: 120 °

Rope length to leadline: 22 m

Divers: Sue & Hans

Key: Lose rocky bottom R
 Gravel G
 Rock shelf RS
 Crevice C

Date: 82-02-12

Time: 15:10

Tide: —

Current: slack

Depth		Band A	Comments	Band B	Comments	Total
9m	1	0	R, G	2	R, G	2
	2	0		1		1
	3	0		0		0
	4	0		0		0
	5	0		0		0
	6	0		0		0
	7	0		0		0
	8	0		0		0
	9	0		0		0
	10	0		0		0
	11	0		0		0
	12	0		0		0
	13	0		0		0
	14	0		0		0
9m	15	0	R, G	0	R, G	0
	16					

Grand total

Transect Sand type

Species: Metridium

Location, peg #: 15

Bearing feather line: 330° lead: 60°

Rope length to lead line: 50 m

Divers: Paul L. &

Date: 82-12-21

Time: —

Tide: —

Current: slack

Key: Loose rocky bottom R
 Gravel G
 Rock shelf RS
 Crevice C

Depth		Band A	Comments	Band B	Comments	Total
9m	1	1	R	3	R	4
	2	2		3		5
	3	1		0		1
	4	0		0		0
	5	0		0		0
	6	1		1		2
	7	1		0		1
	8	5		2		7
	9	3		0		3
	10	2		3		5
	11	4		8		12
	12	37		7		44
	13	15		7		22
	14	14		8		22
↓	15	12	↓	12	↓	24
12m	16	26	R	5	R	31

Grand total 183