Economic Analysis of the Soft-shell Clam, Mya arenaria, *Industry in Casco Bay*

PROJECT
FINAL REPORT

APPENDICES

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prepared for the
CASCO BAY ESTUARY PROJECT

Appendix I

a. Shellfish Survey Quality Assurance Project Plan (QAPjP)
b. Municipal Open and Closed Area Shellfish Survey Summaries
c. Municipal 1994 Open Area Survey Results
d. CBEP Project 1994 Closed Area Survey Results

a. Shellfish Survey
Quality Assurance Project Plan (QAPjP)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
Environmental Services Division
60 Westview Street, Lexington, MA 02173-3185

MEMORANDUM

DATE: August 5, 1994

SUBJ: Approval of Casco Bay Soft Shell Clam Economic Analysis QA Project Plan

FROM: Arthur E. Clark, Chemist,
Quality Assurance Office (EQA) Arthur E Clark

TO: Mark P. Smith, CBEP Coordinator,
Casco Bay Project Office (WQE)

On July 20, 1994, I received the following quality assurance project plan:

> Economic Analysis of the Soft Shell Clam Industry in Casco Bay, Task 1. Estimate Current Standing Crop, Total Annual Value, and Net Present Value, by C. S. Heinig, Rev. 1, June 27, 1994.

I have reviewed the Plan. I find that it meets our requirements.

If you have any comments or questions, please contact me at any time. I may be reached at 617-860-4374.

1. Title Page

Quality Assurance Project Plan (QAPjP)
(Revision 1, June 27, 1994)

Project Title:
Economic Analysis of the Soft Shell Clam Industry in Casco Bay

Task 1. Estimate Current Standing Crop, Total Annual Value, and Net Present Value

QAPjP Prepared by:
Christopher S. Heinig
President, MER Assessment Corporation

Funding Agency:
Casco Bay Estuary Project (CBEP)

7-8-94
Principal Investigator: Date
Christopher S. Heinig
President, MER Assessment Corporation

Nancy Barmakian, Date 8/5/94
Quality Assurance Officer,
US. EPA Region I

7-11-94
Sherry Hanson, Date
Local Government Coordinator
Casco Bay Estuary Project

7/19/94
Mark P. Smith Date
EPA Coordinator
Casco Bay Estuary Project

2. Project Description.

The purpose of the Economic Analysis of the Soft Shell Clam Industry in Casco Bay project is to document the standing crop of the soft-shell clam, *Mya arenaria*, population in certain areas of Casco Bay, determine the economic value of the resource, both to the harvester as well as the region, and estimate the cost of removing contamination sources responsible for harvesting prohibitions, or "closures". The areas initially requested for inclusion in the study, as outlined in the Request for Proposals, were the "open", "redeemable", and "permanently closed" areas of the Bay. For the purposes of this study "open" is taken to refer to those shellfish areas where shellfish harvesting is currently permitted; "redeemable" to refer to areas where shellfish harvesting is currently prohibited or restricted due to bacteriological contamination, but where the sources of contamination are anticipated to be identifiable and correctable; and "permanently closed" to refer to areas where shellfish harvesting is currently prohibited due to bacteriological contamination, and the sources of contamination are <u>not</u> readily identifiable or correctable.

Field data collected in each of the selected shellfish areas will be used to determine the standing crop (in bushels/acre) and the population size distribution. These data will be further used to determine the "ex-vessel dollar value" or "landed value" of the resource harvestable at the time of the survey, i.e. of legal size (≥ 2 inch or 52mm). Given the fact that the landed value fluctuates greatly over the course of a year, a weighted average will be used.

A projected "following year" value will also be estimated for that portion of the population expected to reach legal size during the next growing season. This will be calculated based on estimated growth rate, as determined from annual growth estimates, and assumed rates of mortality. Resource and value projections are developed for municipalities to assist them in determining the proper number of town shellfish licenses to issue each year and effectively allocating personnel and funds designated for pollution abatement.

3. Technical Design.

All of the "open", "redeemable", and "permanently closed" areas of the Bay could not be included in the final scope of work given the time and funding limits of the project. Existing shellfish population statistical information for all of the open areas surveyed between 1990 and 1993 in the towns of Freeport, Brunswick, and Harpswell will be included for analysis in the present project. In addition, the present project proposes to develop <u>new</u> statistical information on the soft-shell clam populations in selected "closed" but "redeemable" areas.

Soft-shell clam, *Mya arenaria*, size-frequency data will be collected in the field at selected locations described below. These data will be used to determine the quantity of resource present, the size distribution of the population. These data will serve as the basis for the economic analyses described above.

Field data will be collected at each of the following four sites selected on the basis of: 1) their current "acceptable" or "slightly contaminated" bacteriological status, 2) their potential importance as harvesting areas as indicated by historical harvesting records (anecdotal or documented), and 3) the likelihood of restoring the areas for commercial harvesting:

1. The area between **Mackworth Island and The Brothers, Falmouth, in Closed Area 14,** is currently closed to commercial and recreational harvesting, but depuration harvesting is allowed, indicating that a commercially valuable resource exists in the area, the degree of contamination is not severe, and remediation is therefore possible;

2. **Broad Cove in Cumberland, two sections in Closed Area 15,** is partially closed at either end of the cove where high bacteriological contamination results have been recorded. Human sources may be implicated, although wildlife and avian sources have also been suggested;

3. The area between **Drinkwater Pt. and Parker Pt. in Yarmouth, in Closed Area 15,** is at the southern mouth of the Royal River. Although presently closed due to contamination, one likely source of contamination, the Yarmouth sewage treatment plant, is scheduled for replacement in 1994. As one of the outermost areas affected by the existing plant, the prospects for reopening this area may be high if the new sewage treatment plant successfully resolves the current treatment capacity problems and any other proximate sources of contamination, if they exist, are eliminated; and

4. **Long Cove in West Bath**, although smaller than the other areas, has been identified, at least preliminarily, as having a resource of commercial significance. Human bacteriological contamination sources are implicated since there are no other identifiable sources other than wildlife.

Total acreage to be surveyed: 181.5. Total number of samples to be taken: 640.
Mean number of samples per acre: 3.53.

The above estimates are based on the tidal flat area as shown on the navigational chart. The actual area populated by soft-shell clams does not necessarily coincide with the entire flat area. If fewer samples are actually required to evaluate the areas described above, the following alternate areas will be included in the study area in the following priority sequence:

1. **Chebeague Island, Closed Area 14-D,** along the western and eastern shores of the island

2. The area between **Cousins Island and Little John Island, Yarmouth, in Closed Area 16- C.**

3. **Mussel Cove, Falmouth, in Closed Area 14.**

No duplicates or blanks will be taken. Multiple samples will be taken across each area to describe the entire population (refer to **Section 7. Sampling Procedure and Chain of Custody; Section 9 Quality Control Samples**)

4. Project Organization and Responsibility.

Christopher S. Heinig will be responsible for all aspects of the sampling and QA Plan:

MER Assessment Corporation
RFD 2, Box 109
So. Harpswell, ME 04079

Phone/Fax: (207) 729-4245

5. Project Schedule. Please refer to Table 1. (Attached)

6. Field Sampling Table.

Sample matrix	Not applicable
Total number of samples	estimate 640
Sample volume	2 ft^2 samples (see Sec. 7.)
Sample container	Not applicable
Analyte/parameter	Clam length (mm)
Method of sample preservation	Not applicable
Maximum allowable holding time	Not applicable

7. Sampling Procedures and Chain of Custody

The methodology to be used for soft-shell clam population evaluation is the standard methodology developed by the Maine Department of Marine Resources (Dow, 1957). A detailed explanation of this methodology is presented by Newell (1983), attached here as Appendix I.

7.1. Sampling Station Location:

The area covered by the survey will be based on a reconnaissance of each area and a prediction of the general configuration of the clam habitat. At the start of the survey, a point of origin is established from which a measured grid is developed across the tidal flat, extending shoreward to the boundary of the shellfish bed, and seaward to the boundary of the shellfish bed or the low water mark, whichever is reached first. Sampling stations are located at 100 foot (or 200 ft., depending on the size of the flat) intervals along imaginary lines which "criss-cross" thus forming a "grid" pattern over the flat. Occasionally, an exception is made in particularly densely populated areas where the grid is tightened to 50 feet. Distances between samples along the "grid" are measured using a 100 ft. line attached to two stakes.

7.2. Sample Collection:

At each grid intersection, two side-by-side imprints of a 0.1 m^2 frame are made in the bottom to form a 0.2 m^2, rectangle for sampling. A 0.025 m^2 subsample of the top 1-2 cm of sediment is then removed to estimate clam seed, or "spat", concentrations. This material is placed in a "Zip-Loc" bag bearing the sampling station number. A discrete cut is then made along one of the imprint lines to define the sample boundary. All of the substrate within the imprint boundaries is removed to a depth of at least .25-.3 meters and examined for clams. All clams collected from the sample plot are placed in the numbered bag for later measurement and counting. Measuring and counting takes place on-site and all clams, with exception of randomly selected individuals sacrificed for growth rate determination, are returned to the flat after measurement and counting.

7.3. Measurements and Calculations:

All clams found in each sample, including spat found in the subsample, are measured to the nearest 5 mm interval on a 0 to 95 mm scale. The information for all stations is then tabulated and entered into a spreadsheet program used specifically for soft-shell clam population analyses. These analyses are performed using equations developed by the Department of Marine Resources for the determination of bushels per acre and harvest yields based on size frequency and yield tables developed by Belding (1930) as modified by Stevenson and Sampson (1981).

Growth rates will be determined from no less than 100 individuals of varying sizes based on the distance between annual growth rings as revealed by "candeling" or "back-lighting".

Chain of Custody - all field sheets will be signed and dated on the date of collection. Data sheets and samples will not be transferred to any other organization, company, or agency.

8. Analytical Procedures.

There are no analytical procedures associated with this project other than the clam length measurements described in Section 7.3., above.

9. Quality Control Samples.

As stated in Section 3., no duplicates will be taken for specific plots since population patchiness renders these useless. Instead, multiple sampling across the flat will be used to describe the population and its distribution across the flat. This is the standard technique used in soft-shell clam population assessment in Maine and is consistent with the methodology used in developing the existing population statistics for open areas of the Bay.

References

Belding, David L., 1930. The soft-shell clam fishery of Massachusetts, Commonwealth of Massachusetts, Dept. of Conservation, Div. of Fish and Game, Mar. Fish. Sec., No. 1, Boston, Mass., 65 pp.

Dow, R.L., 1952. Shellfish Survey Methods, Dept. of Sea and Shore Fisheries, Tech. Bull. No. 1, Augusta, Maine, 15 pp.

Newell, C.R., Ed., 1983. Increasing Clam Harvests in Maine: A Practical Guide, Maine/New Hampshire Sea Grant Program with the Maine Dept. of Marine Resources, Univ. of Maine, Orono, Maine, 60 pp.

Stevenson, D.K and D.B. Sampson, 1981. A method for improving mean density estimates obtained from intertidal clam census surveys, Maine Dept. of Marine Resources, W. Boothbay Harbor, Maine, presented at the 1981 Boothbay Harbor Clam Conference, May 7-8, 1981.

APPENDIX I
Clam Surveying Techniques
Excerpt from *Increasing Clam Harvests in Maine*
Carter Newell, Editor, 1983

Survey teams are formed with a minimum of two persons per team. The *recorder*, who designates where the samples will be dug, maps the area and location of the plots: records clam lengths, plot size, and distance between plots; and makes other field observations. While the *digger-sampler*, who carefully outlines the plot, digs and measures all the clams found in each plot. A third member to this team can make the group more effective by sharing the digging. It is wise for one person to remain in charge of all recording for each survey. Clam populations may also be surveyed by a single person who collects all samples in labeled containers and measures the clams on shore. This technique is also quite effective in large, expansive flats where several people can work along parallel transects.

TOWN: DYERTOWN
FLAT: BACK COVE
DATE: JUNE 23, 1980

TEAM: BEAL AND GRAY
PLOT INTERVAL: 30
PLOT SIZE: 0.2

CLAM LENGTH INTERVALS (mm)

Plot No.	Sediment	Spat	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	TOTAL
1	S	8	3	3	2		2	1	1	2			1	15
2	S	-	2	2	2									6
3	S	-												0
4	S	-	3	2	2	8	3	1	1					20
5	S	14	5		3	9		1	1		2	2	1	24
6	C	-	7	1	7	2	1							18
7	C	-	1	2	2		2	1	2	2	3			15
8	G	-	1	1	3	5	1	1		1	2			15
9	G	-	1		2	1		1						5
10	S	3	3	4	1		2	1		1				12
			26	15	24	25	11	7	5	8	7	1	1	130
Percent of Total			20.0	11.5	18.5	19.2	8.5	5.4	3.8	6.2	5.4	0.8	0.8	
BU/Acre			14.3	18.0	53.1	92.0	62.6	58.3	58.4	126.4	145.7	26.8	33.8	

Average Density of Clams >40 mm =442.4 bu/acre/10 plots
=44.2 bu/acre

For Area of 6 Acres, Standing Crop=265 bu.
Sediment types: Sand=S, Clay=C, Gravel=G

Table 2: Sample Standing Crop and Size Frequency Calculations

the clam-producing areas. Among the choices available in management schemes are:

a. Closing flats containing high percentages of small clams until the clams are large enough to take.
b. Regulating digging by season, time of day, or week.
c. Limiting amounts of clams per digger.
d. Estimating optimum yield of the flats and closing them when this amount is reached.
e. Transplanting small clams from seed areas or purchasing them from other towns for reseeding.
f. Regulating number of diggers.
g. Setting license fees for resident, non-resident, recreational, and commercial diggers.
h. Regulating harvesting methods. (Maine permits harvesting only with hand implements.)
i. Taxing production.
j. Setting size limits.

6. The local supervision of management and enforcement of regulations are responsibilities of the town. It is usually advantageous to appoint a combination shellfish manager/shellfish officer to carry out these local obligations.

Of approximately 80 coastal towns in Maine with clam flats adequate to warrant conservation, about one half have adopted shellfish conservation ordinances.

Clam Surveying Techniques

To manage clam resources effectively and to assure the best yield, managers must have accurate and up-to-date information. Clam surveys provide important information on the extent, abundance, and size distribution of the exploited populations. The standard survey methods depend upon removing clams from a small portion of the entire clam producing area, and then extrapolating the information to cover the total flat. During a survey, all clams are removed from a number of small plots of known area spaced at equal intervals along parallel transects, then counted and measured (length). Sediments and special features of the flat (such as ledges and drainage channels) are noted and a rough map of sample plot locations and the extent of the survey area is made. This map is later used to estimate the acreage of the survey area.

The quality of the survey depends on how carefully all clams are removed and measured and the number of plots which are dug. For most surveys, the distance between the plots is 30 meters (about 100 ft.) and the number of samples is thus determined by the size of the area. Care is taken to ensure that the size of the area populated by clams is clearly defined, and only that area is surveyed. Also, a sample must be taken at precisely the point determined by the distance between plots (and not by the presence or absence of clams) to assure the validity of sample data.

The numbers and sizes of all clams in each plot and any other useful information about the site is recorded on a data sheet (Table 2). Lengths can be recorded in one-quarter inch or 5 mm intervals. A mean population density (bushels/acre) is calculated for the entire survey area based on the numbers and sizes of clams removed from each sample plot and all length data are summarized in a single length frequency distribution.

Equipment

The recorder should have a map drawn to scale (or a photocopy of a map enlargement), clipboards, pencils, and data sheets to record clam lengths for each plot. The digger-sampler should have a clam hoe suitable for the sediment, a measurement device indicating five millimeter or quarter-inch increments, and a rectangular wooden frame measureing 31.6 × 63.3 centimeters of 1 × 2 ft (outside measurements) with a window screen bottom, which is used to screen small clams from the sediments.

The area of the square frame is 0.2 m^2 of a square meter, or 2 ft^2. (In a flat where clams are very dense, a square frame of 0.1 m^2 or 1 ft^2 can be used.) Mark one edge of the frame in 5 mm (or quarter-inch) increments, or attach a measuring tape or ruler to the edge of the box. A 30 mm, (approximately 100 ft) rope may be used to establish sampling upon reaching the flat:

1. Make a brief reconnaissance of the flat to determine grid interval. Consider the area of the flat and concentration of the clams when establishing sampling intervals: 30 m (100 ft) is generally used.
2. Recorder should locate an easily recognizable landmark to locate the first plot.
3. Begin sampling at the upper clam-producing level and follow the tide out.

Mapping and Recording

1. Use a large scale topographic map (i.e., 1:6000 scale) for field notes.
2. Carefully record the number of the plot on the map, and try to keep the location of the plot accurate by reference to the map.
3. Align the plots by sighting from one plot to another, both parallel to the shore and from high water to low water mark. (Small sticks or stakes can be of great assistance.)
4. Measure the distance from the plots high on the shore to the high water mark. Note it on the map . This information will be used to determine boundary area populated with clams.
5. The recorder must record the sediment type at each site (boulder, gravel, sand, silt, or clay), recognizable landmarks, width of clam belt, and other observations at each plot. Any change of interval or the location of a small area of heavily concentrated clams should be noted and the area estimated.
6. Record the number of clams of each size in each plot. (Use some type of tally system for each site.)

Digging and Measuring

Digging:

1. Drop sample frame on ground at the exact site marked by the measuring line. (Make *no* effort to place frame on a visible concentration of clams.)
2. Press the screened box into the flat to make an outline of the plot.

3. Prior to digging plot, clean the sediment and clams away from one edge and *discard*. This provides an easy access to your sample plot.

	⅛ of plot
dig and	used for spat
remove	collection

4. Spat collection: remove sediment from ⅛ of plot to a depth of 1½ inches and placed in the screen box. Screen the sediment, count the spat in the small sample, and record their size range on data sheet (Table 2).
5. Dig all clams in the sample plot.
6. To measure, use the side of the screen box marked off at ¼" or 5 mm intervals or a micrometer, recording the number of clams in each length interval. Dial-type calipers made of plastic, available from Fisher Scientific Co. (Cat. #12-122) for $33.00, are useful for measuring clams.
7. If no clams are found in the plot, enter a zero on the data sheet for the plot. Record all values accurately.

Growth Determination

To estimate how fast clams will grow into harvestable size range, each flat should have some estimate of growth rate recorded. Rate of growth of clams in each flat, or sections of flat, may be estimated by shellfish biologists. The shell with the hinge projection should be shucked from live clams to be taken from representative areas of each flat such as high, mid-range, and low in the ride range. Each sample should consist of: a large clam 50-75 mm or 2-3", a medium sized clam (25-30 mm or 1-1¼"), and a small one (13-19 mm or ½-¾"). Place shells in plastic bags labeled with plot number, location on flat, name of town, flat name, and date. These, and a copy of the field map, should be given to the DMR area biologist who will estimate growth.

Data Analysis

1. For all plots, calculate the total number of clams in each size range and record (Table 2).
2. Calculate the total number of clams removed in the entire survey (Disregard spat).
3. Calculate the percentage of each size class represented as

$$\% \approx \frac{\text{total number of one size}}{\text{total number of clams measured}} \times 100$$

4. Construct a size frequency graph (Table 2).

The size frequency distribution chart prepared for each survey area gives the biologist a picture of population structure. From the data, the biologist may determine:

a. Percentage of total population in the commercial size range (40 mm or 1½", unless a 50 mm or 2" minimum size law is in effect);
b. Percentage of total population of clams in various size ranges;
c. Percentage of clams ready to move into the commercial size ranges in the next growing season; and
d. What recommendations to make to best utilize the resource in that flat.

5. Calculate the density of commercial size clams in bushels per acre for each plot (Table 2) based

on the number of clams in each 5 mm or ¼ inch length intervals (Tables 3 and 4).

6. Add density estimates for all plots and divide by the total number of plots to obtain the average density (bu/acre) of commercial size clams in the survey area.
7. Calculate total standing crop (bushels) of marketable size clams in the survey area by multiplying the average density (bu/acres) times survey area (acres).

BUSHELS PER ACRE
Number of Clams per 0.2 m³ plot

Length (mm)	1	2	3	4	5	6	7	8	9	10
10-14	0.2	0.4	0.5	0.7	0.9	1.1	1.2	1.4	1.6	1.8
15-19	0.6	1.1	1.6	2.2	2.8	3.3	3.8	4.4	5.0	5.5
20-24	1.1	2.4	3.6	4.8	6.0	7.2	8.4	9.6	10.8	12.0
25-29	2.2	4.4	6.6	8.4	11.1	13.3	15.5	17.7	19.9	22.1
30-34	3.7	7.4	11.0	14.7	18.4	22.1	15.8	29.4	33.1	36.8
35-39	5.7	11.4	17.1	22.8	28.4	34.1	39.8	45.5	51.2	56.9
40-44	8.3	16.6	25.0	33.3	41.6	50.0	58.3	66.6	74.9	83.3
45-49	11.7	23.3	35.0	46.7	58.4	70.0	81.7	93.4	105.0	116.7
50-54	15.8	31.6	47.4	63.2	79.0	94.8	110.6	126.4	142.2	158.0
55-59	20.8	41.6	62.4	83.3	104.1	124.9	145.7	166.5	187.4	208.2
60-64	26.8	53.6	80.4	107.2	134.0	160.8	187.6	214.4	241.2	268.0
65-69	33.8	67.6	101.3	135.1	168.9	202.7	236.5	270.2	304.0	337.8
70-74	42.0	84.0	125.9	167.9	209.9	251.9	293.9	335.8	377.8	419.8
75-79	51.4	102.7	154.1	205.4	356.8	308.1	359.5	410.8	462.2	513.6
80-84	61.9	123.8	185.6	247.5	309.4	371.3	433.2	495.0	556.9	618.8
85-89	74.1	148.2	222.4	296.5	370.6	494.7	518.8	593.0	667.1	741.2
90-94	87.6	175.2	262.8	350.4	438.0	525.6	613.2	700.8	788.4	876.0
95-99	102.7	205.4	308.2	410.9	513.6	616.3	719.0	821.7	924.4	1027.2
100-104	119.0	238.1	357.1	476.1	595.1	714.1	833.2	952.0	1071.2	1190.3
105-109	137.6	275.3	413.0	550.6	688.3	825.9	963.6	1101.2	1238.9	1376.5
110-114	158.1	316.7	474.3	632.3	790.4	948.5	1106.6	1264.7	1422.8	1580.9
115-119	180.7	361.3	542.0	722.7	903.3	1084.0	1264.8	1445.3	1626.0	1806.7

Note: For >10 clams per plot in a given lenth interval, add bu/acre estimates, e.g., for 14, 60-64 mm clams, 107.2−268=375.2 bu/acre or for 26, 75-79 mm clams, 410.8+513.6=1335.2 bu/acre.

Table 3. Bushels per Acre/Number of Clams per 0.2m³ Plot.

Estimating Clam Flat Growth Area

A simple method for estimating clam flat growing is as follows:

Place a sheet of tracing paper, ruled in squares, over the scaled map on which the field notes have been transcribed. Then count the squares or portion of squares covering the clam-producing area and record on the map. The area in acres represented by each square is then multiplied by the number of squares recorded. The area represented by the squares is determined by its size and the scale of the map.

The Two-Inch Minimum Law

In the Model Shellfish Conservation Ordinance (Appendix I), towns may regulate the size of clams harvested within that town. Most towns with a manage-

BUSHELS PER ACRE
Number of Clams per 2 ft² plot

Length (inches)	1	2	3	4	5	6	7	8	9	10
0.25-0.49	0.1	0.1	0.2	0.3	0.3	0.4	0.4	0.5	0.6	0.6
0.50-0.74	0.4	0.8	1.2	1.6	2.0	2.4	2.8	3.2	3.7	4.1
0.75-0.99	1.2	2.4	3.6	4.8	6.0	7.3	8.5	9.7	10.9	12.1
1.00-1.24	2.7	5.3	8.0	10.6	13.3	16.0	18.6	21.3	23.9	26.6
1.25-1.49	4.9	9.9	14.8	19.8	24.7	29.7	34.6	39.5	44.5	49.4
1.50-1.74	8.2	16.5	24.7	33.0	41.2	49.5	57.7	66.0	74.2	82.4
1.75-1.99	12.8	25.5	38.3	51.0	63.8	76.5	89.3	102.0	114.8	127.5
2.00-2.24	18.6	37.3	55.9	74.6	93.2	111.9	130.5	149.2	167.8	186.5
2.25-2.49	26.1	52.2	78.4	104.5	130.6	156.7	182.8	208.9	235.1	261.2
2.50-2.74	35.4	70.7	106.1	141.4	176.8	212.1	247.5	282.8	318.2	353.5
2.75-2.99	46.5	93.1	139.6	186.1	232.7	279.2	325.7	372.3	418.8	465.3
3.00-3.24	59.8	119.7	179.5	239.4	299.2	359.1	418.9	478.8	538.6	598.5
3.25-3.49	75.5	151.0	226.4	301.9	377.4	452.9	528.4	603.9	679.3	754.8
3.50-3.74	93.6	187.2	280.9	374.5	468.1	561.7	655.3	749.0	842.6	936.2
3.75-3.99	114.4	228.9	343.4	457.8	572.3	686.7	801.2	915.6	1030.1	1144.5
4.00-4.24	138.2	276.3	414.5	552.6	690.8	828.9	967.1	1105.3	1243.4	1381.6
4.25-4.49	164.9	329.9	494.8	659.7	824.8	989.6	1154.5	1319.4	1484.3	1649.3
4.50-4.74	194.9	389.9	584.8	779.8	974.7	1169.7	1364.6	1559.6	1754.5	1949.5
4.75-4.99	228.4	456.8	685.2	913.6	1142.0	1370.4	1598.8	1827.2	2055.6	2284.0

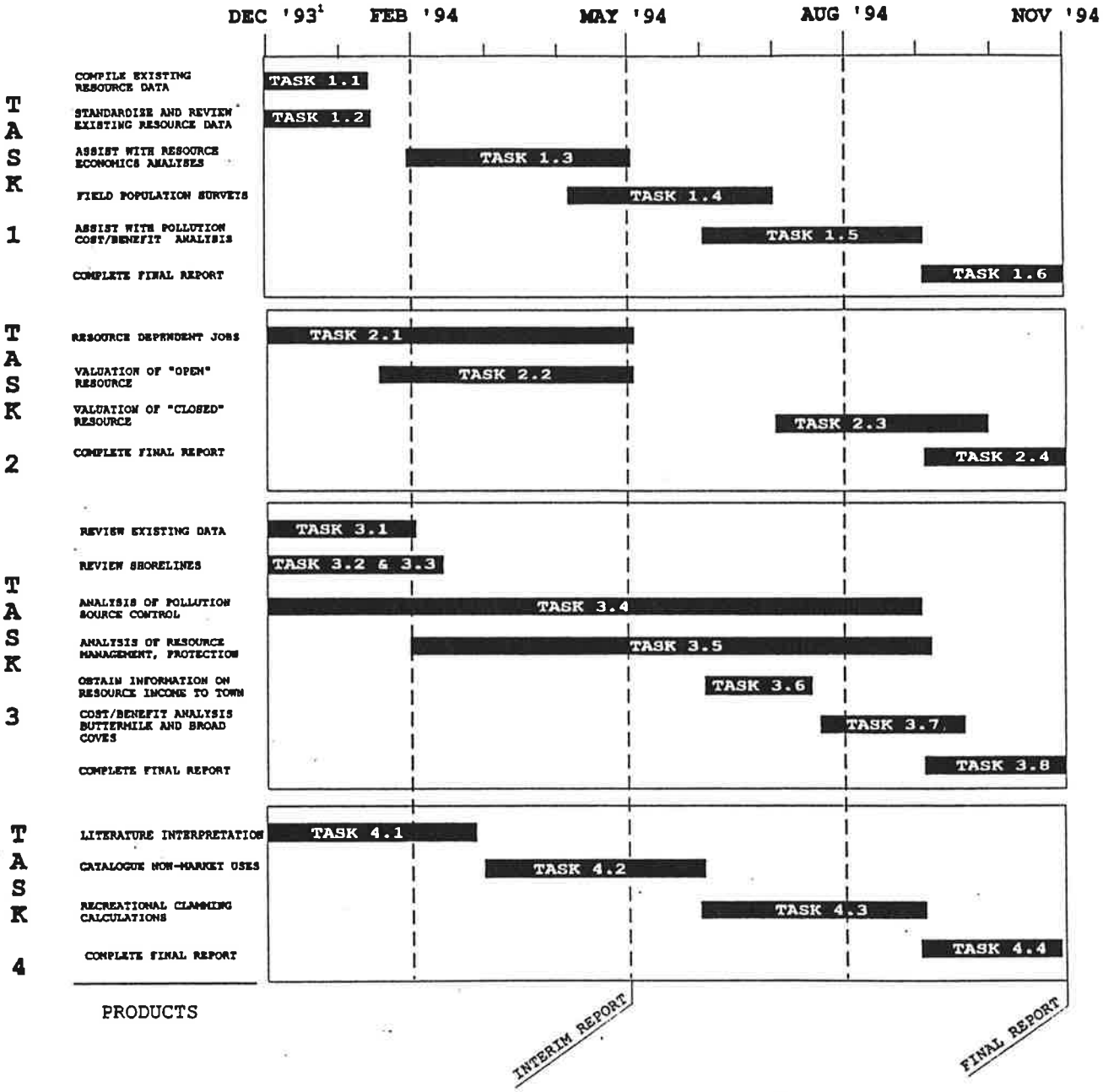
Note: For >10 clams per plot in a given length interval, add bu/acre estimates, e.g., for 14, 2.5-2.74 inch clams, 141.4 − 353.5 = 494.9 bu/acre or for 26, 1.5-1.74 inch clams, 66 + 66 + 82.4 = 214.4 bu/acre.

Table 4. Bushels per Acre/Number of Clams per 2 ft.² Plot.

Table 1.
Project Schedule

SCHEDULE OF TASKS AND PRODUCTS*

Economic Analysis of the Soft Shell Clam Industry in Casco Bay



* REFER TO INDIVIDUAL TASK SECTIONS FOR SPECIFIC TASK DETAILS

[1] OR AT CONTRACT EXECUTION

b. Municipal Open and Closed Area Shellfish Survey Summaries

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: BASIN COVE
DATE: 11-10-93
SAMPLE NO: 58
NO. ACRES: 11.7

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	296	25.6	0.0	0	0	0
5-9	0.000	232	20.1	0.0	0	0	0
10-14	0.000	38	3.3	0.0	0	0	0
15-19	0.550	50	4.3	27.5	0	6	0
20-24	1.196	23	2.0	27.5	0	6	0
25-29	2.212	17	1.5	37.6	1	8	0
30-34	3.681	27	2.3	99.4	2	20	0
35-39	5.690	66	5.7	375.5	6	76	0
40-44	8.327	95	8.2	791.1	14	160	0
45-49	11.670	111	9.6	1295.4	22	261	0
50-54	15.795	89	7.7	1405.8	24	284	284
55-59	20.818	67	5.8	1394.8	24	281	281
60-64	26.801	28	2.4	750.4	13	151	151
65-69	33.780	13	1.1	439.1	8	89	89
70-74	41.980	2	0.2	84.0	1	17	17
75-79	51.356	0	0.0	0.0	0	0	0
80-84	61.881	0	0.0	0.0	0	0	0
85-89	74.121	0	0.0	0.0	0	0	0
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		1154	100.0		116	1357	822
				% BUSHELS HARVESTABLE			60.55

Following-Year Projection [Closed Area - NO Harvesting] "NORMAL" MORTALITY VALUES
SAMPLE NO: 58
NO. ACRES: 11.7

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	148	19.4	81.4	1	16	0
20-24	1.196	116	15.2	138.7	2	28	0
25-29	2.212	19	2.5	42.0	1	8	0
30-34	3.681	25	3.3	92.0	2	19	0
35-39	5.690	14	1.8	78.5	1	16	0
40-44	8.327	14	1.8	113.2	2	23	0
45-49	11.670	22	2.8	252.1	4	51	0
50-54	15.795	53	6.9	834.0	14	168	168
55-59	20.818	81	10.6	1681.1	29	339	339
60-64	26.801	94	12.4	2528.7	44	510	510
65-69	33.780	110	14.5	3724.2	64	751	751
70-74	41.980	41	5.4	1714.9	30	346	346
75-79	51.356	18	2.3	918.8	16	185	185
80-84	61.881	7	0.9	417.7	7	84	84
85-89	74.121	1	0.1	66.7	1	13	13
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		762	100.0		219	2559	2398
				% BUSHELS HARVESTABLE			93.71

Following-Year Projection [Open Area - Harvested] "NORMAL" MORTALITY VALUES
SAMPLE NO: 58
NO. ACRES: 11.7

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	148	30.8	81.4	1	16	0
20-24	1.196	116	24.2	138.7	2	28	0
25-29	2.212	19	4.0	42.0	1	8	0
30-34	3.681	25	5.2	92.0	2	19	0
35-39	5.690	14	2.9	78.5	1	16	0
40-44	8.327	14	2.8	113.2	2	23	0
45-49	11.670	22	4.5	252.1	4	51	0
50-54	15.795	16	3.3	250.2	4	50	50
55-59	20.818	24	5.0	504.3	9	102	102
60-64	26.801	28	5.9	758.6	13	153	153
65-69	33.780	33	7.0	1126.6	19	228	228
70-74	41.980	13	2.8	558.3	10	113	113
75-79	51.356	5	1.1	280.4	5	57	57
80-84	61.881	2	0.4	130.0	2	26	26
85-89	74.121	0	0.1	20.8	0	4	4
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		480	100.0		76	893	732
				% BUSHELS HARVESTABLE			81.99

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION:	**BASIN COVE**
DATE:	**11-10-93**
SAMPLE NO:	**58**
NO. ACRES:	**11.7**

	PRICE ($)/BUSHEL					
	$30	**$40**	**$50**	**$55**	**$60**	**$70**	**$80**
CURRENT YEAR	$24,655	$32,874	$41,092	$45,201	$49,311	$57,529	$65,747
PROJ. (NO HARVEST)	71,931	95,908	119,885	131,873	143,862	167,838	191,815
PROJ. (HARVESTED)	21,975	29,300	36,624	40,287	43,949	51,274	58,599

LOCAL ECONOMIC ACTIVITY MULTIPLIER

CURRENT YEAR	**1.5**	**2.0**	**2.5**	**3.0**	**3.5**	**4.0**
$30	$36,983	$49,311	$61,638	$73,966	$86,293	$98,621
$40	49,311	65,747	82,184	98,621	115,058	131,495
$50	61,638	82,184	102,730	123,276	143,822	164,368
$55	67,802	90,403	113,003	135,604	158,205	180,805
$60	73,966	98,621	123,276	147,932	172,587	197,242
$70	86,293	115,058	143,822	172,587	201,351	230,116
$80	98,621	131,495	164,368	197,242	230,116	262,989
$90	110,949	147,932	184,914	221,897	258,880	295,863

LOCAL ECONOMIC ACTIVITY MULTIPLIER

PROJ. [HARVESTED]	**1.5**	**2.0**	**2.5**	**3.0**	**3.5**	**4.0**
$30	$32,962	$43,949	$54,937	$65,924	$76,911	$87,899
$40	43,949	58,599	73,249	87,899	102,548	117,198
$50	54,937	73,249	91,561	109,873	128,186	146,498
$55	60,430	80,574	100,717	120,861	141,004	161,148
$60	65,924	87,899	109,873	131,848	153,823	175,797
$70	76,911	102,548	128,186	153,823	179,460	205,097
$80	87,899	117,198	146,498	175,797	205,097	234,397
$90	98,886	131,848	164,810	197,772	230,734	263,696

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: BRICKYARD COVE
DATE: 11-19-92
SAMPLE NO: 35
NO. ACRES: 7.0

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	32	1.4	0.0	0	0	0
5-9	0.000	208	9.4	0.0	0	0	0
10-14	0.000	53	2.4	0.0	0	0	0
15-19	0.550	88	4.0	48.4	1	10	0
20-24	1.196	297	13.4	355.2	10	71	0
25-29	2.212	477	21.5	1055.1	30	211	0
30-34	3.681	426	19.2	1568.1	45	314	0
35-39	5.690	284	12.8	1616.0	46	323	0
40-44	8.327	153	6.9	1274.0	36	255	0
45-49	11.670	92	4.2	1073.6	31	215	0
50-54	15.795	66	3.0	1042.5	30	208	208
55-59	20.818	31	1.4	645.4	18	129	129
60-64	26.801	7	0.3	187.6	5	38	38
65-69	33.780	2	0.1	67.6	2	14	14
70-74	41.980	0	0.0	0.0	0	0	0
75-79	51.356	0	0.0	0.0	0	0	0
80-84	61.881	0	0.0	0.0	0	0	0
85-89	74.121	0	0.0	0.0	0	0	0
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		2216	100.0		255	1787	389
				% BUSHELS HARVESTABLE			21.75

Following-Year Projection [Closed Area - NO Harvesting] "NORMAL" MORTALITY VALUES
SAMPLE NO: 35
NO. ACRES: 7.0

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	16	1.0	8.8	0	2	0
20-24	1.196	104	6.4	124.4	4	25	0
25-29	2.212	27	1.6	58.6	2	12	0
30-34	3.681	44	2.7	162.0	5	32	0
35-39	5.690	178	11.0	1014.0	29	203	0
40-44	8.327	382	23.5	3177.6	91	636	0
45-49	11.670	341	21.0	3977.1	114	795	0
50-54	15.795	227	14.0	3588.6	103	718	718
55-59	20.818	130	8.0	2707.4	77	541	541
60-64	26.801	78	4.8	2095.8	60	419	419
65-69	33.780	73	4.5	2477.8	71	496	496
70-74	41.980	16	1.0	686.0	20	137	137
75-79	51.356	4	0.2	200.8	6	40	40
80-84	61.881	1	0.1	55.7	2	11	11
85-89	74.121	0	0.0	0.0	0	0	0
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		1621	100.0		581	4067	2362
				% BUSHELS HARVESTABLE			58.09

Following-Year Projection [Open Area - Harvested] "NORMAL" MORTALITY VALUES
SAMPLE NO: 35
NO. ACRES: 7.0

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	16	1.3	8.8	0	2	0
20-24	1.196	104	8.3	124.4	4	25	0
25-29	2.212	27	2.1	58.6	2	12	0
30-34	3.681	44	3.5	162.0	5	32	0
35-39	5.690	178	14.2	1014.0	29	203	0
40-44	8.327	382	30.5	3177.6	91	636	0
45-49	11.670	341	27.2	3977.1	114	795	0
50-54	15.795	68	5.4	1076.6	31	215	215
55-59	20.818	39	3.1	812.2	23	162	162
60-64	26.801	23	1.9	628.8	18	126	126
65-69	33.780	22	1.8	748.6	21	150	150
70-74	41.980	5	0.4	229.3	6	45	45
75-79	51.356	1	0.1	61.1	2	12	12
80-84	61.881	0	0.0	17.3	0	3	3
85-89	74.121	0	0.0	0.0	0	0	0
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		1251	100.0		345	2418	714
				% BUSHELS HARVESTABLE			29.51

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION:	**BASIN COVE**
DATE:	**11-10-93**
SAMPLE NO:	**58**
NO. ACRES:	**11.7**

	PRICE ($)/BUSHEL						
	$30	**$40**	**$50**	**$55**	**$60**	**$70**	**$80**
CURRENT YEAR	$24,655	$32,874	$41,092	$45,201	$49,311	$57,529	$65,747
PROJ. (NO HARVEST)	71,931	95,908	119,885	131,873	143,862	167,838	191,815
PROJ. (HARVESTED)	21,975	29,300	36,624	40,287	43,949	51,274	58,599

LOCAL ECONOMIC ACTIVITY MULTIPLIER

CURRENT YEAR	**1.5**	**2.0**	**2.5**	**3.0**	**3.5**	**4.0**
$30	$36,983	$49,311	$61,638	$73,966	$86,293	$98,621
$40	49,311	65,747	82,184	98,621	115,058	131,495
$50	61,638	82,184	102,730	123,276	143,822	164,368
$55	67,802	90,403	113,003	135,604	158,205	180,805
$60	73,966	98,621	123,276	147,932	172,587	197,242
$70	86,293	115,058	143,822	172,587	201,351	230,116
$80	98,621	131,495	164,368	197,242	230,116	262,989
$90	110,949	147,932	184,914	221,897	258,880	295,863

LOCAL ECONOMIC ACTIVITY MULTIPLIER

PROJ. (HARVESTED)	**1.5**	**2.0**	**2.5**	**3.0**	**3.5**	**4.0**
$30	$32,962	$43,949	$54,937	$65,924	$76,911	$87,899
$40	43,949	58,599	73,249	87,899	102,548	117,198
$50	54,937	73,249	91,561	109,873	128,186	146,498
$55	60,430	80,574	100,717	120,861	141,004	161,148
$60	65,924	87,899	109,873	131,848	153,823	175,797
$70	76,911	102,548	128,186	153,823	179,460	205,097
$80	87,899	117,198	146,498	175,797	205,097	234,397
$90	98,886	131,848	164,810	197,772	230,734	263,696

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: BIG BULLPEN
DATE: 9-20-93
SAMPLE NO: 42
NO. ACRES: 10.0

	PRICE ($)/BUSHEL						
	$30	$40	$50	$55	$60	$70	$80
CURRENT YEAR	$13,562	$18,083	$22,604	$24,864	$27,125	$31,645	$36,166
PROJ. (NO HARVEST)	40,279	53,705	67,132	73,845	80,558	93,984	107,411
PROJ. (HARVESTED)	12,285	16,380	20,475	22,522	24,570	28,665	32,760

	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
CURRENT YEAR						
$30	$20,344	$27,125	$33,906	$40,687	$47,468	$54,249
$40	27,125	36,166	45,208	54,249	63,291	72,332
$50	33,906	45,208	56,510	67,812	79,114	90,416
$55	37,296	49,729	62,161	74,593	87,025	99,457
$60	40,687	54,249	67,812	81,374	94,936	108,499
$70	47,468	63,291	79,114	94,936	110,759	126,582
$80	54,249	72,332	90,416	108,499	126,582	144,665
$90	61,031	81,374	101,718	122,061	142,405	162,748

	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
PROJ. [HARVESTED]						
$30	$18,427	$24,570	$30,712	$36,855	$42,997	$49,139
$40	24,570	32,760	40,950	49,139	57,329	65,519
$50	30,712	40,950	51,187	61,424	71,662	81,899
$55	33,783	45,044	56,306	67,567	78,828	90,089
$60	36,855	49,139	61,424	73,709	85,994	98,279
$70	42,997	57,329	71,662	85,994	100,326	114,659
$80	49,139	65,519	81,899	98,279	114,659	131,038
$90	55,282	73,709	92,136	110,564	128,991	147,418

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: BRICKYARD COVE
DATE: 11-19-92
SAMPLE NO: 35
NO. ACRES: 7.0

	PRICE ($)/BUSHEL						
	$30	$40	$50	$55	$60	$70	$80
CURRENT YEAR	$11,658	$15,544	$19,430	$21,373	$23,316	$27,202	$31,088
PROJ. (NO HARVEST)	70,872	94,496	118,121	129,933	141,745	165,369	188,993
PROJ. (HARVESTED)	21,407	28,543	35,679	39,247	42,815	49,950	57,086

	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
CURRENT YEAR						
$30	$17,487	$23,316	$29,145	$34,974	$40,803	$46,632
$40	23,316	31,088	38,860	46,632	54,404	62,176
$50	29,145	38,860	48,575	58,290	68,005	77,720
$55	32,059	42,746	53,432	64,119	74,805	85,492
$60	34,974	46,632	58,290	69,948	81,606	93,264
$70	40,803	54,404	68,005	81,606	95,207	108,808
$80	46,632	62,176	77,720	93,264	108,808	124,352
$90	52,461	69,948	87,435	104,922	122,409	139,896

	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
PROJ. [HARVESTED]						
$30	$32,111	$42,815	$53,518	$64,222	$74,926	$85,629
$40	42,815	57,086	71,358	85,629	99,901	114,173
$50	53,518	71,358	89,197	107,037	124,876	142,716
$55	58,870	78,494	98,117	117,740	137,364	156,987
$60	64,222	85,629	107,037	128,444	149,851	171,259
$70	74,926	99,901	124,876	149,851	174,827	199,802
$80	85,629	114,173	142,716	171,259	199,802	228,345
$90	96,333	128,444	160,555	192,666	224,777	256,888

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: COLE'S COVE
DATE: 10-22-93
SAMPLE NO: 13
NO. ACRES: 4.0

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	2	2.3	0.0	0	0	0
15-19	0.550	2	2.3	1.1	0	0	0
20-24	1.196	2	2.3	2.4	0	1	0
25-29	2.212	4	4.6	8.8	1	3	0
30-34	3.681	7	8.0	25.8	2	8	0
35-39	5.690	6	6.9	34.1	3	11	0
40-44	8.327	13	14.9	108.3	8	33	0
45-49	11.670	16	18.4	186.7	14	57	0
50-54	15.795	13	14.9	205.3	16	63	63
55-59	20.818	12	13.8	249.8	19	77	77
60-64	26.801	5	5.7	134.0	10	41	41
65-69	33.780	3	3.4	101.3	8	31	31
70-74	41.980	2	2.3	84.0	6	26	26
75-79	51.356	0	0.0	0.0	0	0	0
80-84	61.881	0	0.0	0.0	0	0	0
85-89	74.121	0	0.0	0.0	0	0	0
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		87	100.0		88	351	238
				% BUSHELS HARVESTABLE			67.84

Following-Year Projection [Closed Area - NO Harvesting] "NORMAL" MORTALITY VALUES
SAMPLE NO: 13
NO. ACRES: 4.0

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	0	0.0	0.0	0	0	0
20-24	1.196	0	0.0	0.0	0	0	0
25-29	2.212	1	1.4	2.2	0	1	0
30-34	3.681	1	1.4	3.7	0	1	0
35-39	5.690	1	1.7	6.8	1	2	0
40-44	8.327	3	4.4	26.6	2	8	0
45-49	11.670	6	7.7	65.4	5	20	0
50-54	15.795	5	6.6	75.8	6	23	23
55-59	20.818	11	15.2	230.0	18	71	71
60-64	26.801	14	18.8	364.5	28	112	112
65-69	33.780	17	23.6	577.6	44	178	178
70-74	41.980	7	10.1	306.9	24	94	94
75-79	51.356	4	4.8	179.7	14	55	55
80-84	61.881	2	3.1	139.2	11	43	43
85-89	74.121	1	1.2	66.7	5	21	21
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		73	100.0		157	629	597
				% BUSHELS HARVESTABLE			94.88

Following-Year Projection [Open Area - Harvested] "NORMAL" MORTALITY VALUES
SAMPLE NO: 13
NO. ACRES: 4.0

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	0	0.0	0.0	0	0	0
20-24	1.196	0	0.0	0.0	0	0	0
25-29	2.212	1	3.3	2.2	0	1	0
30-34	3.681	1	3.3	3.7	0	1	0
35-39	5.690	1	3.9	6.8	1	2	0
40-44	8.327	3	10.5	26.6	2	8	0
45-49	11.670	6	18.4	65.4	5	20	0
50-54	15.795	1	4.7	22.7	2	7	7
55-59	20.818	3	10.9	69.0	5	21	21
60-64	26.801	4	13.4	109.3	8	34	34
65-69	33.780	5	17.0	175.3	13	54	54
70-74	41.980	2	7.8	99.9	8	31	31
75-79	51.356	1	3.5	55.0	4	17	17
80-84	61.881	1	2.3	43.3	3	13	13
85-89	74.121	0	0.9	20.8	2	6	6
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		30	100.0		64	215	193
				% BUSHELS HARVESTABLE			89.04

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: BIG BULLPEN
DATE: 9-20-93
SAMPLE NO: 42
NO. ACRES: 10.0

	PRICE ($)/BUSHEL					
	$30	$40	$50	$55	$60	$70	$80
CURRENT YEAR	$13,562	$18,083	$22,604	$24,864	$27,125	$31,645	$36,166
PROJ. (NO HARVEST)	40,279	53,705	67,132	73,845	80,558	93,984	107,411
PROJ. (HARVESTED)	12,285	16,380	20,475	22,522	24,570	28,665	32,760

	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
CURRENT YEAR						
$30	$20,344	$27,125	$33,906	$40,687	$47,468	$54,249
$40	27,125	36,166	45,208	54,249	63,291	72,332
$50	33,906	45,208	56,510	67,812	79,114	90,416
$55	37,296	49,729	62,161	74,593	87,025	99,457
$60	40,687	54,249	67,812	81,374	94,936	108,499
$70	47,468	63,291	79,114	94,936	110,759	126,582
$80	54,249	72,332	90,416	108,499	126,582	144,665
$90	61,031	81,374	101,718	122,061	142,405	162,748

	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
PROJ. [HARVESTED]						
$30	$18,427	$24,570	$30,712	$36,855	$42,997	$49,139
$40	24,570	32,760	40,950	49,139	57,329	65,519
$50	30,712	40,950	51,187	61,424	71,662	81,899
$55	33,783	45,044	56,306	67,567	78,828	90,089
$60	36,855	49,139	61,424	73,709	85,994	98,279
$70	42,997	57,329	71,662	85,994	100,328	114,659
$80	49,139	65,519	81,899	98,279	114,659	131,038
$90	55,282	73,709	92,136	110,564	128,991	147,418

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: CROW ISLAND
DATE: 10-22-93
SAMPLE NO: 33
NO. ACRES: 5.5

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	4	1.6	2.2	0	0	0
20-24	1.196	13	5.3	15.5	0	3	0
25-29	2.212	22	8.9	48.7	1	8	0
30-34	3.681	22	8.9	81.0	2	13	0
35-39	5.690	37	15.0	210.5	6	35	0
40-44	8.327	46	18.7	383.0	12	64	0
45-49	11.670	49	19.9	571.8	17	95	0
50-54	15.795	33	13.4	521.2	16	87	87
55-59	20.818	13	5.3	270.6	8	45	45
60-64	26.801	6	2.4	160.8	5	27	27
65-69	33.780	1	0.4	33.8	1	6	6
70-74	41.980	0	0.0	0.0	0	0	0
75-79	51.356	0	0.0	0.0	0	0	0
80-84	61.881	0	0.0	0.0	0	0	0
85-89	74.121	0	0.0	0.0	0	0	0
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		246	100.0		70	383	164
				% BUSHELS HARVESTABLE			42.90

Following-Year Projection [Closed Area - NO Harvesting] "NORMAL" MORTALITY VALUES
SAMPLE NO: 33
NO. ACRES: 5.5

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	0	0.0	0.0	0	0	0
20-24	1.196	0	0.0	0.0	0	0	0
25-29	2.212	0	0.0	0.0	0	0	0
30-34	3.681	2	1.0	7.4	0	1	0
35-39	5.690	8	3.9	44.4	1	7	0
40-44	8.327	18	8.7	146.6	4	24	0
45-49	11.670	18	8.7	205.4	6	34	0
50-54	15.795	30	14.6	467.5	14	78	78
55-59	20.818	39	19.3	814.0	25	136	136
60-64	26.801	42	20.6	1116.3	34	186	186
65-69	33.780	36	17.6	1200.9	36	200	200
70-74	41.980	8	4.0	343.0	10	57	57
75-79	51.356	3	1.5	155.6	5	26	26
80-84	61.881	0	0.2	27.8	1	5	5
85-89	74.121	0	0.0	0.0	0	0	0
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		203	100.0		137	765	698
				% BUSHELS HARVESTABLE			91.09

Following-Year Projection [Open Area - Harvested] "NORMAL" MORTALITY VALUES
SAMPLE NO: 33
NO. ACRES: 5.5

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	0	0.0	0.0	0	0	0
20-24	1.196	0	0.0	0.0	0	0	0
25-29	2.212	0	0.0	0.0	0	0	0
30-34	3.681	2	2.2	7.4	0	1	0
35-39	5.690	8	8.4	44.4	1	7	0
40-44	8.327	18	19.0	146.6	4	24	0
45-49	11.670	18	19.0	205.4	6	34	0
50-54	15.795	9	9.6	140.3	4	23	23
55-59	20.818	12	12.7	244.2	7	41	41
60-64	26.801	12	13.5	334.9	10	56	56
65-69	33.780	11	11.6	362.5	11	60	60
70-74	41.980	3	2.9	111.7	3	19	19
75-79	51.356	1	1.0	47.2	1	8	8
80-84	61.881	0	0.2	8.7	0	1	1
85-89	74.121	0	0.0	0.0	0	0	0
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		93	100.0		50	276	209
				% BUSHELS HARVESTABLE			75.58

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: COLE'S COVE
DATE: 10-22-93
SAMPLE NO: 13
NO. ACRES: 4.0

	PRICE ($)/BUSHEL						
	$30	$40	$50	$55	$60	$70	$80
CURRENT YEAR	$7,149	$9,532	$11,915	$13,106	$14,298	$16,681	$19,064
PROJ. (NO HARVEST)	17,913	23,884	29,855	32,840	35,825	41,796	47,767
PROJ. (HARVESTED)	5,496	7,327	9,159	10,075	10,991	12,823	14,655

	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
CURRENT YEAR						
$30	$10,723	$14,298	$17,872	$21,446	$25,021	$28,595
$40	14,298	19,064	23,829	28,595	33,361	38,127
$50	17,872	23,829	29,787	35,744	41,701	47,659
$55	19,659	26,212	32,765	39,319	45,872	52,425
$60	21,446	28,595	35,744	42,893	50,042	57,191
$70	25,021	33,361	41,701	50,042	58,382	66,722
$80	28,595	38,127	47,659	57,191	66,722	76,254
$90	32,170	42,893	53,616	64,339	75,063	85,786

	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
PROJ. [HARVESTED]						
$30	$8,243	$10,991	$13,739	$16,487	$19,235	$21,982
$40	10,991	14,655	18,319	21,982	25,646	29,310
$50	13,739	18,319	22,898	27,478	32,058	36,637
$55	15,113	20,151	25,188	30,226	35,263	40,301
$60	16,487	21,982	27,478	32,974	38,469	43,965
$70	19,235	25,646	32,058	38,469	44,881	51,292
$80	21,982	29,310	36,637	43,965	51,292	58,620
$90	24,730	32,974	41,217	49,460	57,704	65,947

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: INDIAN POINT
DATE: 11/10-12/89
SAMPLE NO: 34
NO. ACRES: 4.3

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	40	3.9	0.0	0	0	0
5-9	0.000	376	36.3	0.0	0	0	0
10-14	0.000	70	6.8	0.0	0	0	0
15-19	0.550	17	1.6	9.4	0	1	0
20-24	1.196	7	0.7	8.4	0	1	0
25-29	2.212	11	1.1	24.3	1	3	0
30-34	3.681	21	2.0	77.3	2	10	0
35-39	5.690	70	6.8	398.3	12	50	0
40-44	8.327	116	11.2	965.9	28	121	0
45-49	11.670	122	11.8	1423.7	42	178	0
50-54	15.795	103	9.9	1626.9	48	203	203
55-59	20.818	45	4.3	936.8	28	117	117
60-64	26.801	29	2.8	777.2	23	97	97
65-69	33.780	7	0.7	236.5	7	30	30
70-74	41.980	1	0.1	42.0	1	5	5
75-79	51.356	1	0.1	51.4	2	6	6
80-84	61.881	0	0.0	0.0	0	0	0
85-89	74.121	0	0.0	0.0	0	0	0
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		1036	100.0		193	822	459
				% BUSHELS HARVESTABLE			55.80

Following-Year Projection [Closed Area - NO Harvesting] "NORMAL" MORTALITY VALUES
SAMPLE NO: 34
NO. ACRES: 4.3

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	20	2.8	11.0	0	1	0
20-24	1.196	188	26.7	224.8	7	28	0
25-29	2.212	35	5.0	77.4	2	10	0
30-34	3.681	9	1.2	31.3	1	4	0
35-39	5.690	4	0.6	23.9	1	3	0
40-44	8.327	9	1.2	73.3	2	9	0
45-49	11.670	17	2.4	196.1	6	25	0
50-54	15.795	56	7.9	884.5	26	111	111
55-59	20.818	99	14.0	2052.7	60	257	257
60-64	26.801	104	14.7	2779.3	82	347	347
65-69	33.780	113	16.0	3815.5	112	477	477
70-74	41.980	32	4.5	1335.8	39	167	167
75-79	51.356	16	2.2	802.2	24	100	100
80-84	61.881	4	0.5	222.8	7	28	28
85-89	74.121	1	0.1	66.7	2	8	8
>90	87.597	0	0.1	37.7	1	5	5
TOTALS		705	100.0		372	1579	1500
				% BUSHELS HARVESTABLE			94.95

Following-Year Projection [Open Area - Harvested] "NORMAL" MORTALITY VALUES
SAMPLE NO: 34
NO. ACRES: 4.3

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	20	4.9	11.0	0	1	0
20-24	1.196	188	45.9	224.8	7	28	0
25-29	2.212	35	8.5	77.4	2	10	0
30-34	3.681	9	2.1	31.3	1	4	0
35-39	5.690	4	1.0	23.9	1	3	0
40-44	8.327	9	2.1	73.3	2	9	0
45-49	11.670	17	4.1	196.1	6	25	0
50-54	15.795	17	4.1	265.4	8	33	33
55-59	20.818	30	7.2	615.8	18	77	77
60-64	26.801	31	7.6	833.8	25	104	104
65-69	33.780	34	8.3	1152.2	34	144	144
70-74	41.980	10	2.5	434.9	13	54	54
75-79	51.356	5	1.2	243.9	7	30	30
80-84	61.881	1	0.3	69.3	2	9	9
85-89	74.121	0	0.1	20.8	1	3	3
>90	87.597	0	0.0	12.3	0	2	2
TOTALS		410	100.0		126	536	486
				% BUSHELS HARVESTABLE			90.12

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION:	**CROW ISLAND**
DATE:	**10-22-93**
SAMPLE NO:	**33**
NO. ACRES:	**5.5**

DIRECT SURVEY DATA

	PRICE ($)/BUSHEL					
	$30	**$40**	**$50**	**$55**	**$60**	**$70**	**$80**
CURRENT YEAR	$4,932	$6,576	$8,220	$9,043	$9,865	$11,509	$13,153
PROJ. (NO HARVEST)	20,625	27,501	34,376	37,813	41,251	48,126	55,001
PROJ. (HARVESTED)	6,247	8,329	10,411	11,453	12,494	14,576	16,658

LOCAL ECONOMIC ACTIVITY MULTIPLIER

CURRENT YEAR	**1.5**	**2.0**	**2.5**	**3.0**	**3.5**	**4.0**
$30	$7,398	$9,865	$12,331	$14,797	$17,263	$19,729
$40	9,865	13,153	16,441	19,729	23,017	26,305
$50	12,331	16,441	20,551	24,661	28,772	32,882
$55	13,564	18,085	22,606	27,126	31,649	36,170
$60	14,797	19,729	24,661	29,594	34,526	39,458
$70	17,263	23,017	28,772	34,526	40,280	46,035
$80	19,729	26,305	32,882	39,458	46,035	52,611
$90	22,195	29,594	36,992	44,390	51,789	59,187

LOCAL ECONOMIC ACTIVITY MULTIPLIER

PROJ. [HARVESTED]	**1.5**	**2.0**	**2.5**	**3.0**	**3.5**	**4.0**
$30	$9,370	$12,494	$15,617	$18,741	$21,864	$24,987
$40	12,494	16,658	20,823	24,987	29,152	33,317
$50	15,617	20,823	26,029	31,234	36,440	41,646
$55	17,179	22,905	28,631	34,358	40,084	45,810
$60	18,741	24,987	31,234	37,481	43,728	49,975
$70	21,864	29,152	36,440	43,728	51,016	58,304
$80	24,987	33,317	41,646	49,975	58,304	66,633
$90	28,111	37,481	46,851	56,222	65,592	74,962

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: MERE POINT
DATE: 8-14-93
SAMPLE NO: 42
NO. ACRES: 10.0

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	12	3.8	0.0	0	0	0
15-19	0.550	15	4.7	8.3	0	2	0
20-24	1.196	15	4.7	17.9	0	4	0
25-29	2.212	26	8.2	57.5	1	14	0
30-34	3.681	38	12.0	139.9	3	33	0
35-39	5.690	41	13.0	233.3	6	56	0
40-44	8.327	47	14.9	391.4	9	93	0
45-49	11.670	62	19.6	723.5	17	172	0
50-54	15.795	38	12.0	600.2	14	143	143
55-59	20.818	14	4.4	291.5	7	69	69
60-64	26.601	4	1.3	107.2	3	26	26
65-69	33.780	3	0.9	101.3	2	24	24
70-74	41.980	1	0.3	42.0	1	10	10
75-79	51.356	0	0.0	0.0	0	0	0
80-84	61.881	0	0.0	0.0	0	0	0
85-89	74.121	0	0.0	0.0	0	0	0
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		316	100.0		65	646	272
				% BUSHELS HARVESTABLE			42.09

Following-Year Projection [Closed Area - NO Harvesting) "NORMAL" MORTALITY VALUES
SAMPLE NO: 42
NO. ACRES: 10.0

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	0	0.0	0.0	0	0	0
20-24	1.196	0	0.0	0.0	0	0	0
25-29	2.212	6	2.4	13.3	0	3	0
30-34	3.681	8	3.0	27.6	1	7	0
35-39	5.690	9	3.6	51.2	1	12	0
40-44	8.327	21	8.2	173.2	4	41	0
45-49	11.670	30	12.0	354.8	8	84	0
50-54	15.795	33	13.0	518.1	12	123	123
55-59	20.818	40	15.8	831.7	20	198	198
60-64	26.601	53	20.9	1412.4	34	336	336
65-69	33.780	41	16.0	1368.1	33	326	326
70-74	41.980	8	3.1	324.9	8	77	77
75-79	51.356	3	1.2	157.7	4	38	38
80-84	61.881	2	0.7	111.4	3	27	27
85-89	74.121	0	0.2	33.4	1	8	8
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		253	100.0		129	1280	1133
				% BUSHELS HARVESTABLE			88.47

Following-Year Projection [Open Area - Harvested] "NORMAL" MORTALITY VALUES
SAMPLE NO: 42
NO. ACRES: 10.0

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	0	0.0	0.0	0	0	0
20-24	1.196	0	0.0	0.0	0	0	0
25-29	2.212	6	4.7	13.3	0	3	0
30-34	3.681	8	5.9	27.6	1	7	0
35-39	5.690	9	7.0	51.2	1	12	0
40-44	8.327	21	16.3	173.2	4	41	0
45-49	11.670	30	23.8	354.8	8	84	0
50-54	15.795	10	7.7	155.4	4	37	37
55-59	20.818	12	9.4	249.5	6	59	59
60-64	26.601	16	12.4	423.7	10	101	101
65-69	33.780	12	9.6	412.8	10	98	98
70-74	41.980	3	2.0	105.8	3	25	25
75-79	51.356	1	0.7	48.3	1	11	11
80-84	61.881	1	0.4	34.7	1	8	8
85-89	74.121	0	0.1	10.4	0	2	2
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		128	100.0		49	491	343
				% BUSHELS HARVESTABLE			69.91

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION:	**INDIAN POINT**
DATE:	**11/10-12/89**
SAMPLE NO:	**34**
NO. ACRES:	**4.3**

	PRICE ($)/BUSHEL					
	$30	$40	$50	$55	$60	$70	$80
CURRENT YEAR	$13,765	$18,354	$22,942	$25,236	$27,530	$32,119	$36,707
PROJ. (NO HARVEST)	44,989	59,985	74,981	82,480	89,978	104,974	119,970
PROJ. (HARVESTED)	13,681	18,242	22,802	25,082	27,363	31,923	36,483

	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
CURRENT YEAR						
$30	$20,648	$27,530	$34,413	$41,296	$48,178	$55,061
$40	27,530	36,707	45,884	55,061	64,238	73,414
$50	34,413	45,884	57,355	68,826	80,297	91,768
$55	37,854	50,472	63,091	75,709	88,327	100,945
$60	41,296	55,061	68,826	82,591	96,356	110,122
$70	48,178	64,238	80,297	96,356	112,416	128,475
$80	55,061	73,414	91,768	110,122	128,475	146,829
$90	61,943	82,591	103,239	123,887	144,535	165,182

	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
PROJ. [HARVESTED]						
$30	$20,522	$27,363	$34,203	$41,044	$47,885	$54,725
$40	27,363	36,483	45,604	54,725	63,846	72,967
$50	34,203	45,604	57,005	68,406	79,808	91,209
$55	37,624	50,165	62,706	75,247	87,788	100,329
$60	41,044	54,725	68,406	82,088	95,769	109,450
$70	47,885	63,846	79,808	95,769	111,731	127,692
$80	54,725	72,967	91,209	109,450	127,692	145,934
$90	61,566	82,088	102,610	123,132	143,654	164,176

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: THOMAS POINT BEACH
DATE: 7-16/22-23-93
SAMPLE NO: 85
NO. ACRES: 21.0

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	112	3.5	0.0	0	0	0
5-9	0.000	640	20.3	0.0	0	0	0
10-14	0.000	125	4.0	0.0	0	0	0
15-19	0.550	248	7.9	136.4	2	34	0
20-24	1.196	363	11.5	434.1	5	107	0
25-29	2.212	461	14.6	1019.7	12	252	0
30-34	3.681	350	11.1	1288.4	15	318	0
35-39	5.690	118	3.7	671.4	8	166	0
40-44	8.327	98	3.1	816.0	10	202	0
45-49	11.670	161	5.1	1878.9	22	464	0
50-54	15.795	189	6.0	2985.3	35	738	738
55-59	20.818	125	4.0	2602.3	31	643	643
60-64	26.801	95	3.0	2546.1	30	629	629
65-69	33.780	49	1.6	1655.2	19	409	409
70-74	41.980	25	0.8	1049.5	12	259	259
75-79	51.356	0	0.0	0.0	0	0	0
80-84	61.881	0	0.0	0.0	0	0	0
85-89	74.121	0	0.0	0.0	0	0	0
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		3159	100.0		201	4221	2678
				% BUSHELS HARVESTABLE			63.44

Following-Year Projection [Closed Area - NO Harvesting] "NORMAL" MORTALITY VALUES
SAMPLE NO: 85
NO. ACRES: 21.0

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	56	2.6	30.8	0	8	0
20-24	1.196	320	14.7	382.7	5	95	0
25-29	2.212	63	2.9	138.3	2	34	0
30-34	3.681	124	5.7	456.4	5	113	0
35-39	5.690	218	10.0	1239.3	15	306	0
40-44	8.327	369	17.0	3071.0	36	759	0
45-49	11.670	280	12.9	3267.6	36	807	0
50-54	15.795	94	4.3	1491.0	18	368	368
55-59	20.818	83	3.8	1734.1	20	428	428
60-64	26.801	137	6.3	3667.7	43	906	906
65-69	33.780	226	10.4	7646.1	90	1889	1889
70-74	41.980	95	4.4	3971.3	47	981	981
75-79	51.356	63	2.9	3230.3	38	798	798
80-84	61.881	33	1.5	2060.6	24	509	509
85-89	74.121	11	0.5	833.9	10	206	206
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		2172	100.0		391	8208	6086
				% BUSHELS HARVESTABLE			74.15

Following-Year Projection [Open Area - Harvested] "NORMAL" MORTALITY VALUES
SAMPLE NO: 85
NO. ACRES: 21.0

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	56	3.4	30.8	0	8	0
20-24	1.196	320	19.3	382.7	5	95	0
25-29	2.212	63	3.8	138.3	2	34	0
30-34	3.681	124	7.5	456.4	5	113	0
35-39	5.690	218	13.2	1239.3	15	306	0
40-44	8.327	369	22.3	3071.0	36	759	0
45-49	11.670	280	16.9	3267.6	36	807	0
50-54	15.795	28	1.7	447.3	5	111	111
55-59	20.818	25	1.5	520.2	6	129	129
60-64	26.801	41	2.5	1100.3	13	272	272
65-69	33.780	69	4.1	2314.9	27	572	572
70-74	41.980	31	1.9	1293.0	15	319	319
75-79	51.356	19	1.2	966.5	12	244	244
80-84	61.881	10	0.6	641.1	8	158	158
85-89	74.121	4	0.2	259.4	3	64	64
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		1656	100.0		190	3990	1868
				% BUSHELS HARVESTABLE			46.83

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION:	**MERE POINT**
DATE:	**8-14-93**
SAMPLE NO:	**42**
NO. ACRES:	**10.0**

	PRICE ($)/BUSHEL						
	$30	**$40**	**$50**	**$55**	**$60**	**$70**	**$80**
CURRENT YEAR	$8,158	$10,878	$13,597	$14,957	$16,317	$19,036	$21,756
PROJ. (NO HARVEST)	33,983	45,310	56,638	62,302	67,966	79,293	90,621
PROJ. (HARVESTED)	10,290	13,719	17,149	18,864	20,579	24,009	27,439

	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	**2.0**	**2.5**	**3.0**	**3.5**	**4.0**
CURRENT YEAR						
$30	$12,236	$16,317	$20,396	$24,475	$28,555	$32,634
$40	16,317	21,756	27,195	32,634	38,073	43,512
$50	20,396	27,195	33,994	40,792	47,591	54,390
$55	22,436	29,914	37,393	44,872	52,350	59,829
$60	24,475	32,634	40,792	48,951	57,109	65,268
$70	28,555	38,073	47,591	57,109	66,628	76,146
$80	32,634	43,512	54,390	65,268	76,146	87,024
$90	36,713	48,951	61,189	73,426	85,664	97,902

	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	**2.0**	**2.5**	**3.0**	**3.5**	**4.0**
PROJ. (HARVESTED)						
$30	$15,434	$20,579	$25,724	$30,869	$36,013	$41,158
$40	20,579	27,439	34,298	41,158	48,018	54,878
$50	25,724	34,298	42,873	51,448	60,022	68,597
$55	28,296	37,728	47,160	56,593	66,025	75,457
$60	30,869	41,158	51,448	61,737	72,027	82,316
$70	36,013	48,018	60,022	72,027	84,031	96,036
$80	41,158	54,878	68,597	82,316	96,036	109,755
$90	46,303	61,737	77,172	92,606	108,040	123,475

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: MAQUOIT BAY
DATE: 9-16-93
SAMPLE NO: 21
NO. ACRES: 40.0

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	0	0.0	0.0	0	0	0
20-24	1.196	0	0.0	0.0	0	0	0
25-29	2.212	0	0.0	0.0	0	0	0
30-34	3.681	1	1.5	3.7	0	7	0
35-39	5.690	3	4.5	17.1	1	33	0
40-44	8.327	12	18.2	99.9	5	190	0
45-49	11.670	15	22.7	175.1	8	333	0
50-54	15.795	15	22.7	236.9	11	451	451
55-59	20.818	10	15.2	208.2	10	397	397
60-64	26.801	5	7.6	134.0	6	255	255
65-69	33.780	4	6.1	135.1	6	257	257
70-74	41.980	1	1.5	42.0	2	80	80
75-79	51.356	0	0.0	0.0	0	0	0
80-84	61.881	0	0.0	0.0	0	0	0
85-89	74.121	0	0.0	0.0	0	0	0
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		66	100.0		50	2004	1440
				% BUSHELS HARVESTABLE			71.89

Following-Year Projection [Closed Area - NO Harvesting] "NORMAL" MORTALITY VALUES
SAMPLE NO: 21
NO. ACRES: 40.0

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	0	0.0	0.0	0	0	0
20-24	1.196	0	0.0	0.0	0	0	0
25-29	2.212	0	0.0	0.0	0	0	0
30-34	3.681	0	0.0	0.0	0	0	0
35-39	5.690	0	0.0	0.0	0	0	0
40-44	8.327	0	0.0	0.0	0	0	0
45-49	11.670	1	1.4	9.3	0	18	0
50-54	15.795	2	4.2	37.9	2	72	72
55-59	20.818	10	17.8	212.3	10	404	404
60-64	26.801	13	22.3	341.7	16	651	651
65-69	33.780	18	31.4	608.0	29	1158	1158
70-74	41.980	6	11.3	270.8	13	516	516
75-79	51.356	4	6.9	202.9	10	386	386
80-84	61.881	2	3.9	139.2	7	265	265
85-89	74.121	0	0.8	33.4	2	64	64
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		57	100.0		88	3534	3517
				% BUSHELS HARVESTABLE			99.50

Following-Year Projection [Open Area - Harvested] "NORMAL" MORTALITY VALUES
SAMPLE NO: 21
NO. ACRES: 40.0

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	0	0.0	0.0	0	0	0
20-24	1.196	0	0.0	0.0	0	0	0
25-29	2.212	0	0.0	0.0	0	0	0
30-34	3.681	0	0.0	0.0	0	0	0
35-39	5.690	0	0.0	0.0	0	0	0
40-44	8.327	0	0.0	0.0	0	0	0
45-49	11.670	1	4.4	9.3	0	18	0
50-54	15.795	1	4.0	11.4	1	22	22
55-59	20.818	3	17.0	63.7	3	121	121
60-64	26.801	4	21.2	102.5	5	195	195
65-69	33.780	5	30.3	184.1	9	351	351
70-74	41.980	2	11.7	68.2	4	168	168
75-79	51.356	1	6.7	62.1	3	118	118
80-84	61.881	1	3.9	43.3	2	83	83
85-89	74.121	0	0.8	10.4	0	20	20
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		18	100.0		27	1095	1077
				% BUSHELS HARVESTABLE			98.38

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: THOMAS POINT BEACH
DATE: 7-16/22-23-93
SAMPLE NO: 85
NO. ACRES: 21.0

	PRICE ($)/BUSHEL						
	$30	$40	$50	$55	$60	$70	$80
CURRENT YEAR	$80,331	$107,108	$133,885	$147,274	$160,662	$187,439	$214,216
PROJ. (NO HARVEST)	182,590	243,453	304,316	334,748	365,179	426,042	486,906
PROJ. (HARVESTED)	56,054	74,739	93,424	102,766	112,108	130,793	149,478

CURRENT YEAR

	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
$30	$120,497	$160,662	$200,828	$240,993	$281,159	$321,324
$40	160,662	214,216	267,770	321,324	374,878	428,432
$50	200,828	267,770	334,713	401,655	468,598	535,541
$55	220,910	294,547	368,184	441,821	515,458	589,095
$60	240,993	321,324	401,655	481,986	562,318	642,649
$70	281,159	374,878	468,598	562,318	656,037	749,757
$80	321,324	428,432	535,541	642,649	749,757	856,865
$90	361,490	481,986	602,483	722,980	843,476	963,973

PROJ. [HARVESTED]

	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
$30	$84,081	$112,108	$140,135	$168,162	$196,189	$224,216
$40	112,108	149,478	186,847	224,216	261,586	298,955
$50	140,135	186,847	233,559	280,271	326,982	373,694
$55	154,149	205,532	256,915	308,298	359,681	411,064
$60	168,162	224,216	280,271	336,325	392,379	448,433
$70	196,189	261,586	326,982	392,379	457,775	523,172
$80	224,216	298,955	373,694	448,433	523,172	597,911
$90	252,244	336,325	420,406	504,487	588,568	672,649

	ACRES	1993 EST.	1994 EST.	1995 EST.
Maquoit Bay (west)	40	2720	3181	1657
Maquoit Bay (east)	30	—	—	1636
Middle Bay	129	11250	11997	9500
Upper Middle Bay	10	100	100	100
Mere Point	10	100	871	500
Smith's Cove	8	240	260	1623
Crow Island	10	100	930	382
Cole's Cove	7	182	714	214
Barnes' Cove	7	—	105	432
Harpswell Cove	57	5700	3250	4731
Prince's Point	15	855	1441	1778
Big Bullpen	24	3700	2257	885
Little Bullpen	3.5	655	518	400
Upper Coombs	24	2775	3552	3000
New Meadows	30	4080	4080	4080
Thomas Point Beach	21	2856	2845	2136
Buttermilk Cove	2	—	—	154
		35,313	36,101	33,208

TOTAL ACREAGE:				
	1993	388.5	35,313 bu	90.9 bu/acre
	1994	395.5	36,101 bu	91.3 bu/acre
	1995	427.5	33,208 bu	77.7 bu/acre

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: MAQUOIT BAY
DATE: 8-16-93
SAMPLE NO: 21
NO. ACRES: 40.0

	PRICE ($)/BUSHEL					
	$30	$40	$50	$55	$60	$70	$80
CURRENT YEAR	$43,212	$57,616	$72,020	$79,222	$86,424	$100,828	$115,232
PROJ. (NO HARVEST)	105,498	140,664	175,830	193,413	210,996	246,162	281,328
PROJ. (HARVESTED)	32,325	43,100	53,875	59,262	64,649	75,424	86,199

CURRENT YEAR

	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
$30	$64,818	$86,424	$108,030	$129,636	$151,242	$172,848
$40	86,424	115,232	144,040	172,848	201,656	230,464
$50	108,030	144,040	180,050	216,060	252,070	288,080
$55	118,833	158,444	198,055	237,666	277,277	316,888
$60	129,636	172,848	216,060	259,272	302,484	345,696
$70	151,242	201,656	252,070	302,484	352,898	403,312
$80	172,848	230,464	288,080	345,696	403,312	460,928
$90	194,454	259,272	324,090	388,908	453,726	518,544

PROJ. (HARVESTED)

	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
$30	$48,487	$64,649	$80,812	$96,974	$113,137	$129,299
$40	64,649	86,199	107,749	129,299	150,849	172,399
$50	80,812	107,749	134,686	161,624	188,561	215,498
$55	88,893	118,524	148,155	177,786	207,417	237,048
$60	96,974	129,299	161,624	193,948	226,273	258,598
$70	113,137	150,849	188,561	226,273	263,985	301,697
$80	129,299	172,399	215,498	258,598	301,697	344,797
$90	145,461	193,948	242,435	290,923	339,410	387,897

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: ASH POINT COVE
DATE: 10-29-91 , 11-15-91
SAMPLE NO: 24
NO. ACRES: 6.5

	PRICE ($)/BUSHEL					
	$30	$40	$50	$55	$60	$70	$80
CURRENT YEAR	$5,138	$6,851	$8,564	$9,420	$10,276	$11,989	$13,702
PROJ. (NO HARVEST)	12,576	16,768	20,960	23,056	25,152	29,344	33,537
PROJ. (HARVESTED)	3,851	5,134	6,418	7,060	7,701	8,985	10,268

LOCAL ECONOMIC ACTIVITY MULTIPLIER

CURRENT YEAR	1.5	2.0	2.5	3.0	3.5	4.0
$30	$7,707	$10,276	$12,845	$15,415	$17,984	$20,553
$40	10,276	13,702	17,127	20,553	23,978	27,404
$50	12,845	17,127	21,409	25,691	29,973	34,255
$55	14,130	18,840	23,550	28,260	32,970	37,680
$60	15,415	20,553	25,691	30,829	35,967	41,105
$70	17,984	23,978	29,973	35,967	41,962	47,956
$80	20,553	27,404	34,255	41,105	47,956	54,807
$90	23,122	30,829	38,536	46,244	53,951	61,658

LOCAL ECONOMIC ACTIVITY MULTIPLIER

PROJ. [HARVESTED]	1.5	2.0	2.5	3.0	3.5	4.0
$30	$5,776	$7,701	$9,627	$11,552	$13,477	$15,403
$40	7,701	10,268	12,835	15,403	17,970	20,537
$50	9,627	12,835	16,044	19,253	22,462	25,671
$55	10,589	14,119	17,649	21,179	24,708	28,238
$60	11,552	15,403	19,253	23,104	26,954	30,805
$70	13,477	17,970	22,462	26,954	31,447	35,939
$80	15,403	20,537	25,671	30,805	35,939	41,074
$90	17,328	23,104	28,880	34,656	40,432	46,208

c. Municipal 1994 Open Area Survey Results

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: Cushing-Briggs/Bartol Island
DATE: 9/10-11/94
SAMPLE NO: 463

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLOT	PLOT NO.
1		1						2	1	1			1								6	1
2		10					1	7	3	1			2								24	2
3		1					1	2	2	1	3		1								11	3
4								1	1												2	4
5								2		2	1	1		1							7	5
6		1									1		2								4	6
7		1					2	1													4	7
8							1														1	8
9						1	1														2	9
10																					0	10
11		1			1	1															3	11
12																					0	12
13		2	1					2													5	13
14						1															1	14
15								1	1												2	15
16																					0	16
17							1		1	1											3	17
18		1																			1	18
19			1										1								2	19
20		9																			9	20
21		1	2								1	1	1								6	21
22		1														1					2	22
23		1							1		2	1	1								6	23
24		1																			1	24
25				1					1												2	25
26																					0	26
27																					0	27
28						1				1											2	28
29							1	1		1	1			2							6	29
30																					0	30
31							1	2		1											4	31
32												1									1	32
33								2													2	33
34									1	1		1									3	34
35								1				1									2	35
36											1	1									2	36
37										1		1									2	37
38																					0	38
39																					0	39
40								1			1										2	40
41																					0	41
42																					0	42
43								1			1										2	43
44								1	1		1										3	44
45							1		1	1		1									4	45
46											1		2	1							4	46
47								1													1	47
48				1								1									2	48
48(A)								3	2					1		1					7	48(A)
49						1		4	1	1	2										9	49
50		4						2	2	1	1										10	50
TOTALS		35	4	2	1	5	10	37	19	14	17	10	11	5	0	2	0	0	0	0	172	
%/SIZE		20.35	2.33	1.16	0.58	2.91	5.81	21.51	11.05	8.14	9.88	5.81	6.40	2.91	0.00	1.16	0.00	0.00	0.00	0.00	100	
#SQ.FT.		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: Cushing-Briggs/Bartol Island
DATE: 9/10-11/94
SAMPLE NO: 463

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLOT	PLOT NO.
1-50		35	4	2	1	5	10	37	19	14	17	10	11	5	0	2	0	0	0	0	172	1-50
51							2		1	1											4	51
52						3		1	1	1				1							7	52
53			1				1	2	2					1							7	53
54		5				1															6	54
55		3									1										4	55
56		3				1					1	1									6	56
57																					0	57
58														1							1	58
59		1					1	3	1			2									8	59
60						1	1				1										3	60
61							1														1	61
62		2																			2	62
63		1				1		2		1				1							6	63
64		2							1					1							4	64
65		1							2	1											4	65
66																					0	66
67												1	1								2	67
68										1	1		1								3	68
69											1	1									2	69
70		2																			2	70
71																					0	71
72										1											1	72
73																					0	73
74		2					1			1	1	1		1							7	74
75			1					1	1		1		2								6	75
76				1						1											2	76
77				1							1	1	1								4	77
78										1											1	78
79									1	1		1		1							4	79
80							1	3													4	80
81		2							3	3	2	1		1							12	81
82			1																		1	82
83		3			1			1	1	1		2	1								10	83
84		1						2	3	1	3	2		1							13	84
85		3						1	1		2		1								8	85
86		3																			3	86
87									2	1	1										4	87
88		9																			9	88
89								1		1		1	1								4	89
90		4	1																		5	90
91									1	1			1								3	91
92		2					1	1	2	1	1	3	1								12	92
93									1	1											2	93
94		4								1			1								6	94
95		2						1	1	1			2	1							8	95
96		2	1								1	1									5	96
97					1	1		3		1			2								8	97
98		10						1		1	1										13	98
99		5									1										6	99
TOTALS		107	9	4	3	13	19	60	44	38	37	28	26	15	0	2	0	0	0	0	405	
%SIZE		26.42	2.22	0.99	0.74	3.21	4.69	14.81	10.86	9.38	9.14	6.91	6.42	3.70	0.00	0.49	0.00	0.00	0.00	0.00	100.00	
#SQ.FT.		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: Cushing-Briggs/Bartol Island
DATE: 9/10-11/94
SAMPLE NO: 463

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLOT	PLOT NO.
1-99		107	9	4	3	13	19	60	44	38	37	28	26	15	0	2	0	0	0	0	405	1-99
100		5									1	1									7	100
101		7						1	1												9	101
102		3										1									4	102
103		2						1			1		1								5	103
104				1				1			1	2									5	104
105									1	1		2		1							5	105
106										1	2	1		1			1				6	106
107			1									1									2	107
108								1				1									2	108
109								2		2	1		1								6	109
110										1	1		1								3	110
111								2	1	1	2		1	1							8	111
112								1	3	1	2	3	2		1						13	112
113											1	1									2	113
114																2					2	114
115					1				1		3	1	1		1						8	115
116					1			1	1												3	116
117								1	1	2		1									5	117
118			1												1						2	118
119				1				1	1	1		2	2		1						9	119
120										3	1	2	1	1							8	120
121		3						1		1											5	121
122				1		1			1					1							4	122
123				1				1			2	1									5	123
124																					0	124
125																					0	125
126									2												2	126
127																					0	127
128							1	1			1										3	128
129		3				1															4	129
130		1								2											3	130
131		1									2										3	131
132		1					2	1		1											5	132
133		1			1					2		1									5	133
134											1		1								2	134
135		2							1	1	1										5	135
136						2															2	136
137		2			1	2		1													6	137
138		1							2	1											4	138
139							2														2	139
140						1	2			1											4	140
141								1				1									2	141
142		1			1	1	1		1		1										6	142
143							1														1	143
144																					0	144
145						1	1	1				1									4	145
146																					0	146
147		1				1				1											3	147
148								1	5	2	1	1	1								11	148
TOTALS		141	11	8	8	23	29	80	66	63	62	52	38	20	4	4	1	0	0	0	610	
%SIZE		23.11	1.80	1.31	1.31	3.77	4.75	13.11	10.82	10.33	10.16	8.52	6.23	3.28	0.66	0.66	0.16	0.00	0.00	0.00	100.00	
#/SQ.FT.		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: Cushing-Briggs/Bartol Island
DATE: 9/10-11/94
SAMPLE NO: 463

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLOT	PLOT NO.
1-148		141	11	8	8	23	29	80	66	63	62	52	38	20	4	4	1	0	0	0	610	1-148
149																					0	149
150											1	2									3	150
151																					0	151
152										1											1	152
153																					0	153
154									2		2			1							5	154
155						1	1	2	1	1											6	155
156		1					1	2	1	1											6	156
157									1	1											2	157
158										1											1	158
159		1					1														2	159
160											1				1						2	160
161					1		1						1								3	161
162							1			1			1								3	162
163							1	2	1		1										5	163
164							3	1			2										6	164
165		3					2			1											6	165
166		4										1	1								6	166
167									3												3	167
168				1		1					1		1								4	168
169															1						1	169
170					1																1	170
171																					0	171
172				1		1															2	172
173		1		2			1														4	173
174			1								1	2									4	174
175										2											2	175
176											1										1	176
177									1			1									2	177
178						1	1		1												3	178
179							1	1				1									3	179
180										1		1									2	180
181								2				1									3	181
182											1		1								2	182
183									1												1	183
184																					0	184
185											1										1	185
186																					0	186
187																					0	187
188								1	1												2	188
189									1		2	1									4	189
190				1	1	1		1					1								5	190
191								1		2		1									4	191
192								2		2											4	192
193								1	1		1					1					4	193
194								3	2	1		1	2	1	1						11	194
195											1	2									3	195
196											1										1	196
197																					0	197
TOTALS		151	12	13	11	28	43	99	83	78	79	66	46	22	7	5	1	0	0	0	744	
%/SIZE		20.30	1.61	1.75	1.48	3.76	5.78	13.31	11.16	10.48	10.62	8.87	6.18	2.96	0.94	0.67	0.13	0.00	0.00	0.00	100.00	
#SQ.FT.		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	

LOCATION: Cushing-Briggs/Bartol Island
DATE: 9/10-11/94
SAMPLE NO: 463

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLOT	PLOT NO.
1-197		151	12	13	11	28	43	99	83	78	79	66	46	22	7	5	1	0	0	0	744	1-197
198				1	1			1													3	198
199																					0	199
200																					0	200
201				1			1		1												3	201
202				2																	2	202
203			1										1								2	203
204		2					1		1		1										5	204
205																					0	205
206										1											1	206
207																					0	207
208																					0	208
209																					0	209
210																					0	210
211																					0	211
212						1															1	212
213							1				1	1									3	213
214				1					1	3	2										7	214
215		2		1																	3	215
216		2		1					2			1									6	216
217										2		2									4	217
218		1										1									2	218
219								1													1	219
220																					0	220
221		2			1																3	221
222																					0	222
223													1								1	223
224															1						1	224
225																					0	225
226																					0	226
227												1									1	227
228												1									1	228
229		5						1													6	229
230		3									1										4	230
231		2					1			1											4	231
232		4								1											5	232
233		5																			5	233
234		6																			6	234
235		7																			7	235
236																					0	236
237										1											1	237
238						1		1													2	238
239								1		1		1									3	239
240		3		1		1			1	1	2	1									10	240
241		5								1	1	2	1								10	241
242		2						1	1	1	1	1	1								8	242
243		2						1	1	1	2	1	1								9	243
244		1				1	1														3	244
245		4									1	2		1							8	245
246									2			2									4	246
247							1														1	247
TOTALS		209	13	21	13	32	49	106	93	92	91	83	51	23	8	5	1	0	0	0	890	
%/SIZE		23.48	1.46	2.36	1.46	3.60	5.51	11.91	10.45	10.34	10.22	9.33	5.73	2.58	0.90	0.56	0.11	0.00	0.00	0.00	100.00	
#/SQ.FT.		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: Cushing-Briggs/Bartol Island
DATE: 9/10-11/94
SAMPLE NO: 463

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLOT	PLOT NO.
1-247		209	13	21	13	32	49	106	93	92	91	83	51	23	8	5	1	0	0	0	890	1-247
248		1																			1	248
249		1											1								2	249
250		1																			1	250
251		1																			1	251
252									1												1	252
253																		1			1	253
254										1		1									2	254
255		2										2							1		5	255
256																					0	256
257																					0	257
258										1	1		1								3	258
259												1		1			1				3	259
260		3						1	1		3		1								9	260
261		2		1		1				2	1	2			2						11	261
262							1	1	2			1									5	262
263		3				2			2	2		1									10	263
264		12							1	1		1	1								16	264
265											1										1	265
266							3	2	1	2	1										9	266
267						1		1		1	1		1	1							6	267
268																					0	268
269																					0	269
270																					0	270
271																					0	271
272		4										1			1						6	272
273		4					1		1												6	273
274		7	1										1	1		1					11	274
275		1	1								1										3	275
276		5	1									2	1			1					10	276
277		4						2	1			1									8	277
278		5		3				1	2	1											12	278
279		7					1	2	1	1	2	1	1	1							17	279
280		5					1		1												7	280
281								2	1				1								4	281
282											1	3	1								5	282
283																					0	283
284																					0	284
285																					0	285
286																					0	286
287																					0	287
288																					0	288
289																					0	289
290																					0	290
291																					0	291
292																					0	292
293																					0	293
294																					0	294
295																					0	295
296												1									1	296
TOTALS		277	16	25	13	36	56	118	108	104	103	101	61	27	11	7	2	1	1	0	1067	
%/SIZE		25.96	1.50	2.34	1.22	3.37	5.25	11.06	10.12	9.75	9.65	9.47	5.72	2.53	1.03	0.66	0.19	0.09	0.09	0.00	100.00	
#/SQ.FT.		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	

LOCATION: Cushing-Briggs/Bartol Island
DATE: 9/10-11/94
SAMPLE NO: 463

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLOT	PLOT NO.
1-296		277	16	25	13	36	56	118	108	104	103	101	61	27	11	7	2	1	1	0	1087	1-296
297																					0	297
298		4																			4	298
299													1	1							2	299
300									1	2	1	1									5	300
301				1		1	1		1	1											5	301
302		3					2	3	5		2		1								16	302
303		2			1	2		1	1	1											8	303
304								1	1	1				1	1						5	304
305						1					1		1	1							4	305
306								2	2			1									5	306
307						1							2								3	307
308		10																			10	308
309		5																			5	309
310		5																			5	310
311		1																			1	311
312		11																			11	312
313		10																			10	313
314		12																			12	314
315		4																			4	315
316		11																			11	316
317		3																			3	317
318		5					1						1								7	318
319		1				2				1		1									5	319
320							2		1	1											4	320
321		1								1	1		1								4	321
322						1		1				1									3	322
323									1			1									2	323
324		1							2			1		1							5	324
325								1			2	2	1	2							8	325
326		3																			3	326
327		1							2		1										4	327
328		1																			1	328
329		2							1	1		1									5	329
330		6					1														7	330
331		4																			4	331
332		5																			5	332
333		1	1	1																	3	333
334						1		1	1		1					1					5	334
335										1		1	1								3	335
336												1	2								3	336
337			1	3				1	1	1	1		1	1							10	337
338					1			1				2									4	338
339			1			2	3	1			2										9	339
340																					0	340
341																					0	341
342											1										1	342
343																					0	343
344																					0	344
345		1	1			1															3	345
TOTALS		390	20	30	15	48	66	131	128	115	116	114	73	34	12	8	2	1	1	0	1304	
%/SIZE		29.91	1.53	2.30	1.15	3.68	5.06	10.05	9.82	8.82	8.90	8.74	5.60	2.61	0.92	0.61	0.15	0.08	0.08	0.00	100.00	
#SQ.FT.		3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: Cushing-Briggs/Bartol Island
DATE: 9/10-11/94
SAMPLE NO: 463

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLOT	PLOT NO.
1-345		390	20	30	15	48	66	131	128	115	116	114	73	34	12	8	2	1	1	0	1304	1-345
346		6	1				2	1	1	1											12	346
347																					0	347
348					1	2	1	1		1	2	2	1								11	348
349				3	1	1						1	2								8	349
350										2		1									3	350
351				1		2		2				1	2	1							9	351
352		4				1															5	352
353		3				1	1	1		1	1										8	353
354		6	1				1			1	1										10	354
355							1	1		1	2	3	2								10	355
356		1	3	1		3	4	6	2			1	1								22	356
357		1	1					3			1	1		2							9	357
358			1							1		2		1							5	358
359		5																			5	359
360		7																			7	360
361		6																			6	361
362		4				1	1	1		3		1		1							12	362
363		3			2		1			2	2	3	5	1							19	363
364						4	1		1	1				2	1						10	364
365		4				2	4	3	1				2	3	1						20	365
366		9				1															10	366
367		2																			2	367
368		3			1					2			1								7	368
369		2	1	1	3		2	4	1	4	2		1								21	369
370		1		3	1	2	1	2		1	1										12	370
371			1	1		1	1				2										6	371
372																					0	372
373		1			1	3															5	373
374		8			2	2	5	1	1			2		2							23	374
375		1			2	7		3		1	1										15	375
376		1		1	2	5	3	4	4				1	1	1						23	376
377		4	1	1	3	2	4	3	2	2	2	6	1	1	1	1					34	377
378																					0	378
379		2												1							3	379
380		2												1							3	380
381		4			1	2	4	3	1			2	1		1						19	381
382		2		1	4	2	6	2	1	1	1										20	382
383		2			1	4	1	3	2	5			4			1					23	383
384							1	3	4	2	7	1	1								19	384
385		5	1																		6	385
386		2	3																		5	386
387		5																			5	387
388		2																			2	388
389		1																			1	389
390		1																			1	390
391		5									1										6	391
392		2								1			1								4	392
393		1				1					3		1								6	393
394		1	1		1				3	1	4	2	1								14	394
TOTALS		509	35	43	41	97	111	178	152	149	149	143	101	51	17	10	2	1	1	0	1790	
%/SIZE		28.44	1.96	2.40	2.29	5.42	6.20	9.94	8.49	8.32	8.32	7.99	5.64	2.85	0.95	0.56	0.11	0.06	0.06	0.00	100.00	
#SQ.FT.		4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	

LOCATION: Cushing-Briggs/Bartol Island
DATE: 9/10-11/94
SAMPLE NO: 463

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLOT	PLOT NO.
1-394		509	35	43	41	97	111	178	152	149	149	143	101	51	17	10	2	1	1	0	1790	1-394
395		8				2	1	1	2		6	5				2					29	395
396		1			2	1	1	2	1	6	3	2									19	396
397								1	4	1		1									7	397
398									2	1	3	1	1								8	398
399							2	1					1	1							5	399
400				1	3	5	4	4		4	2	2	1								26	400
401					4	5	3														12	401
402																					0	402
403		1																			1	403
404		1				1							1			1					4	404
405																					0	405
406		2				2	2		1	1	1										9	406
407		1				1	7	6	2		2										21	407
408		1					4	2	1		1				1						10	408
409			1	2	3	4	4	5	5	2	1			1	1				1		30	409
410		6							2	1	1	2	1	1							14	410
411		2				2	1	3			1	2	2	2							15	411
412			1	1	3	4	1	1	1	1			1								14	412
413																					0	413
414								1	1			1		1							4	414
415		1								1											2	415
416						1	1														2	416
417																					0	417
418		4					1														5	418
419		1			1																2	419
420		7					1		1		1		1		2						13	420
421				1			1				1	1									4	421
422							1		1	2		2	1								7	422
423		1						1		1		1		1							5	423
424					2	6	3	5		1	1				1						19	424
425		1			1				1	1	2	1		1							8	425
426					3	2	5	3		1	1	2									17	426
427							2		1		3			1							7	427
428									1			1									2	428
429																					0	429
430			1																		1	430
431																					0	431
432																					0	432
433		1			1		1		1							1					5	433
434		3																			3	434
435		4	1																		5	435
436		2																			2	436
437		2		1	1																4	437
438		2					3			1				2		1					9	438
439		5		1	2		1			1											10	439
440		3			1	1					1				1						7	440
441		2		1		1		3	2	2	1	2			1						15	441
442		2				1	1			1				1							6	442
443						1	1	1	1	1	1		1								7	443
TOTALS		573	39	51	68	137	163	220	183	179	184	169	112	63	24	15	2	1	2	0	2185	
%/SIZE		26.22	1.78	2.33	3.11	6.27	7.46	10.07	8.38	8.19	8.42	7.73	5.13	2.88	1.10	0.69	0.09	0.05	0.09	0.00	100.00	
#SQ.FT.		5	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: Cushing-Briggs/Bartol Island
DATE: 9/10-11/94
SAMPLE NO: 463

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLOT	PLOT NO.
1-443		573	39	51	68	137	163	220	183	179	184	169	112	63	24	15	2	1	2	0	2185	1-443
444		3				4	2							1							10	444
445		2		1	1					1	1	2	2								10	445
446		2					1			1			1	2							7	446
447										1			1								2	447
448		2																			2	448
449		1					1			1											3	449
450		2																			2	450
451		1	1																		2	451
452										1											1	452
453		2	1																		3	453
454				1	1										2						4	454
455			1				1								1						3	455
456		1																1			2	456
457		1			3	4		1													9	457
458		1					1														2	458
459		7			1	1			2			1	1								13	459
460		5		2	2	3	1														13	460
461		6								1			1								8	461
462		3																			3	462
463																					0	463
TOTALS		612	42	55	76	149	170	221	185	185	185	172	118	66	27	15	2	2	2	0	2284	
%SIZE		26.80	1.84	2.41	3.33	6.52	7.44	9.68	8.10	8.10	8.10	7.53	5.17	2.89	1.18	0.66	0.09	0.09	0.09	0.00	100.00	
#/SQ.FT.		5	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: Cushing-Briggs/Bartol Island
DATE: 9/10-11/94
SAMPLE NO: 463
NO. ACRES: 109.3

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	612	26.8	0.0	0	0	0
5-9	0.000	42	1.8	0.0	0	0	0
10-14	0.000	55	2.4	0.0	0	0	0
15-19	0.550	76	3.3	41.8	0	10	0
20-24	1.196	149	6.5	178.2	0	42	0
25-29	2.212	170	7.4	376.0	1	89	0
30-34	3.681	221	9.7	813.5	2	192	0
35-39	5.690	185	8.1	1052.7	2	248	0
40-44	8.327	185	8.1	1540.5	3	363	0
45-49	11.670	185	8.1	2159.0	5	509	0
50-54	15.795	172	7.5	2716.7	6	641	641
55-59	20.818	118	5.2	2456.5	5	580	580
60-64	26.801	66	2.9	1768.9	4	417	417
65-69	33.780	27	1.2	912.1	2	215	215
70-74	41.980	15	0.7	629.7	1	149	149
75-79	51.356	2	0.1	102.7	0	24	24
80-84	61.881	2	0.1	123.8	0	29	29
85-89	74.121	2	0.1	148.2	0	35	35
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		**2284**	**100.0**		**32**	**3544**	**2090**
				% BUSHELS HARVESTABLE			**58.98**

Following-Year Projection [Closed Area - NO Harvesting) "NORMAL" MORTALITY VALUES
SAMPLE NO: 463
NO. ACRES: 109.3

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	306	18.9	168.3	0	40	0
20-24	1.196	21	1.3	25.1	0	6	0
25-29	2.212	28	1.7	60.8	0	14	0
30-34	3.681	38	2.4	139.9	0	33	0
35-39	5.690	89	5.5	508.7	1	120	0
40-44	8.327	136	8.4	1132.5	2	267	0
45-49	11.670	177	10.9	2063.3	4	487	0
50-54	15.795	148	9.2	2337.7	5	552	552
55-59	20.818	157	9.7	3273.6	7	772	772
60-64	26.801	157	9.7	4214.5	9	994	994
65-69	33.780	208	12.9	7022.9	15	1657	1657
70-74	41.980	79	4.9	3321.5	7	784	784
75-79	51.356	41	2.5	2081.5	4	491	491
80-84	61.881	19	1.2	1169.6	3	276	276
85-89	74.121	8	0.5	567.0	1	134	134
>90	87.597	5	0.3	408.2	1	96	96
TOTALS		1616	100.0		62	6724	5757
				% BUSHELS HARVESTABLE			85.62

Following-Year Projection [Open Area - Harvested] "NORMAL" MORTALITY VALUES
SAMPLE NO: 463
NO. ACRES: 109.3

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	306	29.3	168.3	0	40	0
20-24	1.196	21	2.0	25.1	0	6	0
25-29	2.212	28	2.6	60.8	0	14	0
30-34	3.681	38	3.6	139.9	0	33	0
35-39	5.690	89	8.6	508.7	1	120	0
40-44	8.327	136	13.0	1132.5	2	267	0
45-49	11.670	177	16.9	2063.3	4	487	0
50-54	15.795	44	4.3	701.3	2	165	165
55-59	20.818	47	4.5	982.1	2	232	232
60-64	26.801	47	4.5	1264.3	3	298	298
65-69	33.780	63	6.0	2126.8	5	502	502
70-74	41.980	26	2.5	1081.4	2	255	255
75-79	51.356	12	1.2	634.8	1	150	150
80-84	61.881	6	0.6	363.9	1	86	86
85-89	74.121	2	0.2	176.4	0	42	42
>90	87.597	1	0.1	126.1	0	30	30
TOTALS		1044	100.0		25	2727	1760
				% BUSHELS HARVESTABLE			64.53

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

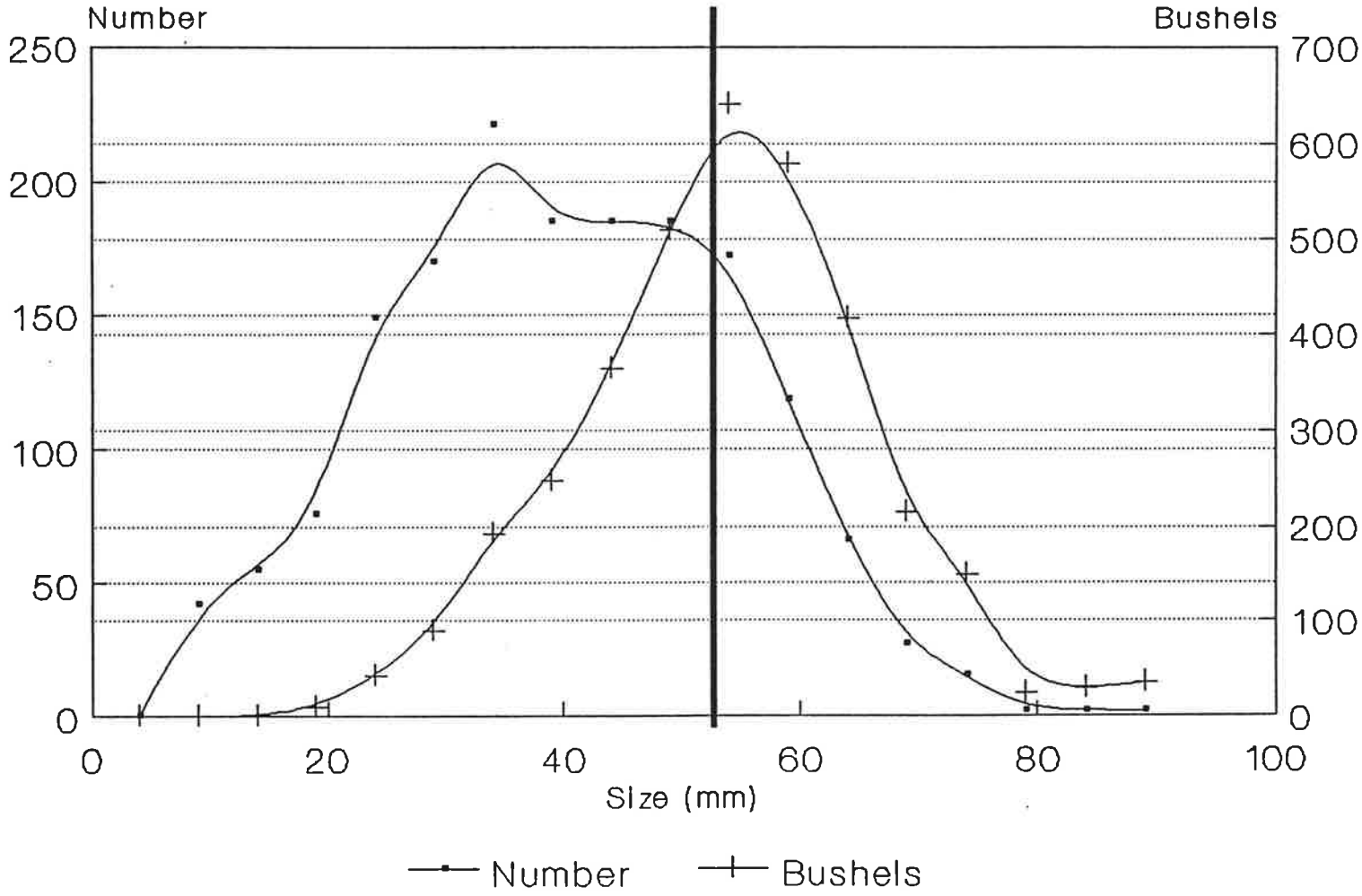
LOCATION: Cushing-Briggs/Bartol Island
DATE: 9/10-11/94
SAMPLE NO: 463
NO. ACRES: 109.3

	PRICE ($)/BUSHEL							
	$30	$40	$50	$55	$60	$70	$80	$90
CURRENT YEAR	$62,709	$83,611	$104,514	$114,966	$125,417	$146,320	$167,223	$188,126
PROJ. (NO HARVEST)	172,697	230,263	287,829	316,612	345,395	402,961	460,526	518,092
PROJ. (HARVESTED)	52,787	70,383	87,979	96,777	105,575	123,171	140,767	158,362

	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
CURRENT YEAR						
$30	$94,063	$125,417	$156,771	$188,126	$219,480	$250,834
$40	125,417	167,223	209,029	250,834	292,640	334,446
$50	156,771	209,029	261,286	313,543	365,800	418,057
$55	172,449	229,932	287,414	344,897	402,380	459,863
$60	188,126	250,834	313,543	376,252	438,960	501,669
$70	219,480	292,640	365,800	438,960	512,120	585,280
$80	250,834	334,446	418,057	501,669	585,280	668,892
$90	282,189	376,252	470,314	564,377	658,440	752,503

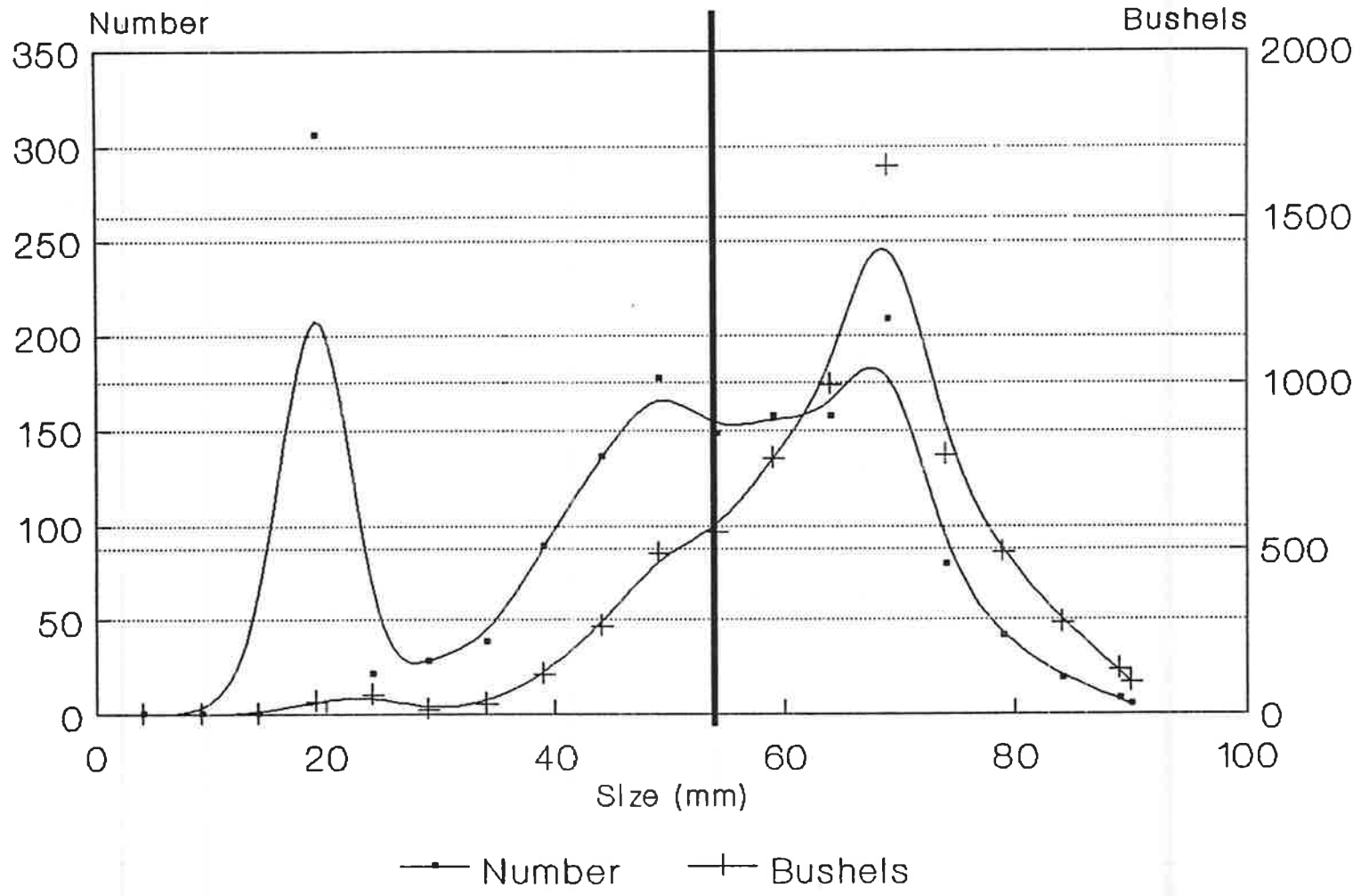
	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
PROJ. [HARVESTED]						
$30	$79,181	$105,575	$131,969	$158,362	$184,756	$211,150
$40	105,575	140,767	175,958	211,150	246,342	281,533
$50	131,969	175,958	219,948	263,937	307,927	351,916
$55	145,166	193,554	241,943	290,331	338,720	387,108
$60	158,362	211,150	263,937	316,725	369,512	422,300
$70	184,756	246,342	307,927	369,512	431,098	492,683
$80	211,150	281,533	351,916	422,300	492,683	563,066
$90	237,544	316,725	395,906	475,087	554,268	633,450

Cushing-Briggs/Bartol Island
Freeport, Maine

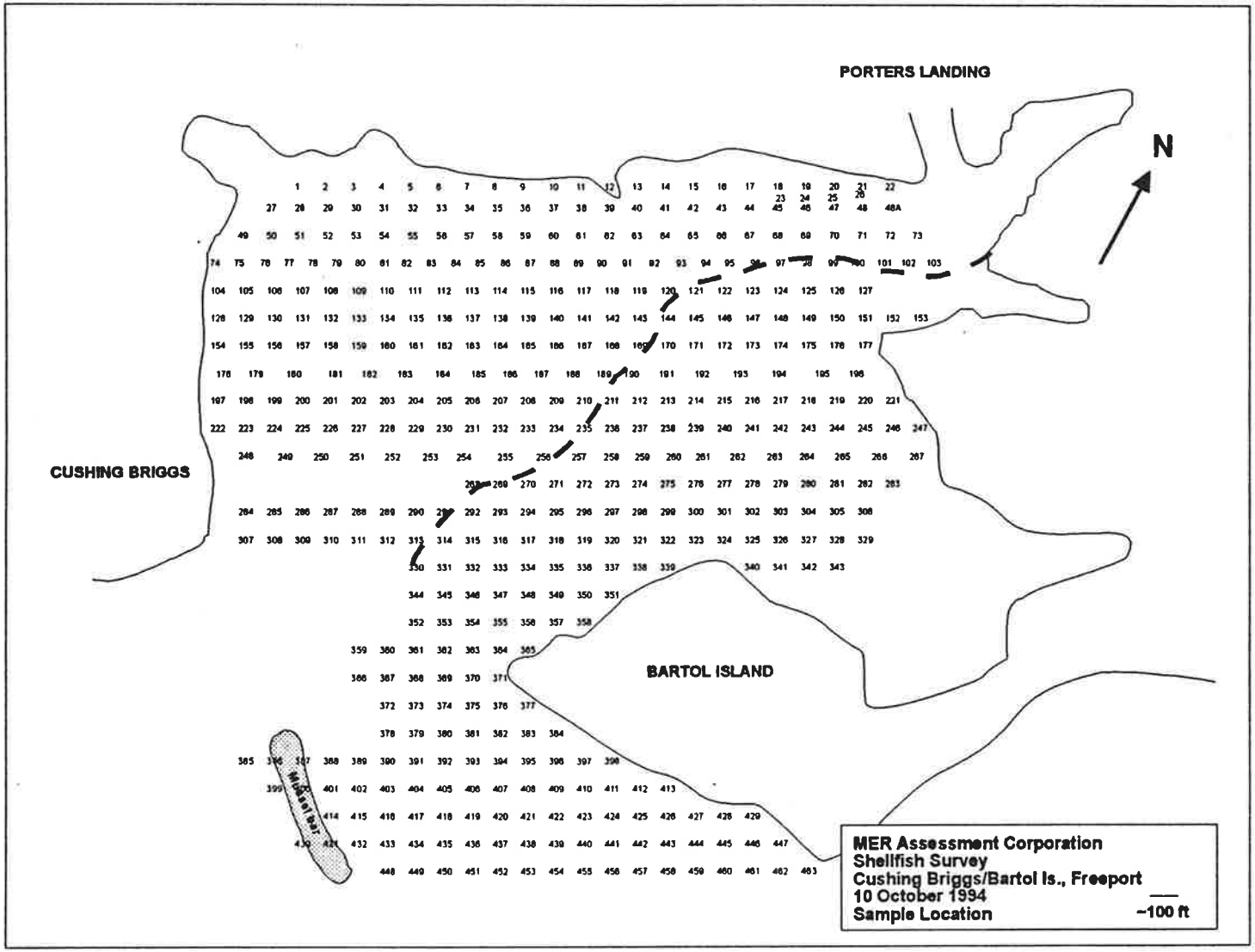


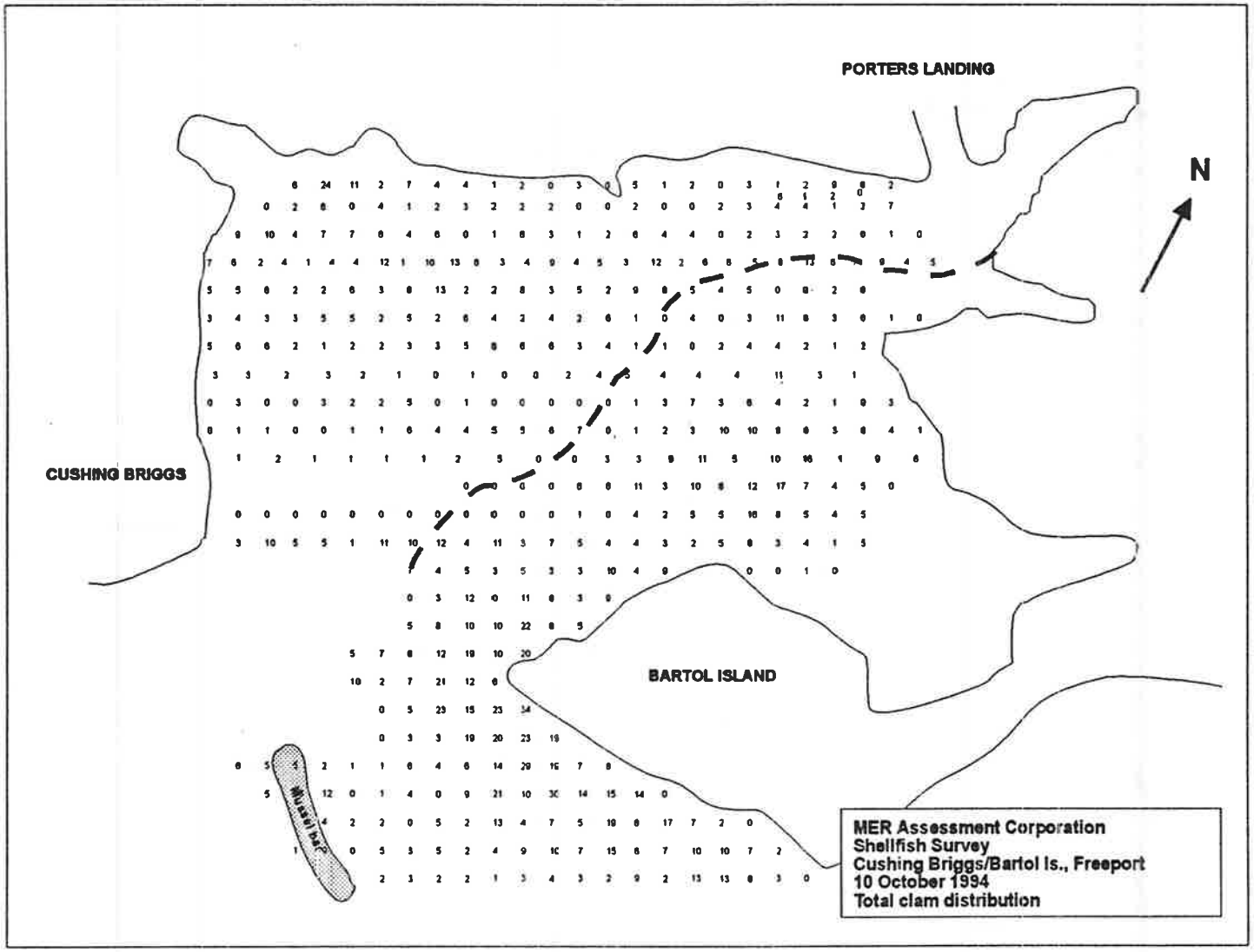
September 1994 NO 0-4mm shown

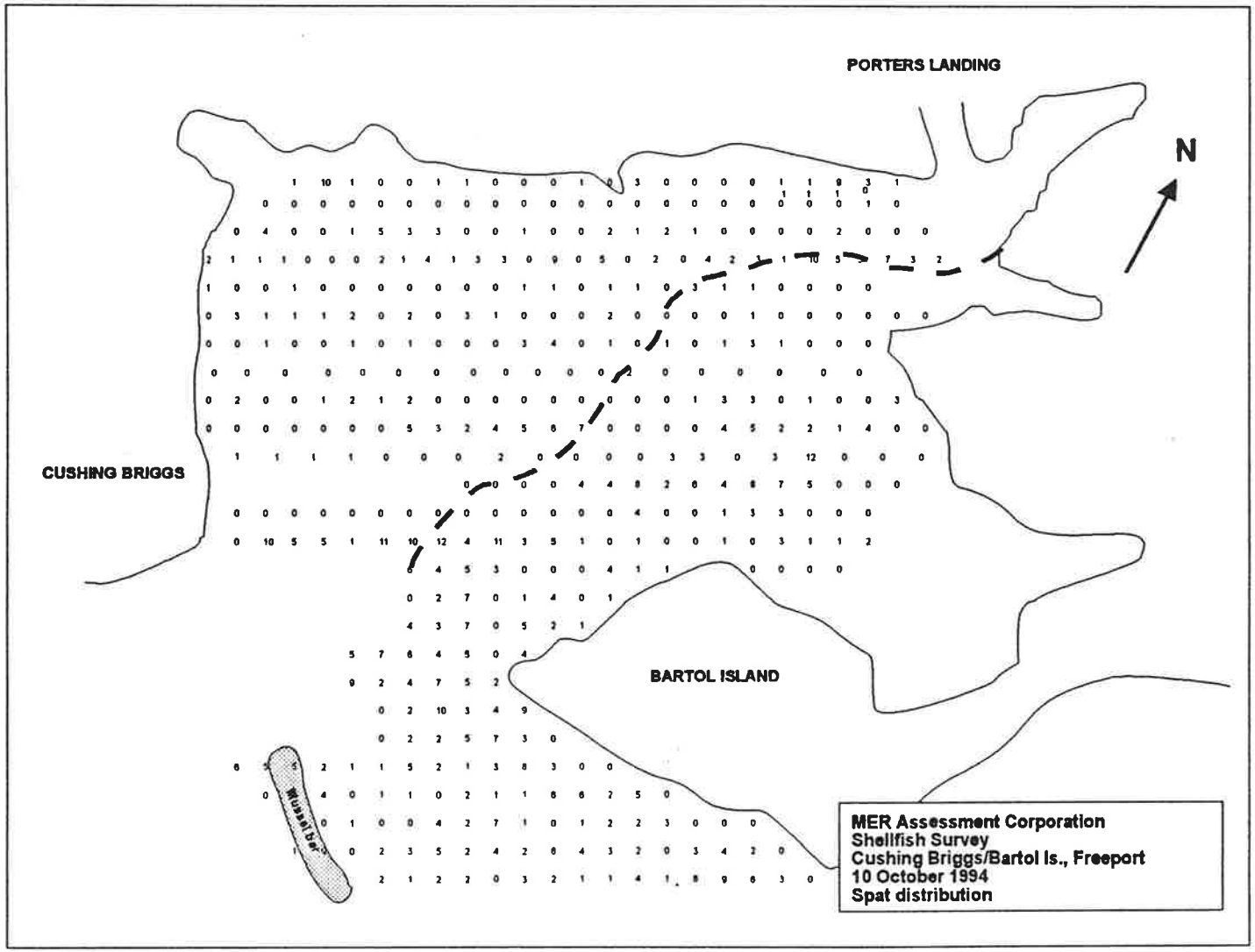
Cushing-Briggs/Bartol Island
Freeport, Maine



1996 Production Projection If Closed


PORTERS LANDING
N
CUSHING BRIGGS
BARTOL ISLAND
Mullet Bar
MER Assessment Corporation
Shellfish Survey
Cushing Briggs/Bartol Is., Freeport
10 October 1994
Sample Location
~100 ft


PORTERS LANDING
N
CUSHING BRIGGS
BARTOL ISLAND
Mussel bar
MER Assessment Corporation
Shellfish Survey
Cushing Briggs/Bartol Is., Freeport
10 October 1994
Total clam distribution


PORTERS LANDING
N
CUSHING BRIGGS
BARTOL ISLAND
Wupatki
MER Assessment Corporation
Shellfish Survey
Cushing Briggs/Bartol Is., Freeport
10 October 1994
Spat distribution

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: CELIA'S
DATE: 9/11/94
SAMPLE NO: 159

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLOT	PLOT NO.
1												1									1	1
2																					0	2
3																					0	3
4								1													1	4
5						2															2	5
6			2	3																	5	6
7							1														1	7
8												1		1	1						3	8
9					1							1	1	1		1					5	9
10														1							1	10
11																					0	11
12																					0	12
13																					0	13
14												1	1								2	14
15					1																1	15
16							1							1							2	16
17																					0	17
18												2		1							3	18
19												1									1	19
20									2	2	1				1						6	20
21						1		1			1										3	21
22												1	1								2	22
23																					0	23
24												1		1							2	24
25																					0	25
26			1						1		1										3	26
27					4	1		2	6	4											17	27
28									4	1				1							6	28
29									3	1				1	1						6	29
30					1	2	1														4	30
31			2		1						1	1		1							6	31
32				1	1																2	32
33						1									1						2	33
34			1																		1	34
35																					0	35
36						1	1		1			1	1	1							6	36
37					1		1		2						1						5	37
38				1				1			1										3	38
39		1		1				3		1	2		2	1							11	39
40					1	4	2	5	3	1	1	1	4								22	40
41								2													2	41
42			1	2	1	1	2	2	2	4			1								16	42
43					1	1															2	43
44																					0	44
45							1	1													2	45
46																					0	46
47							1														1	47
48																					0	48
49							1														1	49
50								1		1	1										3	50
TOTALS		1	7	8	13	14	12	19	24	15	9	12	11	11	5	1	0	0	0	0	162	
%/SIZE		0.62	4.32	4.94	8.02	8.64	7.41	11.73	14.81	9.26	5.56	7.41	6.79	6.79	3.09	0.62	0.00	0.00	0.00	0.00	100	
#SQ.FT.		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	

MER ASSESSMENT CORPORATION
CLAIM RESOURCE SURVEY

LOCATION: CELIA'S
DATE: 9/11/94
SAMPLE NO: 159

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLOT	PLOT NO.
1-50		1	7	8	13	14	12	19	24	15	9	12	11	11	5	1	0	0	0	0	162	1-50
51											1										1	51
52																					0	52
53											1										1	53
54											1										1	54
55																					0	55
56																					0	56
57									1	1											2	57
58			1		1									1							3	58
59					2		3				1										6	59
60					1		1	2	1		2	1	1								9	60
61								1	1		2										4	61
62				1	2				1	1											5	62
63							1			1	1										3	63
64		2				1															3	64
65		3									2					1					6	65
66		1				1															2	66
67						3	3														6	67
68						1	3	2				1									7	68
69								1			1				1						3	69
70										1											1	70
71											2										2	71
72							1	1	2	2	1	2	1								10	72
73					2	1	3														6	73
74						1					1										2	74
75						1			1				1								3	75
76											1										1	76
77																					0	77
78											1		1								2	78
79																					0	79
80				2			1														3	80
81				1	2																3	81
82																					0	82
83										2		1									3	83
84									1					1		1	1				4	84
85		3				1	1														5	85
86																					0	86
87			1	1			2		1												5	87
88																					0	88
89								1	1												2	89
90				1	1	1															3	90
91							1														1	91
92		1				2	2														5	92
93		1				3	2														6	93
94								1	1	1											3	94
95			1																		1	95
96				1					1	1											3	96
97										2				1							3	97
98												1				1					2	98
99																					0	99
TOTALS		12	10	15	24	30	36	28	36	27	27	18	15	14	6	4	1	0	0	0	303	
%/SIZE		3.96	3.30	4.95	7.92	9.90	11.88	9.24	11.88	8.91	8.91	5.94	4.95	4.62	1.98	1.32	0.33	0.00	0.00	0.00	100.00	
#/SQ.FT.		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: CELIA'S
DATE: 9/11/94
SAMPLE NO: 159

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLOT	PLOT NO.
1-99		12	10	15	24	30	36	28	36	27	27	18	15	14	6	4	1	0	0	0	303	1-99
100						1	1			1	1										4	100
101						1		1			1										3	101
102			1				1	3	1		1										7	102
103		2					1		2	1											6	103
104						1						1		1							3	104
105		1	1																		2	105
106																					0	106
107																					0	107
108							2														2	108
109				1										1							2	109
110											2		1								3	110
111											1										1	111
112											1										1	112
113																					0	113
114																					0	114
115																					0	115
116																					0	116
117																					0	117
118					1			2													3	118
119																					0	119
120																					0	120
121				2	2			1	2	1		1	1	2							12	121
122		7	2																		9	122
123		2																			2	123
124		5																			5	124
125																					0	125
126		1																			1	126
127		2																			2	127
128		2																			2	128
129		4																			4	129
130									1												1	130
131																					0	131
132																					0	132
133																					0	133
134																					0	134
135																					0	135
136																					0	136
137																					0	137
138																					0	138
139		1																			1	139
140																					0	140
141																					0	141
142																					0	142
143																					0	143
144			1																		1	144
145															1						1	145
146																					0	146
147																					0	147
148																					0	148
TOTALS		39	15	18	27	33	41	35	42	30	34	20	17	18	7	4	1	0	0	0	381	
%/SIZE		10.24	3.94	4.72	7.09	8.66	10.76	9.19	11.02	7.87	8.92	5.25	4.46	4.72	1.84	1.05	0.26	0.00	0.00	0.00	100.00	
#/SQ.FT.		1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: CELIA'S
DATE: 9/11/94
SAMPLE NO: 159

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLOT	PLOT NO.
1-148		39	15	18	27	33	41	35	42	30	34	20	17	18	7	4	1	0	0	0	381	1-148
149																					0	149
150																					0	150
151																					0	151
152																					0	152
153			1																		1	153
154																					0	154
155																					0	155
156		3																			3	156
157			1																		1	157
158																					0	158
159		1																			1	159
TOTALS		43	17	18	27	33	41	35	42	30	34	20	17	18	7	4	1	0	0	0	387	
%/SIZE		11.11	4.39	4.65	6.98	8.53	10.59	9.04	10.85	7.75	8.79	5.17	4.39	4.65	1.81	1.03	0.26	0.00	0.00	0.00	100.00	
#/SQ.FT.		1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: CELIA'S
DATE: 9/11/94
SAMPLE NO: 159
NO. ACRES: 33.5

CLAM SIZE in mm	CONV.FA	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	43	5.2	0.0	0.0	0	0
5-9	0.000	17	4.4	0.0	0.0	0	0
10-14	0.000	18	4.7	0.0	0.0	0	0
15-19	0.550	27	7.0	14.9	0.1	3	0
20-24	1.196	33	8.5	39.5	0.2	8	0
25-29	2.212	41	10.6	90.7	0.6	19	0
30-34	3.681	35	9.0	128.8	0.8	27	0
35-39	5.690	42	10.9	239.0	1.5	50	0
40-44	8.327	30	7.8	249.8	1.6	53	0
45-49	11.670	34	8.8	396.8	2.5	84	0
50-54	15.795	20	5.2	315.9	2.0	67	67
55-59	20.818	17	4.4	353.9	2.2	75	75
60-64	26.801	18	4.7	482.4	3.0	102	102
65-69	33.780	7	1.8	236.5	1.5	50	50
70-74	41.980	4	1.0	167.9	1.1	35	35
75-79	51.356	1	0.3	51.4	0.3	11	11
80-84	61.881	0	0.0	0.0	0.0	0	0
85-89	74.121	0	0.0	0.0	0.0	0	0
>90	87.597	0	0.0	0.0	0.0	0	0
TOTALS		387	94.1		17.4	583	339
				% BUSHELS HARVESTABLE			58.10

Following-Year Projection [Closed Area - NO Harvesting] "NORMAL" MORTALITY VALUES
SAMPLE NO: 159
NO. ACRES. 33.5

CLAM SIZE in mm	CONV.FA	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	10	3.7	5.5	0	1	0
20-24	1.196	9	3.2	10.2	0	2	0
25-29	2.212	9	3.3	19.9	0	4	0
30-34	3.681	14	5.0	49.7	0	10	0
35-39	5.690	20	7.4	112.7	1	24	0
40-44	8.327	33	12.2	273.1	2	58	0
45-49	11.670	28	10.4	326.8	2	69	0
50-54	15.795	34	12.5	530.7	3	112	112
55-59	20.818	26	9.5	530.9	3	112	112
60-64	26.801	29	10.8	774.5	5	163	163
65-69	33.780	26	9.5	866.5	5	183	183
70-74	41.980	15	5.6	631.8	4	133	133
75-79	51.356	11	4.1	559.3	4	118	118
80-84	61.881	5	1.8	306.3	2	65	65
85-89	74.121	2	0.8	166.8	1	35	35
>90	87.597	0	0.2	37.7	0	8	8
TOTALS		269	100.0		33	1096	928
				% BUSHELS HARVESTABLE			84.66

Following-Year Projection [Open Area - Harvested] "NORMAL" MORTALITY VALUES
SAMPLE NO: 159
NO. ACRES: 33.5

CLAM SIZE in mm	CONV.FA	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	10	6.0	5.5	0	1	0
20-24	1.196	9	5.1	10.2	0	2	0
25-29	2.212	9	5.4	19.9	0	4	0
30-34	3.681	14	8.1	49.7	0	10	0
35-39	5.690	20	11.9	112.7	1	24	0
40-44	8.327	33	19.7	273.1	2	58	0
45-49	11.670	28	16.8	326.8	2	69	0
50-54	15.795	10	6.1	159.2	1	34	34
55-59	20.818	8	4.6	159.3	1	34	34
60-64	26.801	9	5.2	232.4	1	49	49
65-69	33.780	8	4.7	262.8	2	55	55
70-74	41.980	5	2.9	205.7	1	43	43
75-79	51.356	3	2.0	170.5	1	36	36
80-84	61.881	2	0.9	95.3	1	20	20
85-89	74.121	1	0.4	51.9	0	11	11
>90	87.597	0	0.1	12.3	0	3	3
TOTALS		166	100.0		14	452	284
				% BUSHELS HARVESTABLE			62.84

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

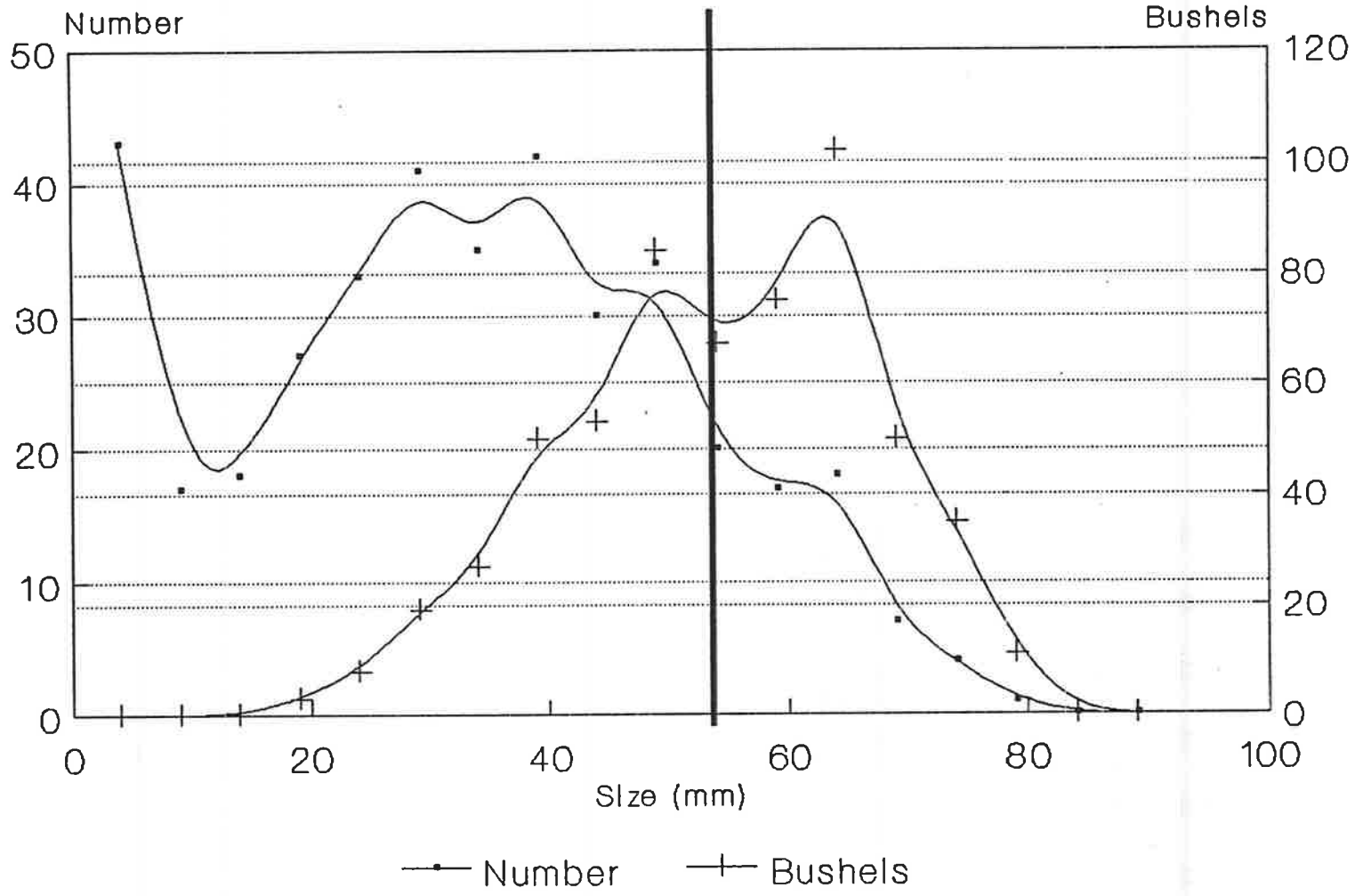
LOCATION: CELIA'S
DATE: 9/11/94
SAMPLE NO: 159
NO. ACRES: 33.5

	PRICE ($)/BUSHEL							
	$30	$40	$50	$55	$60	$70	$80	$90
CURRENT YEAR	$10,164	$13,551	$16,939	$18,633	$20,327	$23,715	$27,103	$30,491
PROJ. (NO HARVEST)	27,839	37,119	46,398	51,038	55,678	64,958	74,238	83,517
PROJ. (HARVESTED)	8,529	11,371	14,214	15,636	17,057	19,900	22,743	25,586

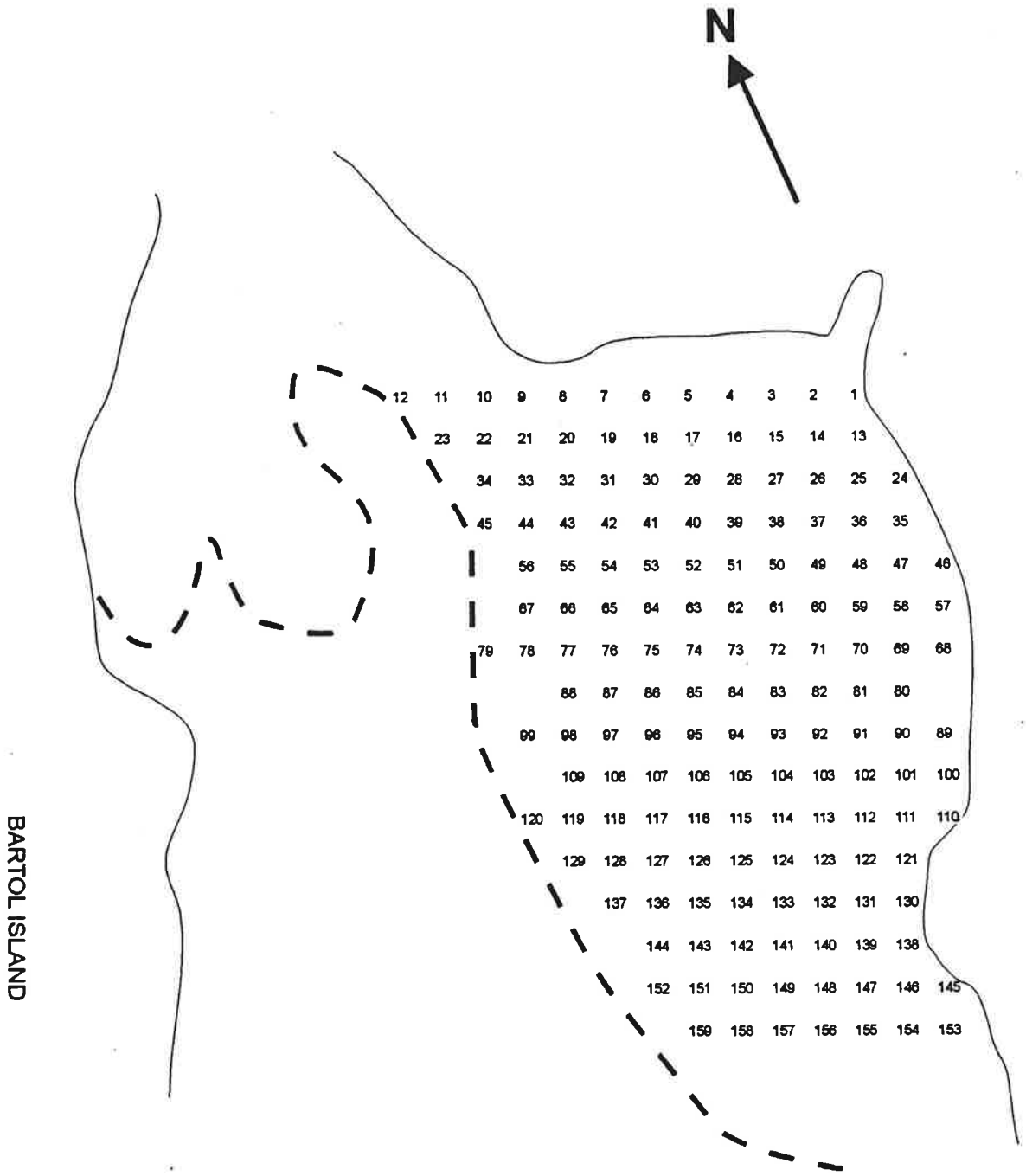
	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
CURRENT YEAR						
$30	$15,245	$20,327	$25,409	$30,491	$35,572	$40,654
$40	20,327	27,103	33,878	40,654	47,430	54,205
$50	25,409	33,878	42,348	50,818	59,287	67,757
$55	27,950	37,266	46,583	55,899	65,216	74,532
$60	30,491	40,654	50,818	60,981	71,145	81,308
$70	35,572	47,430	59,287	71,145	83,002	94,860
$80	40,654	54,205	67,757	81,308	94,860	108,411
$90	45,736	60,981	76,226	91,472	106,717	121,962

	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
PROJ. (HARVESTED)						
$30	$12,793	$17,057	$21,321	$25,586	$29,850	$34,114
$40	17,057	22,743	28,429	34,114	39,800	45,486
$50	21,321	28,429	35,536	42,643	49,750	56,857
$55	23,454	31,271	39,089	46,907	54,725	62,543
$60	25,586	34,114	42,643	51,171	59,700	68,228
$70	29,850	39,800	49,750	59,700	69,650	79,600
$80	34,114	45,486	56,857	68,228	79,600	90,971
$90	38,378	51,171	63,964	76,757	89,550	102,343

"Celia's" Cove - East Bartol
Freeport, Maine

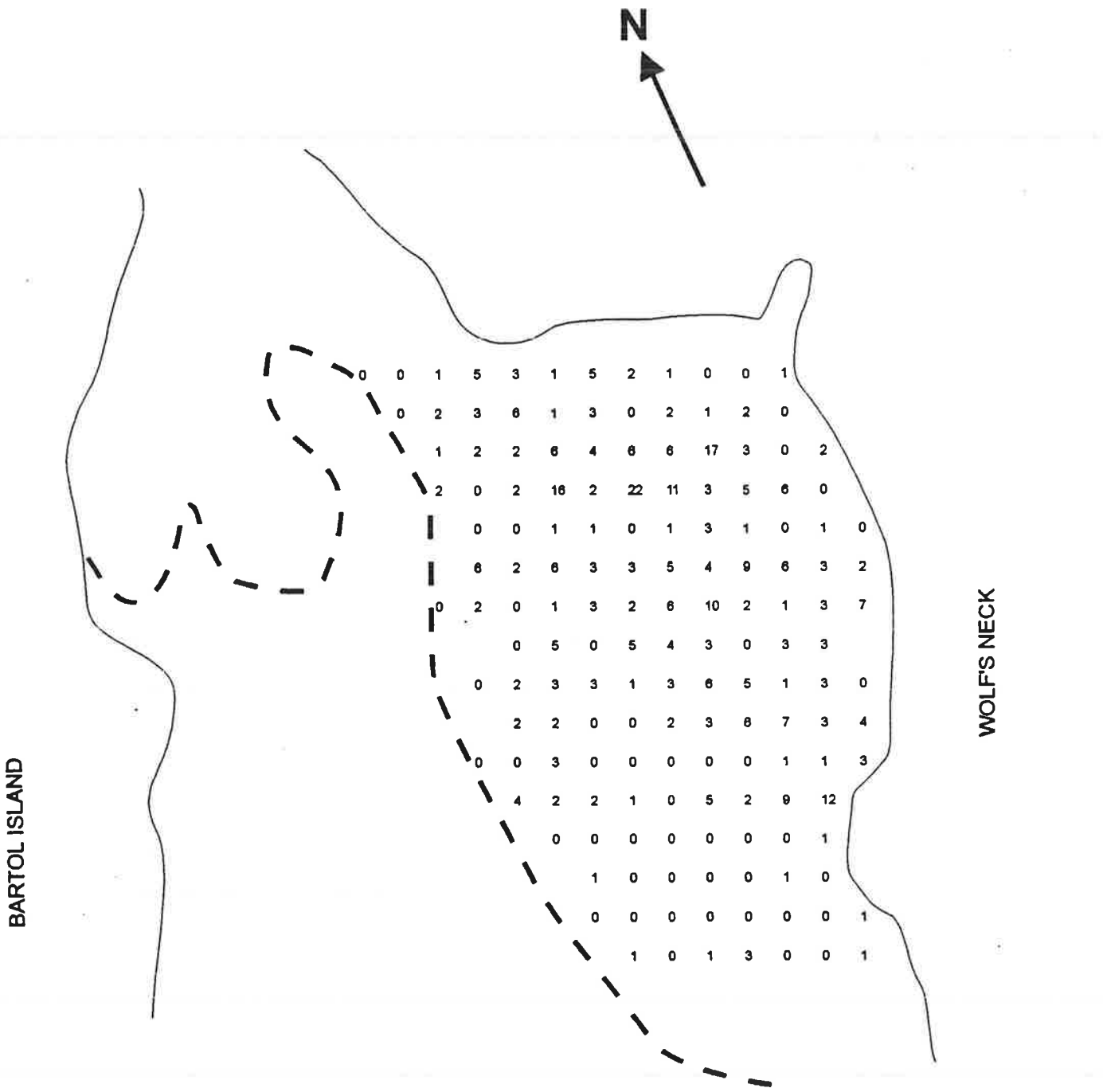


September 1994



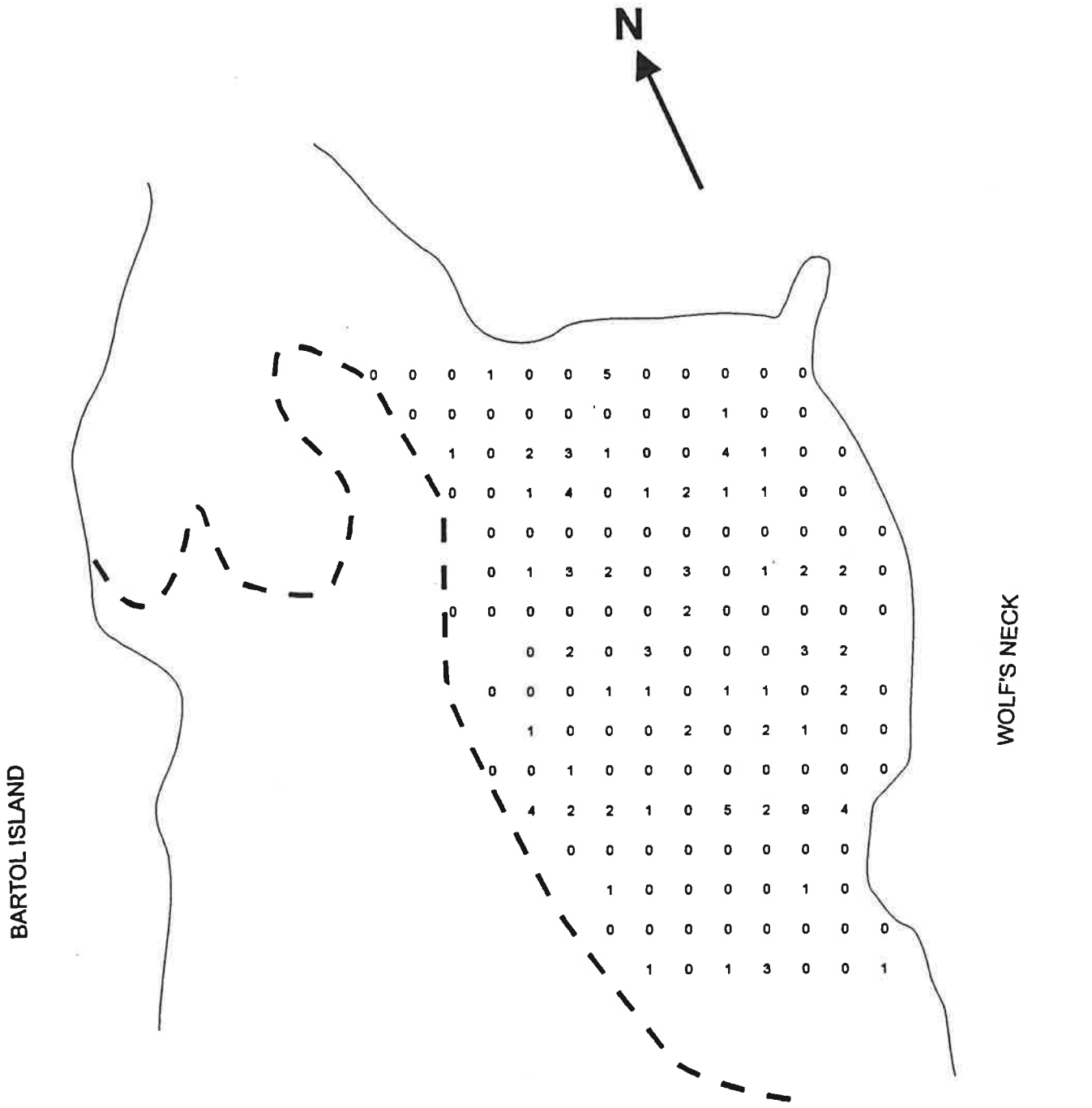
MER Assessment Corporation
Shellfish Survey
"Celia's" Cove, Freeport
11 Septemer 1994
Sample Location

~100 ft



MER Assessment Corporation
Shellfish Survey
"Celia's" Cove, Freeport
11 September 1994
Total clam distribution

~100 ft



MER Assessment Corporation
Shellfish Survey
"Celia's" Cove, Freeport
11 September 1994
Spat distribution

~100 ft

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: COLLINS
DATE: 10-9-94
SAMPLE NO 202

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLOT	PLOT NO.
1																					0	1
2		1					1	1													3	2
3		1																			1	3
4		1						1	1		1		1								5	4
5		1			1	2	1	2					2								9	5
6								2	1												3	6
7							1	1				1		1							4	7
8		2							1	1		1	1								6	8
9		1					1	3													5	9
10		11								2	2	1		1							17	10
11		3						1		1	1	3									9	11
12		4								1	1	1	2	2							11	12
13		1						1													2	13
14													2	1							3	14
15		6								1				1							8	15
16		1						1							1						3	16
17			2	1							1										4	17
18							1														1	18
19		2								1	1		1								5	19
20				2																	2	20
21		1									1										2	21
22		1		1								1	1								4	22
23					1								1								2	23
24		1		3					1												5	24
25		1	1			1		2	1		1										7	25
26		1						1			1	2	1								6	26
27				3	1	1		1	4	1	1	1									13	27
28					1	3	1	4	1												10	28
29		2	1					1		1	1										6	29
30		1							1				1								3	30
31				1				1	1	1		1	1								6	31
32											2		1	1							4	32
33		1						1	1		1		1								5	33
34		1									2	2	1	1	1						8	34
35				1	1					1					1						4	35
36				1	1	1					1										4	36
37		1						1	1												3	37
38		1				1															2	38
39		1									1										2	39
40		1																			1	40
41											1										1	41
42											1										1	42
43									1	1					1						3	43
44										1		1		1							3	44
45								1	1	1							1				4	45
46					1		1		1					1							4	46
47										1											1	47
48								1						1	1						3	48
49						1	1	1													3	49
50										1	1										2	50
TOTALS		49	4	13	7	10	8	28	17	16	22	15	17	11	5	0	1	0	0	0	223	
%/SIZE		21.97	1.79	5.83	3.14	4.48	3.59	12.56	7.62	7.17	9.87	6.73	7.62	4.93	2.24	0.00	0.45	0.00	0.00	0.00	100	
#/SQ.FT.		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: COLLINS
DATE: 10-9-94
SAMPLE NO 202

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLOT	PLOT NO.
1-50		49	4	13	7	10	8	28	17	16	22	15	17	11	5	0	1	0	0	0	223	1-50
51								1.00	1	4			1.00								7	51
52								1	4	2	2										9	52
53							1	1	2	1	1										6	53
54									1	2	1	1									5	54
55									3												3	55
56							2		1	4	1										8	56
57							1	1	1	1	1										5	57
58		1	1								1										3	58
59		1							1	1											3	59
60							1			3											4	60
61		2	1																		3	61
62		1		1		1															3	62
63		1				1															2	63
64						1	1	1													3	64
65				2																	2	65
66							2		1												3	66
67										1											1	67
68																					0	68
69									1	1											2	69
70								2	1		2										5	70
71					1	1	2	1	3	1											9	71
72								3	1												4	72
73											2										2	73
74						1	1	1	2												5	74
75									1												1	75
76										1											1	76
77						1			1												2	77
78								1			1	1									3	78
79											1										1	79
80																					0	80
81																					0	81
82								1			1										2	82
83																					0	83
84																					0	84
85															1						1	85
86																					0	86
87													1								1	87
88			1								1			1							3	88
89													1	1	1						3	89
90												2									2	90
91											2										2	91
92		1							1				1								3	92
93												1		1							2	93
94		3						1													4	94
95		1				2		1			1		1								6	95
96					1		1	1		1			1	3							8	96
97																					0	97
98		1														1					2	98
99		1																			1	99
TOTALS		62	7	16	9	18	20	45	43	39	40	20	23	17	7	1	1	0	0	0	368	
%SIZE		16.85	1.90	4.35	2.45	4.89	5.43	12.23	11.68	10.60	10.87	5.43	6.25	4.62	1.90	0.27	0.27	0.00	0.00	0.00	100.00	
#SQ.FT.		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: COLLINS
DATE: 10-9-94
SAMPLE NO 202

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLOT	PLOT NO.
1-99		62	7	16	9	18	20	45	43	39	40	20	23	17	7	1	1	0	0	0	368	1-99
100		1																			1	100
101		1			1	1							1								4	101
102																					0	102
103		1							1			1			1						4	103
104																					0	104
105		2	1																		3	105
106		4																			4	106
107		5																			5	107
108		8																			8	108
109		5																			5	109
110		5				2	1					1									9	110
111		5					2			1	3	1		1							13	111
112				1		1					1			1							4	112
113		3						1	1	1	1										7	113
114		2				1		1		2		1									7	114
115		1									3			1	1						6	115
116							3	1			1	1									6	116
117				1		2			1	1	1		1								7	117
118				1		1	1							1							4	118
119		7				1					1										9	119
120		6																			6	120
121		5																			5	121
122		10																			10	122
123		5										1									6	123
124		5						1			1		3	1	1	1					13	124
125		1			1																2	125
126		2							1	1	1				1						6	126
127																					0	127
128		1																			1	128
129		3																			3	129
130		3								1						1					5	130
131		7	2				1					1									11	131
132		3						1		1	1	1		2	1						10	132
133		2				1	1	1			1		1								7	133
134							1	1				1	1					1			5	134
135		3		1	3	1	4	2	1			1	1								17	135
136		1				5	10		2		2	2									22	136
137		12			1	1	2			1	1		1								19	137
138		4		1	1	5	3	4	2		2	1									23	138
139		1			1	2	2	1		3	1	3									14	139
140		1	2			1	2				2										8	140
141			2	1					4	1	2	2	1								13	141
142								2					2								4	142
143																					0	143
144				2						1	3		1								7	144
145			1	2	1			1	1			3									9	145
146		1																			1	146
147		4																			4	147
148		7																			7	148
TOTALS		199	15	26	18	43	53	62	57	53	68	41	36	24	12	3	1	1	0	0	712	
%/SIZE		27.95	2.11	3.65	2.53	6.04	7.44	8.71	8.01	7.44	9.55	5.76	5.06	3.37	1.69	0.42	0.14	0.14	0.00	0.00	100.00	
#SQ.FT.		4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: COLLINS
DATE: 10-9-94
SAMPLE NO 202

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLOT	PLOT NO.
1-148		199	15	26	18	43	53	62	57	53	68	41	36	24	12	3	1	1	0	0	712	1-148
149		3								1											4	149
150		13				1			1	1											16	150
151		7		1							1					1					10	151
152		4			1		1			1		2		1							10	152
153		4					2	1						1							8	153
154		4				1		1													6	154
155		13			1		4	3			1			2							24	155
156		16				3	6	5	4	2	2				1						41	156
157		3		1							2		1								7	157
158		4			1	2	3	3	1	2											16	158
159		2						1	1	1											5	159
160									2	2			1								5	160
161				1					2		1	1									5	161
162								2				1	1								4	162
163				1					1	1											3	163
164										1	1	1	1								4	164
165																					0	165
166									1												1	166
167																					0	167
168																					0	168
169																					0	169
170															1						1	170
171														1							1	171
172																1					1	172
173		2							1			1									4	173
174		3								2		1	1	1							8	174
175		1					2		3	1	1										8	175
176		1									1	1		1							4	176
177		3			1		1			1	1			1							8	177
178		3					3	1	3												10	178
179		2																			2	179
180						1		2	1	1	1										6	180
181		3							1		3	1	2								10	181
182							1		1	2		2			1						7	182
183										1											1	183
184		4												1							5	184
185		3								1	1	3	1								9	185
186		3							1		1	1		2			1				9	186
187						1	2		2		1		1	1							8	187
188								3		1	3										7	188
189		2																			2	189
190		2										1									3	190
191							3		1	2	3	1	2		2						14	191
192		2				1	2	1	1	2	2	1			2						14	192
193		13					2		1	2	1			1		1					21	193
194								1													1	194
195						1	1	2			2			2							8	195
196												1									1	196
197						1		1	1				1								4	197
TOTALS		319	15	30	22	55	88	89	87	81	97	60	48	39	19	6	2	1	0	0	1058	
%/SIZE		30.15	1.42	2.84	2.08	5.20	8.32	8.41	8.22	7.66	9.17	5.67	4.54	3.69	1.80	0.57	0.19	0.09	0.00	0.00	100.00	
#SQ.FT.		6	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: COLLINS
DATE: 10-9-94
SAMPLE NO 202

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLOT	PLOT NO.
1-197		319	15	30	22	55	68	89	87	81	97	60	48	39	19	6	2	1	0	0	1058	1-197
198					1		2	2	1		1										7	198
199									6	1				1							8	199
200						1	2	2	4		1										10	200
201		1		3	1	3			2	3	1										14	201
202							5	3	4		3	2	1								18	202
TOTALS		320	15	33	24	59	97	96	104	85	103	62	49	40	19	6	2	1	0	0	1115	
%/SIZE		28.70	1.35	2.96	2.15	5.29	8.70	8.61	9.33	7.62	9.24	5.56	4.39	3.59	1.70	0.54	0.18	0.09	0.00	0.00	100.00	
#/SQ.FT.		6	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: COLLINS
DATE: 10-9-94
SAMPLE NO 202
NO. ACRES: 22.7

CLAM SIZE in mm	CONV.FA	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	320	28.7	0.0	0	0	0
5-9	0.000	15	1.3	0.0	0	0	0
10-14	0.000	33	3.0	0.0	0	0	0
15-19	0.550	24	2.2	13.2	0	1	0
20-24	1.196	59	5.3	70.6	0	8	0
25-29	2.212	97	8.7	214.6	1	24	0
30-34	3.681	96	8.6	353.4	2	40	0
35-39	5.690	104	9.3	591.8	3	66	0
40-44	8.327	85	7.6	707.8	4	80	0
45-49	11.670	103	9.2	1202.0	6	135	0
50-54	15.795	62	5.6	979.3	5	110	110
55-59	20.818	49	4.4	1020.1	5	115	115
60-64	26.801	40	3.6	1072.0	5	120	120
65-69	33.780	19	1.7	641.8	3	72	72
70-74	41.980	6	0.5	251.9	1	28	28
75-79	51.356	2	0.2	102.7	1	12	12
80-84	61.881	1	0.1	61.9	0	7	7
85-89	74.121	0	0.0	0.0	0	0	0
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		1115	100.0		36.1	818.4	464.1
				% BUSHELS HARVESTABLE			56.70

Following-Year Projection [Closed Area - NO Harvesting "NORMAL" MORTALITY VALUES
SAMPLE NO 202
NO. ACRES: 22.7

CLAM SIZE in mm	CONV.FA	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	160	20.3	88.0	0	10	0
20-24	1.196	8	1.0	9.0	0	1	0
25-29	2.212	17	2.1	36.5	0	4	0
30-34	3.681	12	1.5	44.2	0	5	0
35-39	5.690	35	4.5	201.4	1	23	0
40-44	8.327	78	9.9	646.2	3	73	0
45-49	11.670	77	9.8	896.3	4	101	0
50-54	15.795	83	10.6	1314.1	7	148	148
55-59	20.818	72	9.2	1504.1	7	169	169
60-64	26.801	88	11.1	2346.4	12	264	264
65-69	33.780	78	9.9	2629.8	13	296	296
70-74	41.980	38	4.9	1606.6	8	181	181
75-79	51.356	26	3.3	1322.4	7	149	149
80-84	61.881	11	1.4	696.2	3	78	78
85-89	74.121	4	0.5	266.8	1	30	30
>90	87.597	2	0.2	158.6	1	18	18
TOTALS		787	100.0		68	1547	1331
				% BUSHELS HARVESTABLE			86.04

Following-Year Projection [Open Area - Harvested] "NORMAL" MORTALITY VALUES
SAMPLE NO 202
NO. ACRES: 22.7

CLAM SIZE in mm	CONV.FA	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	160	31.5	88.0	0	10	0
20-24	1.196	8	1.5	9.0	0	1	0
25-29	2.212	17	3.2	36.5	0	4	0
30-34	3.681	12	2.4	44.2	0	5	0
35-39	5.690	35	7.0	201.4	1	23	0
40-44	8.327	78	15.3	646.2	3	73	0
45-49	11.670	77	15.1	896.3	4	101	0
50-54	15.795	25	4.9	394.2	2	44	44
55-59	20.818	22	4.3	451.2	2	51	51
60-64	26.801	26	5.2	703.9	3	79	79
65-69	33.780	24	4.8	797.2	4	90	90
70-74	41.980	12	2.5	523.1	3	59	59
75-79	51.356	8	1.5	403.7	2	45	45
80-84	61.881	4	0.7	216.6	1	24	24
85-89	74.121	1	0.2	83.0	0	9	9
>90	87.597	1	0.1	49.9	0	6	6
TOTALS		508	100.0		27	623	407
				% BUSHELS HARVESTABLE			65.34

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

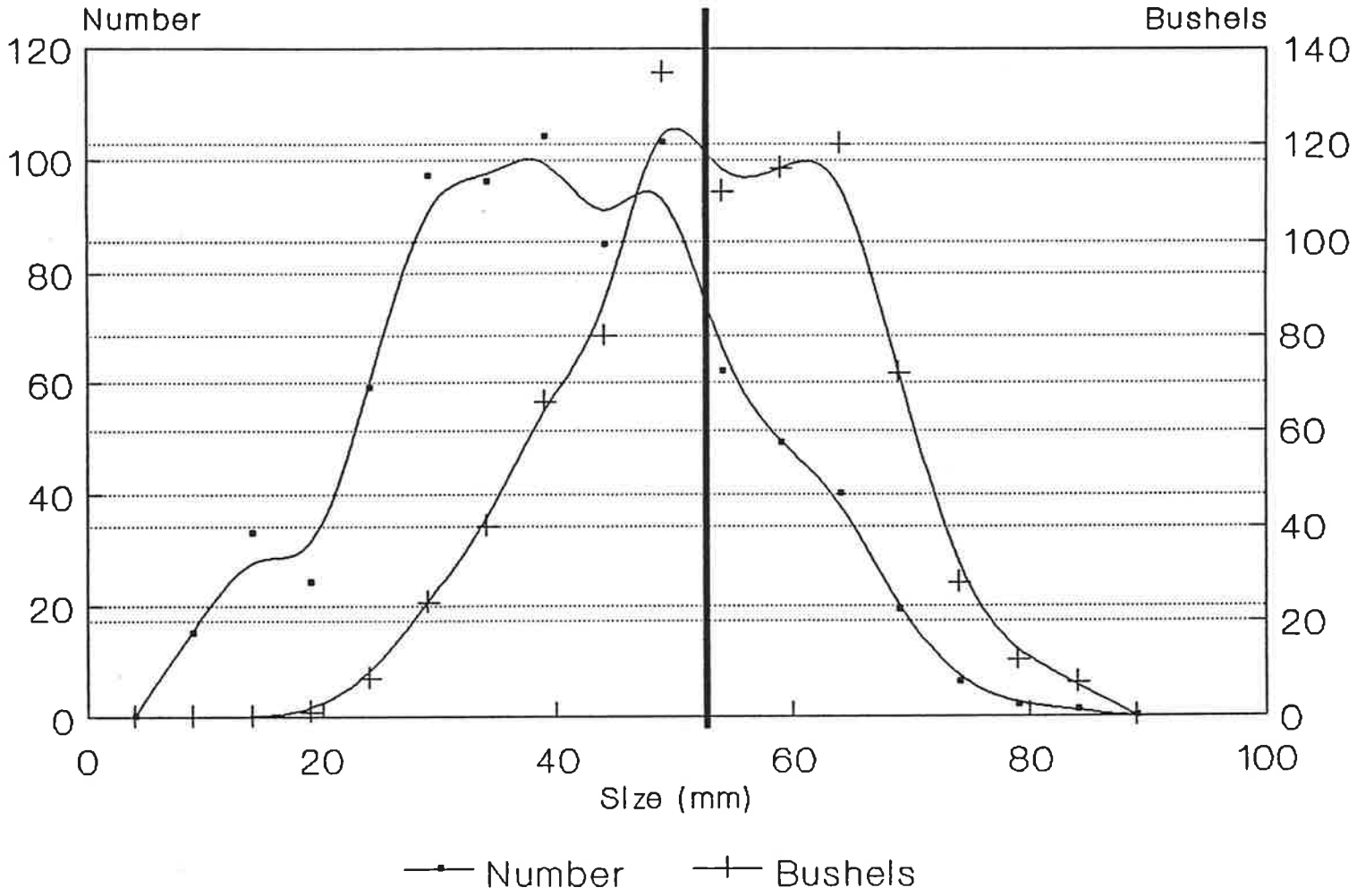
LOCATION: COLLINS
DATE: 10-9-94
SAMPLE NO 202
NO. ACRES: 22.7

	PRICE ($)/BUSHEL							
	$30	$40	$50	$55	$60	$70	$80	$90
CURRENT YEAR	$13,922	$18,563	$23,204	$25,524	$27,845	$32,486	$37,126	$41,767
PROJ. (NO HARVEST)	39,933	53,244	66,555	73,210	79,866	93,177	106,488	119,799
PROJ. (HARVESTED)	12,214	16,285	20,356	22,392	24,427	28,499	32,570	36,641

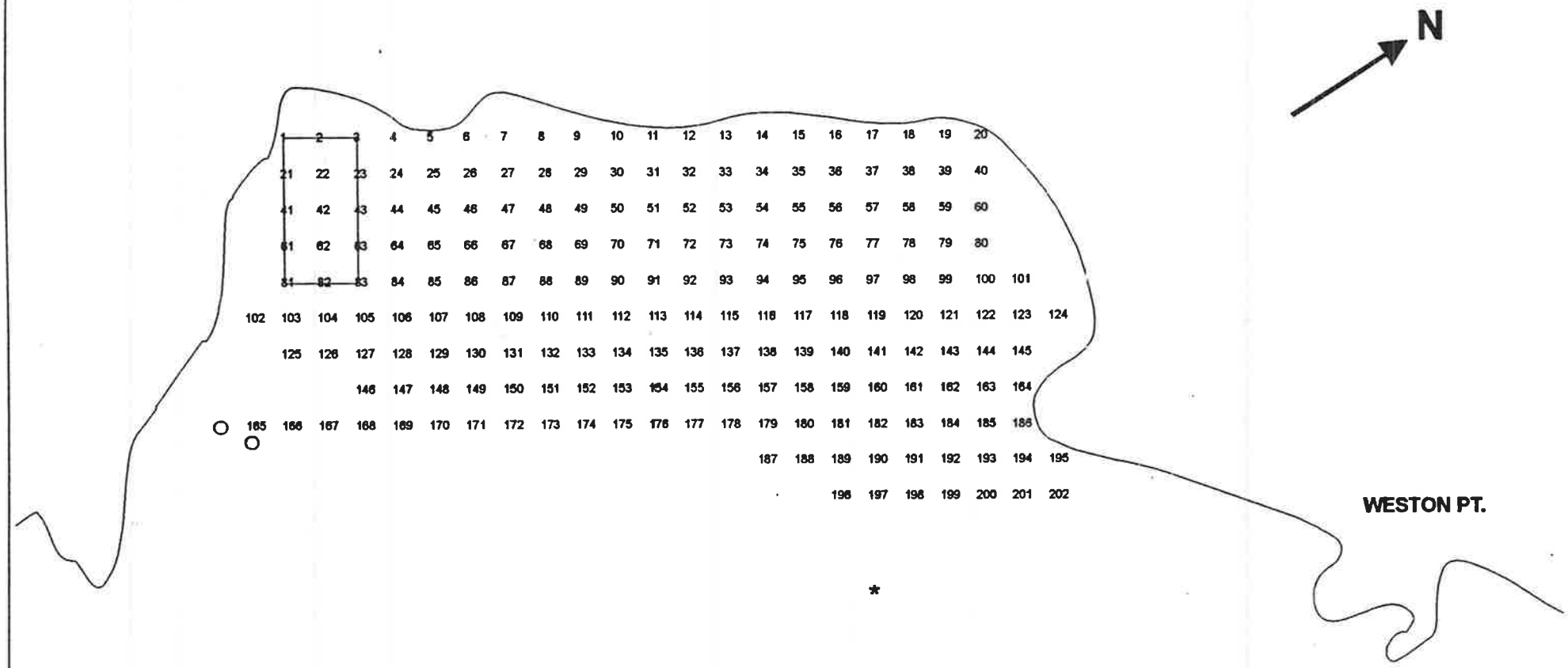
	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
CURRENT YEAR						
$30	$20,884	$27,845	$34,806	$41,767	$48,728	$55,690
$40	27,845	37,126	46,408	55,690	64,971	74,253
$50	34,806	46,408	58,010	69,612	81,214	92,816
$55	38,287	51,049	63,811	76,573	89,336	102,098
$60	41,767	55,690	69,612	83,535	97,457	111,379
$70	48,728	64,971	81,214	97,457	113,700	129,943
$80	55,690	74,253	92,816	111,379	129,943	148,506
$90	62,651	83,535	104,418	125,302	146,185	167,069

	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
PROJ. [HARVESTED]						
$30	$18,321	$24,427	$30,534	$36,641	$42,748	$48,855
$40	24,427	32,570	40,712	48,855	56,997	65,140
$50	30,534	40,712	50,891	61,069	71,247	81,425
$55	33,588	44,784	55,980	67,176	78,371	89,567
$60	36,641	48,855	61,069	73,282	85,496	97,710
$70	42,748	56,997	71,247	85,496	99,745	113,995
$80	48,855	65,140	81,425	97,710	113,995	130,280
$90	54,962	73,282	91,603	109,924	128,244	146,565

Collins Cove
Freeport, Maine



October 1994 NO 0-4mm

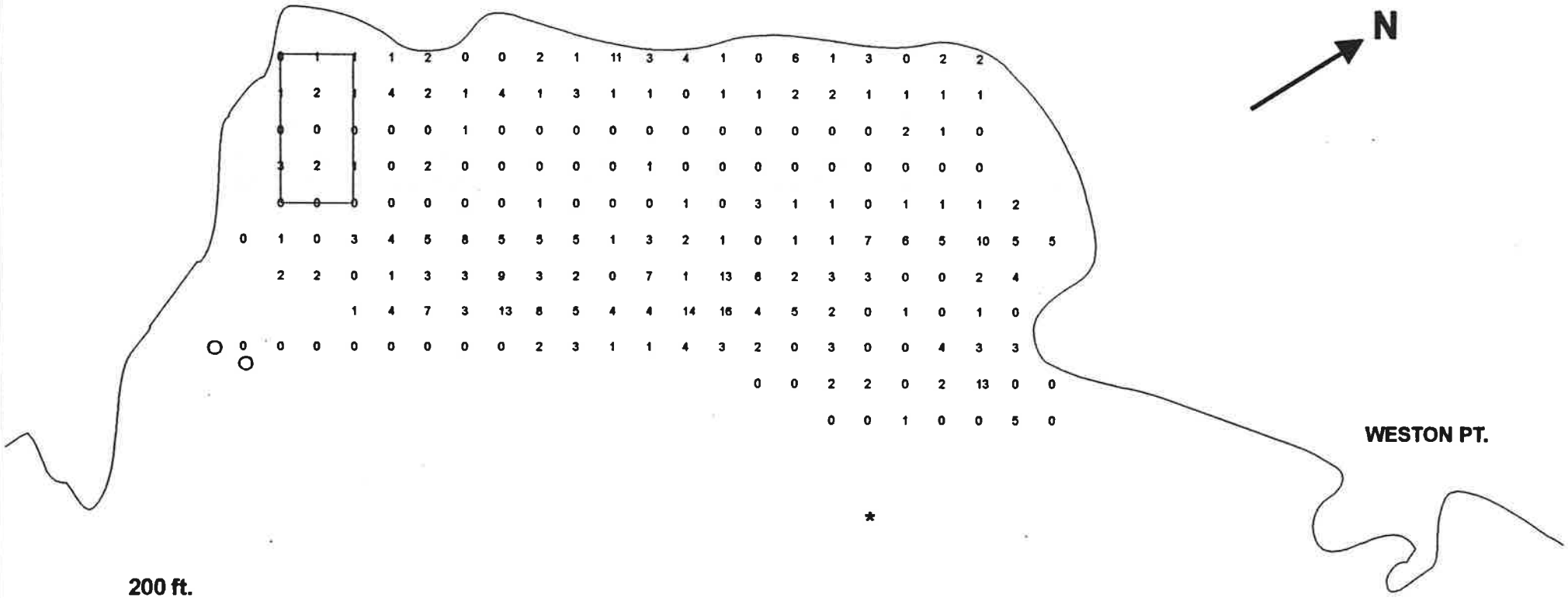


200 ft.

200 ft.

Rectangle represents a 200 ft. by 200 ft. grid. This representation is used for ease of presenting results. Sampling interval was 100 ft. on the horizontal transects, only 50 ft. on the vertical transects.

MER Assessment Corporation
Shellfish Survey
Collins Cove, Freeport
09 October 1994
Sample Location

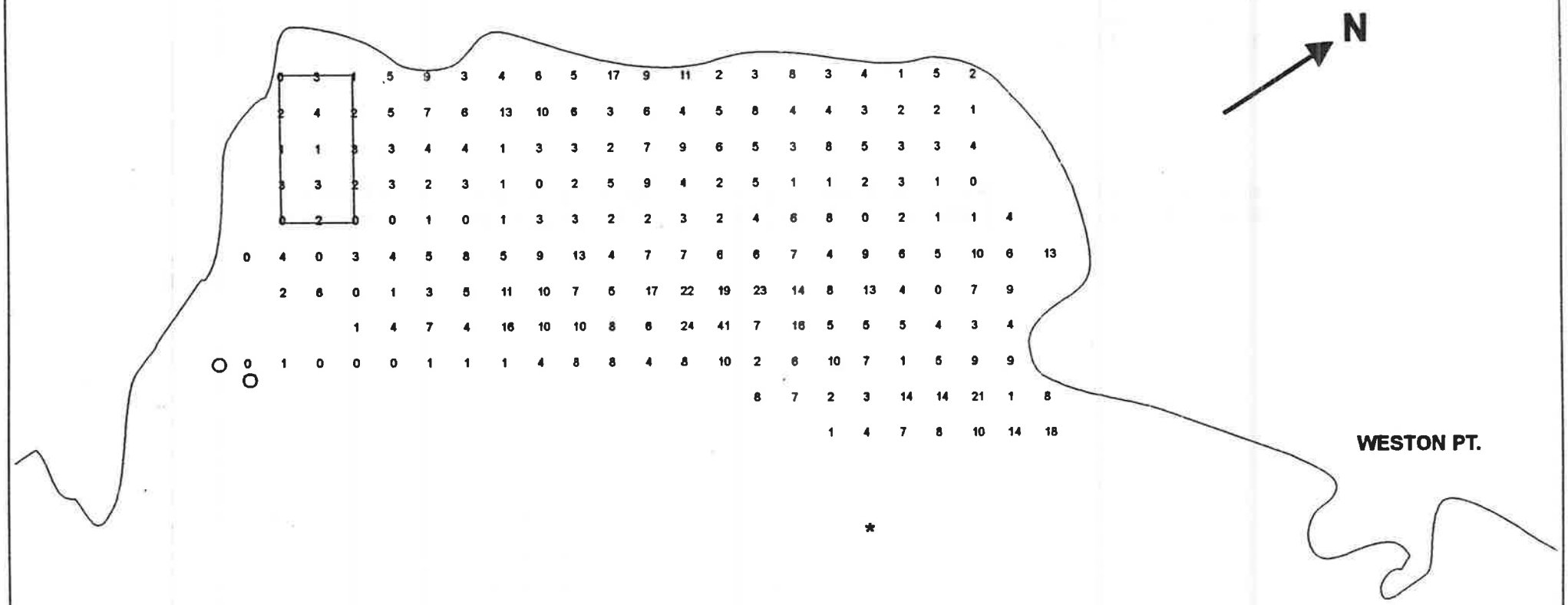


200 ft.

200 ft.

Rectangle represents a 200 ft. by 200 ft. grid. This representation is used for ease of presenting results. Sampling interval was 100 ft. on the horizontal transects, only 50 ft. on the vertical transects.

MER Assessment Corporation
Shellfish Survey
Collins Cove, Freeport
09 October 1994
Spat distribution



200 ft.

200 ft.

Rectangle represents a 200 ft. by 200 ft. grid. This representation is used for ease of presenting results. Sampling interval was 100 ft. on the horizontal transects, only 50 ft. on the vertical transects.

MER Assessment Corporation
Shellfish Survey
Collins Cove, Freeport
09 October 1994
Total clam distribution

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: BRICKYARD COVE
DATE: 10-10-94
SAMPLE NO: 49

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLOT	PLOT NO.
1						1								1	1						3	1
2					1			2	3	4	1			1	1	1					14	2
3		1						1	2	1		1									6	3
4								2			3										5	4
5					1			2	4	1	2										10	5
6				1	1			3	4	3	1	1									14	6
7				1					1	1	1	1	2								7	7
8			1	5	2	3	3	2													16	8
9					1																1	9
10		1		1	1	2	1				1					1			1		9	10
11			4	11	13	17	6				1										52	11
12				4	7	7	10	15	1												44	12
13																					0	13
14								2		1	1	1	4	1			1				11	14
15								1	1	1	2				1	1	1				8	15
16								1	1	3	2	1		1							9	16
17		1			1			2		5	2		1								12	17
18		3						1		5	1	2	1		1	1					15	18
19		3		1	2		5	6	3	12	8	3	1			1					45	19
20		1							3	3	4	2	4	1		1					19	20
21		1																			1	21
22																					0	22
23																					0	23
24		2			1	1	6	2	2	1											15	24
25		25	25	30			1	1	2	1	1										86	25
26		8				2	6	3													19	26
27									2												2	27
28								2	6	3											11	28
29								3	2	1	1										7	29
30						1	1	3	6	2				1							14	30
31		1					2	2													5	31
32		1																			1	32
33																					0	33
34																					0	34
35																					0	35
36		1		6	12	7	4														30	36
37		2	1	7	14	10	3	2	1												40	37
38		1					1	2													4	38
39			1	1																	2	39
40							3	6	4		2		1		1						17	40
41				1	5	5	10	5	8	1	1	1			2	1	1				41	41
42				1	3	1				1											6	42
43			4	13	20	6	6	1													50	43
44					3	2	8														13	44
45																					0	45
46				1																	1	46
47		2			2		1														5	47
48							1	6	4			3		2		1					19	48
49						4	2	10	15	7	3	2	1								44	49
TOTALS		54	36	84	90	69	80	90	75	57	38	18	15	8	7	8	3	0	1	0	733	
%SIZE		7.37	4.91	11.46	12.28	9.41	10.91	12.28	10.23	7.78	5.18	2.46	2.05	1.09	0.95	1.09	0.41	0.00	0.14	0.00	100	
#SQ.FT.		4	3	7	7	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	7	

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: BRICKYARD COVE
DATE: 10-10-94
SAMPLE NO: 49
NO. ACRES: 7.5

CLAM SIZE in mm	CONV.FA	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	54	7.4	0.0	0	0	0
5-9	0.000	36	4.9	0.0	0	0	0
10-14	0.000	84	11.5	0.0	0	0	0
15-19	0.550	90	12.3	49.5	1	8	0
20-24	1.196	69	9.4	82.5	2	13	0
25-29	2.212	80	10.9	177.0	4	27	0
30-34	3.681	90	12.3	331.3	7	51	0
35-39	5.690	75	10.2	426.8	9	65	0
40-44	8.327	57	7.8	474.6	10	73	0
45-49	11.670	38	5.2	443.5	9	68	0
50-54	15.795	18	2.5	284.3	6	44	44
55-59	20.818	15	2.0	312.3	6	48	48
60-64	26.801	8	1.1	214.4	4	33	33
65-69	33.780	7	1.0	236.5	5	36	36
70-74	41.980	8	1.1	335.8	7	51	51
75-79	51.356	3	0.4	154.1	3	24	24
80-84	61.881	0	0.0	0.0	0	0	0
85-89	74.121	1	0.1	74.1	2	11	11
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		733	100.0		73.4	550.5	246.7
				% BUSHELS HARVESTABLE			44.81

Following-Year Projection [Closed Area - NO Harvesting) "NORMAL" MORTALITY VALUES
SAMPLE NO: 49
NO. ACRES: 7.5

CLAM SIZE in mm	CONV.FA	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	27	5.4	14.9	0	2	0
20-24	1.196	18	3.6	21.5	0	3	0
25-29	2.212	42	8.3	92.9	2	14	0
30-34	3.681	45	8.9	165.6	3	25	0
35-39	5.690	41	8.2	235.6	5	36	0
40-44	8.327	64	12.7	532.9	11	82	0
46-49	11.670	72	14.3	840.2	17	129	0
50-54	15.795	60	11.9	947.7	19	145	145
55-59	20.818	48	9.6	1008.6	21	154	154
60-64	26.801	32	6.4	865.7	18	133	133
65-69	33.780	23	4.6	775.3	16	119	119
70-74	41.980	10	2.0	415.2	8	64	64
75-79	51.356	7	1.3	338.4	7	52	52
80-84	61.881	7	1.3	417.7	9	64	64
85-89	74.121	5	1.0	366.9	7	56	56
>90	87.597	2	0.4	196.2	4	30	30
TOTALS		504	100.0		148	1107	816
				% BUSHELS HARVESTABLE			73.69

Following-Year Projection [Open Area - Harvested] "NORMAL" MORTALITY VALUES
SAMPLE NO: 49
NO. ACRES: 7.5

CLAM SIZE in mm	CONV.FA	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	27	7.3	14.9	0	2	0
20-24	1.196	18	4.9	21.5	0	3	0
25-29	2.212	42	11.4	92.9	2	14	0
30-34	3.681	45	12.2	165.6	3	25	0
35-39	5.690	41	11.2	235.6	5	36	0
40-44	8.327	64	17.4	532.9	11	82	0
45-49	11.670	72	19.6	840.2	17	129	0
50-54	15.795	18	4.9	284.3	6	44	44
55-59	20.818	15	3.9	302.6	6	46	46
60-64	26.801	10	2.6	259.7	5	40	40
65-69	33.780	7	1.9	235.1	5	36	36
70-74	41.980	3	0.9	135.2	3	21	21
75-79	51.356	2	0.5	103.7	2	16	16
80-84	61.881	2	0.6	130.0	3	20	20
85-89	74.121	2	0.4	114.1	2	17	17
>90	87.597	1	0,2	62.2	1	10	10
TOTALS		368	100.0		72	540	249
				% BUSHELS HARVESTABLE			46.08

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

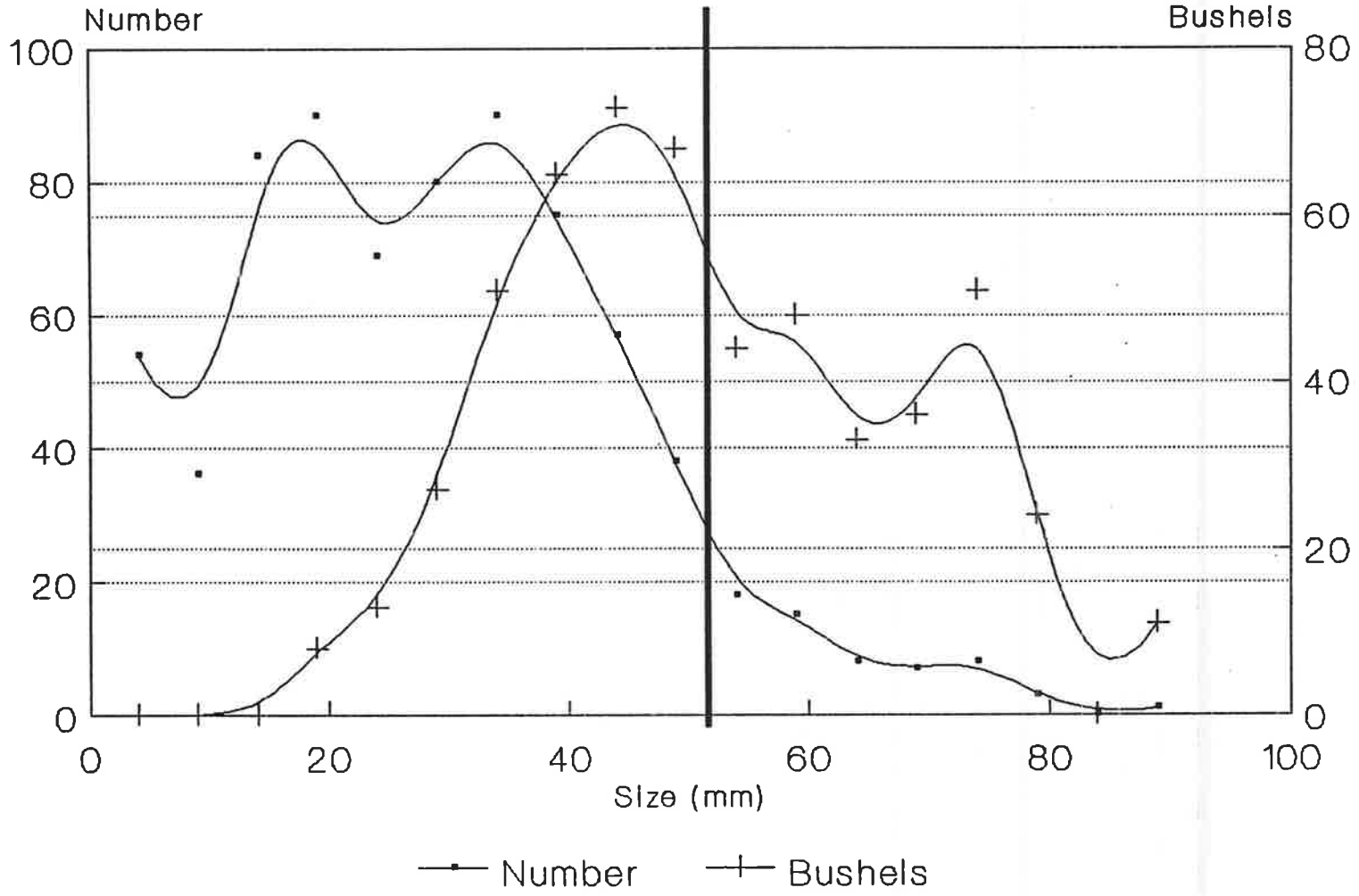
LOCATION: BRICKYARD COVE
DATE: 10-10-94
SAMPLE NO: 49
NO. ACRES: 7.5

	PRICE ($)/BUSHEL							
	$30	$40	$50	$55	$60	$70	$80	$90
CURRENT YEAR	$7,400	$9,866	$12,333	$13,566	$14,799	$17,266	$19,732	$22,199
PROJ. (NO HARVEST)	24,482	32,643	40,804	44,884	48,964	57,125	65,286	73,447
PROJ. (HARVESTED)	7,471	9,961	12,451	13,696	14,941	17,431	19,921	22,412

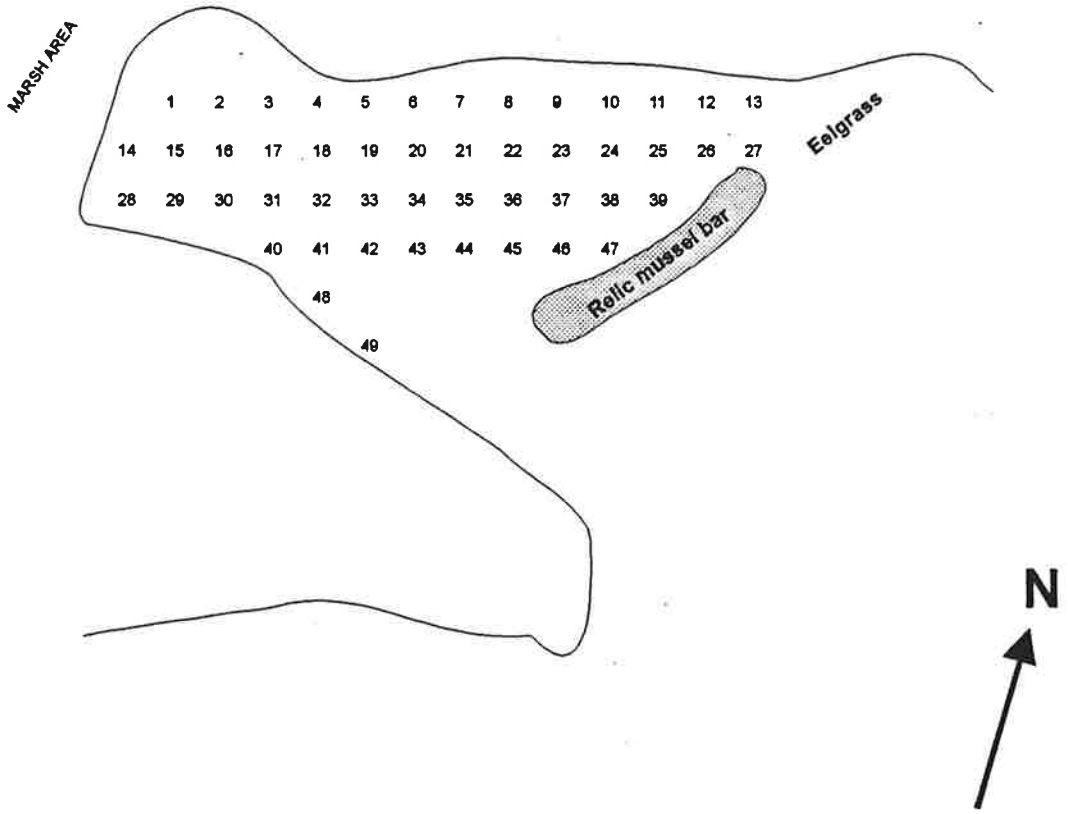
	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
CURRENT YEAR						
$30	$11,099	$14,799	$18,499	$22,199	$25,899	$29,599
$40	14,799	19,732	24,665	29,599	34,532	39,465
$50	18,499	24,665	30,832	36,998	43,165	49,331
$55	20,349	27,132	33,915	40,698	47,481	54,264
$60	22,199	29,599	36,998	44,398	51,797	59,197
$70	25,899	34,532	43,165	51,797	60,430	69,063
$80	29,599	39,465	49,331	59,197	69,063	78,929
$90	33,298	44,398	55,497	66,597	77,696	88,796

	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
PROJ. [HARVESTED]						
$30	$11,206	$14,941	$18,676	$22,412	$26,147	$29,882
$40	14,941	19,921	24,902	29,882	34,862	39,843
$50	18,676	24,902	31,127	37,353	43,578	49,804
$55	20,544	27,392	34,240	41,088	47,936	54,784
$60	22,412	29,882	37,353	44,823	52,294	59,764
$70	26,147	34,862	43,578	52,294	61,009	69,725
$80	29,882	39,843	49,804	59,764	69,725	79,686
$90	33,617	44,823	56,029	67,235	78,441	89,646

Brickyard Cove
Freeport, Maine

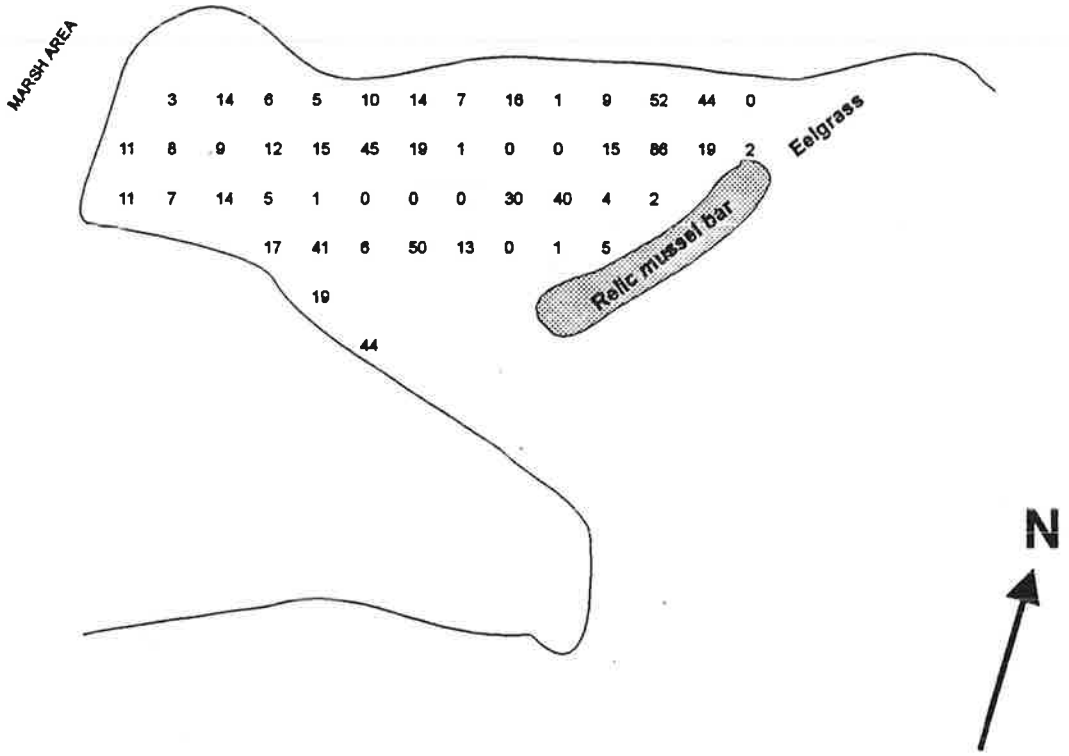


October 1994



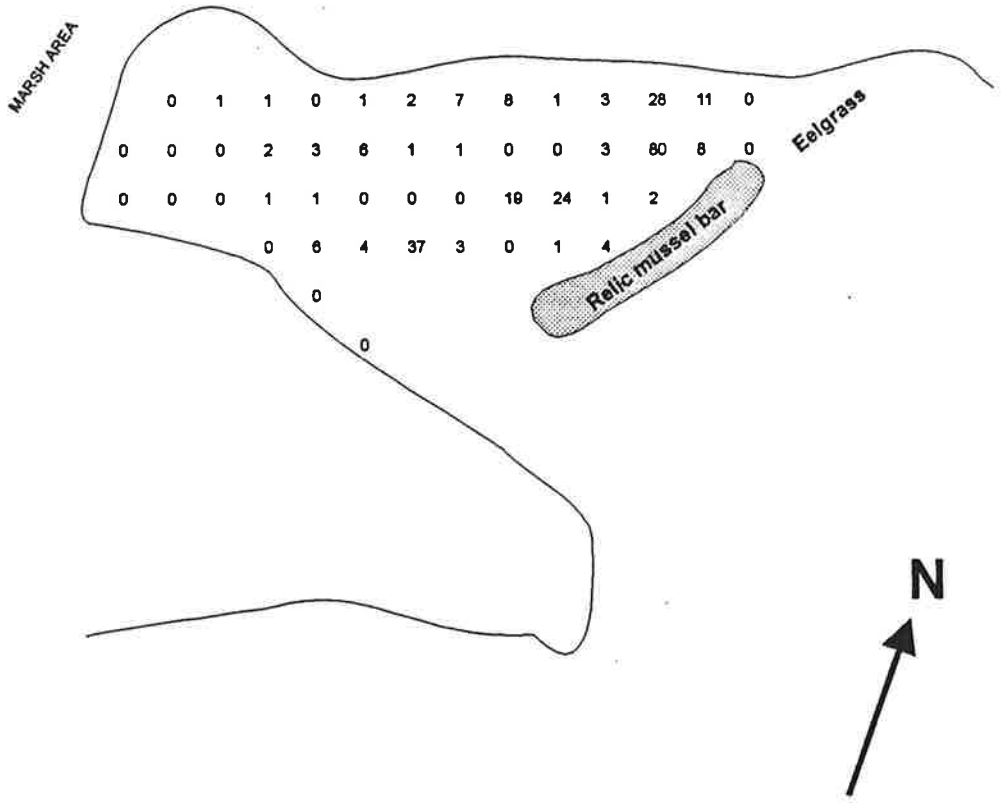
MER Assessment Corporation
Shellfish Survey
Brickyard Cove, Freeport
10 October 1994
Sample Location

~100 ft



MER Assessment Corporation
Shellfish Survey
Brickyard Cove, Freeport
10 October 1994
Total clam distribution

~100 ft



MER Assessment Corporation
Shellfish Survey
Brickyard Cove, Freeport
10 October 1994
Spat distribution

~100 ft

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: HILDA'S
DATE: 10-10-94
SAMPLE NO 33

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLOT	PLOT NO.
1		3						1	6	8	2	5			1	1	1				28	1
2		1									1	2									4	2
3								5	9	6		2	1		1						24	3
4		1							3	5	6	6	3	1		1					26	4
5		2					1			2	5	4	1	2							17	5
6										4	10	7	3	2		2					28	6
7		2						3	3	4	2	4		1							19	7
8		2								2	1	2									7	8
9								1	5	11	2	2	6								27	9
10		2					3	3	1												9	10
11											1		1								2	11
12		1							2		3	3	1	1							11	12
13									2	1	7		1								11	13
14									2	1	3	6	1	1			3				17	14
15										1	2	2							1		6	15
16					4		1	4	9	9	9	4									40	16
17										1	1	1	1		4	2	1	3	2		16	17
18									2	4	13	6	1								26	18
19									1			1			2	1	2	1			8	19
20					1					1		1	3	2	1						9	20
21			1		1																2	21
22				1		1															2	22
23				1												1	1				3	23
24							1			3	2	1									7	24
25									1		1	1									3	25
26						3	3		1	6	3										16	26
27					1		2	1		1		1		1		2					9	27
28								1		1							1	1			4	28
29																					0	29
30			2	4	2		2	8	3	3	2	1		1	1	1	1	1			32	30
31		1									1	1									3	31
32			1			6	15	18	16	4	1		2	2	2						67	32
33											1	3	1			1	1				7	33
TOTALS		15	4	6	9	10	28	45	66	78	79	66	26	14	12	12	11	6	3	0	490	
%/SIZE		3.06	0.82	1.22	1.84	2.04	5.71	9.18	13.47	15.92	16.12	13.47	5.31	2.86	2.45	2.45	2.24	1.22	0.61	0.00	100	
#SQ.FT.		2	0	1	1	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	7	

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: HILDA'S
DATE: 10-10-94
SAMPLE NO 33
NO. ACRES: 3.2

CLAM SIZE in mm	CONV.FA	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	15	3.1	0.0	0	0	0
5-9	0.000	4	0.8	0.0	0	0	0
10-14	0.000	6	1.2	0.0	0	0	0
15-19	0.550	9	1.8	5.0	0	0	0
20-24	1.196	10	2.0	12.0	0	1	0
25-29	2.212	28	5.7	61.9	2	6	0
30-34	3.681	45	9.2	165.6	5	16	0
35-39	5.690	66	13.5	375.5	11	36	0
40-44	8.327	78	15.9	649.5	20	63	0
45-49	11.670	79	16.1	921.9	28	89	0
50-54	15.795	66	13.5	1042.5	32	101	101
55-59	20.818	26	5.3	541.3	16	52	52
60-64	26.801	14	2.9	375.2	11	36	36
65-69	33.780	12	2.4	405.4	12	39	39
70-74	41.980	12	2.4	503.8	15	49	49
75-79	51.356	11	2.2	564.9	17	55	55
80-84	61.881	6	1.2	371.3	11	36	36
85-89	74.121	3	0.6	222.4	7	22	22
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		490	100.0		188.4	603.0	390.5
				% BUSHELS HARVESTABLE			64.76

Following-Year Projection [Closed Area - NO Harvesti"NORMAL" MORTALITY VALUES
SAMPLE NO 33
NO. ACRES: 3.2

CLAM SIZE in mm	CONV.FA	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	8	1.9	4.1	0	0	0
20-24	1.196	2	0.5	2.4	0	0	0
25-29	2.212	3	0.7	6.6	0	1	0
30-34	3.681	5	1.1	16.6	1	2	0
35-39	5.690	8	1.5	34.1	1	3	0
40-44	8.327	22	5.6	186.5	6	18	0
45-49	11.670	36	9.0	420.1	13	41	0
50-54	15.795	53	13.1	834.0	25	81	81
55-59	20.818	66	16.5	1380.2	42	134	134
60-64	26.801	67	16.7	1799.7	55	175	175
65-69	33.780	71	17.7	2401.8	73	233	233
70-74	41.980	17	4.3	722.1	22	70	70
75-79	51.356	11	2.8	586.5	18	57	57
80-84	61.881	11	2.7	668.3	20	65	65
85-89	74.121	10	2.6	767.2	23	74	74
>90	87.597	13	3.3	1163.3	35	113	113
TOTALS		402	100.0		333	1066	1001
				% BUSHELS HARVESTABLE			93.90

Following-Year Projection [Open Area - Harvested] "NORMAL" MORTALITY VALUES
SAMPLE NO 33
NO. ACRES: 3.2

CLAM SIZE in mm	CONV.FA	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	8	4.2	4.1	0	0	0
20-24	1.196	2	1.1	2.4	0	0	0
25-29	2.212	3	1.7	6.6	0	1	0
30-34	3.681	5	2.5	16.6	1	2	0
35-39	5.690	6	3.4	34.1	1	3	0
40-44	8.327	22	12.5	186.5	6	18	0
45-49	11.670	36	20.2	420.1	13	41	0
50-54	15.795	16	8.9	250.2	8	24	24
55-59	20.818	20	11.1	414.1	13	40	40
60-64	26.801	20	11.3	539.9	16	52	52
65-69	33.780	21	12.0	724.9	22	70	70
70-74	41.980	6	3.1	235.1	7	23	23
75-79	51.356	4	2.0	179.7	5	17	17
80-84	61.881	3	1.9	207.9	6	20	20
85-89	74.121	3	1.8	238.7	7	23	23
>90	87.597	4	2.3	363.5	11	35	35
TOTALS		179	100.0		116	371	306
				% BUSHELS HARVESTABLE			82.47

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

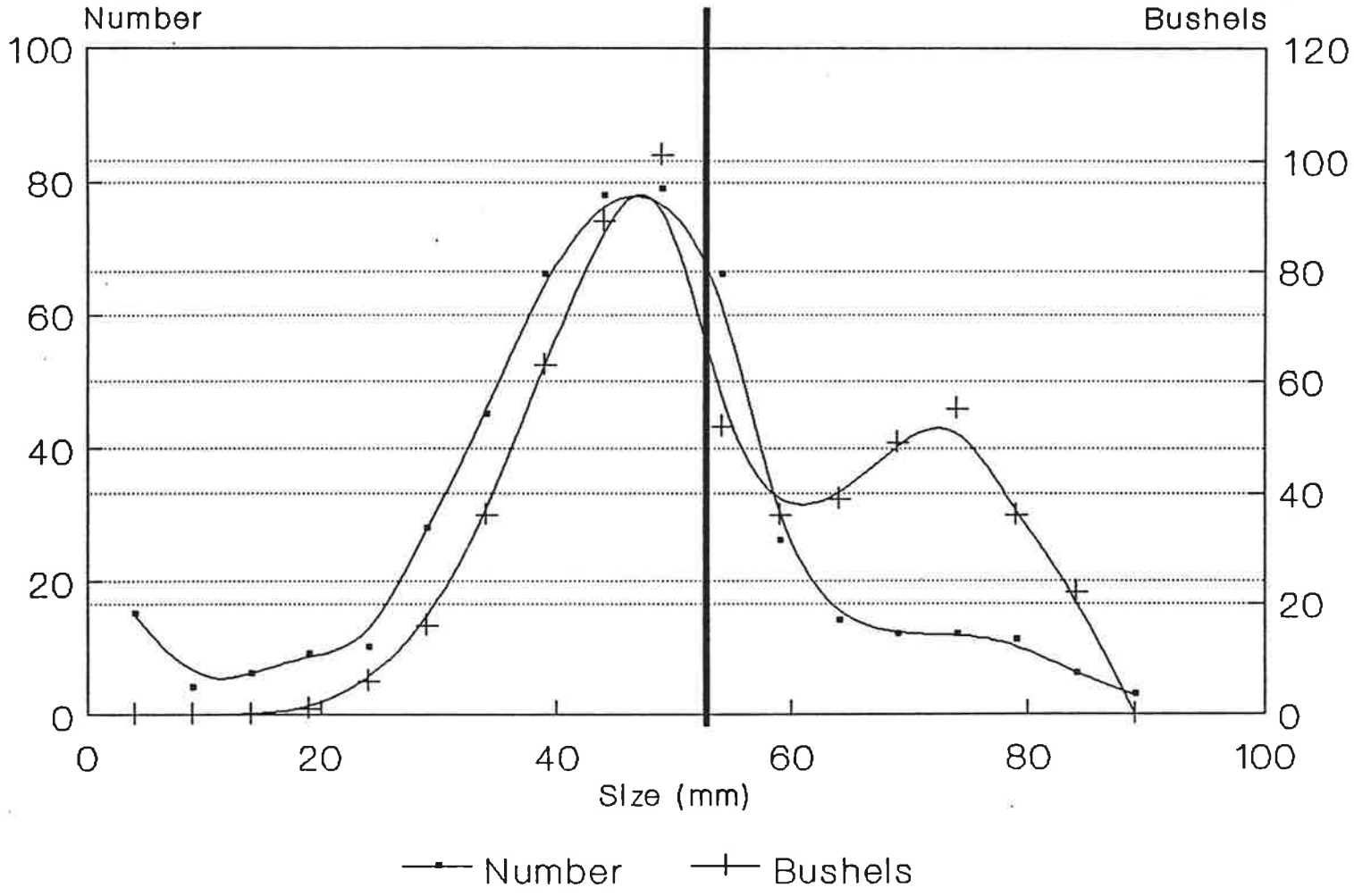
LOCATION: HILDA'S
DATE: 10-10-94
SAMPLE NO 33
NO. ACRES: 3.2

	PRICE ($)/BUSHEL							
	$30	$40	$50	$55	$60	$70	$80	$90
CURRENT YEAR	$11,714	$15,618	$19,523	$21,475	$23,428	$27,332	$31,237	$35,142
PROJ. (NO HARVES	30,030	40,041	50,051	55,056	60,061	70,071	80,081	90,091
PROJ. (HARVESTE	9,175	12,234	15,292	16,822	18,351	21,409	24,466	27,526

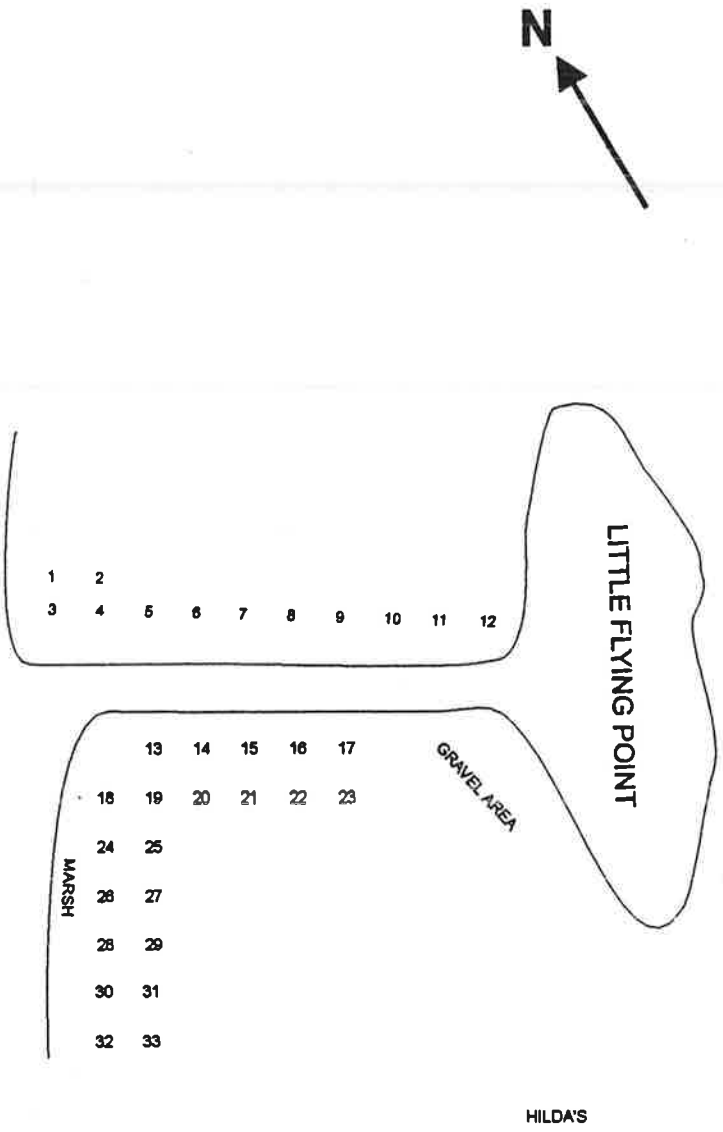
	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
CURRENT YEAR						
$30	$17,571	$23,428	$29,285	$35,142	$40,998	$46,855
$40	23,428	31,237	39,046	46,855	54,665	62,474
$50	29,285	39,046	48,808	58,569	68,331	78,092
$55	32,213	42,951	53,688	64,426	75,164	85,902
$60	35,142	46,855	58,569	70,283	81,997	93,711
$70	40,998	54,665	68,331	81,997	95,663	109,329
$80	46,855	62,474	78,092	93,711	109,329	124,948
$90	52,712	70,283	87,854	105,425	122,995	140,566

	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
PROJ. [HARVESTED]						
$30	$13,763	$18,351	$22,938	$27,526	$32,114	$36,702
$40	18,351	24,468	30,585	36,702	42,818	48,935
$50	22,938	30,585	38,231	45,877	53,523	61,169
$55	25,232	33,643	42,054	50,465	58,875	67,286
$60	27,526	36,702	45,877	55,052	64,228	73,403
$70	32,114	42,818	53,523	64,228	74,932	85,637
$80	36,702	48,935	61,169	73,403	85,637	97,871
$90	41,289	55,052	68,815	82,578	96,342	110,105

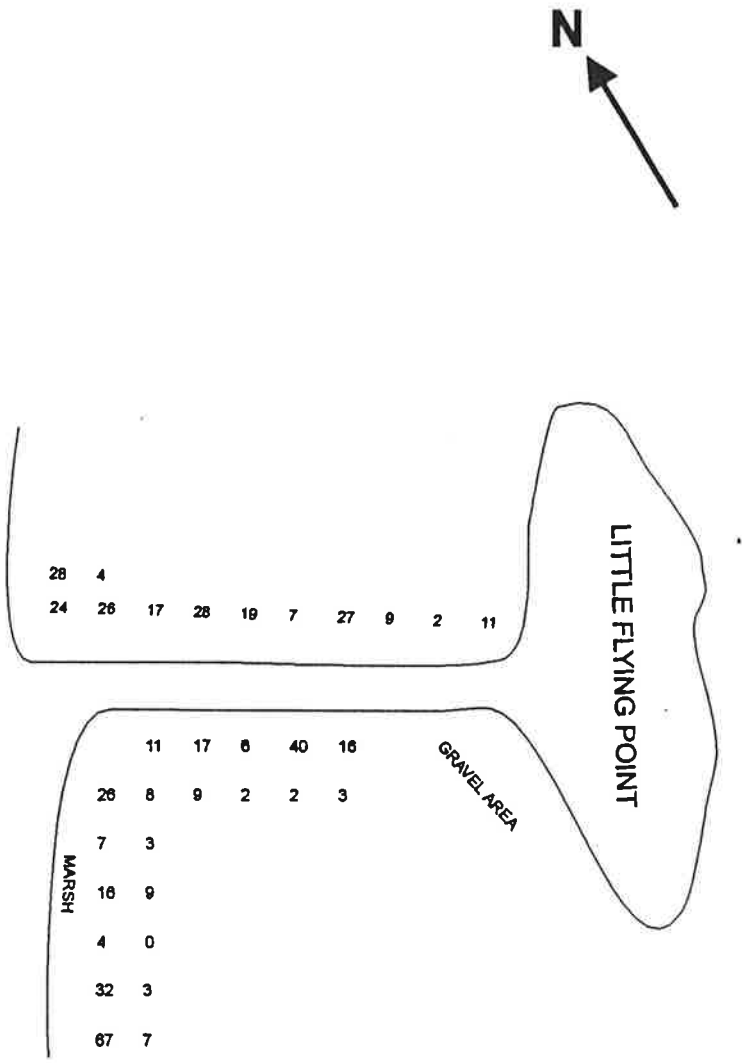
"Hilda's" Cove
Freeport, Maine



October 1994

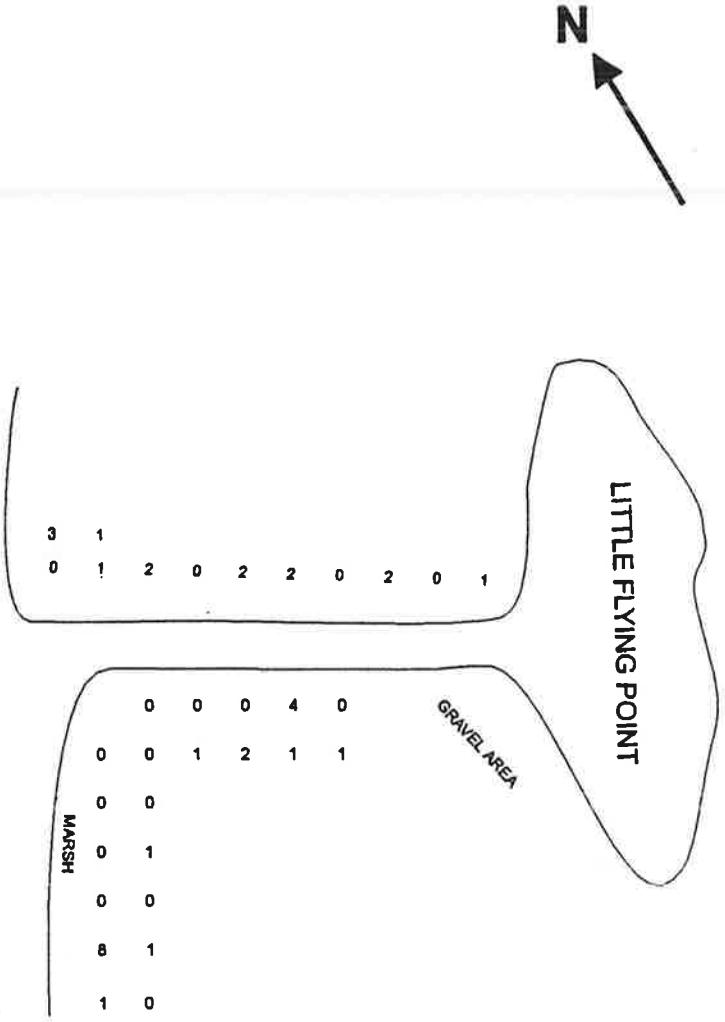


MER Assessment Corporation
Shellfish Survey
"Hilda's" Cove, Freeport
10 October 1994
Sample Location ~100 ft.



MER Assessment Corporation
Shellfish Survey
"Hilda's" Cove, Freeport
10 October 1994
Total clam distribution

~100 ft.



MER Assessment Corporation
Shellfish Survey
"Hilda's" Cove, Freeport
10 October 1994
Spat distribution

~100 ft.

MER ASSESSMENT CORP.
CLAM RESOURCE SURVEY

LOCATION: COUSINS-LITTLE JOHN
DATE: 8-2/3-94
SAMPLE NO 34

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLOT	PLOT NO.
1		6	9	1	3	2	6						2	4	3	2					36	1
2			1	2	1	1	2	1	4					1	2						15	2
3						1	1	1				1		2							6	3
4			2	4	3	2	6	3	2		3	3	4	3							35	4
5		3	6	8	3																20	5
6		1	1	3	12	23	11	2			1	2	1								57	6
7			1	2	1	7	2	2				2	1								18	7
8			1	2	1	4	1	2	1	1				1							14	8
9			1	4	1	2	13	16	5	3											45	9
10			2	4		1															7	10
11			1																		1	11
12					1																1	12
13				3	5	16	6	5			1		1				1				38	13
14			8	4	4	5	6	3				3	4	1							38	14
15			2	8	22	8	2	2		1	4	7	6								62	15
16			1	3	9	18	11		1	1	6	7	1	1							59	16
17			1	2	8	11	6	1		5	9	11	4	1							59	17
18				7	16	21	17	3			2		4	2	1						73	18
19		2	2	4	5	28	39	11		1	1			1							94	19
20		2	4	3	17	32	48	18	3		2	3	2								134	20
21		4	9			8	2	2						1		1					27	21
22		1	6	10	6	5	6		1	1	3	4	4	2							49	22
23			3	2	6	1															12	23
24		3	5	5	5	2															20	24
25																					0	25
26																					0	26
27		3	56	42	128	40	21	63	14	1											368	27
28		1	10	29	30	10	4	5													89	28
29		1	1	5	4	8	11	7	4	1											42	29
30		6	61	73	22	10	8	1	2	1					2						186	30
31		2	35	88	142	90	9														366	31
32		1	2	6	3	1	2	5	1												21	32
33		1	7	11	1	5		1	1												27	33
34			1	6	3																10	34
TOTALS		**37**	**239**	**341**	**462**	**362**	**240**	**154**	**39**	**16**	**32**	**43**	**34**	**20**	**8**	**3**	**1**	**0**	**0**	**0**	**2031**	
%/SIZE		**1.82**	**11.77**	**16.79**	**22.75**	**17.82**	**11.82**	**7.58**	**1.92**	**0.79**	**1.58**	**2.12**	**1.67**	**0.98**	**0.39**	**0.15**	**0.05**	**0.00**	**0.00**	**0.00**	**100**	
#/SQ.FT.		**4**	**28**	**40**	**54**	**5**	**4**	**2**	**1**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**30**	

PLOT 21 AND 27 JUVENILES BASED ON 1/4 SQ. FT. CORE DUE TO # OF JUVENILE

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: COUSINS-LITTLE JOHN
DATE: 8-2/3-94
SAMPLE NO 34
NO. ACRES: 5.6

CLAM SIZE in mm	CONV.FA	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	37	1.8	0.0	0.0	0.0	0.0
5-9	0.000	239	11.8	0.0	0.0	0.0	0.0
10-14	0.000	341	16.8	0.0	0.0	0.0	0.0
15-19	0.550	462	22.7	254.1	7.5	41.9	0.0
20-24	1.196	362	17.8	433.0	12.7	71.3	0.0
25-29	2.212	240	11.8	530.9	15.6	87.4	0.0
30-34	3.681	154	7.6	566.9	16.7	93.4	0.0
35-39	5.690	39	1.9	221.9	6.5	36.5	0.0
40-44	8.327	16	0.8	133.2	3.9	21.9	0.0
45-49	11.670	32	1.6	373.4	11.0	61.5	0.0
50-54	15.795	43	2.1	679.2	20.0	111.9	111.9
55-59	20.818	34	1.7	707.8	20.8	116.6	116.6
60-64	26.801	20	1.0	536.0	15.8	88.3	88.3
65-69	33.780	8	0.4	270.2	7.9	44.5	44.5
70-74	41.980	3	0.1	125.9	3.7	20.7	20.7
75-79	51.356	1	0.0	51.4	1.5	8.5	8.5
80-84	61.881	0	0.0	0.0	0.0	0.0	0.0
85-89	74.121	0	0.0	0.0	0.0	0.0	0.0
>90	87.597	0	0.0	0.0	0.0	0.0	0.0
TOTALS		2031	100.0		143.6	804.4	390.4
				% BUSHELS HARVESTABLE			48.5

Following-Year Projection [Closed Area - NO Harvesting "NORMAL" MORTALITY VALUES
SAMPLE NO 34
NO. ACRES: 5.6

CLAM SIZE in mm	CONV.FA	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0.0	0.0	0.0
5-9	0.000	0	0.0	0.0	0.0	0.0	0.0
10-14	0.000	0	0.0	0.0	0.0	0.0	0.0
15-19	0.550	19	1.5	10.2	0.3	1.7	0.0
20-24	1.196	120	9.6	142.9	4.2	23.5	0.0
25-29	2.212	171	13.7	377.1	11.1	62.1	0.0
30-34	3.681	231	18.6	850.3	25.0	140.1	0.0
35-39	5.690	217	17.5	1235.9	36.3	203.6	0.0
40-44	8.327	192	15.5	1598.8	47.0	263.3	0.0
45-49	11.670	123	9.9	1437.7	42.3	236.8	0.0
50-54	15.795	31	2.5	492.8	14.5	81.2	81.2
55-59	20.818	14	1.1	283.1	8.3	46.6	46.6
60-64	26.801	27	2.2	729.0	21.4	120.1	120.1
65-69	33.780	54	4.4	1824.1	53.7	300.4	300.4
70-74	41.980	23	1.9	974.8	28.7	160.6	160.6
75-79	51.356	12	1.0	626.5	18.4	103.2	103.2
80-84	61.881	5	0.4	306.3	9.0	50.5	50.5
85-89	74.121	2	0.1	133.4	3.9	22.0	22.0
>90	87.597	0	0.0	37.7	1.1	6.2	6.2
TOTALS		1241	100.0		325.3	1821.8	890.7
				% BUSHELS HARVESTABLE			48.9

Following-Year Projection [Open Area - Harvested] "NORMAL" MORTALITY VALUES
SAMPLE NO 34
NO. ACRES: 5.6

CLAM SIZE in mm	CONV.FA	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0.0	0.0	0.0
5-9	0.000	0	0.0	0.0	0.0	0.0	0.0
10-14	0.000	0	0.0	0.0	0.0	0.0	0.0
15-19	0.550	19	1.6	10.2	0.3	1.7	0.0
20-24	1.196	120	10.6	142.9	4.2	23.5	0.0
25-29	2.212	171	15.2	377.1	11.1	62.1	0.0
30-34	3.681	231	20.6	850.3	25.0	140.1	0.0
35-39	5.690	217	19.3	1235.9	36.3	203.6	0.0
40-44	8.327	192	17.1	1598.8	47.0	263.3	0.0
45-49	11.670	123	11.0	1437.7	42.3	236.8	0.0
50-54	15.795	9	0.8	147.8	4.3	24.4	24.4
55-59	20.818	4	0.4	84.9	2.5	14.0	14.0
60-64	26.801	8	0.7	218.7	6.4	36.0	36.0
65-69	33.780	16	1.5	553.0	16.3	91.1	91.1
70-74	41.980	8	0.7	317.4	9.3	52.3	52.3
75-79	51.356	4	0.3	191.0	5.6	31.5	31.5
80-84	61.881	2	0.1	95.3	2.8	15.7	15.7
85-89	74.121	1	0.0	41.5	1.2	6.8	6.8
>90	87.597	0	0.0	12.3	0.4	2.0	2.0
TOTALS		1123	100.0		215.1	1204.8	273.7
				% BUSHELS HARVESTABLE			22.7

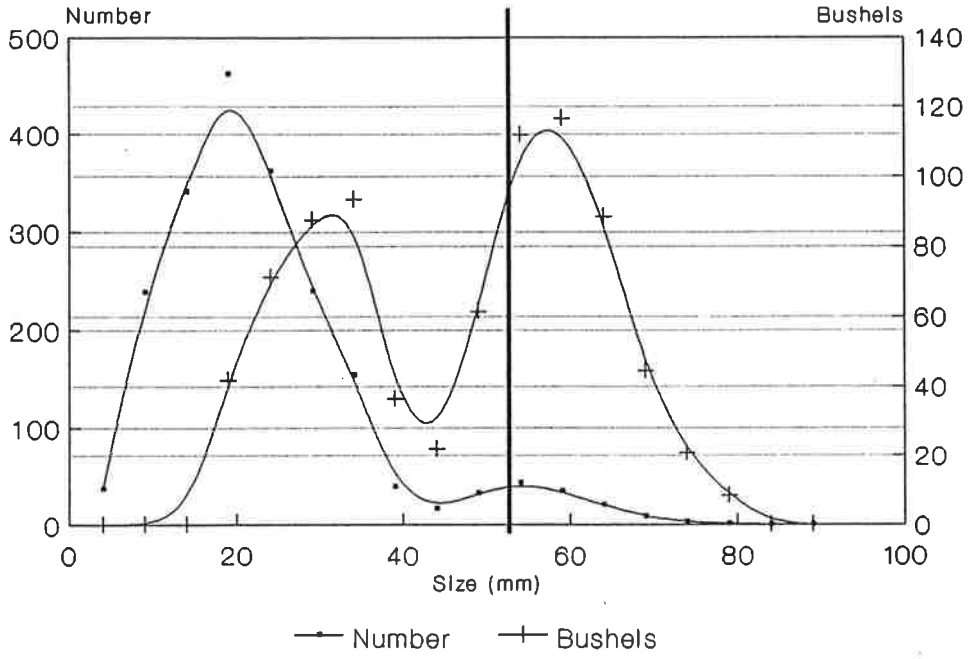
MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

	PRICE ($)/BUSHEL							
	$30	$40	$50	$55	$60	$70	$80	$90
CURRENT YEAR	$11,713	$15,618	$19,522	$21,474	$23,427	$27,331	$31,236	$35,140
PROJ. (NO HARVEST)	26,721	35,628	44,534	48,988	53,441	62,348	71,255	80,162
PROJ. (HARVESTED)	8,212	10,949	13,687	15,055	16,424	19,161	21,898	24,636

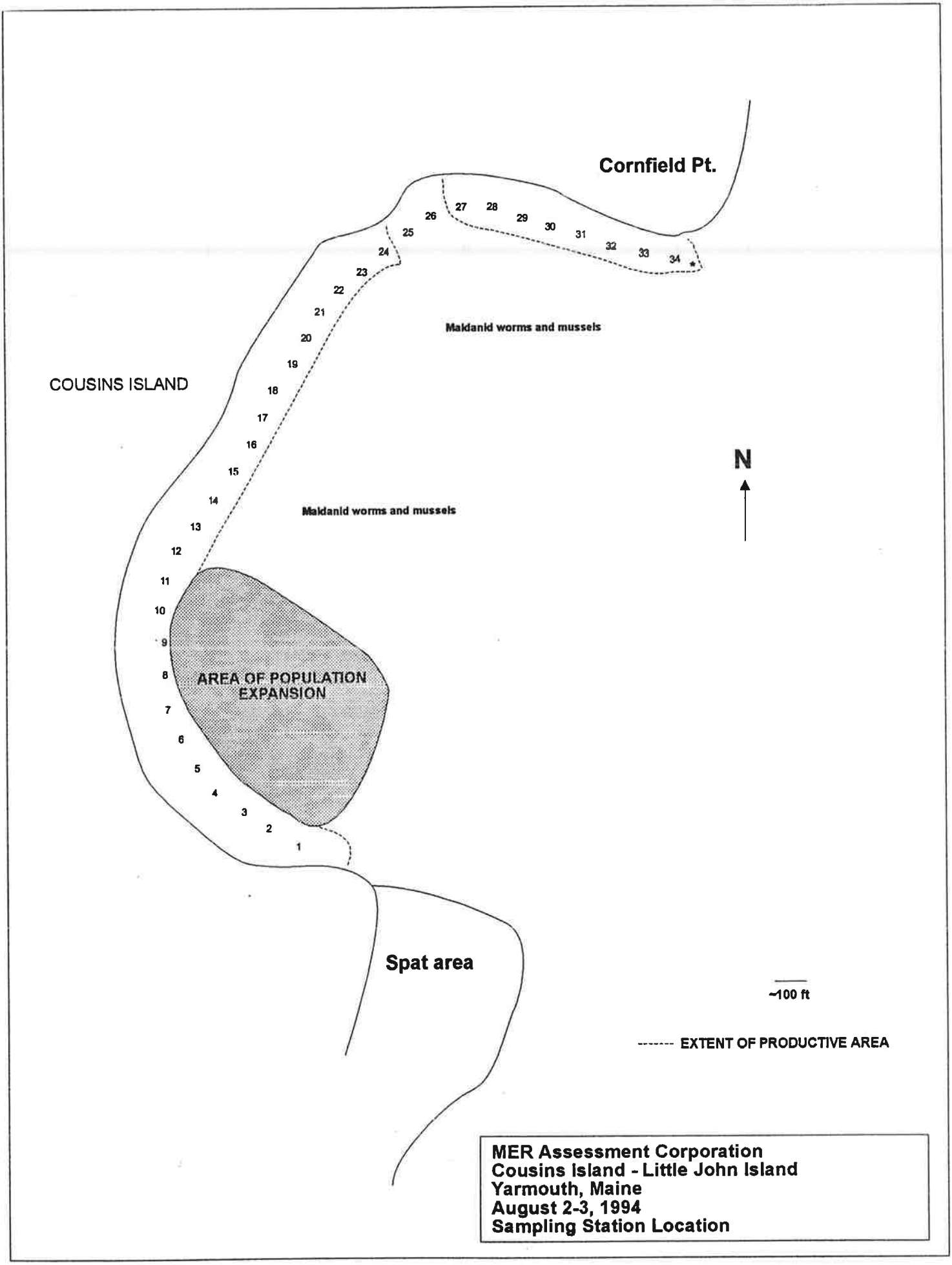
	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
CURRENT YEAR						
$30	$17,570	$23,427	$29,283	$35,140	$40,997	$46,853
$40	23,427	31,236	39,044	46,853	54,662	62,471
$50	29,283	39,044	48,806	58,567	68,328	78,089
$55	32,212	42,949	53,686	64,423	75,160	85,898
$60	35,140	46,853	58,567	70,280	81,993	93,707
$70	40,997	54,662	68,328	81,993	95,659	109,324
$80	46,853	62,471	78,089	93,707	109,324	124,942
$90	52,710	70,280	87,850	105,420	122,990	140,560

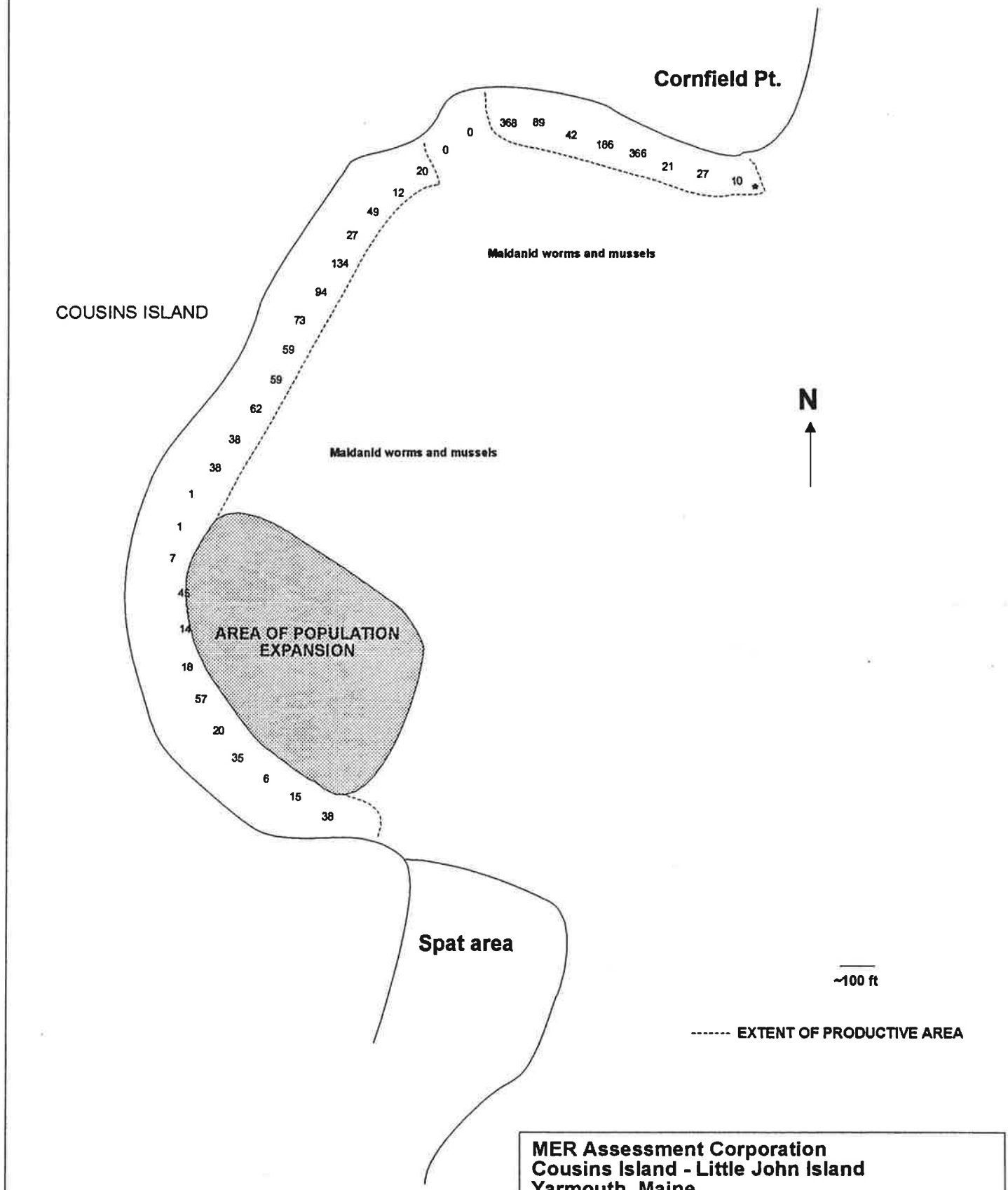
	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
PROJ. [HARVESTED]						
$30	$12,318	$16,424	$20,530	$24,636	$28,742	$32,848
$40	16,424	21,898	27,373	32,848	38,322	43,797
$50	20,530	27,373	34,216	41,060	47,903	54,746
$55	22,583	30,110	37,638	45,166	52,693	60,221
$60	24,636	32,848	41,060	49,271	57,483	65,695
$70	28,742	38,322	47,903	57,483	67,064	76,645
$80	32,848	43,797	54,746	65,695	76,645	87,594
$90	36,954	49,271	61,589	73,907	86,225	98,543

Cousins Island - Little John
Yarmouth, Maine

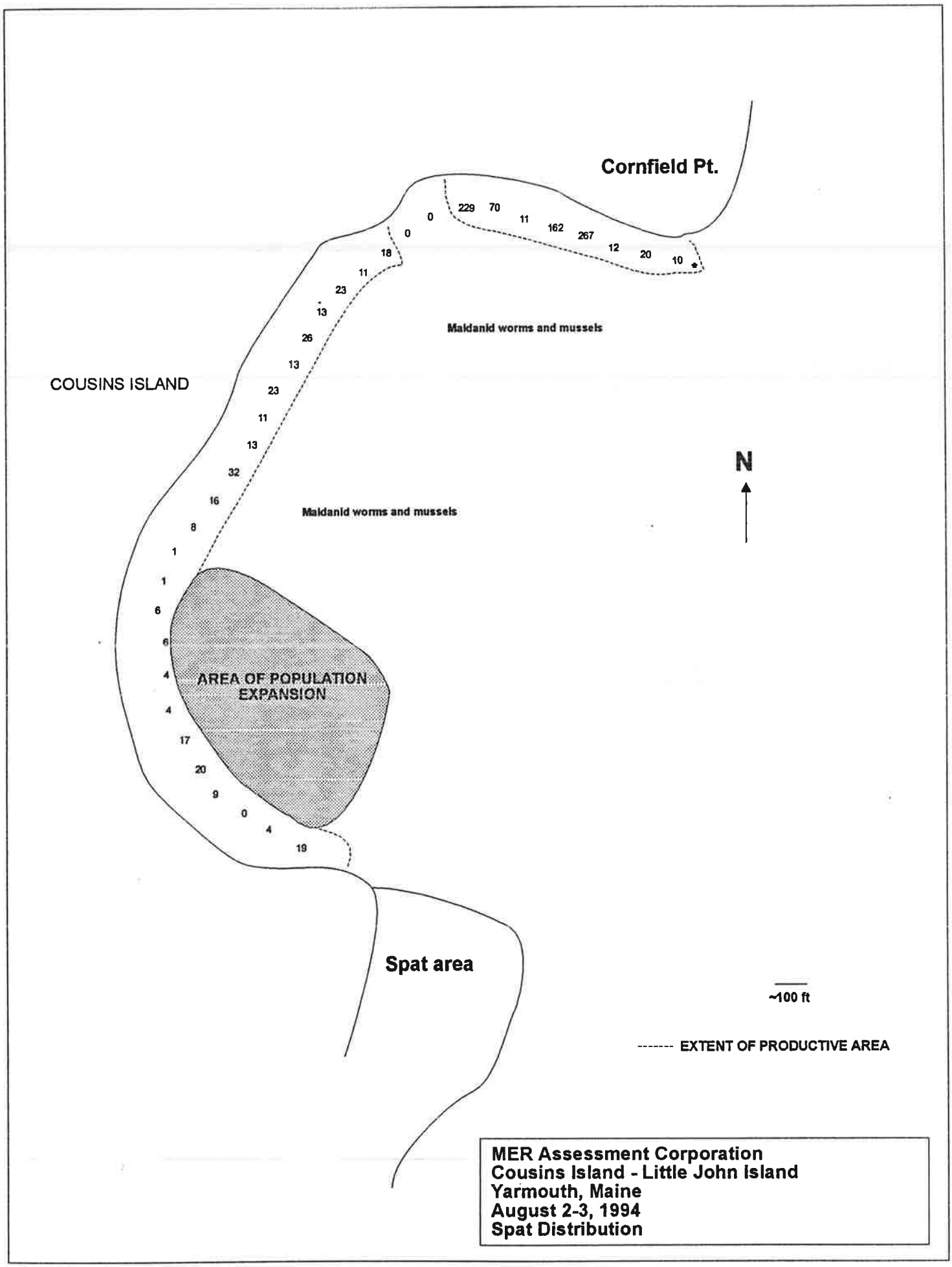


August 1994


Cornfield Pt.
COUSINS ISLAND
Maldanid worms and mussels
Maldanid worms and mussels
AREA OF POPULATION EXPANSION
Spat area
N
~100 ft
------- EXTENT OF PRODUCTIVE AREA
MER Assessment Corporation
Cousins Island - Little John Island
Yarmouth, Maine
August 2-3, 1994
Sampling Station Location



MER Assessment Corporation
Cousins Island - Little John Island
Yarmouth, Maine
August 2-3, 1994
Total Clam Distribution


Cornfield Pt.
0
229
70
11
162
267
12
20
10
0
18
11
23
13
26
13
23
11
13
32
16
8
1
1
6
6
4
4
17
20
9
0
4
19
Maldanid worms and mussels
Maldanid worms and mussels
COUSINS ISLAND
AREA OF POPULATION EXPANSION
Spat area
N
~100 ft
------- EXTENT OF PRODUCTIVE AREA
MER Assessment Corporation
Cousins Island - Little John Island
Yarmouth, Maine
August 2-3, 1994
Spat Distribution

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: LANES ISLAND
DATE: 11-12-94
SAMPLE NO: 35

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLOT	PLOT N
1			1	3	3		1	2						1							11	1
2				2	2		1	4	1	1		3	3	1	1						19	2
3			2		2	2	1	2	3	5	2		1	1							21	3
4					1	6		1	2	1	2	1			1						15	4
5				2																	2	5
6			1	1																	2	6
7					1	2	4	2	2	1				1							13	7
8				1		1		2	5	5	2	1	1								18	8
9			1	1	6	8	1	3	7	6	3						1				37	9
10			1		3	2		1							1						8	10
11							1		1	3	4										9	11
12					1	2	1		3	2	1										10	12
13									3	3					1						7	13
14				3	1			1		1				1	1		1				9	14
15				1	1						1	1									4	15
16			1											1	1						3	16
17				1	2	1	1	1	2					2	3						13	17
18						3															3	18
19					1	1															2	19
20				1	3	5					1										10	20
21						1	3	3													7	21
22					1	3	10	1													15	22
23																					0	23
24						2	1	1													4	24
25						1		1													2	25
26				1					1						1						3	26
27					1		1	1	1					1							5	27
28			1	1			1	5	5	1											14	28
29				7	1			1						3							12	29
30			3	4	3	1	4	9	20	3	3		3	1	1						55	30
31					2	5	6	1													14	31
32				32		32	9	3									1				77	32
33					8	48	6	4	3		1										70	33
34					1	10	3	1													15	34
35				2			1														3	35
TOTALS		0	11	63	44	136	56	50	59	32	20	8	13	12	7	1	2	0	0	0	512	
%/SIZE		0.00	2.15	12.30	8.59	26.56	10.94	9.77	11.52	6.25	3.91	1.17	2.54	2.34	1.37	0.20	0.39	0.00	0.00	0.00	100	
#SQ.FT.		0	1	7	5	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	7	

PLOT 32 AND 33 JUVENILES ARE BASED ON 1/4 SQ. FT. CORE SUBSAMPLE

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: LANES ISLAND
DATE: 11-12-94
SAMPLE NO: 35
NO. ACRES: 4.3

CLAM SIZE In mm	CONV.FA	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0.0	0.0	0.0
5-9	0.000	11	2.1	0.0	0.0	0.0	0.0
10-14	0.000	63	12.3	0.0	0.0	0.0	0.0
15-19	0.550	44	8.6	24.2	0.7	2.9	0.0
20-24	1.196	136	26.6	162.7	4.6	19.8	0.0
25-29	2.212	56	10.9	123.9	3.5	15.0	0.0
30-34	3.681	50	9.8	184.1	5.3	22.3	0.0
35-39	5.690	59	11.5	335.7	9.6	40.8	0.0
40-44	8.327	32	6.3	266.5	7.6	32.4	0.0
45-49	11.670	20	3.9	233.4	6.7	28.3	0.0
50-54	15.795	6	1.2	94.8	2.7	11.5	11.5
55-59	20.818	13	2.5	270.6	7.7	32.9	32.9
60-64	26.801	12	2.3	321.6	9.2	39.1	39.1
65-69	33.780	7	1.4	236.5	6.8	28.7	28.7
70-74	41.980	1	0.2	42.0	1.2	5.1	5.1
75-79	51.356	2	0.4	102.7	2.9	12.5	12.5
80-84	61.881	0	0.0	0.0	0.0	0.0	0.0
85-89	74.121	0	0.0	0.0	0.0	0.0	0.0
>90	87.597	0	0.0	0.0	0.0	0.0	0.0
TOTALS		512	100.0		68.5	291.2	129.7
				% BUSHELS HARVESTABLE			44.5

Following-Year Projection [Closed Area - NO Harvesting "NORMAL" MORTALITY VALUES
SAMPLE NO: 35
NO. ACRES: 4.3

CLAM SIZE In mm	CONV.FA	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0.0	0.0	0.0
5-9	0.000	0	0.0	0.0	0.0	0.0	0.0
10-14	0.000	0	0.0	0.0	0.0	0.0	0.0
15-19	0.550	0	0.0	0.0	0.0	0.0	0.0
20-24	1.196	6	1.6	6.6	0.2	0.8	0.0
25-29	2.212	32	8.9	69.7	2.0	8.5	0.0
30-34	3.681	22	6.2	81.0	2.3	9.8	0.0
35-39	5.690	82	23.1	464.3	13.3	56.4	0.0
40-44	8.327	45	12.7	373.0	10.7	45.3	0.0
45-49	11.670	40	11.3	466.8	13.3	56.7	0.0
50-54	15.795	47	13.4	745.5	21.3	90.5	90.5
55-59	20.818	27	7.7	566.2	16.2	68.8	68.8
60-64	26.801	17	4.8	455.6	13.0	55.3	55.3
65-69	33.780	11	3.2	380.0	10.9	46.1	46.1
70-74	41.980	11	3.0	451.3	12.9	54.8	54.8
75-79	51.356	8	2.4	426.8	12.2	51.8	51.8
80-84	61.881	4	1.0	222.8	6.4	27.1	27.1
85-89	74.121	1	0.4	100.1	2.9	12.2	12.2
>90	87.597	1	0.2	75.3	2.2	9.1	9.1
TOTALS		353	100.0		139.6	593.2	415.7
				% BUSHELS HARVESTABLE			70.1

Following-Year Projection [Open Area - Harvested] "NORMAL" MORTALITY VALUES
SAMPLE NO: 35
NO. ACRES: 4.3

CLAM SIZE In mm	CONV.FA	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0.0	0.0	0.0
5-9	0.000	0	0.0	0.0	0.0	0.0	0.0
10-14	0.000	0	0.0	0.0	0.0	0.0	0.0
15-19	0.550	0	0.0	0.0	0.0	0.0	0.0
20-24	1.196	6	2.1	6.6	0.2	0.8	0.0
25-29	2.212	32	11.9	69.7	2.0	8.5	0.0
30-34	3.681	22	8.3	81.0	2.3	9.8	0.0
35-39	5.690	82	30.9	464.3	13.3	56.4	0.0
40-44	8.327	45	17.0	373.0	10.7	45.3	0.0
45-49	11.670	40	15.1	466.8	13.3	56.7	0.0
50-54	15.795	14	5.4	223.7	6.4	27.2	27.2
55-59	20.818	8	3.1	169.9	4.9	20.6	20.6
60-64	26.801	5	1.9	136.7	3.9	16.6	16.6
65-69	33.780	3	1.3	116.2	3.3	14.1	14.1
70-74	41.980	4	1.3	146.0	4.2	17.8	17.8
75-79	51.356	3	1.0	130.4	3.7	15.8	15.8
80-84	61.881	1	0.4	69.3	2.0	8.4	8.4
85-89	74.121	0	0.2	31.1	0.9	3.8	3.8
>90	87.597	0	0.1	24.5	0.7	3.0	3.0
TOTALS		264	100.0		71.7	304.8	127.3
				% BUSHELS HARVESTABLE			41.8

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

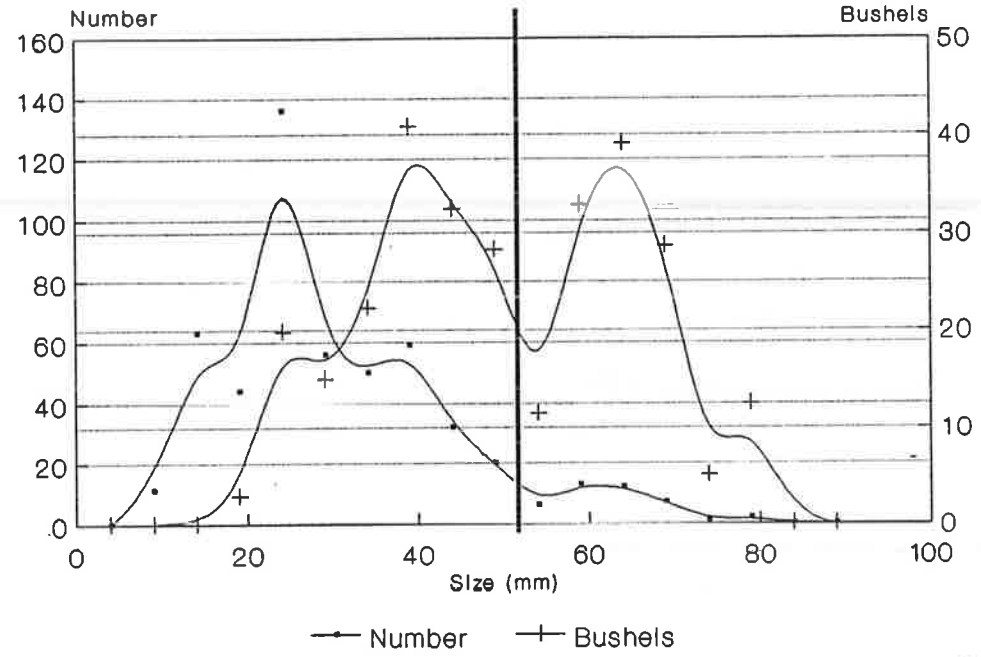
LOCATION: LANES ISLAND
DATE: 11-12-94
SAMPLE NO: 35
NO. ACRES: 4.3

	PRICE ($)/BUSHEL							
	$30	$40	$50	$55	$60	$70	$80	$90
CURRENT YEAR	$3,891	$5,188	$6,485	$7,134	$7,782	$9,079	$10,376	$11,674
PROJ. (NO HARVEST)	12,472	16,629	20,786	22,865	24,944	29,101	33,258	37,415
PROJ. (HARVESTED)	3,820	5,094	6,367	7,004	7,641	8,914	10,188	11,461

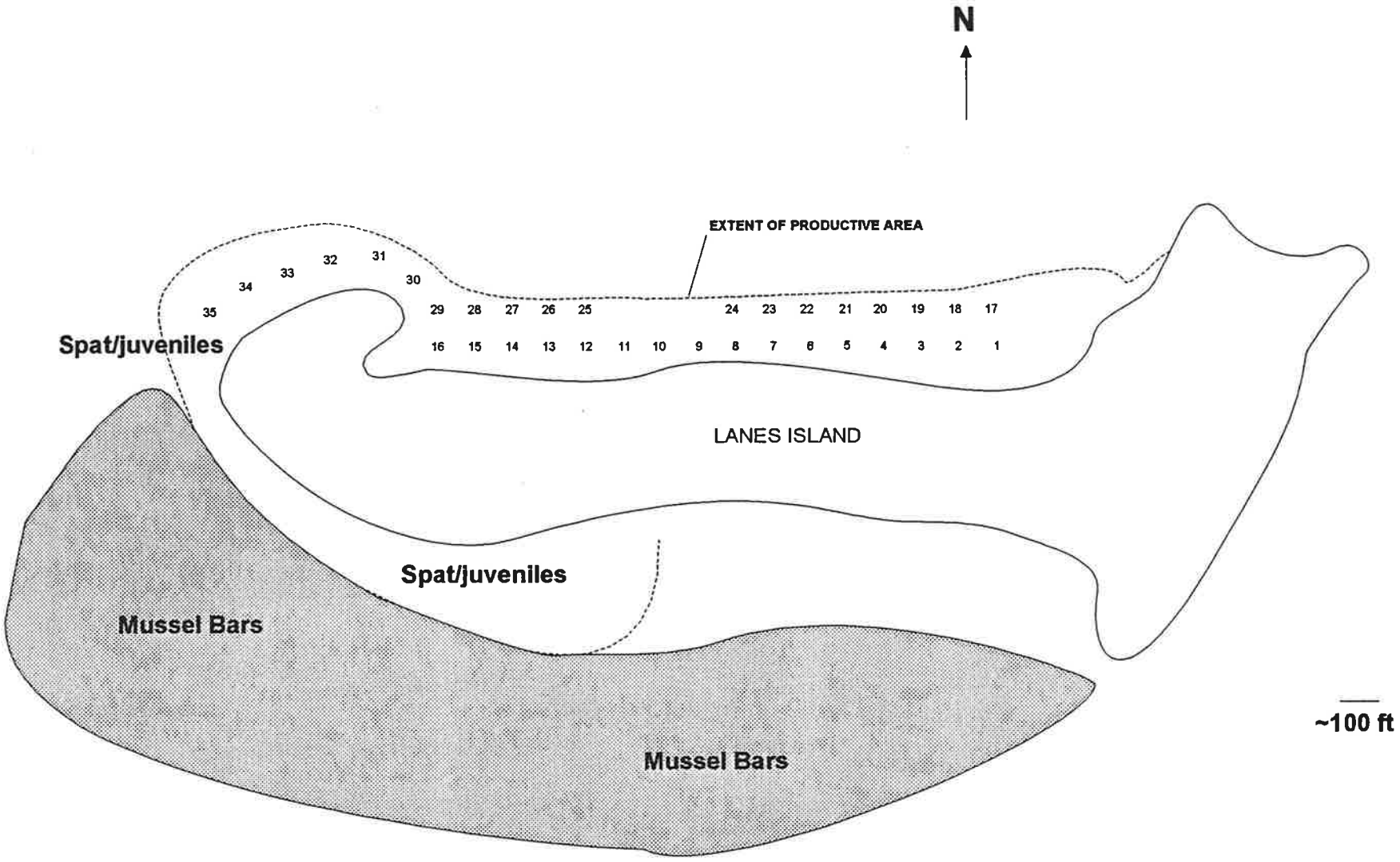
	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
CURRENT YEAR						
$30	$5,837	$7,782	$9,728	$11,674	$13,619	$15,565
$40	7,782	10,376	12,971	15,565	18,159	20,753
$50	9,728	12,971	16,213	19,456	22,699	25,941
$55	10,701	14,268	17,835	21,402	24,968	28,535
$60	11,674	15,565	19,456	23,347	27,238	31,129
$70	13,619	18,159	22,699	27,238	31,778	36,318
$80	15,565	20,753	25,941	31,129	36,318	41,506
$90	17,510	23,347	29,184	35,021	40,857	46,694

	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
PROJ. [HARVESTED]						
$30	$5,731	$7,641	$9,551	$11,461	$13,372	$15,282
$40	7,641	10,188	12,735	15,282	17,829	20,376
$50	9,551	12,735	15,919	19,102	22,286	25,470
$55	10,506	14,008	17,511	21,013	24,515	28,017
$60	11,461	15,282	19,102	22,923	26,743	30,564
$70	13,372	17,829	22,286	26,743	31,201	35,658
$80	15,282	20,376	25,470	30,564	35,658	40,752
$90	17,192	22,923	28,654	34,384	40,115	45,846

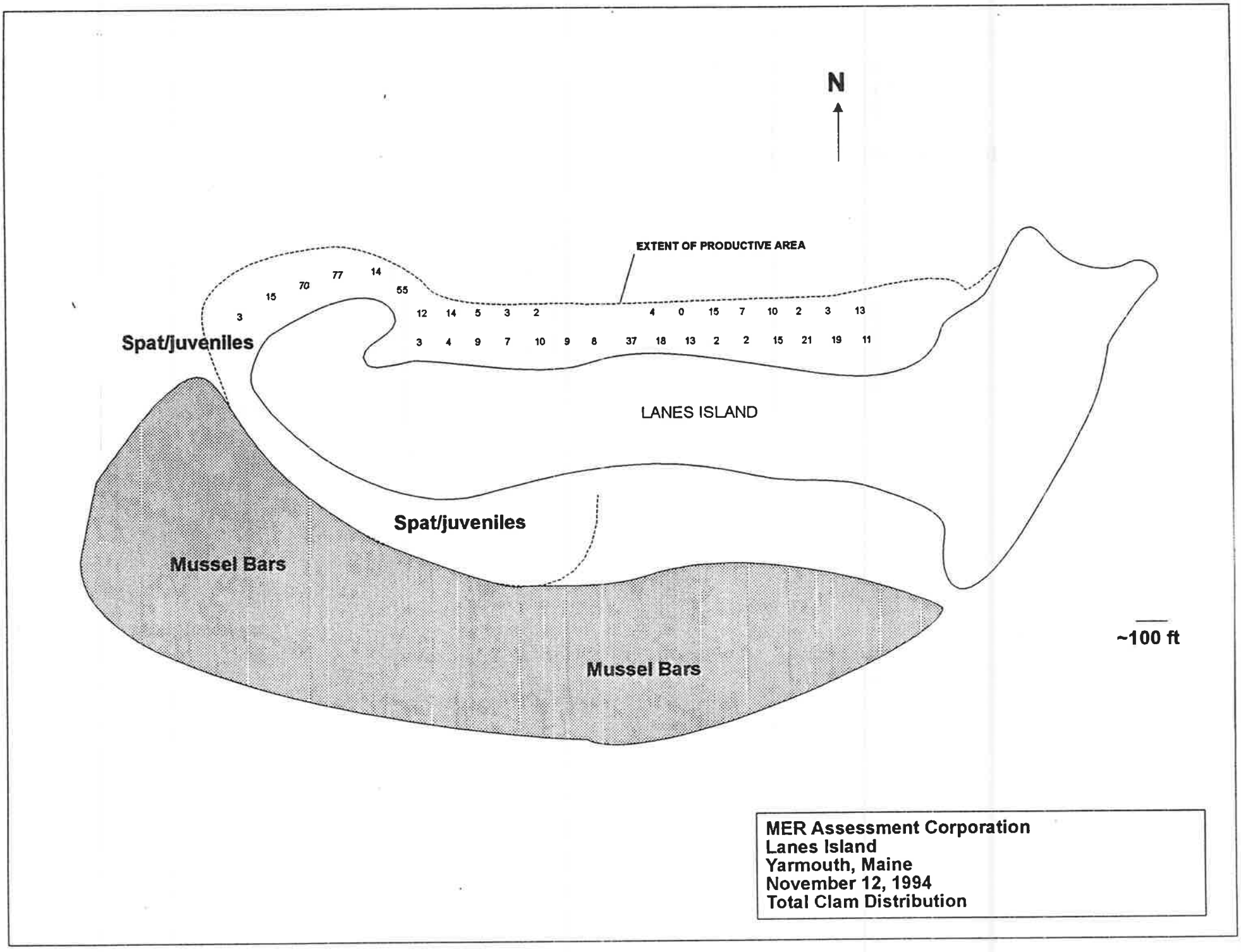
Lanes Island
Yarmouth, Maine

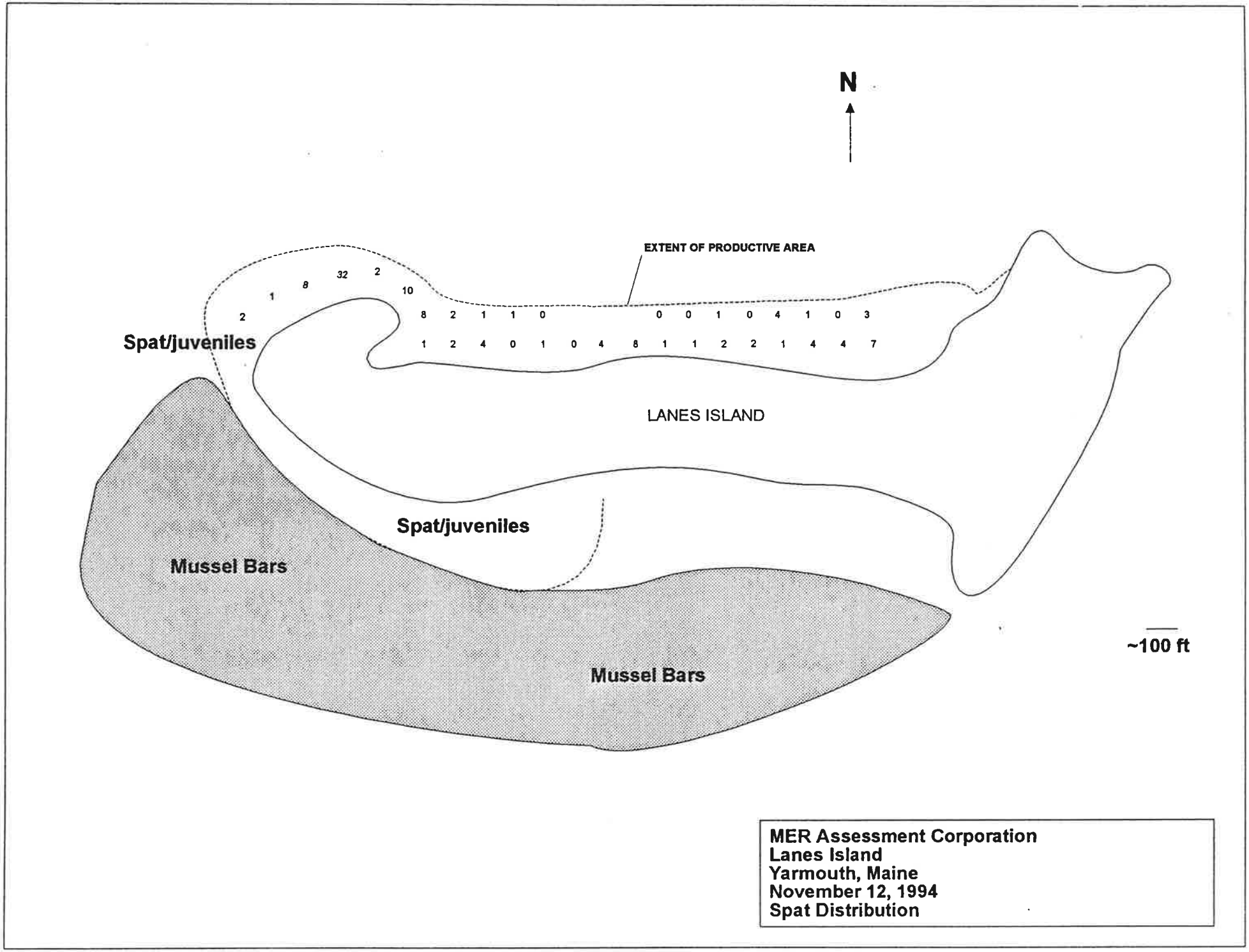


November 1994

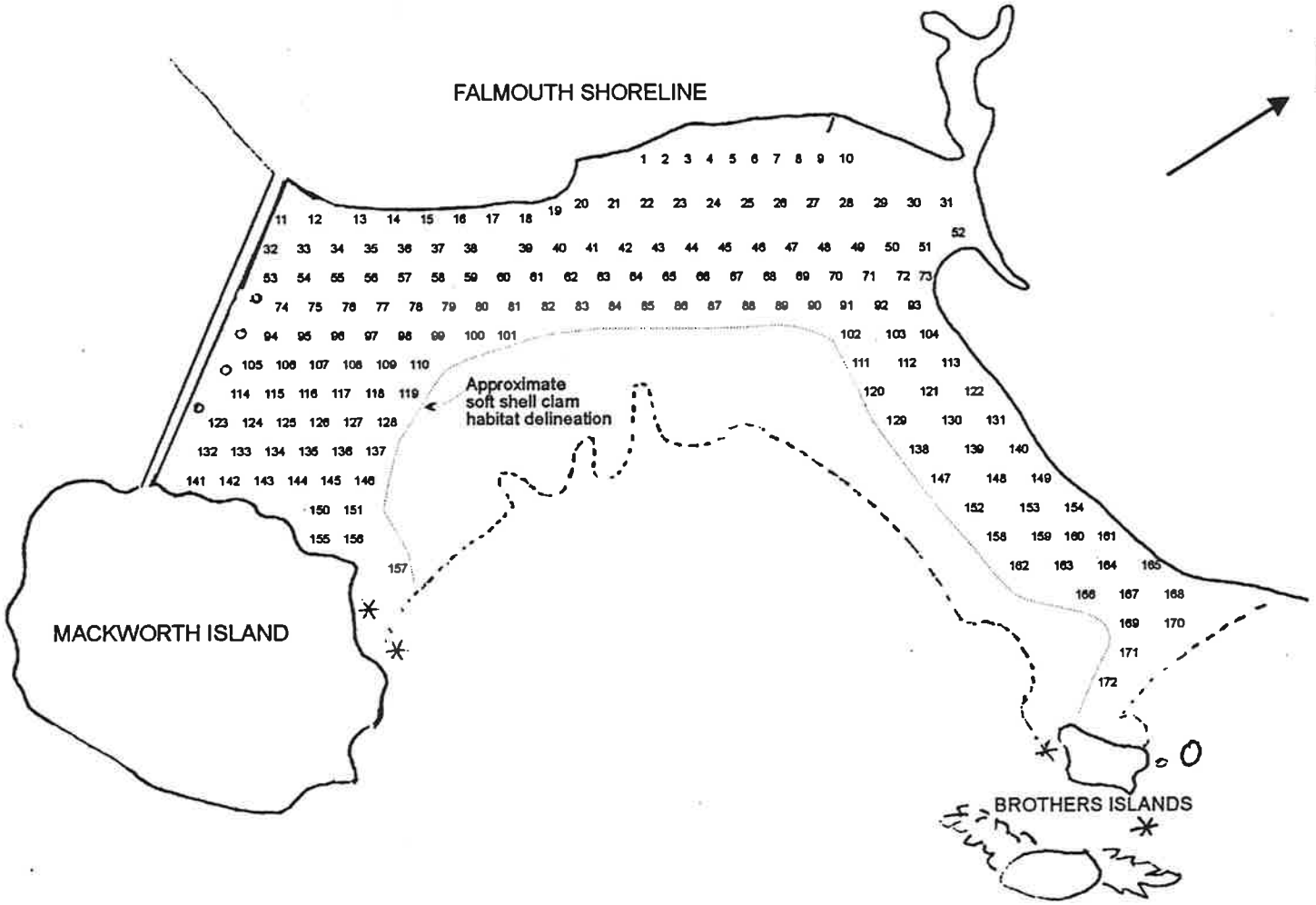


MER Assessment Corporation
Lanes Island
Yarmouth, Maine
November 12, 1994
Sampling Station Location


N
EXTENT OF PRODUCTIVE AREA
3
15
70
77
14
55
12 14 5 3 2
4 0 15 7 10 2 3 13
3 4 9 7 10 9 8 37 18 13 2 2 15 21 19 11
Spat/juveniles
LANES ISLAND
Spat/juveniles
Mussel Bars
Mussel Bars
~100 ft
MER Assessment Corporation
Lanes Island
Yarmouth, Maine
November 12, 1994
Total Clam Distribution

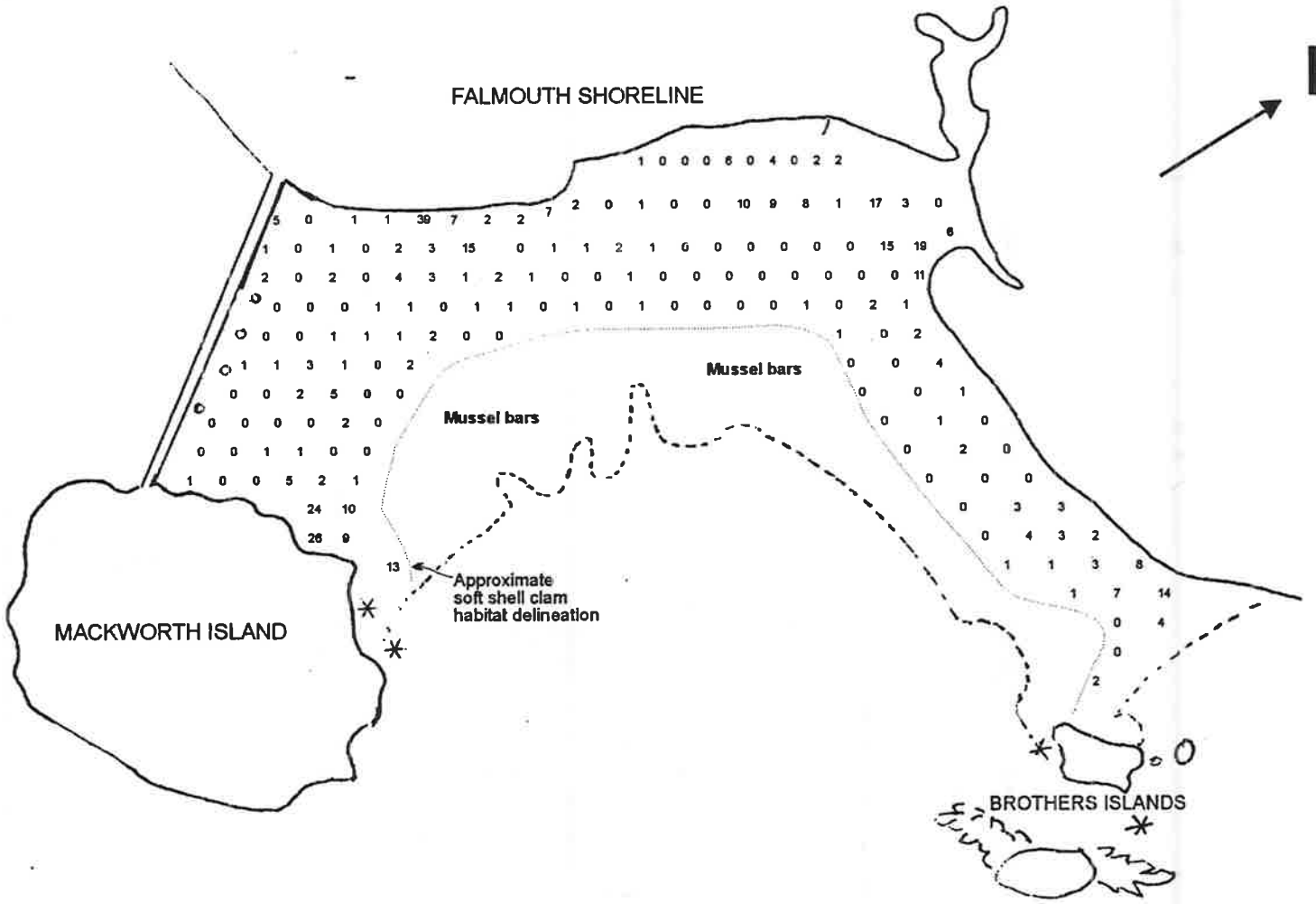

N
EXTENT OF PRODUCTIVE AREA
2 1 8 32 2 10
8 2 1 1 0 0 0 1 0 4 1 0 3
1 2 4 0 1 0 4 8 1 1 2 2 1 4 4 7
Spat/juveniles
LANES ISLAND
Spat/juveniles
Mussel Bars
Mussel Bars
~100 ft
MER Assessment Corporation
Lanes Island
Yarmouth, Maine
November 12, 1994
Spat Distribution

d. CBEP Project 1994 Closed Area Survey Results



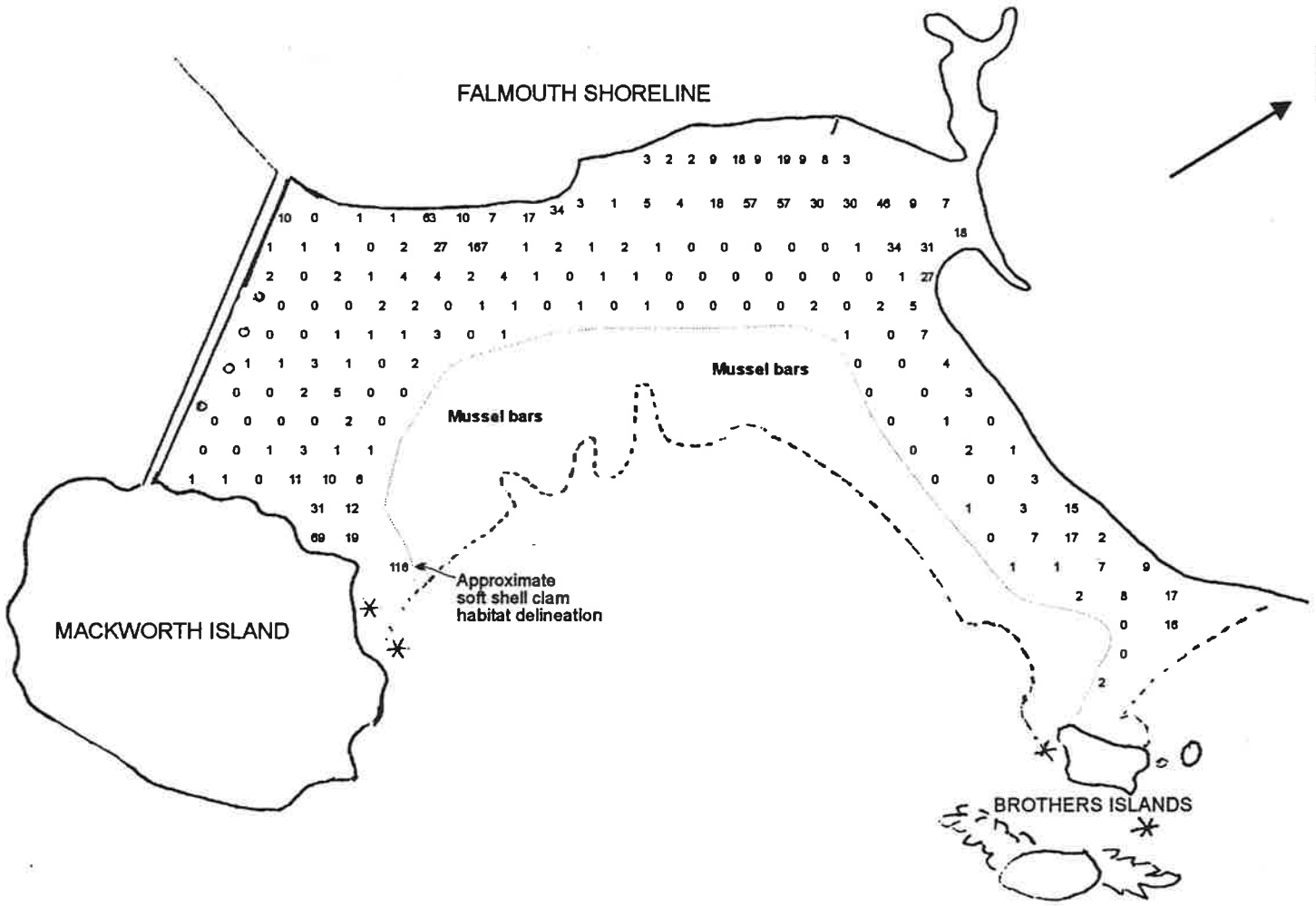
MER Assessment Corporation
Shellfish Survey
Mackworth Island, Falmouth
June 24 and July 12, 13, 14, 15, 20, 1994
Sampling Station Locations

~100 ft



MER Assessment Corporation
Shellfish Survey
Mackworth Island, Falmouth
June 24 and July 12, 13, 14, 15, 20, 1994
Spat (0-9mm) Distribution

~100 ft



MER Assessment Corporation
Shellfish Survey
Mackworth Island, Falmouth
June 24 and July 12, 13, 14, 15, 20, 1994
Total clam distribution

~100 ft

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION Mackworth Island
DATE: June 24-July 20, 1994
SAMPLE N 172
ACRES: 114.00

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLO	PLOT NO.
1		1		1		1															3	1
2				1	1																2	2
3					1	1															2	3
4				1	2	3	3														9	4
5		3	3	3	5	3	1														18	5
6				1	4	4															9	6
7		2	2	6	5	3	1														19	7
8				1	2	3	3														9	8
9		1	1	1	4	1															8	9
10		1	1						1												3	10
11		4	1		2	3															10	11
12																					0	12
13			1																		1	13
14		1																			1	14
15		20	19	16	7	1															63	15
16		5	2		3																10	16
17		1	1	1	3	1															7	17
18		2		4	9	1	1														17	18
19		4	3	8	17	2															34	19
20		2		1																	3	20
21					1																1	21
22		1		2		1	1														5	22
23						4															4	23
24					4	8	5	1													18	24
25		5	5	8	26	12	1														57	25
26		2	7	16	25	7															57	26
27		2	6	11	8	3															30	27
28			1	5	9	13	2														30	28
29		2	15	10	14	5															46	29
30			3		1	1		2			1						1				9	30
31							1			1	2				2	1					7	31
32		1																			1	32
33							1														1	33
34		1																			1	34
35																					0	35
36		1	1																		2	36
37		2	1		5	12	6	1													27	37
38			15	40	60	45	6	1													167	38
39				1																	1	39
40			1		1																2	40
41		1																			1	41
42			2																		2	42
43		1																			1	43
44																					0	44
45																					0	45
46																					0	46
47																					0	47
48																					0	48
49						1															1	49
50		2	13	11	3	5															34	50
51		8	11	8	4																31	51
52		4	2		1	1		1	1			1	2	3	2						18	52
53			2																		2	53
54																					0	54
55		1	1																		2	55
56				1																	1	56
57		3	1																		4	57
58		3		1																	4	58
59		1			1																2	59
60		2		2																	4	60
TOTALS		90	121	181	228	145	32	7	2	3	1	2	3	4	1	1	0	0	0	0	801	
%/SIZE		11.24	15.11	20.10	28.46	18.10	4.00	0.87	0.25	0.37	0.12	0.25	0.37	0.50	0.12	0.12	0.00	0.00	0.00	0.00	100.00	
#/SQ.FT.		2	3	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION Mackworth Island
DATE: June 24-July 20, 1994
SAMPLE N 172
ACRES: 114.00

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLO	PLOT NO.
1-60		90	121	161	228	145	32	7	2	3	1	2	3	4	1	1	0	0	0	0	801	1-60
61		1																			1	61
62																					0	62
63					1																1	63
64		1																			1	64
65																					0	65
66																					0	66
67																					0	67
68																					0	68
69																					0	69
70																					0	70
71																					0	71
72					1																1	72
73		3	8	12	4																27	73
74																					0	74
75																					0	75
76																					0	76
77		1		1																	2	77
78		1		1																	2	78
79																					0	79
80			1																		1	80
81		1																			1	81
82																					0	82
83		1																			1	83
84																					0	84
85			1																		1	85
86																					0	86
87																					0	87
88																					0	88
89																					0	89
90		1		1																	2	90
91																					0	91
92		1	1																		2	92
93			1		3	1															5	93
94																					0	94
95																					0	95
96		1																			1	96
97			1																		1	97
98			1																		1	98
99			2	1																	3	99
100																					0	100
101					1																1	101
102			1																		1	102
103																					0	103
104		1	1	2	2	1															7	104
105			1																		1	105
106			1																		1	106
107			3																		3	107
108		1																			1	108
109																					0	109
110		2																			2	110
111																					0	111
112																					0	112
113		1	3																		4	113
114																					0	114
115																					0	115
116		2																			2	116
117		3	2																		5	117
118																					0	118
119																					0	119
120																					0	120
TOTALS		112	149	179	240	147	32	7	2	3	1	2	3	4	1	1	0	0	0	0	883	
%/SIZE		13.96	18.60	22.35	29.96	18.35	4.00	0.87	0.25	0.37	0.12	0.25	0.37	0.50	0.12	0.12	0.00	0.00	0.00	0.00	110.24	
#/SQ.FT.		3	3	4	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION Mackworth Island
DATE: June 24-July 20, 1994
SAMPLE N 172
ACRES: 114.00

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLO	PLOT NO.
1-120		112	149	179	240	147	32	7	2	3	1	2	3	4	1	1	0	0	0	0	883	1-120
121																					0	121
122			1	1	1																3	122
123																					0	123
124																					0	124
125																					0	125
126																					0	126
127		1	1																		2	127
128																					0	128
129																					0	129
130		1																			1	130
131																					0	131
132																					0	132
133																					0	133
134			1																		1	134
135			1	1	1																3	135
136					1																1	136
137					1																1	137
138																					0	138
139		2																			2	139
140				1																	1	140
141			1	1																	2	141
142				1																	1	142
143																					0	143
144		1	4	2	3	1															11	144
145			2	4	4																10	145
146			1	2	3																6	146
147																					0	147
148																					0	148
149				1	1	1															3	149
150		14	10	6	1																31	150
151		6	4	1	1																12	151
152				1																	1	152
153		2	1																		3	153
154		2	1	1	8	3															15	154
155		8	18	19	19	5															69	155
156		2	7	4	5	1															19	156
157			13	34	51	14					2	1		1							116	157
158																					0	158
159		1	3	2	1																7	159
160		2	1	7	7																17	160
161			2																		2	161
162			1																		1	162
163			1																		1	163
164		1	2	2	1	1															7	164
165		7	1	1																	9	165
166		1				1															2	166
167		2	5		1																8	167
168		4	10	3																	17	168
169																					0	169
170		1	3	11	1																16	170
171																					0	171
172		1	1																		2	172
TOTALS		171	245	285	351	174	32	7	2	3	3	3	3	5	1	1	0	0	0	0	1286	
%/SIZE		13.30	19.05	22.16	27.29	13.53	2.49	0.54	0.16	0.23	0.23	0.23	0.23	0.39	0.08	0.08	0.00	0.00	0.00	0.00	18.20	
#/SQ.FT.		4	6	7	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: **Meckworth Island**
DATE: **June 24-July 20, 1994**
SAMPLE NO: 172
NO. ACRES: 114.00

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	171	13.3	0.0	0	0	0
5-9	0.000	245	19.1	0.0	0	0	0
10-14	0.000	285	22.2	0.0	0	0	0
15-19	0.550	351	27.3	193.1	1	128	0
20-24	1.196	174	13.5	208.1	1	138	0
25-29	2.212	32	2.5	70.8	0	47	0
30-34	3.681	7	0.5	25.8	0	17	0
35-39	5.690	2	0.2	11.4	0	8	0
40-44	8.327	3	0.2	25.0	0	17	0
45-49	11.670	3	0.2	35.0	0	23	0
50-54	15.795	3	0.2	47.4	0	31	31
55-59	20.818	3	0.2	62.5	0	41	41
60-64	26.801	5	0.4	134.0	1	89	89
65-69	33.780	1	0.1	33.8	0	22	22
70-74	41.980	1	0.1	42.0	0	28	28
75-79	51.356	0	0.0	0.0	0	0	0
80-84	61.881	0	0.0	0.0	0	0	0
85-89	74.121	0	0.0	0.0	0	0	0
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		1286	100.0		5	589	212
				% BUSHELS HARVESTABLE			35.96

Following-Year Projection [Closed Area - NO Harvesting) "NORMAL" MORTALITY VALUES
SAMPLE NO: 172
NO. ACRES: 114.0

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	86	12.6	47.0	0	31	0
20-24	1.196	123	18.0	146.5	1	97	0
25-29	2.212	143	21.0	315.2	2	209	0
30-34	3.681	176	25.8	646.0	4	428	0
35-39	5.690	104	15.4	594.0	3	394	0
40-44	8.327	26	3.8	213.2	1	141	0
45-49	11.670	6	0.8	65.4	0	43	0
50-54	15.795	2	0.2	25.3	0	17	17
55-59	20.818	3	0.4	53.1	0	35	35
60-64	26.801	3	0.4	68.3	0	45	45
65-69	33.780	4	0.6	136.8	1	91	91
70-74	41.980	3	0.5	144.4	1	96	96
75-79	51.356	3	0.4	133.5	1	88	88
80-84	61.881	1	0.1	55.7	0	37	37
85-89	74.121	0	0.1	33.4	0	22	22
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		680	100.0		16	1775	431
				% BUSHELS HARVESTABLE			24.29

Following-Year Projection [Open Area - Harvested] "NORMAL" MORTALITY VALUES
SAMPLE NO: 172
NO. ACRES: 114.0

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	86	12.8	47.0	0	31	0
20-24	1.196	123	18.4	146.5	1	97	0
25-29	2.212	143	21.4	315.2	2	209	0
30-34	3.681	176	26.3	646.0	4	428	0
35-39	5.690	104	15.6	594.0	3	394	0
40-44	8.327	26	3.8	213.2	1	141	0
45-49	11.670	6	0.8	65.4	0	43	0
50-54	15.795	0	0.1	7.6	0	5	5
55-59	20.818	1	0.1	15.9	0	11	11
60-64	26.801	1	0.1	20.5	0	14	14
65-69	33.780	1	0.2	41.5	0	28	28
70-74	41.980	1	0.2	47.0	0	31	31
75-79	51.356	1	0.1	40.6	0	27	27
80-84	61.881	0	0.0	17.3	0	11	11
85-89	74.121	0	0.0	10.4	0	7	7
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		667	100.0		13	1477	133
				% BUSHELS HARVESTABLE			9.01

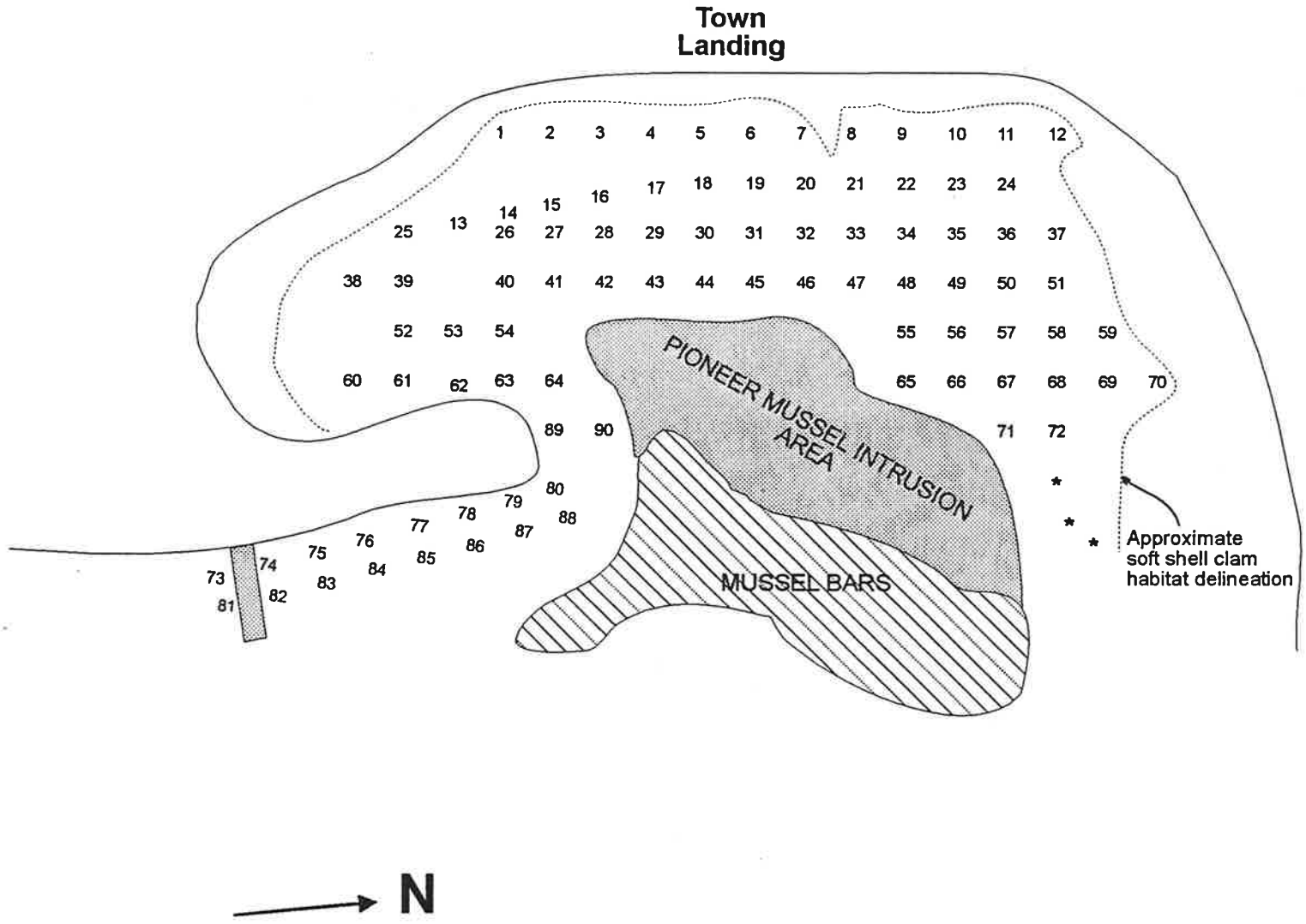
MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

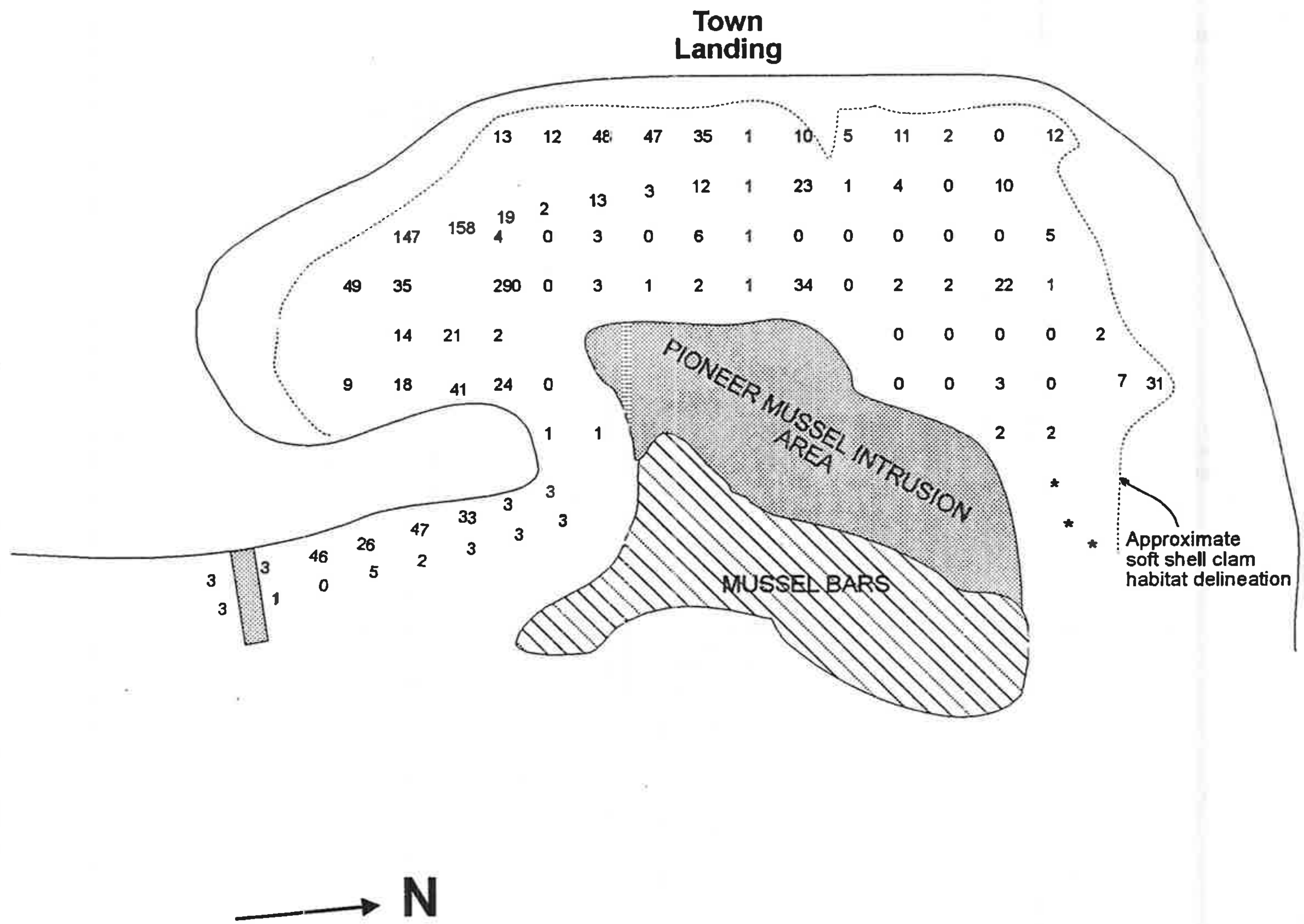
LOCATION: Mackworth Island
DATE: June 24-July 20, 1994
SAMPLE NO: 172
NO. ACRES: 114.0

	PRICE ($)/BUSHEL							
	$30	$40	$50	$55	$60	$70	$80	$90
CURRENT YEAR	$6,355	$8,473	$10,592	$11,651	$12,710	$14,828	$16,946	$19,065
PROJ. (NO HARVEST)	12,934	17,246	21,557	23,713	25,868	30,180	34,491	38,803
PROJ. (HARVESTED)	3,994	5,325	6,656	7,322	7,987	9,319	10,650	11,981

	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
CURRENT YEAR						
$30	$9,532	$12,710	$15,887	$19,065	$22,242	$25,420
$40	12,710	16,946	21,183	25,420	29,656	33,893
$50	15,887	21,183	26,479	31,775	37,070	42,366
$55	17,476	23,301	29,127	34,952	40,777	46,603
$60	19,065	25,420	31,775	38,130	44,484	50,839
$70	22,242	29,656	37,070	44,484	51,898	59,313
$80	25,420	33,893	42,366	50,839	59,313	67,786
$90	28,597	38,130	47,662	57,194	66,727	76,259

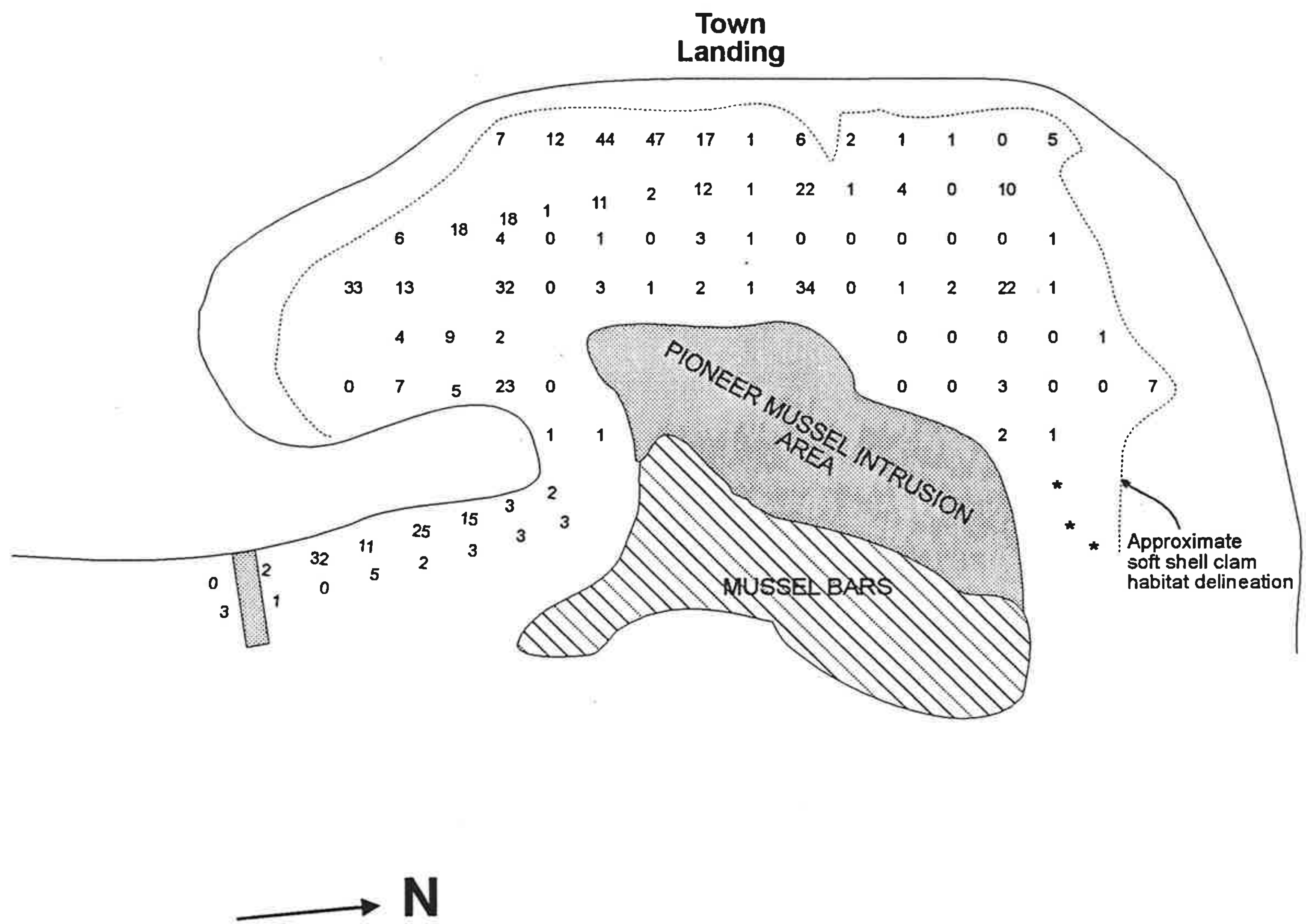
	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
PROJ. [HARVESTED]						
$30	$5,991	$7,987	$9,984	$11,981	$13,978	$15,975
$40	7,987	10,650	13,312	15,975	18,637	21,300
$50	9,984	13,312	16,640	19,968	23,296	26,625
$55	10,983	14,644	18,304	21,965	25,626	29,287
$60	11,981	15,975	19,968	23,962	27,956	31,949
$70	13,978	18,637	23,296	27,956	32,615	37,274
$80	15,975	21,300	26,625	31,949	37,274	42,599
$90	17,972	23,962	29,953	35,943	41,934	47,924


Town
Landing
1 2 3 4 5 6 7 8 9 10 11 12
13 14 15 16 17 18 19 20 21 22 23 24
25 26 27 28 29 30 31 32 33 34 35 36 37
38 39 40 41 42 43 44 45 46 47 48 49 50 51
52 53 54 55 56 57 58 59
60 61 62 63 64 65 66 67 68 69 70
71 72
73 74 75 76 77 78 79 80
81 82 83 84 85 86 87 88 89 90
PIONEER MUSSEL INTRUSION AREA
MUSSEL BARS
Approximate soft shell clam habitat delineation
N
MER Assessment Corporation
Shellfish Survey
Broad Cove, Cumberland
May 31, 1994 and June 20,21,22, 1994
Sample Station Location
~100 ft.



MER Assessment Corporation
Shellfish Survey
Broad Cove, Cumberland
May 31, 1994 and June 20,21,22, 1994
Total Clam Distribution

~100 ft.



MER Assessment Corporation
Shellfish Survey
Broad Cove, Cumberland
May 31, 1994 and June 20,21,22, 1994
Spat (0-9mm) Distribution

~100 ft.

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: BROAD COVE
DATE: 5-31-94
SAMPLE NO 90
ACRES: 11.55

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLOT	PLOT NO.
1		6	1	4	1	1															13	1
2		12																			12	2
3		29	15	3	1																48	3
4		40	7																		47	4
5		14	3			3	11	3	1												35	5
6		1																			1	6
7		4	2	1									1		2						10	7
8		2		2		1															5	8
9		1		5	3	2															11	9
10			1		1																2	10
11																					0	11
12		2	3	3		1							3								12	12
13		9	9	20	32	35	30	22					1								158	13
14		14	4	1																	19	14
15		1					1														2	15
16		10	1	2																	13	16
17		1	1		1																3	17
18		11	1																		12	18
19			1																		1	19
20		17	5	1																	23	20
21			1																		1	21
22		4																			4	22
23																					0	23
24		10																			10	24
25		4	2	5	45	57	26	7					1								147	25
26		3	1																		4	26
27																					0	27
28			1	1	1																3	28
29																					0	29
30		2	1	1	2																6	30
31			1																		1	31
32																					0	32
33																					0	33
34																					0	34
35																					0	35
36																					0	36
37		1		2		2															5	37
38		26	7	2								2	3	4	4			1			49	38
39		7	6	3	6	8	2	2				1									35	39
40		28	4	26	93	107	29	1				2									290	40
41																					0	41
42		3																			3	42
43		1																			1	43
44		2																			2	44
45		1																			1	45
46		34																			34	46
47																					0	47
48		1		1																	2	48
49		2																			2	49
50		22																			22	50
51			1																		1	51
52		2	2	3	2	3								1	1						14	52
53		3	6	6	2	3	1														21	53
54			2																		2	54
55																					0	55
56																					0	56
57																					0	57
58																					0	58
59		1					1														2	59
60					4	2	1				1	1									9	60
TOTALS		331	89	92	194	225	102	35	1	0	1	6	9	5	7	0	0	1	0	0	1098	
%/SIZE		30.15	8.11	8.38	17.67	20.49	9.29	3.19	0.09	0.00	0.09	0.55	0.82	0.46	0.64	0.00	0.00	0.09	0.00	0.00	100.00	
#SQ.FT.		15	4	4	9	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5	

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: BROAD COVE
DATE: 5-31-94
SAMPLE NO 90
ACRES: 11.55

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLOT	PLOT NO.
1-60		331	89	92	194	225	102	35	1	0	1	6	9	5	7	0	0	1	0	0	1098	
61		6	1	1	1	2	7														18	61
62		3	2	7	6	3	1				1	5	3	4	3	3					41	62
63		12	11	1																	24	63
64																					0	64
65																					0	65
66																					0	66
67		3																			3	67
68																					0	68
69						2		2		1	1		1								7	69
70		4	3		5	7	7	3				2									31	70
71		2																			2	71
72		1		1																	2	72
73															2		1				3	73
74		1	1	1																	3	74
75		16	16	2	1										2	2	3	2	2		46	75
76		7	4		1											5	3	3	3		26	76
77		20	5	2	1		2	1					2	1	3	4	3	1	2		47	77
78		15									1	1		3	1	1	4	5	2		33	78
79			3																		3	79
80			2	1																	3	80
81		1	2																		3	81
82		1																			1	82
83																					0	83
84		3	2																		5	84
85		2																			2	85
86		2	1																		3	86
87		1	2																		3	87
88		3																			3	88
89		1																			1	89
90			1																		1	90
TOTALS		435	145	108	209	239	119	41	1	1	4	14	15	13	18	15	14	12	9	0	1412	
%/SIZE		30.81	10.27	7.65	14.80	16.93	8.43	2.90	0.07	0.07	0.28	0.99	1.06	0.92	1.27	1.06	0.99	0.85	0.64	0.00	36.47	
#SQ.FT.		19	6	5	9	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8	

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: **BROAD COVE**
DATE: **5-31-94**
SAMPLE NO **90**
NO. ACRES: **11.55**

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	435	30.8	0.0	0	0	0
5-9	0.000	145	10.3	0.0	0	0	0
10-14	0.000	108	7.6	0.0	0	0	0
15-19	0.550	209	14.8	115.0	1	15	0
20-24	1.196	239	16.9	285.8	3	37	0
25-29	2.212	119	8.4	263.2	3	34	0
30-34	3.681	41	2.9	150.9	2	19	0
35-39	5.690	1	0.1	5.7	0	1	0
40-44	8.327	1	0.1	8.3	0	1	0
45-49	11.670	4	0.3	46.7	1	6	0
50-54	15.795	14	1.0	221.1	2	28	28
55-59	20.818	15	1.1	312.3	3	40	40
60-64	26.801	13	0.9	348.4	4	45	45
65-69	33.780	18	1.3	608.0	7	78	78
70-74	41.980	15	1.1	629.7	7	81	81
75-79	51.356	14	1.0	719.0	8	92	92
80-84	61.881	12	0.8	742.6	8	95	95
85-89	74.121	9	0.6	667.1	7	86	86
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		1412	100.0		56.9	657.6	545.2
				% BUSHELS HARVESTABLE			82.91

Following-Year Projection [Closed Area - NO Harvesting) "NORMAL" MORTALITY VALUES
SAMPLE NO 90
NO. ACRES: 11.6

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	218	26.4	119.6	1	15	0
20-24	1.196	73	8.8	86.7	1	11	0
25-29	2.212	54	6.6	119.4	1	15	0
30-34	3.681	105	12.7	384.7	4	49	0
35-39	5.690	143	17.4	815.9	9	105	0
40-44	8.327	95	11.6	792.7	9	102	0
45-49	11.670	33	4.0	382.8	4	49	0
50-54	15.795	1	0.1	12.0	0	2	2
55-59	20.818	1	0.1	17.7	0	2	2
60-64	26.801	3	0.4	91.1	1	12	12
65-69	33.780	19	2.3	653.6	7	84	84
70-74	41.980	12	1.5	505.4	6	65	65
75-79	51.356	14	1.7	703.1	8	90	90
80-84	61.881	15	1.8	918.9	10	118	118
85-89	74.121	13	1.6	967.3	11	124	124
>90	87.597	26	3.2	2274.9	25	292	292
TOTALS		824	100.0		98.3	1135.3	788.6
				% BUSHELS HARVESTABLE			69.46

Following-Year Projection [Open Area - Harvested] "NORMAL" MORTALITY VALUES
SAMPLE NO 90
NO. ACRES: 11.6

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	218	28.9	119.6	1	15	0
20-24	1.196	73	9.6	86.7	1	11	0
25-29	2.212	54	7.2	119.4	1	15	0
30-34	3.681	105	13.9	384.7	4	49	0
35-39	5.690	143	19.1	815.9	9	105	0
40-44	8.327	95	12.7	792.7	9	102	0
45-49	11.670	33	4.4	382.8	4	49	0
50-54	15.795	0	0.0	3.8	0	0	0
55-59	20.818	0	0.0	5.3	0	1	1
60-64	26.801	1	0.1	27.3	0	4	4
65-69	33.780	6	0.8	198.6	2	25	25
70-74	41.980	4	0.5	164.6	2	21	21
75-79	51.356	4	0.6	216.2	2	28	28
80-84	61.881	5	0.6	285.9	3	37	37
85-89	74.121	4	0.5	300.9	3	39	39
>90	87.597	8	1.1	705.2	8	90	90
TOTALS		752	100.0		51.2	591.6	244.8
				% BUSHELS HARVESTABLE			41.39

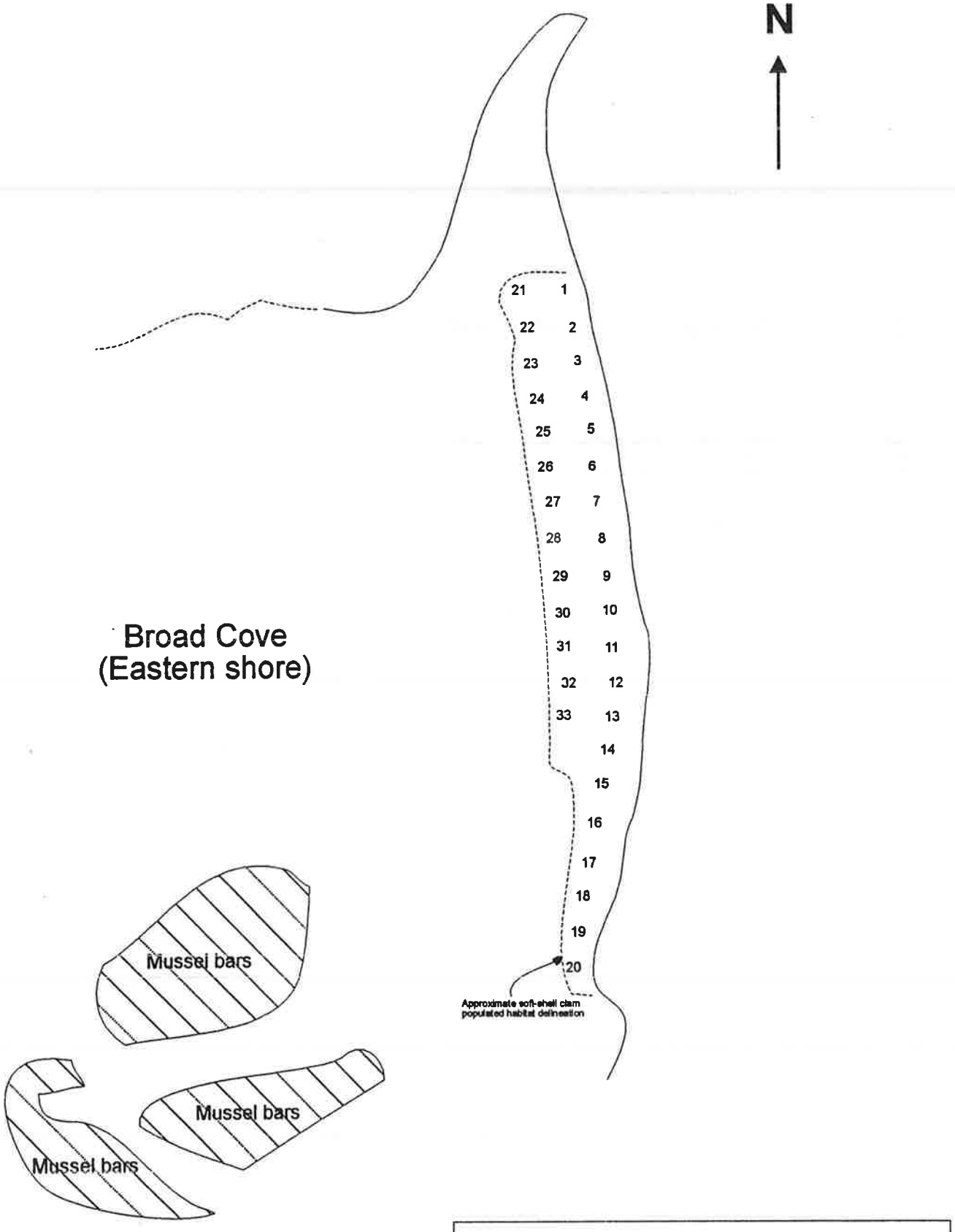
MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: BROAD COVE
DATE: 5-31-94
SAMPLE NO 90
NO. ACRES: 11.6

	PRICE ($)/BUSHEL							
	$30	$40	$50	$55	$60	$70	$80	$90
CURRENT YEAR	$16,356	$21,807	$27,259	$29,985	$32,711	$38,163	$43,615	$49,067
PROJ. (NO HARVEST)	23,657	31,543	39,429	43,371	47,314	55,200	63,086	70,971
PROJ. (HARVESTED)	7,345	9,793	12,242	13,466	14,690	17,138	19,587	22,035

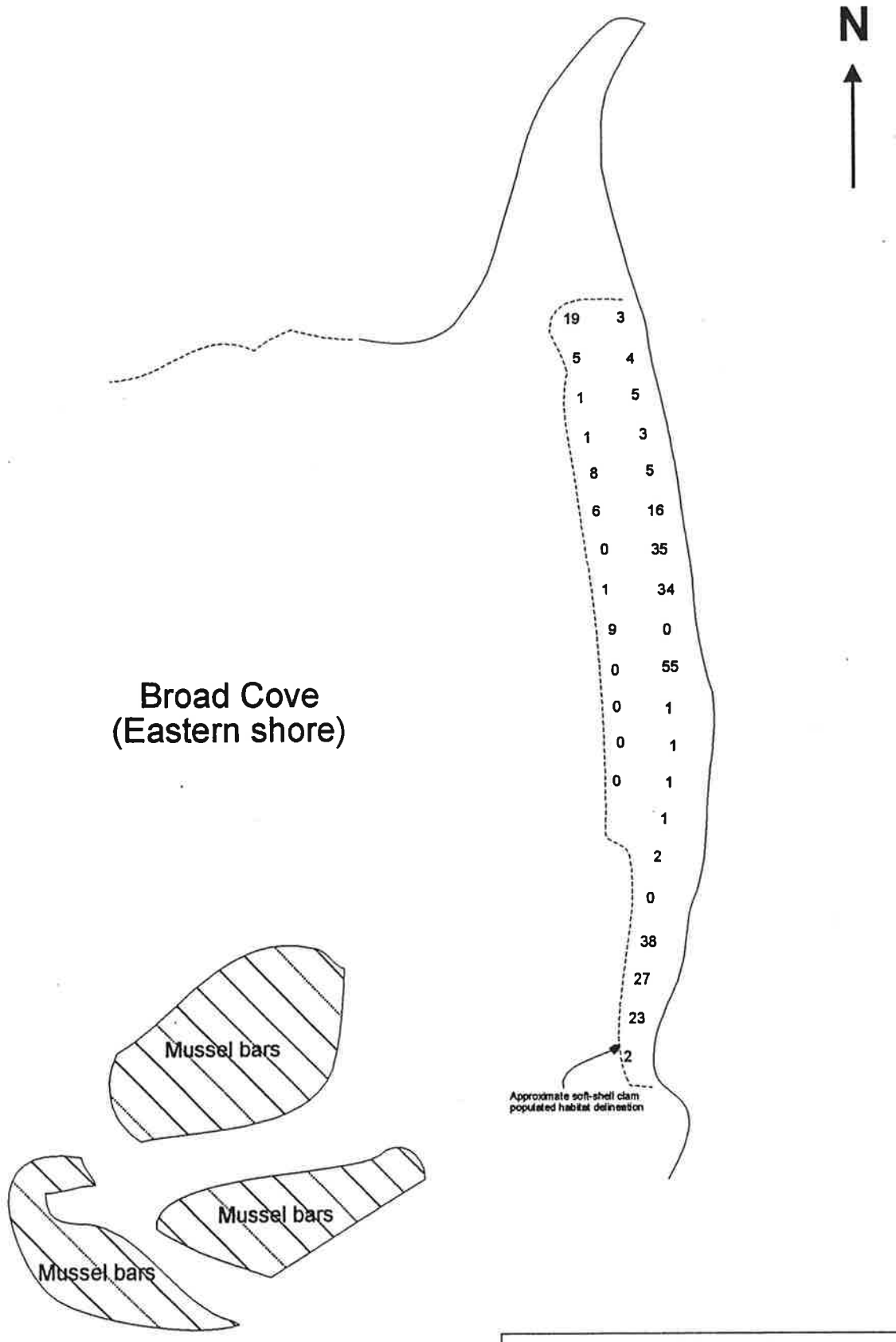
	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
CURRENT YEAR						
$30	$24,533	$32,711	$40,889	$49,067	$57,244	$65,422
$40	32,711	43,615	54,519	65,422	76,326	87,230
$50	40,889	54,519	68,148	81,778	95,407	109,037
$55	44,978	59,970	74,963	89,956	104,948	119,941
$60	49,067	65,422	81,778	98,133	114,489	130,844
$70	57,244	76,326	95,407	114,489	133,570	152,652
$80	65,422	87,230	109,037	130,844	152,652	174,459
$90	73,600	98,133	122,667	147,200	171,733	196,267

	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
PROJ. [HARVESTED]						
$30	$11,018	$14,690	$18,363	$22,035	$25,708	$29,380
$40	14,690	19,587	24,484	29,380	34,277	39,174
$50	18,363	24,484	30,604	36,725	42,846	48,967
$55	20,199	26,932	33,665	40,398	47,131	53,864
$60	22,035	29,380	36,725	44,070	51,415	58,761
$70	25,708	34,277	42,846	51,415	59,985	68,554
$80	29,380	39,174	48,967	58,761	68,554	78,347
$90	33,053	44,070	55,088	66,106	77,123	88,141



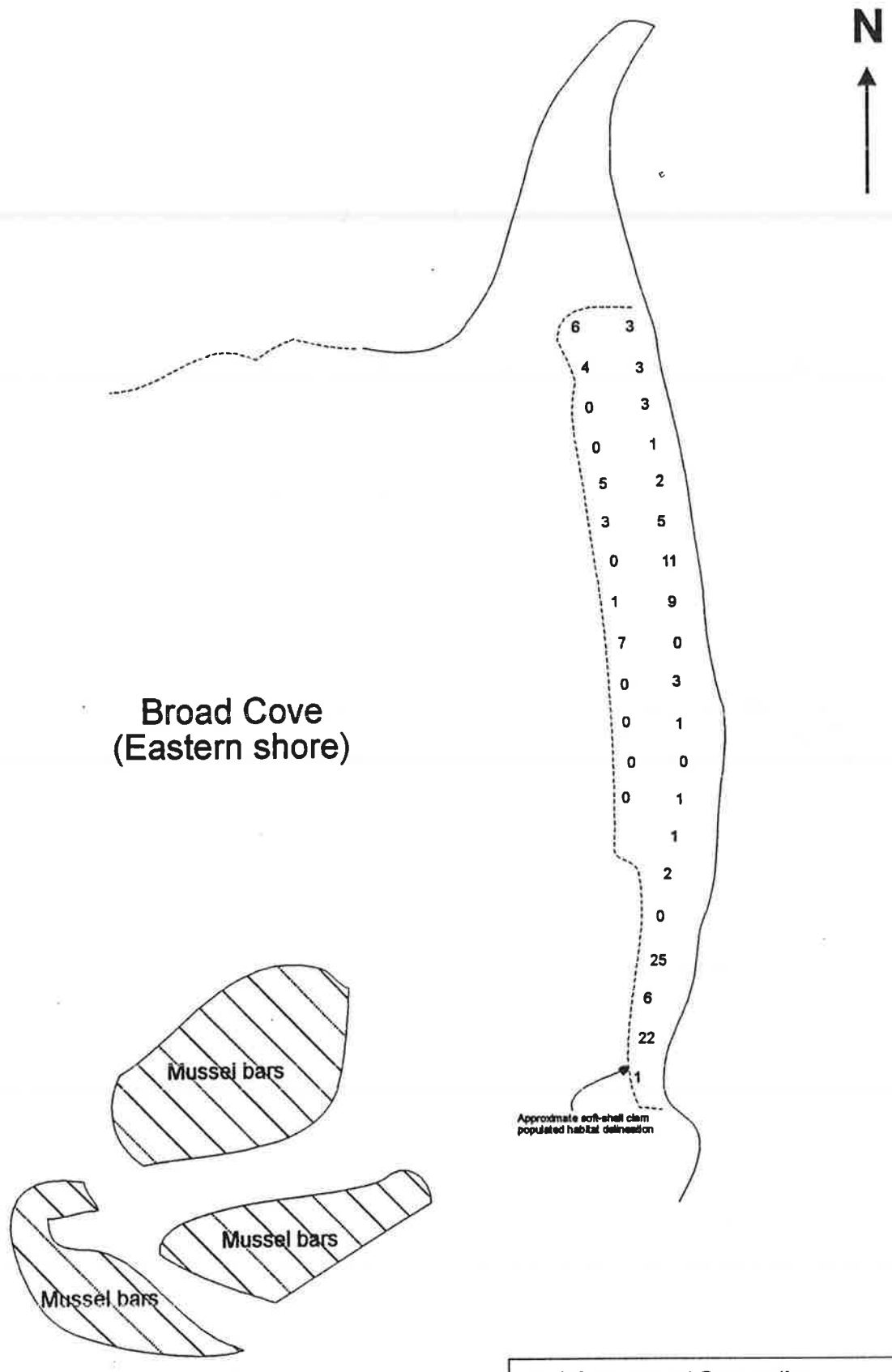
MER Assessment Corporation
Shellfish Survey
Broad Cove (East), Yarmouth
June 23, 1994
Sampling Station Location

~100 ft.



MER Assessment Corporation
Shellfish Survey
Broad Cove (East), Yarmouth
June 23, 1994
Total Clam Distribution

~100 ft.



MER Assessment Corporation
Shellfish Survey
Broad Cove (East), Yarmouth
June 23, 1994
Spat (0-9mm) Distribution

~100 ft.

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: BROAD COVE (EAST)
DATE: 6-23-94
SAMPLE NO: 33

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLOT	PLOT NO.
1		1	2																		3	1
2		2	1							1											4	2
3		1	2		1	1															5	3
4		1				2															3	4
5		1	1		2	1															5	5
6		2	3	2	3					2	3	1									16	6
7		3	8	21	1					1			1								35	7
8		1	8	20	1	1					2		1								34	8
9																					0	9
10			3	4	18	8	1	1	4	7	6	3									55	10
11		1																			1	11
12							1														1	12
13			1																		1	13
14		1																			1	14
15		1	1																		2	15
16																					0	16
17		15	10	4		1	1		1	3	3										38	17
18		5	1							2	7	4	5	2	1						27	18
19		17	5										1								23	19
20		1										1									2	20
21		3	3	7	4		1			1											19	21
22		1	3	1																	5	22
23				1																	1	23
24				1																	1	24
25		4	1	1						1	1										8	25
26			3			2	1														6	26
27																					0	27
28		1																			1	28
29		7			2																9	29
30																					0	30
31																					0	31
32																					0	32
33																					0	33
TOTALS		**69**	**56**	**62**	**32**	**16**	**5**	**1**	**5**	**18**	**22**	**9**	**8**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**306**	
%/SIZE		**22.55**	**18.30**	**20.26**	**10.46**	**5.23**	**1.63**	**0.33**	**1.63**	**5.88**	**7.19**	**2.94**	**2.61**	**0.65**	**0.33**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**100**	
#/SQ.FT.		**8**	**7**	**8**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: BROAD COVE (EAST)
DATE: 6-23-94
SAMPLE NO: 33
NO. ACRES: 3.4

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	69	22.5	0.0	0.0	0	0
5-9	0.000	56	18.3	0.0	0.0	0	0
10-14	0.000	62	20.3	0.0	0.0	0	0
15-19	0.550	32	10.5	17.6	0.5	2	0
20-24	1.196	16	5.2	19.1	0.6	2	0
25-29	2.212	5	1.6	11.1	0.3	1	0
30-34	3.681	1	0.3	3.7	0.1	0	0
35-39	5.690	5	1.6	28.5	0.9	3	0
40-44	8.327	18	5.9	149.9	4.5	15	0
45-49	11.670	22	7.2	256.7	7.8	26	0
50-54	15.795	9	2.9	142.2	4.3	15	15
55-59	20.818	8	2.6	166.5	5.0	17	17
60-64	26.801	2	0.7	53.6	1.6	6	6
65-69	33.780	1	0.3	33.8	1.0	3	3
70-74	41.080	0	0.0	0.0	0.0	0	0
75-79	51.356	0	0.0	0.0	0.0	0	0
80-84	61.881	0	0.0	0.0	0.0	0	0
85-89	74.121	0	0.0	0.0	0.0	0	0
>90	87.597.	0	0.0	0.0	0.0	0	0
TOTALS		306	100.0		26.7	91	41

% BUSHELS HARVESTABLE 44.87

Following-Year Projection [Closed Area - NO Harvesting) "NORMAL" MORTALITY VALUES
SAMPLE NO: 33
NO. ACRES: 3.4

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	35	19.2	19.0	1	2	0
20-24	1.196	28	15.6	33.5	1	3	0
25-29	2.212	31	17.3	68.6	2	7	0
30-34	3.681	16	8.9	58.9	2	6	0
35-39	5.690	10	5.3	54.6	2	6	0
40-44	8.327	4	2.2	33.3	1	3	0
45-49	11.670	1	0.4	9.3	0	1	0
50-54	15.795	4	2.2	63.2	2	7	7
55-59	20.818	15	8.5	318.5	10	33	33
60-64	26.801	19	10.4	501.2	15	52	52
65-69	33.780	12	6.5	395.2	12	41	41
70-74	41.980	4	2.4	180.5	5	19	19
75-79	51.356	1	0.7	67.3	2	7	7
80-84	61.881	0	0.3	27.8	1	3	3
85-89	74.121	0	0.0	0.0	0	0	0
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		180	100.0		55	189	160

% BUSHELS HARVESTABLE 84.66

Following-Year Projection [Open Area - Harvested] "NORMAL" MORTALITY VALUES
SAMPLE NO: 33
NO. ACRES: 3.4

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	35	24.5	19.0	1	2	0
20-24	1.196	28	19.9	33.5	1	3	0
25-29	2.212	31	22.0	68.6	2	7	0
30-34	3.681	16	11.4	58.9	2	6	0
35-39	5.690	10	6.8	54.6	2	6	0
40-44	8.327	4	2.8	33.3	1	3	0
45-49	11.670	1	0.6	9.3	0	1	0
50-54	15.795	1	0.9	19.0	1	2	2
55-59	20.818	5	3.3	95.0	3	10	10
60-64	26.801	6	4.0	150.4	5	15	15
65-69	33.780	4	2.5	119.9	4	12	12
70-74	41.980	1	1.0	58.8	2	6	6
75-79	51.356	0	0.3	20.5	1	2	2
80-84	61.881	0	0.1	8.7	0	1	1
85-89	74.121	0	0.0	0.0	0	0	0
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		141	100.0		23	77	49

% BUSHELS HARVESTABLE 63.04

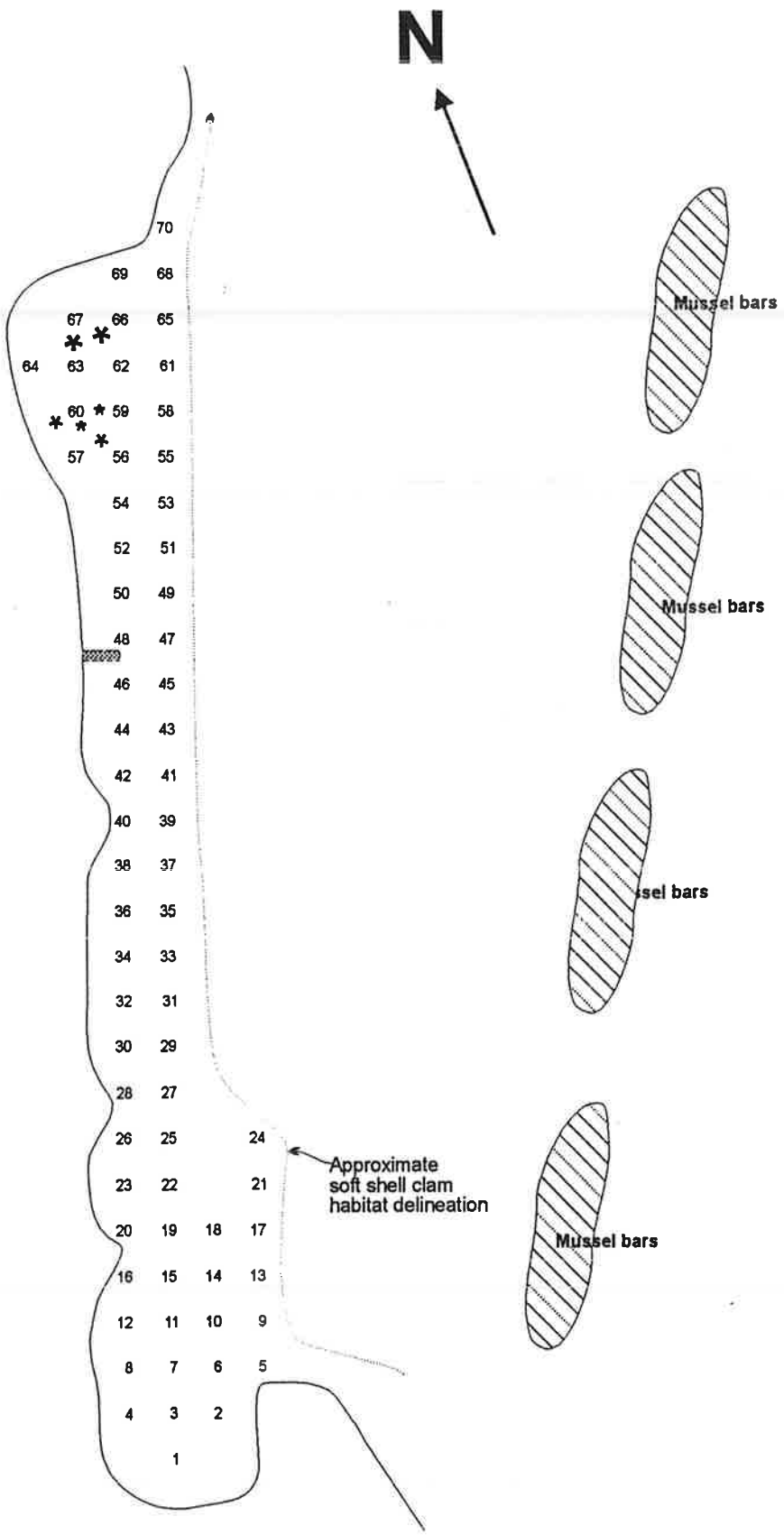
MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: BROAD COVE (EAST)
DATE: 6-23-94
SAMPLE NO: 33
NO. ACRES: 3.4

	PRICE ($)/BUSHEL							
	$30	$40	$50	$55	$60	$70	$80	$90
CURRENT YEAR	$1,224	$1,632	$2,040	$2,244	$2,449	$2,857	$3,265	$3,673
PROJ. (NO HARVEST)	4,802	6,403	8,004	8,805	9,605	11,206	12,807	14,407
PROJ. (HARVESTED)	1,461	1,948	2,435	2,679	2,923	3,410	3,897	4,384

	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
CURRENT YEAR						
$30	$1,836	$2,449	$3,061	$3,673	$4,285	$4,897
$40	2,449	3,265	4,081	4,897	5,713	6,529
$50	3,061	4,081	5,101	6,121	7,141	8,162
$55	3,367	4,489	5,611	6,733	7,856	8,978
$60	3,673	4,897	6,121	7,346	8,570	9,794
$70	4,285	5,713	7,141	8,570	9,998	11,426
$80	4,897	6,529	8,162	9,794	11,426	13,059
$90	5,509	7,346	9,182	11,018	12,855	14,691

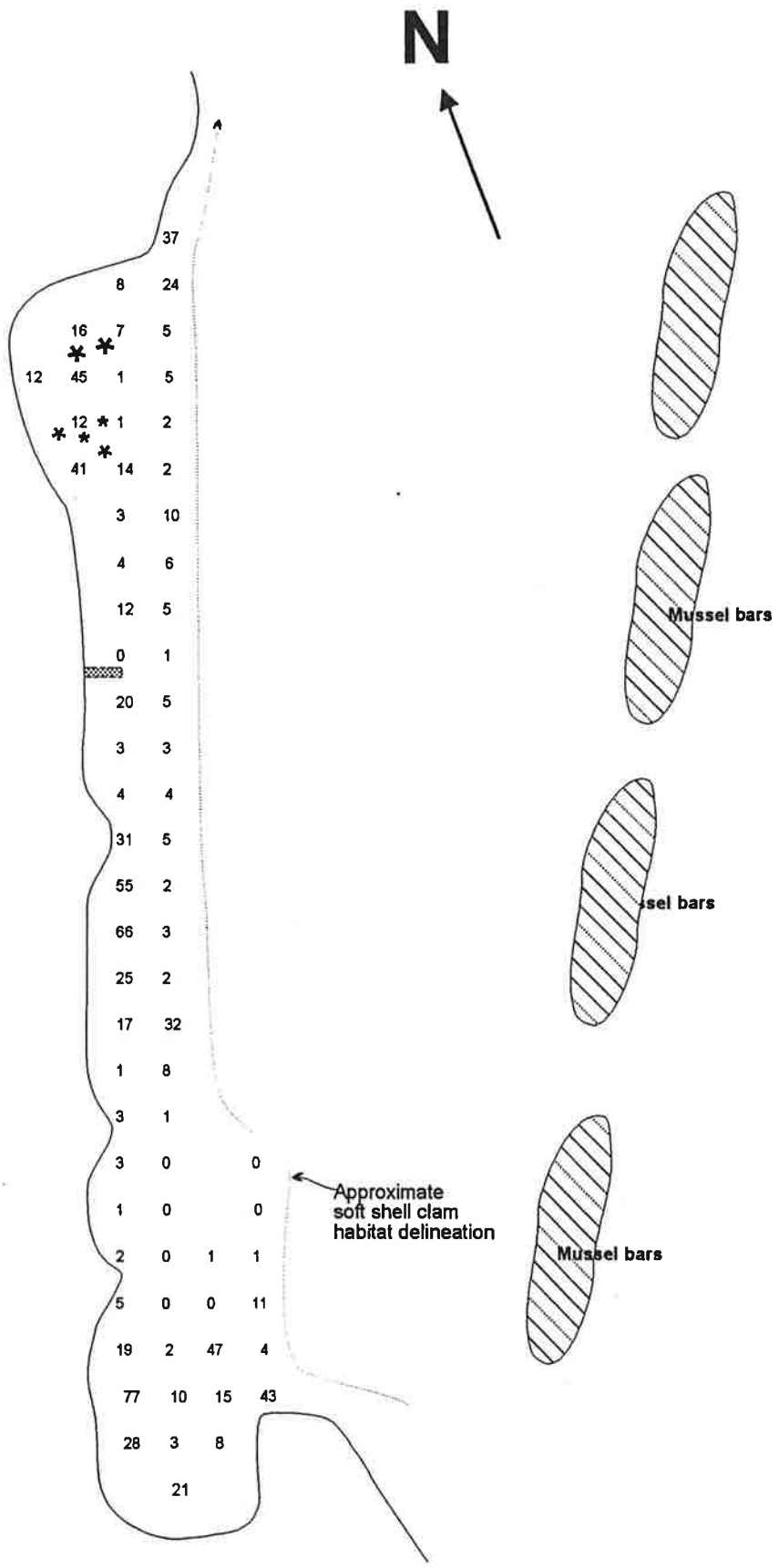
	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
PROJ. [HARVESTED]						
$30	$2,192	$2,923	$3,653	$4,384	$5,114	$5,845
$40	2,923	3,897	4,871	5,845	6,819	7,793
$50	3,653	4,871	6,089	7,306	8,524	9,742
$55	4,018	5,358	6,697	8,037	9,376	10,716
$60	4,384	5,845	7,306	8,768	10,229	11,690
$70	5,114	6,819	8,524	10,229	11,934	13,638
$80	5,845	7,793	9,742	11,690	13,638	15,587
$90	6,576	8,768	10,959	13,151	15,343	17,535



DRINKWATER POINT

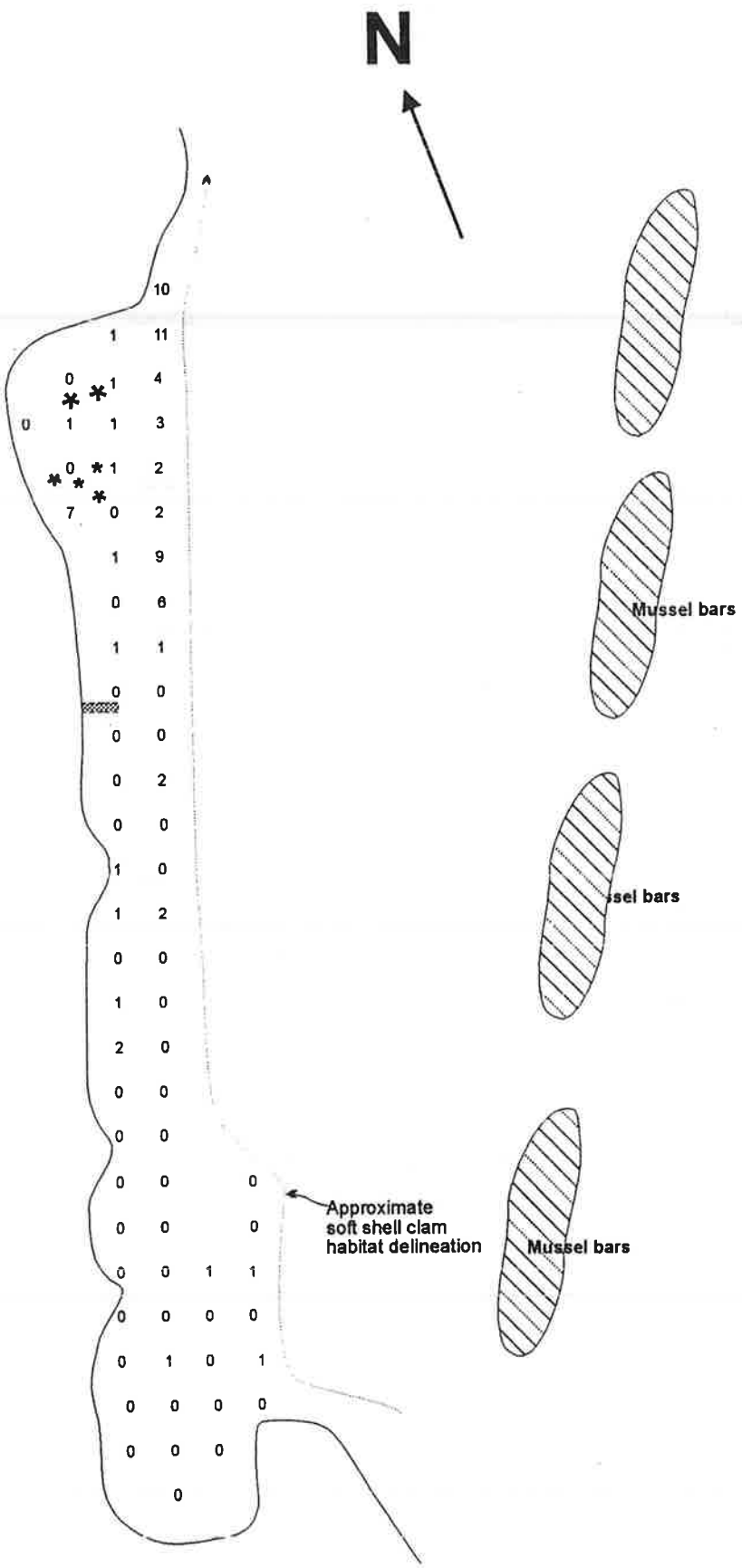
MER Assessment Corporation
Shellfish Survey
White Cove, Yarmouth
August 29 and 30, 1994
Sampling Station Locations

~100 ft



MER Assessment Corporation
Shellfish Survey
White Cove, Yarmouth
August 29 and 30, 1994
Total Clam Distribution

~100 ft



DRINKWATER POINT

MER Assessment Corporation
Shellfish Survey
White Cove, Yarmouth
August 29 and 30, 1994
Spat (0-9mm) distribution

~100 ft

MER ASSESSMENT CORP.
CLAM RESOURCE SURVEY

LOCATION: WHITE'S COVE
DATE: 8-29/30-94
SAMPLE NO: 70

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLOT	PLOT NO
1						1	4			1	4	1	4	5	1						21	1
2						1		4				3									8	2
3				1	2																3	3
4						2	13	5			1	2	2	3							28	4
5							11	17	11		1	2		1							43	5
6							3	4	1	2	1	1	1	2							15	6
7					2	1	4	1	1	1											10	7
8					4	5	25	26	2	1		1	6	4	3						77	8
9			1						1	1	1										4	9
10					1	2	2	9	13	10		2	4	2	1	1					47	10
11			1				1														2	11
12								9	5	4		1									19	12
13					1	2	1		2	4	1										11	13
14																					0	14
15																					0	15
16				1						2	2										5	16
17			1																		1	17
18		1																			1	18
19																					0	19
20								1						1							2	20
21																					0	21
22																					0	22
23					1																1	23
24																					0	24
25																					0	25
26						1				2											3	26
27					1																1	27
28								1		2											3	28
29					1	3	1	2		1											8	29
30					1																1	30
31				1	6	13	5	3	4												32	31
32		1	1				3	3	7	2											17	32
33				1	1																2	33
34			1	3	3	4	1	2	6	1			1	1		2					25	34
35								3													3	35
36				3	4	3	9	12	3	1	4	2	10	7	7	1					66	36
37		2																			2	37
38			1	10	4	4	10	11	1			3	3	4	2		1	1			55	38
39					1	1	1	1	1												5	39
40			1	6	6	10	5	1		1				1							31	40
41							2	2													4	41
42				2	1	1															4	42
43		2					1														3	43
44						2		1													3	44
45					1			4													5	45
46					5	3	10	2													20	46
47							1														1	47
48																					0	48
49			1			1	3														5	49
50		1			3	2	3	1	1	1											12	50
TOTALS		7	8	28	49	62	119	125	69	37	15	18	31	31	14	4	1	1	0	0	609	
%/SIZE		1.15	1.31	4.60	8.05	10.18	19.54	20.53	9.69	6.08	2.46	2.96	5.09	5.09	2.30	0.66	0.16	0.16	0.00	0.00	100	
#SQ.FT.		0	0	2	3	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4	

MER ASSESSMENT CORP.
CLAM RESOURCE SURVEY

LOCATION: WHITE'S COVE
DATE: 8-29/30-94
SAMPLE NO: 70

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLOT	PLOT NO
1-50		7	8	28	49	62	119	125	59	37	15	18	31	31	14	4	1	1	0	0	609	1-50
51		4	2																		6	51
52					1		1	1				1									4	52
53		6	3				1														10	53
54		1				2															3	54
55		2																			2	55
56					1	6	6	1													14	56
57		1	6	8	1	1	3	3	1		1	5	3	4	2	1		1			41	57
58		2																			2	58
59		1																			1	59
60					3		2	1	1				2	2		1					12	60
61		2	1			1	1														5	61
62			1																		1	62
63			1	2	4	5	6	10	12		1			1	1	2					45	63
64				1	2	2		1					1	1	3		1				12	64
65		3	1				1														5	65
66			1		1		4	1													7	66
67				1	2		1	6	3				1	1	1						16	67
68		11		1		4	5	3													24	68
69			1	2									4	1							8	69
70		1	9	18	9																37	70
TOTALS		41	34	61	73	83	150	152	76	37	17	24	42	41	21	8	2	2	0	0	864	
%/SIZE		4.75	3.94	7.06	8.45	9.61	17.36	17.59	8.80	4.28	1.97	2.78	4.86	4.75	2.43	0.93	0.23	0.23	0.00	0.00	100.00	
#/SQ.FT.		2	2	3	4	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	6	

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: WHITE'S COVE
DATE: 8-29/30-94
SAMPLE NO: 70
NO. ACRES: 9.2

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	41	4.7	0.0	0.0	0	0
5-9	0.000	34	3.9	0.0	0.0	0	0
10-14	0.000	61	7.1	0.0	0.0	0	0
15-19	0.550	73	8.4	40.2	0.6	5	0
20-24	1.196	83	9.6	99.3	1.4	13	0
25-29	2.212	150	17.4	331.8	4.7	44	0
30-34	3.681	152	17.6	559.5	8.0	74	0
35-39	5.690	76	8.8	432.4	6.2	57	0
40-44	8.327	37	4.3	308.1	4.4	40	0
45-49	11.670	17	2.0	198.4	2.8	26	0
50-54	15.795	24	2.8	379.1	5.4	50	50
55-59	20.818	42	4.9	874.4	12.5	115	115
60-64	26.801	41	4.7	1098.8	15.7	144	144
65-69	33.780	21	2.4	709.4	10.1	93	93
70-74	41.980	8	0.9	335.8	4.8	44	44
75-79	51.356	2	0.2	102.7	1.5	13	13
80-84	61.881	2	0.2	123.8	1.8	16	16
85-89	74.121	0	0.0	0.0	0.0	0	0
>90	87.597	0	0.0	0.0	0.0	0	0
TOTALS		864	100.0		79.9	735	476
				% BUSHELS HARVESTABLE			**64.79**

Following-Year Projection [Closed Area - NO Harvesting) "NORMAL" MORTALITY VALUES
SAMPLE NO: 70
NO. ACRES: 9.2

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	21	3.3	11.3	0	1	0
20-24	1.196	17	2.7	20.3	0	3	0
25-29	2.212	31	4.9	67.5	1	9	0
30-34	3.681	37	5.8	134.4	2	18	0
35-39	5.690	50	8.0	283.4	4	37	0
40-44	8.327	120	19.2	999.2	14	131	0
45-49	11.670	122	19.4	1419.1	20	187	0
50-54	15.795	61	9.7	960.3	14	126	126
55-59	20.818	31	5.0	654.7	9	86	86
60-64	26.801	14	2.3	387.3	6	51	51
65-69	33.780	41	6.5	1368.1	20	180	180
70-74	41.980	36	5.7	1498.3	21	197	197
75-79	51.356	27	4.3	1390.7	20	183	183
80-84	61.881	13	2.1	807.5	12	106	106
85-89	74.121	5	0.7	333.5	5	44	44
>90	87.597	3	0.4	241.8	3	32	32
TOTALS		626	100.0		151	1390	1004
				% BUSHELS HARVESTABLE			72.25

Following-Year Projection [Open Area - Harvested] "NORMAL" MORTALITY VALUES
SAMPLE NO: 70
NO. ACRES: 9.2

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	21	4.4	11.3	0	1	0
20-24	1.196	17	3.6	20.3	0	3	0
25-29	2.212	31	6.5	67.5	1	9	0
30-34	3.681	37	7.8	134.4	2	18	0
35-39	5.690	50	10.7	283.4	4	37	0
40-44	8.327	120	25.7	999.2	14	131	0
45-49	11.670	122	26.1	1419.1	20	187	0
50-54	15.795	18	3.9	288.1	4	38	38
55-59	20.818	9	2.0	196.4	3	26	26
60-64	26.801	4	0.9	116.2	2	15	15
65-69	33.780	12	2.6	417.5	6	55	55
70-74	41.980	12	2.5	487.8	7	64	64
75-79	51.356	8	1.8	424.7	6	56	56
80-84	61.881	4	0.9	251.2	4	33	33
85-89	74.121	1	0.3	103.6	1	14	14
>90	87.597	1	0.2	75.3	1	10	10
TOTALS		466	100.0		76	696	310
				% BUSHELS HARVESTABLE			44.58

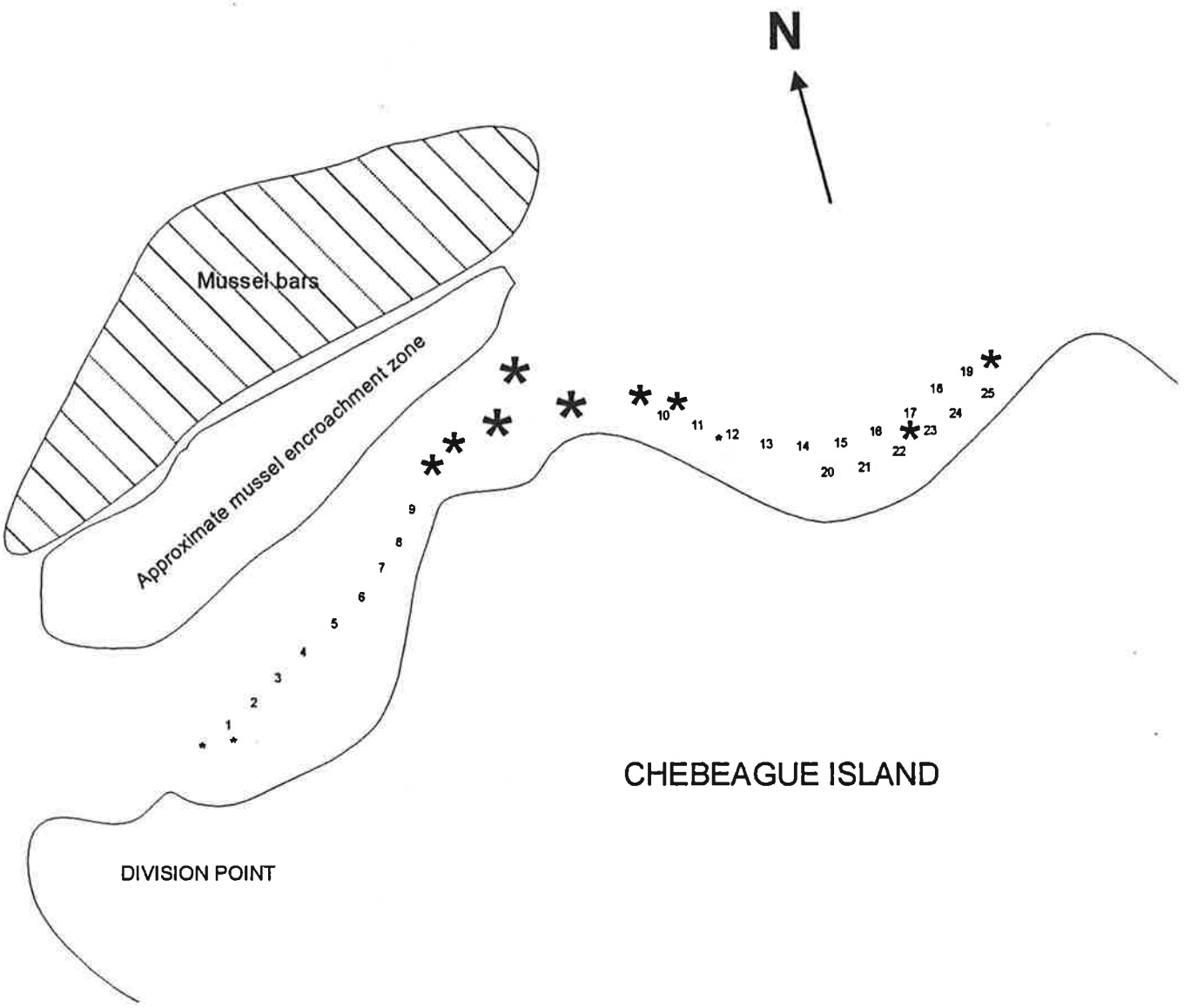
MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: WHITE'S COVE
DATE: 8-29/30-94
SAMPLE NO: 70
NO. ACRES: 9.2

	PRICE ($)/BUSHEL							
	$30	$40	$50	$55	$60	$70	$80	$90
CURRENT YEAR	$14,269	$19,052	$23,815	$26,196	$28,578	$33,341	$38,103	$42,866
PROJ. (NO HARVEST)	30,132	40,177	50,221	55,243	60,265	70,309	80,353	90,397
PROJ. (HARVESTED)	9,309	12,413	15,516	17,067	18,619	21,722	24,825	27,928

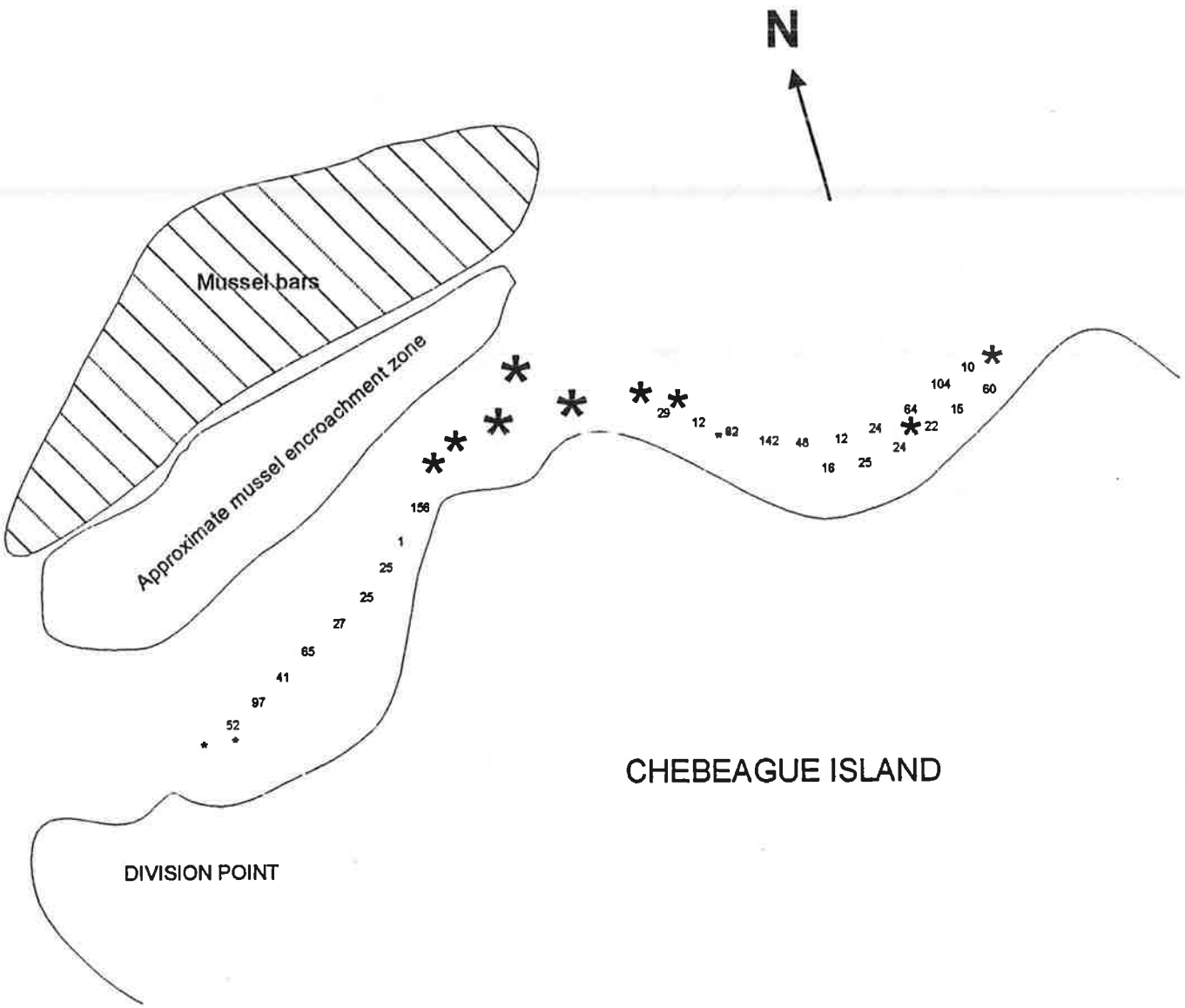
	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
CURRENT YEAR						
$30	$21,433	$28,578	$35,722	$42,866	$50,011	$57,155
$40	28,578	38,103	47,629	57,155	66,681	76,207
$50	35,722	47,629	59,537	71,444	83,351	95,259
$55	39,294	52,392	65,490	78,588	91,686	104,785
$60	42,866	57,155	71,444	85,733	100,022	114,310
$70	50,011	66,681	83,351	100,022	116,692	133,362
$80	57,155	76,207	95,259	114,310	133,362	152,414
$90	64,300	85,733	107,166	128,599	150,032	171,466

	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
PROJ. (HARVESTED)						
$30	$13,964	$18,619	$23,274	$27,928	$32,583	$37,238
$40	18,619	24,825	31,031	37,238	43,444	49,650
$50	23,274	31,031	38,789	46,547	54,305	62,063
$55	25,601	34,135	42,668	51,202	59,735	68,269
$60	27,928	37,238	46,547	55,856	65,166	74,475
$70	32,583	43,444	54,305	65,166	76,027	86,888
$80	37,238	49,650	62,063	74,475	86,888	99,300
$90	41,892	55,856	69,821	83,785	97,749	111,713



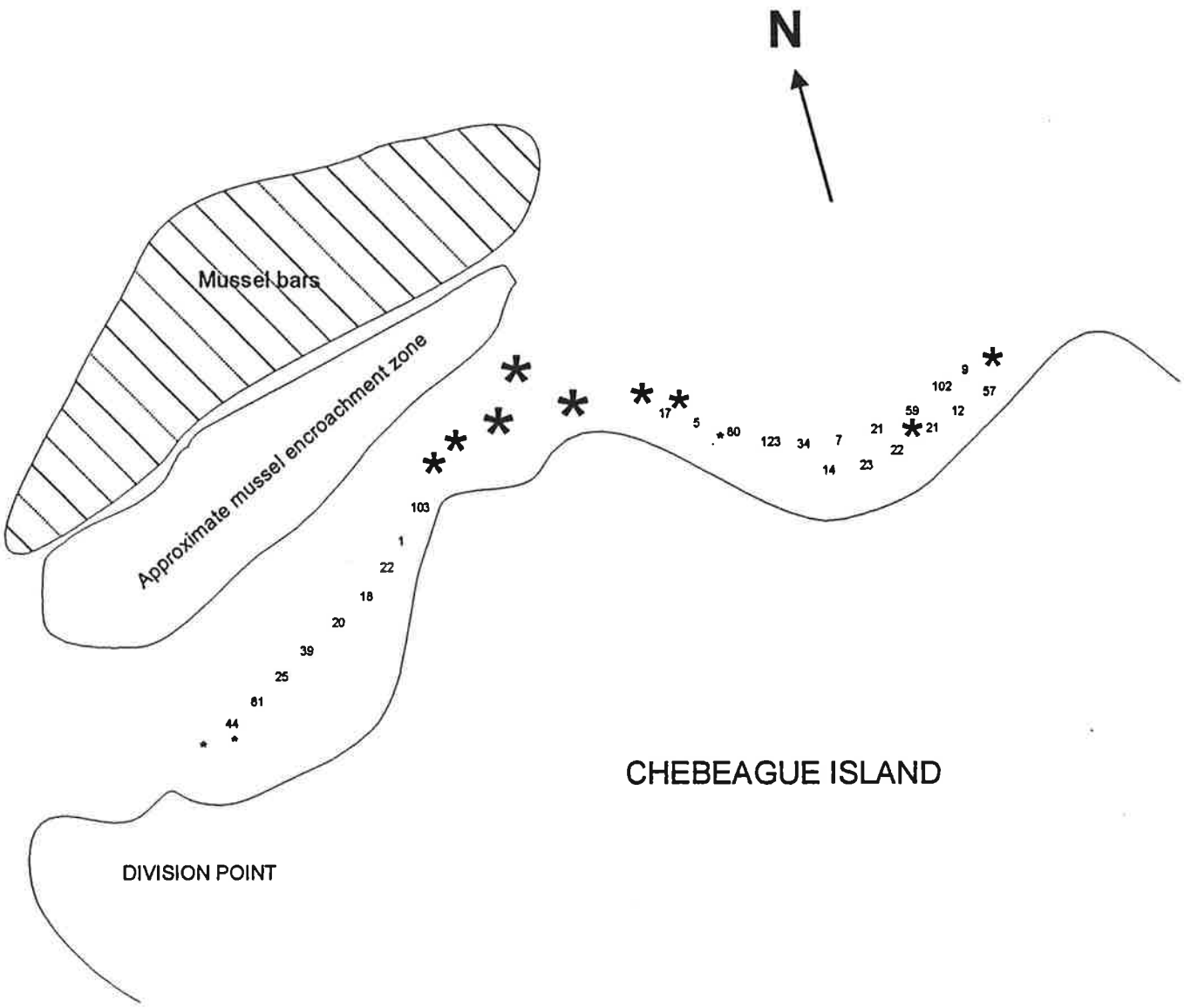
MER Assessment Corporation
Shellfish Survey
Chebeague Is., North of Division Point
September 9, 1994
Sample Station Location

~100 ft.



MER Assessment Corporation
Shellfish Survey
Chebeague Is., North of Division Point
September 9, 1994
Total Clam Distribution

~100 ft.



MER Assessment Corporation
Shellfish Survey
Chebeague Is., North of Division Point
September 9, 1994
Spat (0-9mm) Distribution

~100 ft.

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: DIVISION POINT
DATE: 9/9/94
SAMPLE NO 25

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLOT	PLOT NO.
1		6	8	11	19	3	1	1	1	1	1										52	1
2		3	20	32	28	12	1	1	1	1											97	2
3			1	10	14	12	4														41	3
4		1	3	12	23	23	2	1													65	4
5			3	11	6	7															27	5
6			4	5	9	5	2														25	6
7		1	9	8	4	3															25	7
8			1																		1	8
9		19	30	31	23	12	20	18	4	1											156	9
10		2	5	5	5	5	6	1													29	10
11			2	2	1	7															12	11
12		3	12	36	27	1	1														82	12
13		7	25	39	52	15	3	1													142	13
14			3	18	13	2	1	1	1	6	2					1					48	14
15			5	1	1	1	1	1	1	1											12	15
16		2	10	6	3	2		1													24	16
17		10	14	24	11	3			1	1											54	17
18		40	30	27	5	2															104	18
19			5	2	2	1															10	19
20			5	7	2	1												1			16	20
21		4	5	11	3	2															25	21
22		5	12	4	1	2															24	22
23		6	10	4	1									1							22	23
24		3	4	5		2			1												15	24
25		10	20	18	9	3															60	25
TOTALS		122	246	331	260	126	42	24	10	11	3	0	0	1	0	1	0	1	0	0	1178	
%/SIZE		10.36	20.86	28.10	22.07	10.70	3.57	2.04	0.85	0.93	0.25	0.00	0.00	0.08	0.00	0.08	0.00	0.08	0.00	0.00	100	
#SQ.FT.		20	39	53	42	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	24	

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: DIVISION POINT
DATE: 9/9/94
SAMPLE NO 25
NO. ACRES: 3.9

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	122	10.4	0.0	0	0	0
5-9	0.000	246	20.9	0.0	0	0	0
10-14	0.000	331	28.1	0.0	0	0	0
15-19	0.550	260	22.1	143.0	6	22	0
20-24	1.196	126	10.7	150.7	6	24	0
25-29	2.212	42	3.6	92.9	4	14	0
30-34	3.681	24	2.0	88.3	4	14	0
35-39	5.690	10	0.8	56.9	2	9	0
40-44	8.327	11	0.9	91.6	4	14	0
45-49	11.670	3	0.3	35.0	1	5	0
50-54	15.795	0	0.0	0.0	0	0	0
55-59	20.818	0	0.0	0.0	0	0	0
60-64	26.801	1	0.1	26.8	1	4	4
65-69	33.780	0	0.0	0.0	0	0	0
70-74	41.980	1	0.1	42.0	2	7	7
75-79	51.356	0	0.0	0.0	0	0	0
80-84	61.881	1	0.1	61.9	2	10	10
85-89	74.121	0	0.0	0.0	0	0	0
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		1178	100.0		32	123	20
				% BUSHELS HARVESTABLE			16.56

Following-Year Projection [Closed Area - NO Harvesting) "NORMAL" MORTALITY VALUES
SAMPLE NO 25
NO. ACRES: 3.9

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	61	9.7	33.6	1	5	0
20-24	1.196	123	19.5	147.1	6	23	0
25-29	2.212	166	26.2	366.1	15	57	0
30-34	3.681	130	20.6	478.5	19	75	0
35-39	5.690	76	12.0	430.2	17	67	0
40-44	8.327	34	5.3	279.8	11	44	0
45-49	11.670	19	3.0	224.1	9	35	0
50-54	15.795	8	1.3	126.4	5	20	20
55-59	20.818	9	1.5	194.6	8	30	30
60-64	26.801	3	0.4	68.3	3	11	11
65-69	33.780	0	0.0	0.0	0	0	0
70-74	41.980	0	0.1	18.1	1	3	3
75-79	51.356	0	0.1	22.1	1	3	3
80-84	61.881	0	0.1	27.8	1	4	4
85-89	74.121	0	0.1	33.4	1	5	5
>90	87.597	1	0.2	83.2	3	13	13
TOTALS		631	100.0		101	395	90
				% BUSHELS HARVESTABLE			22.66

Following-Year Projection [Open Area - Harvested] "NORMAL" MORTALITY VALUES
SAMPLE NO 25
NO. ACRES: 3.9

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	61	9.9	33.6	1	5	0
20-24	1.196	123	20.0	147.1	6	23	0
25-29	2.212	166	26.9	366.1	15	57	0
30-34	3.681	130	21.1	478.5	19	75	0
35-39	5.690	76	12.3	430.2	17	67	0
40-44	8.327	34	5.5	279.8	11	44	0
45-49	11.670	19	3.1	224.1	9	35	0
50-54	15.795	2	0.4	37.9	2	6	6
55-59	20.818	3	0.5	58.4	2	9	9
60-64	26.801	1	0.1	20.5	1	3	3
65-69	33.780	0	0.0	0.0	0	0	0
70-74	41.980	0	0.0	5.9	0	1	1
75-79	51.356	0	0.0	6.7	0	1	1
80-84	61.881	0	0.0	8.7	0	1	1
85-89	74.121	0	0.0	10.4	0	2	2
>90	87.597	0	0.0	25.4	1	4	4
TOTALS		615	100.0		85	333	27
				% BUSHELS HARVESTABLE			8.15

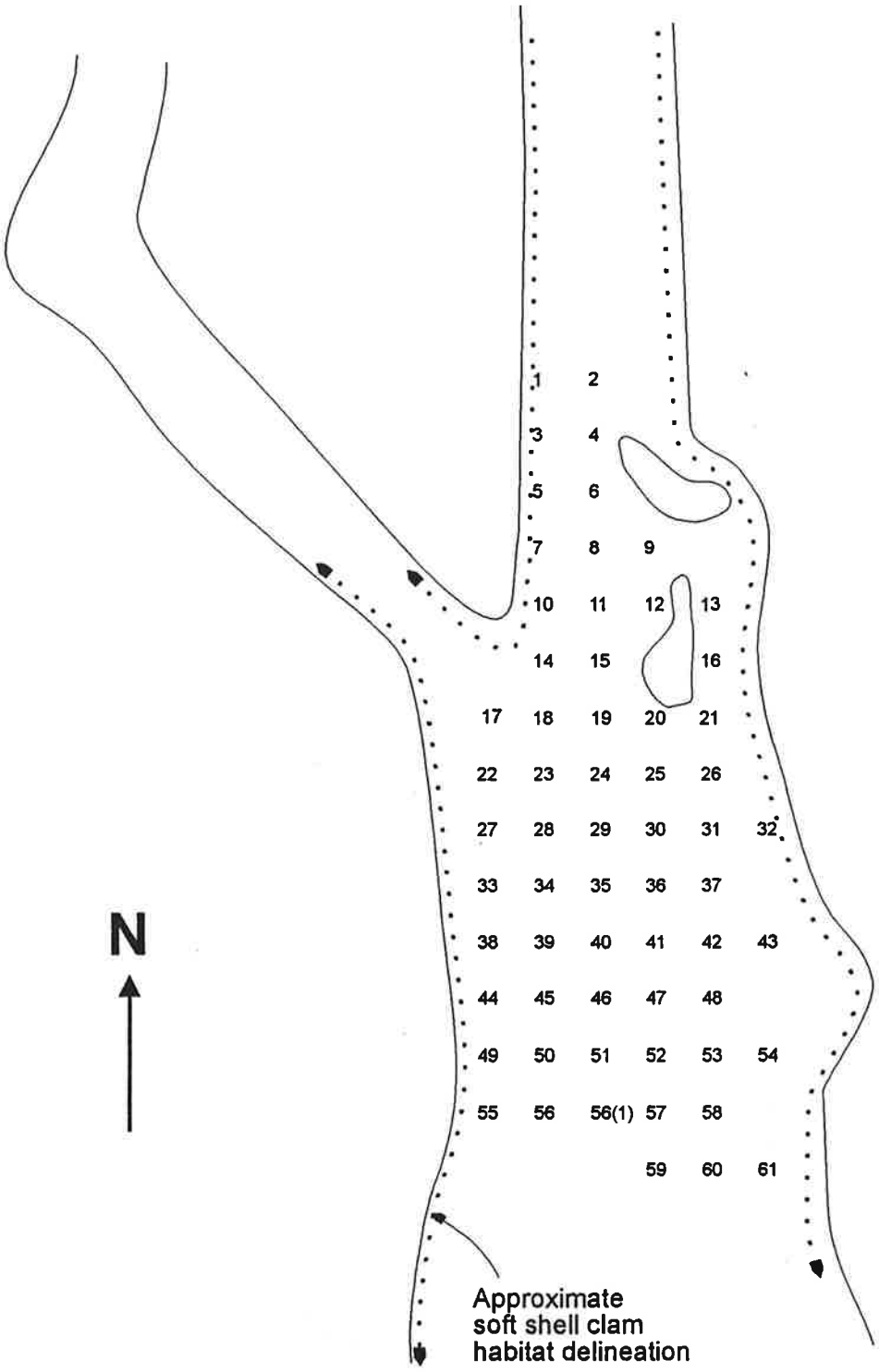
MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: DIVISION POINT
DATE: 9/9/94
SAMPLE NO 25
NO. ACRES: 3.9

	PRICE ($)/BUSHEL							
	$30	$40	$50	$55	$60	$70	$80	$90
CURRENT YEAR	$611	$815	$1,019	$1,121	$1,223	$1,427	$1,631	$1,834
PROJ. (NO HARVEST)	2,686	3,581	4,476	4,924	5,372	6,267	7,162	8,058
PROJ. (HARVESTED)	813	1,085	1,356	1,491	1,627	1,898	2,169	2,440

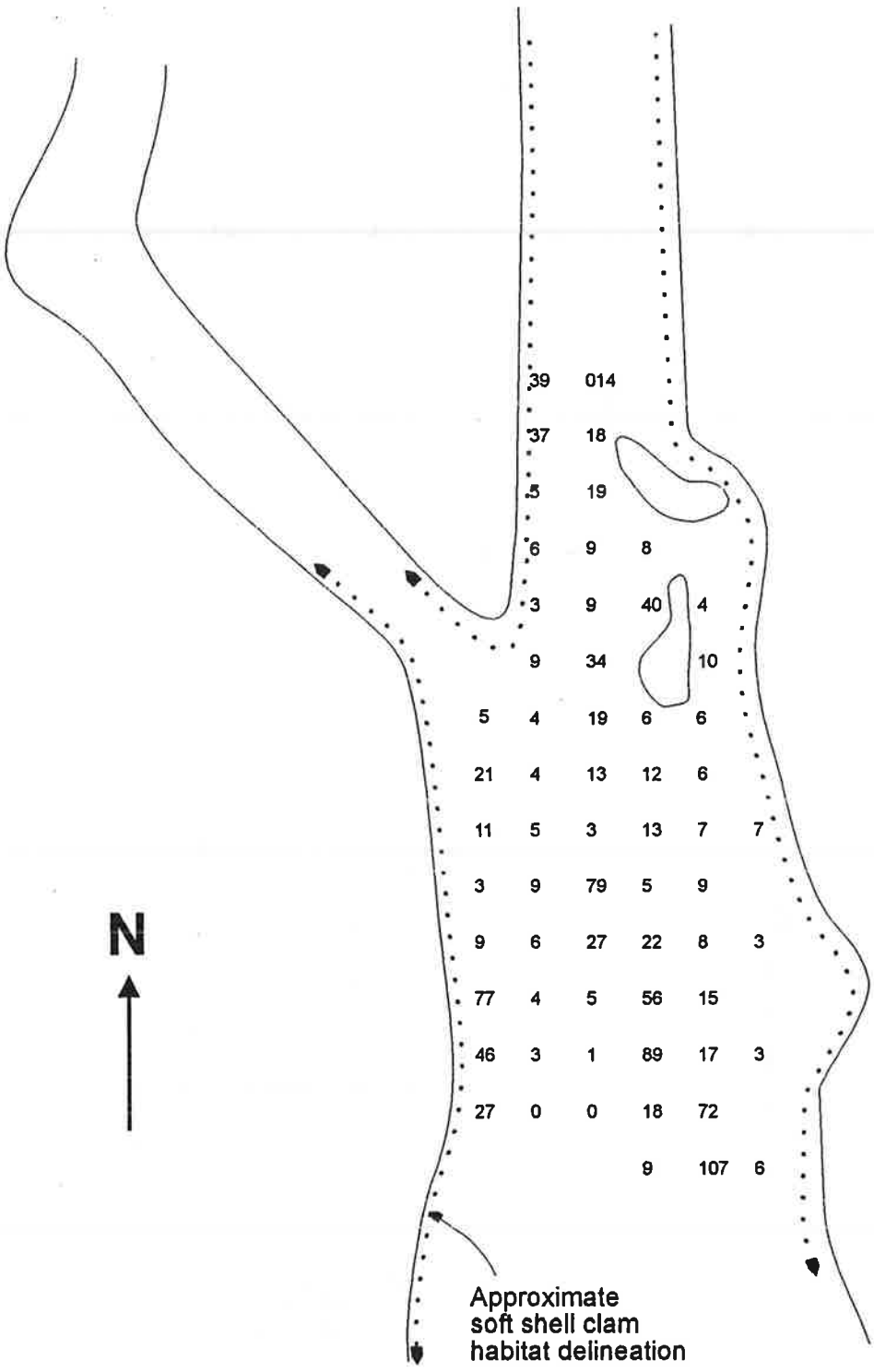
	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
CURRENT YEAR						
$30	$917	$1,223	$1,529	$1,834	$2,140	$2,446
$40	1,223	1,631	2,038	2,446	2,854	3,261
$50	1,529	2,038	2,548	3,057	3,567	4,077
$55	1,682	2,242	2,803	3,363	3,924	4,484
$60	1,834	2,446	3,057	3,669	4,280	4,892
$70	2,140	2,854	3,567	4,280	4,994	5,707
$80	2,446	3,261	4,077	4,892	5,707	6,523
$90	2,752	3,669	4,586	5,503	6,421	7,338

	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
PROJ. [HARVESTED]						
$30	$1,220	$1,627	$2,033	$2,440	$2,847	$3,254
$40	1,627	2,169	2,711	3,254	3,796	4,338
$50	2,033	2,711	3,389	4,067	4,745	5,423
$55	2,237	2,982	3,728	4,474	5,219	5,965
$60	2,440	3,254	4,067	4,880	5,694	6,507
$70	2,847	3,796	4,745	5,694	6,643	7,592
$80	3,254	4,338	5,423	6,507	7,592	8,676
$90	3,660	4,880	6,100	7,321	8,541	9,761



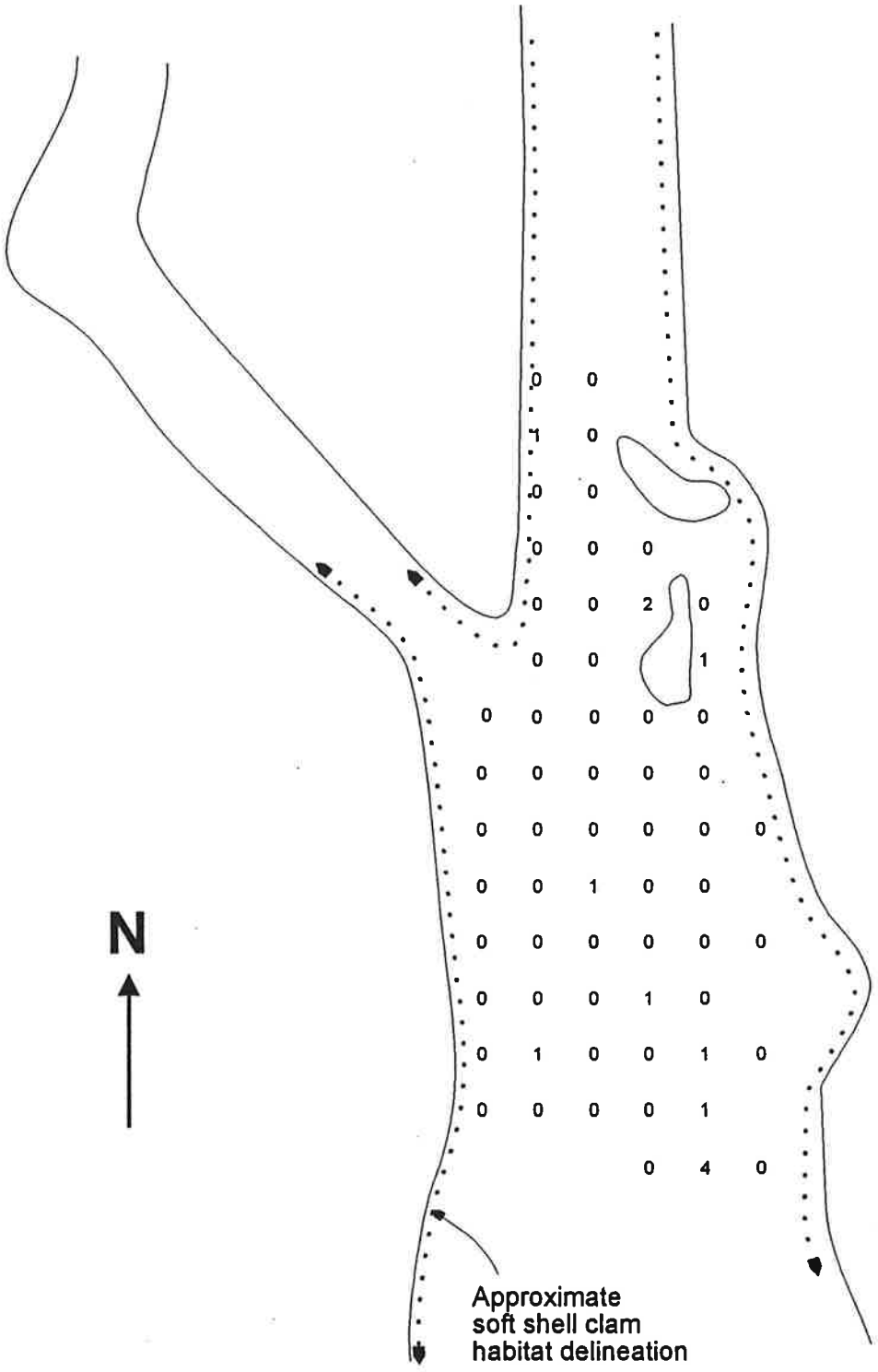
MER Assessment Corporation
Shellfish Survey
Long Cove, West Bath
July 28 and 29, 1994
Sample Station Location

~100 ft.



MER Assessment Corporation
Shellfish Survey
Long Cove, West Bath
July 28 and 29, 1994
Total Clam Distribution

~100 ft.



MER Assessment Corporation
Shellfish Survey
Long Cove, West Bath
July 28 and 29, 1994
Spat (0-9mm) Distribution

~100 ft.

MER ASSESSMENT CORP.
CLAM RESOURCE SURVEY

LOCATION: LONG COVE
DATE: 7-28/29-94
SAMPLE NO: 62

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLOT	PLOT
1							2	1	2	3	4	14	10	1	2						39	1
2								1		6	1	2	2	2							14	2
3			1			4	8	3	3	3	5	6	1	2		1					37	3
4				2			2	1	3		2	2	3		3						18	4
5											2	1		1	1						5	5
6							3	1	3	1	2	3	3		1	1	1				19	6
7												1	2	1	1	1					6	7
8							1		3	1		1	1	1			1				9	8
9								1			2	1	2	2							8	9
10														1	1			1			3	10
11							1				2	1	2	3							9	11
12			2				2	2	2	2	7	6	8	5	1	3					40	12
13									1		1	1	1								4	13
14				1	1		1			1		1		1	3						9	14
15					1		1		3	7	5	4	3	5	2	2	1				34	15
16			1					1		3	1		2			2					10	16
17								1	2	1			1								5	17
18								1	1	1							1				4	18
19					1	1	5		3	1	3		2	1	1	1					19	19
20										2	1	1	1	1							6	20
21									1	1	1		1	1			1				6	21
22								2	1	2	2	2	1	5	4	1		1			21	22
23						1					1	1				1					4	23
24						2	4	1	2	1	1		1	1							13	24
25						2			1	1		1	1	4	1			1			12	25
26											1		2	1	1			1			6	26
27											2	1	2	4	1		1				11	27
28						1	1	1			1					1						5	28
29								1	1	1											3	29
30						1		1		2	1	1	1	2	4						13	30
31											1	1	1		1	2		1			7	31
32						2			1	1			1		1	1					7	32
33												1		1		1					3	33
34				2	1							1	2			3					9	34
35			1	1		2	1	6	2	8	8	12	13	13	6	4	2				79	35
36									1	1	1					2					5	36
37					1	1	1	1			2		1	1		1					9	37
38					2				1		2		3			1					9	38
39				1	1							1			2	1					6	39
40				1			1			1	3	6	5	4	4	1	1				27	40
41					1	6	1		1	5		1	1	3	1	1	1				22	41
42				1	1		1			1	1						3				8	42
43										1	1				1						3	43
44						1		1	4	3	12	14	14	12	10	5	1				77	44
45				1	1	1		1													4	45
46					1	2	1	1													5	46
47			1	2	3		5	4	7	7	7	8	6	3	2	1					56	47
48						1		2	4	2		3		2	1						15	48
49				1		1	1	2		1	5	4	7	6	7	5	4	1	1		46	49
50			1			1	1														3	50
TOTALS		0	7	13	15	30	44	37	53	71	91	103	107	90	63	43	18	6	1	0	792	
%/SIZE		0.00	0.88	1.64	1.89	3.79	5.56	4.67	6.69	8.96	11.49	13.01	13.51	11.36	7.95	5.43	2.27	0.76	0.13	0.00	100	
#/SQ.FT.		0	0	1	1	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	6	

MER ASSESSMENT CORP.
CLAM RESOURCE SURVEY

LOCATION: LONG COVE
DATE: 7-28/29-94
SAMPLE NO: 62

PLOT NO.	SED.	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89	>90	TOTAL/PLOT	PLOT
1-50		0	7	13	15	30	44	37	53	71	91	103	107	90	63	43	18	6	1	0	792	1-50
51				1.00																	1	51
52				1	1	3	6	3	3	4	11	19	13	9	11	5					89	52
53			1	1		1			3			1	2	5	3						17	53
54									1	1			1								3	54
55				1	2	11	10	2	1												27	55
56																					0	56
56 (1)																					0	56 (1)
57						4	3	6	3	1	1										18	57
58			1	9	23	7	7	3			5	1		6	4	3	2	1			72	58
59						2	4	2	1												9	59
60			4	11	18	11	4	3	1	2	5	3	11	8	17	7	2				107	60
61				3							1		1	1							6	61
TOTALS		**0**	**13**	**40**	**59**	**69**	**78**	**56**	**66**	**79**	**114**	**127**	**135**	**119**	**98**	**58**	**22**	**7**	**1**	**0**	**1141**	
%/SIZE		**0.00**	**1.14**	**3.51**	**5.17**	**6.05**	**6.84**	**4.91**	**5.78**	**6.92**	**9.99**	**11.13**	**11.83**	**10.43**	**8.59**	**5.08**	**1.93**	**0.61**	**0.09**	**0.00**	**100.00**	
#/SQ.FT.		**0**	**1**	**3**	**4**	**1**	**1**	**0**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**9**	

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: LONG COVE
DATE: 7-28/29-94
SAMPLE NO: 62
NO. ACRES: 12

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0	0	0	0	0
5-9	0.000	13	1.1	0.0	0	0	0
10-14	0.000	40	3.5	0.0	0	0	0
15-19	0.550	59	5.2	32.5	1	6	0
20-24	1.196	69	6.0	82.5	1	15	0
25-29	2.212	78	6.8	172.5	3	32	0
30-34	3.681	56	4.9	206.1	3	38	0
35-39	5.690	66	5.8	375.5	6	70	0
40-44	8.327	79	6.9	657.8	11	122	0
45-49	11.670	114	10.0	1330.4	21	247	0
50-54	15.795	127	11.1	2006.0	32	372	372
55-59	20.818	135	11.8	2810.4	45	521	521
60-64	26.801	119	10.4	3189.3	51	592	592
65-69	33.780	98	8.6	3310.4	53	614	614
70-74	41.980	58	5.1	2434.8	39	452	452
75-79	51.356	22	1.9	1129.8	18	210	210
80-84	61.881	7	0.6	433.2	7	80	80
85-89	74.121	1	0.1	74.1	1	14	14
>90	87.597	0	0.0	0.0	0	0	0
TOTALS		1141	100.0		294	3384	2854
				% BUSHELS HARVESTABLE			84.34

Following-Year Projection [Closed Area - NO Harvesting] "NORMAL" MORTALITY VALUES
SAMPLE NO: 62
NO. ACRES: 11.5

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	0	0.0	0.0	0	0	0
20-24	1.196	7	0.7	7.8	0	1	0
25-29	2.212	20	2.2	44.2	1	8	0
30-34	3.681	30	3.2	106.6	2	20	0
35-39	5.690	41	4.5	235.6	4	44	0
40-44	8.327	62	6.8	519.6	8	96	0
45-49	11.670	45	4.8	522.8	8	97	0
50-54	15.795	53	5.7	834.0	13	155	155
55-59	20.818	67	7.3	1397.9	23	259	259
60-64	26.801	97	10.5	2597.0	42	482	482
65-69	33.780	175	18.9	5913.2	95	1097	1097
70-74	41.980	109	11.8	4585.1	74	850	850
75-79	51.356	95	10.3	4892.7	79	908	908
80-84	61.881	70	7.6	4344.0	70	806	806
85-89	74.121	36	3.9	2668.4	43	495	495
>90	87.597	17	1.8	1494.4	24	277	277
TOTALS		924	100.0		487	5595	5328
				% BUSHELS HARVESTABLE			95.23

Following-Year Projection [Open Area - Harvested] "NORMAL" MORTALITY VALUES
SAMPLE NO: 62
NO. ACRES: 11.5

CLAM SIZE in mm	CONV.FACT.	NO/SIZE	%/SIZE	B/A/SZ	BU/AC	BUSHELS	HARVESTABLE BUSHELS
0-4	0.000	0	0.0	0.0	0	0	0
5-9	0.000	0	0.0	0.0	0	0	0
10-14	0.000	0	0.0	0.0	0	0	0
15-19	0.550	0	0.0	0.0	0	0	0
20-24	1.196	7	1.5	7.8	0	1	0
25-29	2.212	20	4.7	44.2	1	8	0
30-34	3.681	30	6.9	108.6	2	20	0
35-39	5.690	41	9.7	235.6	4	44	0
40-44	8.327	62	14.6	519.6	8	96	0
45-49	11.670	45	10.5	522.8	8	97	0
50-54	15.795	16	3.7	260.2	4	48	48
55-59	20.818	20	4.7	419.4	7	78	78
60-64	26.801	29	6.8	779.1	13	145	145
65-69	33.780	53	12.5	1796.8	29	333	333
70-74	41.980	36	8.3	1492.8	24	277	277
75-79	51.356	29	6.9	1499.1	24	278	278
80-84	61.881	22	5.1	1351.5	22	251	251
85-89	74.121	11	2.6	830.2	13	154	154
>90	87.597	5	1.3	473.0	8	88	88
TOTALS		426	100.0		167	1916	1649
				% BUSHELS HARVESTABLE			86.07

MER ASSESSMENT CORPORATION
CLAM RESOURCE SURVEY

LOCATION: LONG COVE
DATE: 7-28/29-94
SAMPLE NO: 62
NO. ACRES: 11.5

	PRICE ($)/BUSHEL							
	$30	$40	$50	$55	$60	$70	$80	$90
CURRENT YEAR	$85,627	$114,170	$142,712	$156,984	$171,255	$199,797	$228,340	$256,882
PROJ. (NO HARVEST)	159,850	213,133	266,417	293,058	319,700	372,983	426,267	479,550
PROJ. (HARVESTED)	49,480	65,973	82,466	90,713	98,959	115,452	131,946	148,439

	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
CURRENT YEAR						
$30	$128,441	$171,255	$214,069	$256,882	$299,696	$342,510
$40	171,255	228,340	285,425	342,510	399,595	456,680
$50	214,069	285,425	356,781	428,137	499,493	570,849
$55	235,475	313,967	392,459	470,951	549,443	627,934
$60	256,882	342,510	428,137	513,764	599,392	685,019
$70	299,696	399,595	499,493	599,392	699,291	799,189
$80	342,510	456,680	570,849	685,019	799,189	913,359
$90	385,323	513,764	642,206	770,647	899,088	1,027,529

	LOCAL ECONOMIC ACTIVITY MULTIPLIER					
	1.5	2.0	2.5	3.0	3.5	4.0
PROJ. (HARVESTED)						
$30	$74,219	$98,959	$123,699	$148,439	$173,179	$197,918
$40	98,959	131,946	164,932	197,918	230,905	263,891
$50	123,699	164,932	206,165	247,398	288,631	329,864
$55	136,069	181,425	226,781	272,138	317,494	362,850
$60	148,439	197,918	247,398	296,878	346,357	395,837
$70	173,179	230,905	288,631	346,357	404,083	461,810
$80	197,918	263,891	329,864	395,837	461,810	527,782
$90	222,658	296,878	371,097	445,316	519,536	593,755

Appendix II

Complete Casco Bay-area Restaurant/Dealer Survey Results

TABLE 2-9

CBEP-AREA RESTAURANTS SERVING CLAMS

INTERVIEW RESPONSES (31)

CO.	Employs Sum/Win	Origin of clams	Prefer local?	Current use/year? gal/bu	Retail cost per serving ($2.50-4.00/ serving is restaurant cost)	Total 94 clam sales	% of gross sales	Recrea-tional purchases ?	Source during Red Tide?	1994 Price range fried/ steam	Oct 94 price
A	8/5	Casco Bay	Yes	32 bu	steam $6.95/2 lb	$5,824	<1%	No	No	55-80/gal 50-120/bu	
B	50	Casco Bay	Yes	2,000 bu 360 gal/ 1280 bu	fried $6.95/8 oz steamers $6.95/1.5 lb	$200,000	10%	Direct from diggers, some dealers			
C	30/15	Casco Bay	Yes	864 bu (400 gals, 64 bu)	fried $12.95/8 oz $6.50/5 oz steamers $9.95/1.5 lb	$105,387	10%	No Dealers and retail only (Harbor Fish and Bayley's)		70/gal 135/bu	
D	50/25	Casco Bay	Yes, Freeports	432 bu (128 bu, 152 gals)	fried $14/3.5 oz steam $8.95/1 lb	$137,728	<5%	No	Downeast or Canada		
E	16	90% Casco B.	Yes	900 bu (360 gal/ 180 bu)	fried $13.95/7 oz $7.95/4 oz steam $6.95/1.25 lb	$144,575	25 %	No. Dealers only	Canadian (small, less flavor)		
F	30/closed in winter	Casco B. Diggers;Harbor Fish	Only	28 bu	$5.00/1 lb	$7,280	<5%	No	Don't serve		

TABLE 2-9 (con't)

CO.	Employs Sum/Win	Origin of clams	Prefer local?	Current use/year? gal/bu	Retail cost per serving ($2.50-4.00/ serving is restaurant cost)	Total 94 clam sales	% of gross sales	Recrea-tional purchases ?	Source during Red Tide?	1994 Price range fried/ steam	Oct 94 price
G	5	Casco Bay (60%) Canada	Canadian (smaller, tastier, quality, plate coverage)	312 bu (156 gal)	fried $9/5 oz	$35,942	<5%	No	Downeast Canada	130/bu (highest ever been--in 91 was $54/bu)	
H	120/40	Scarboro Casco Bay	Yes	3,040 (1360 gal/ 320 bu)	fried $13/32 oz steam $9.95/2.25 lb	$144,676	10%	No	Downeast ME Shellfish		$75/bu $135/ga
I	100/10	Casco B diggers, some dealers	Yes	600 bu (200 gal, 200 bu)	fried $16.95 steam $10.95/1.5 lb	$130,666	?	No	Canadian		
J	125/95	Casco Bay Freeports and ME Shellfish	Yes	424 (192 gals/40 bu)	fried $13/5.5 oz steam $8/3 lb	$63,635	<5%	No	Canada, ME Shellfish		$73/bu $65/gal
K	130 year round	Casco Bay Some Downeast and Scarboro	Yes, depends on price and availablity	1120 bu (500 gals 120 bu)	fried $13.95/7 oz steam $7.95/1 lb	$177,920	10 %	No.	Mass		
L	21/10	Casco B only diggers	Only	100 bu	$7.95/3 lb	$13,866	20 %	No	Stop selling	50-100/bu	$55/bu

TABLE 2-9 (con't)

CO.	Employs Sum/Win	Origin of clams	Prefer local?	Current use/year? gal/bu	Retail cost per serving ($2.50-4.00/ serving is restaurant cost)	Total 94 clam sales	% of gross sales	Recrea-tional purchases ?	Source during Red Tide?	1994 Price range fried/ steam	Oct 94 price
M	18/14	Steamers, Freeport Gallons, Canada	Yes	416 bu (352 gal/ 64 bu)	fried $12/8 oz steam $8/2 lb	$47,104	5%	No	Downeast Canada	50-80/gal 65-138/bu	$68
N	60/40	Casco Bay Dealers, diggers	Yes	180 bu 70 gal/ 40 bu	fried $13/9 oz steam $8/2 lb	$21,262	<1%	No	Downeast or depurate	120/bu	
O	20/10	Casco Bay Plant's	Yes	18 bu	steam $7.95/1.5 lb	$4,992	<1%	No Dealer only	No		$80/bu
P	20/15	Casco Bay Dealers, diggers	Yes	78 bu	steam $$8/1.5 lb	$21,632	3%	No	No	60-130/bu	$70/bu
Q	60/30	Freeport for steam MD for fried	Yes	625 250 gal/ 125 bu	fried $13/9 oz steam $8/1.5 lb	$80,890	<5%	No	Downeast Canada or MD	55-85/gal 70-125/bu	$70/bu
R	16/8	Casco Bay Diggers	Yes	86 bu	steam $12/1.5 lb	$33,540	<2%	No	Downeast		
S	24/6	Casco Bay Diggers and dealers	Yes	610 bu (270 gals/70 bu)	fried $11/4 oz steam $8/1.75 lb	$111,690	20%	No	Downeast	50-120/gal $45-125/bu	
T	20/5	Casco Bay Day's	Only	16 bu	steam $6/1.5 lb	$3,300	<1%	No	Stop serving	60-120 bu	

TABLE 2-9 (con't)

CO.	Employs Sum/Win	Origin of clams	Prefer local?	Current use/year? gal/bu	Retail cost per serving ($2.50-4.00/ serving is restaurant cost)	Total 94 clam sales	% of gross sales	Recrea-tional purchases ?	Source during Red Tide?	1994 Price range fried/ steam	Oct 94 price
U	70/45	Casco Bay, Freeports	Yes	380 bu (150 gals 80 bu)	fried $14/8 oz steam $8.95/1.25 lb	$56,760	<5%	No Dealer only	No	70-100/gal	$95/bu gals $9.38/1 b steam $1.90/1 b
V	30/20	Casco Bay, Downeast	Yes	108 bu (36 gal/ 36 bu)	fried $12/8 oz steam $8/0.5 lb	$36,862	<1%	No	Canada	65-110/gal $40-64/bu	
W	100/65	Casco Bay for steamers, Maryland/Canada for fried	Yes	2,464 bu (7200 gal/ 1240 bu)	fried $14/10 oz steam $8/1.5 lb	$277,845	20%	No	Canada Maryland	80-90/gal 102/bu	$64/bu $78/gal
X	18/8	Casco Bay Plants, J&A	Yes	1,410 bu (570 gal/ 270 bu)	fried $13/7 oz steam $13/2 lb	$226,760	11%	No	No	60-110/gal 75-130/bu	$90/bu $75/gal
Y	25/20	Non-local ME Shellfish	No	208 bu (78gal/52 bu)	fried $13.95/7 oz steam $8.95/1.5 lb	$36,192	<1%	No Dealers only	No		

TABLE 2-9 (con't)

CO.	Employs Sum/Win	Origin of clams	Prefer local?	Current use/year? gal/bu	Retail cost per serving ($2.50-4.00/ serving is restaurant cost)	Total 94 clam sales	% of gross sales	Recrea-tional purchases ?	Source during Red Tide?	1994 Price range fried/ steam	Oct 94 price
Z	150	Searsport Freeport Bruns/Harps well Canada	Yes	5,500 bu (5,000 gals 3,000 bu) NOTE: Jun-Sept 300 bu/wk		$1.85 m	<5%	No; not widesprea d			
AA	45/30	Casco Bay Digger, ME Shellfish	Yes	524 bu (216 gal/ 92 bu)	fried $11/4 oz steam $7/2 lb	$92,776	3%	No	Downeast		
BB	40/35	Canada	Yes	20 bu (10 gal)	fried $16/8 oz	$2,560	<1%	No	No		
EE	13	Casco Bay diggers Friers from dealers of Canada, MA product	For steamers	1472 bu (400 gals, 672 bu)	fried $12/12 oz steam $8/2 lb	$190,976	<5%	No	No	55-80/gal 50-120/bu	
FF	75/50	Downeast Canada	No	417 bu (156 gal/ 105 bu)	fried $13/7 oz steam $10/1.5 lb	$73,483	<5%	No	Canada	60-120	$81/bu

Appendix III

Sample analysis results for Town Landing Cove, Cumberland, 5-11-94
Sample analysis results for Town Landing Cove, Cumberland, 8-18-94
Selected correspondence between the Town of Cumberland and the Maine Department of Marine Resources, 4-7-92 to 2-9-93

State of Maine
DEPARTMENT OF MARINE RESOURCES

MEMORANDUM

Date: April 7, 1992

To: Walter Foster

From: Ron Aho

Subject: Feasibility of Opening Town Landing Cove - Cumberland

==========

I met with Jim Higgens (1-800-888-2984, Ext. 885), Dick Peterson (829-5448), and Chief Lionel Planche (829-6391) at the Cumberland town offices. Higgens is the Chairman of the shellfish committee, Peterson is also on the committee and is the plumbing inspector, and Planche is Chief of Police and essentially the head shellfish officer.

They are concerned with opening the area around the Cumberland town landing for recreational digging. They were told in January by DMR that not enough samples exist to warrant an approved classification, but that the samples taken over the last year (1991) were clean enough to warrant more intensive sampling in the area. They want to sample the Cumberland shore to get the requisite number of samples. I agreed to try to arrange the sampling of Cheabeaque so that they could collect samples on the same day.

In looking at the available data, it appears that there is enough water quality data to open the area. There are 16 samples from both station 30 and 31 with a geometric mean of 3.4 and 3.5, respectively, and no samples were greater than 49 fecal colonies/100 ml MPN. I explained that the data would have to be examined to determine if any meteorological correlations could be made i.e., if all of the good samples were dry weather samples. I also explained that the incoming waters would have to be sampled and an updated shoreline survey would have to be performed. When asked if conditions had changed which might cause a significant improvement in water quality, they explained that due to the death of an individual, ducks and poultry had been removed from a duck pond about a mile inland.

I took a survey sample at the stream in the cove, and intend to dig some clams in the area next week to test for bacteria. I set up a meeting for April 13 at 10:00 a.m. to establish a sampling schedule and to bring them up to date with progress. I told them that if all went well with clam sampling and water sampling, that we might be able to open the area for digging by the fourth of July.

RA:ll

Walter File

TOWN OF CUMBERLAND
Town Office Building
P.O. Box 128
12 Drowne Road
Cumberland, Maine 04021
(207) 829-5559

E. Penn Estabrook
Deputy Commisioner
Dept. of Marine Resources
State House Station 21
Augusta Me. 04333

9/28/92

Dear Mr. Estabrook

The Town of Cumberland Shellfish Conservation Commission respectfully request the opening of State Shellfish Area #15, Town Landing Area, on a controlled basis.

Water quality samples from collection areas 30 & 31 have been good for an extended period. The exceptions to this rule occured when samples have been taken shortly after a heavy rainfall.

The Town of Cumberland Shellfish Conservation Commission would propose to monitor rainfall, post closing after heavy rainfall, and reopen at recommended time, if this request is accepted. We are prepared to establish all State guidlines covering this activity.

Our observations show a good supply of adult clams in this area. We would like to make this area available to townspeople for recreational digging.

Although the Town of Cumberland has a generous shorefront, we have a serious public access problem because of private ownership issues. This area has good public access, and availability would be a boost to our shellfish program.

We appreciate your consideration of this request.

Sincerely

Jim HIggins

Chairman
Cumberland Shellfish Conservation Commission
6 Brookside Drive
Cumberland Me. 04021

cc: Brad Sterl

TOWN OF CUMBERLAND
Town Office Building
P.O. Box 128
12 Drowne Road
Cumberland, Maine 04021
(207) 829-5559

E. Penn Estabrook
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Sincerely

Jim HIggins

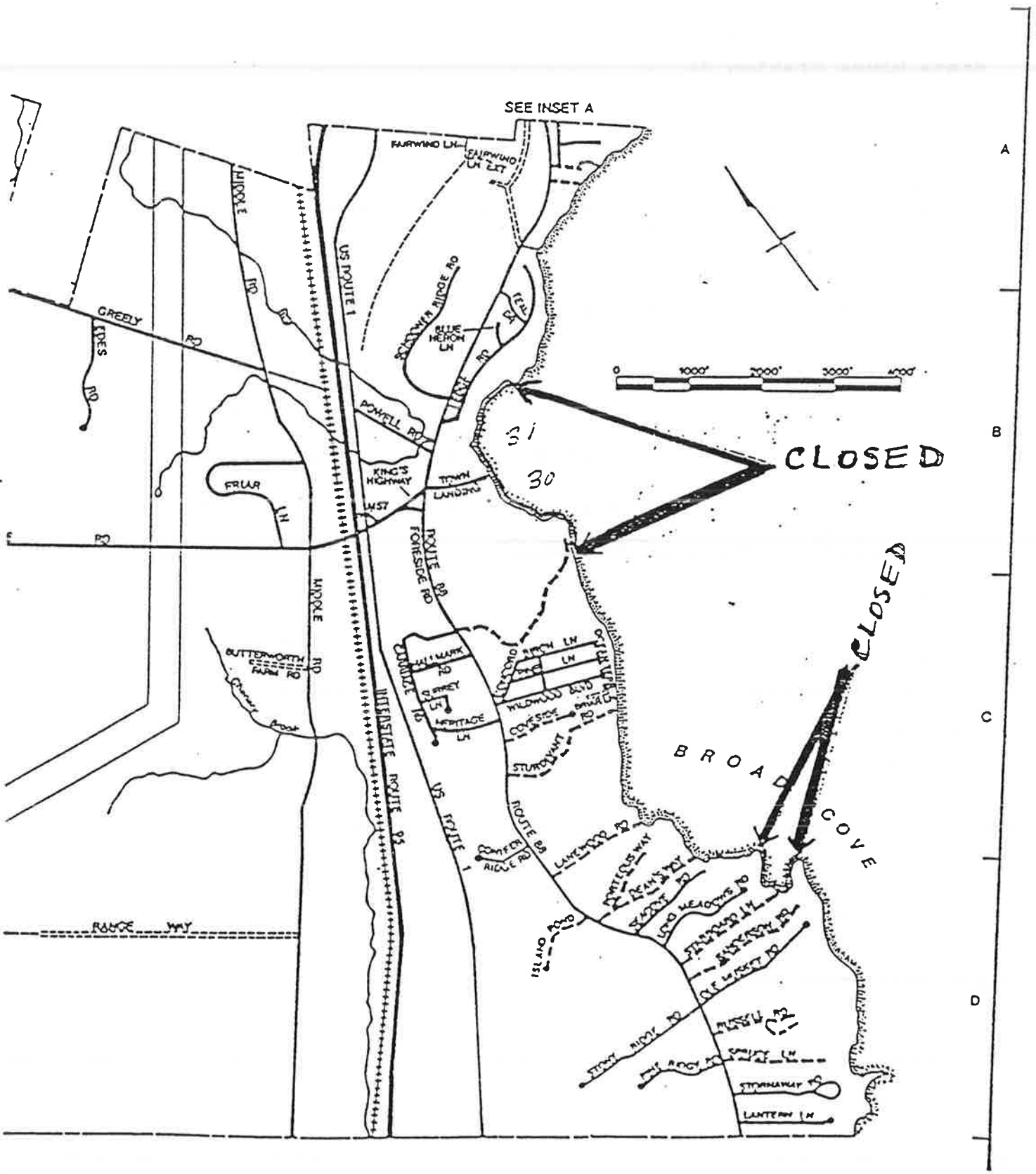
Chairman
Cumberland Shellfish Conservation Commission
6 Brookside Drive
Cumberland Me. 04021

cc: Brad Sterl

TOWN OF CUMBERLAND, ME

CLOSED AREAS: STATE AREA #15: From RED POST 1500' North of Town Landing Road to the Payson dock SOUTH of Town Landing Road.

SEA COVE: All closed



John R. McKernan, Jr.
Governor

William J. Brennan
Commissioner

DEPARTMENT OF MARINE RESOURCES

Telephone (207) 624-6550
FAX (207) 289-5758

February 9, 1993

Jim Higgins, Chairman
Cumberland Shellfish Committee
6 Brookside Drive
Cumberland,ME 04021

Dear Mr. Higgins:

This is in response to your letter of January 27, 1993 about opening the Town Landing.

We will be working with Dick Peterson to establish a profile of water quality relative to environmental factors to define the conditional opening.

Sincerely,

Walter S. Foster, Director
Industry Services Division

rr

cc: Brad Sterl
Stuart Sherburne
Ron Aho

DEPARTMENT OF MARINE RESOURCES

Telephone (207) 633-5572

Pollution Source Survey

Surveyed By: Don Newberg
Date Surveyed: May 11, 1994
Examined By: J Riggens
Date Examined: 5/12/94
Time of Low/High Tide: ______
(Circle One)

Area Name: Cumberland
Area No. I (near I-31)
Area Status: ______
Area Class: ______
Other: ______
Runoff Conditions: lighter than normal for time of year

Source #	Time	Type Samp W/C	Cnd.* Sal. 0/00 / temp.	LAB Test	LAB Extra Dil.	RESULTS TC / FC	Location (Address)	IMPACT Dir/Ind.	IMPACT Pot/Act.	Description/Remarks
CBC-1	1230	W	220 / 13.5			15	Salinity (DMR lab) 0			50' above NHW in stream discharging at I-31
CBC-2	1245	W	215 / 9.5			15	0			discharging groundwater, @ at NHW 275' north along shore from Town Ldg. Rd.
CBC-3	1255	W	205 / 15			<3.0	0			Culvert, east end: Powell Rd. at pump station
CBC-4	1305	W	170 / 14.5			3.6	0			1st culvert beneath Rte #1 north of Tuttle Rd. east end of culvert
CBC-5	1315	W	245 / 14			9.1	0			2nd culvert north of Tuttle Rd. east end of culvert
CBC-6	1327	W	180-270 / 12.5			43	0			500' +/- south of RC Hagklon east end of culvert beneath Middle Rd.
CBC-7	1343	W	90 / 18			<3.0	0			culvert west side Middle Rd. just south Greely Rd.
CBC-8	1400	W	120 / 16.5			<3.0	0			culvert - west side of Middle Rd., opposite pond

* cnd./temp. °C meas'd in situ with YSI, model #33 S-C-T meter

Tests: A-1 (FC); MFC (FC); MTFT (TC/FC)
Description of source should include: Type of source (pipe, culvert, failing septic, etc); Size of source: Estimate of flow; Other pertinent info.

relinquished by: Donald Newberg date/time: 5/11/94 16:00 received by: S. Sherburne date/time: 5/11/94 16:--

John R. McKernan, Jr.
Governor

William J. Brennan
Commissioner

DEPARTMENT OF MARINE RESOURCES

Telephone (207) 624-6550
FAX (207) 289-5758

November 10, 1992

Jim Higgins, Chairman
Cumberland Shellfish Conservation Commission
6 Brookside Drive
Cumberland, ME 04021

Dear Mr. Higgins:

This is in response to your letter of September 28, 1992 about reclassifying the shellfish area near the public landing to allow shellfish harvest.

Members of the shellfish committee met with DMR biologist Ron Aho while he was working on the area. As you mentioned, the results of his work indicates that the water quality may remain relatively good in the absence of a significant amount of rain. At the moment, it is not clear what the seasonal variations in water quality are and how much or what different amounts of rain cause degraded water quality. A prospect that Aho and I discussed was attempting to allow harvesting in the area for a finite period in the summer, for example August and September, when rainfall would be expected to be relatively low and infrequent. Another period of low rain could be December or January through February, but that may not be appealing to recreational diggers. What we would like to avoid is having the area managed on a year-round basis that would cause closure in the event of a given amount of rain. Managing Scarborough's conditional area has cost the state over $2,640.00 in the required public advertising for 1992 to date. Freeport's area has been even more expensive due to some problems with the municipal waste water treatment plant. Each closure requires this Department to analyze water quality in the area to determine when it has returned to safe levels before it may be reopened. If a limited period of time during which openings and rain-caused conditional closures would be managed, then the benefits versus the costs could be expected to be more proportional. Please consider this possibility and let me know if it seems reasonable to the shellfish commission.

Sincerely,

Walter S. Foster, Director
Industry Services Division

rr

State House Station 21, Augusta, Maine 04333-0021 — *Offices at* Stevens School Complex, Hallowell

FEB 8 1993

DEPT. MARINE RESOURCES
AUGUSTA

TOWN OF CUMBERLAND
Town Office Building
P.O. Box 128
12 Drowne Road
Cumberland, Maine 04021
(207) 829-5559

Walter S.Foster
Director
Industry Services Division
Dept. of Marine Resources
Augusta, Maine 04333

1/27/93

Dear Mr. Foster:

Thank you very much for your response to our letter requesting opening of the Town Landing, State Shellfish Area #15, during periods that would be safest from rainfall induced bacterial counts.

Our committee feels your suggestion as stated in your letter of November 10 is a good one, and would tie in well with availability of the resource, but also with some forced resting periods.

We feel,once opened, this section would have a lot of activity, and this staggered opening approach would help keep this area from being overdug.

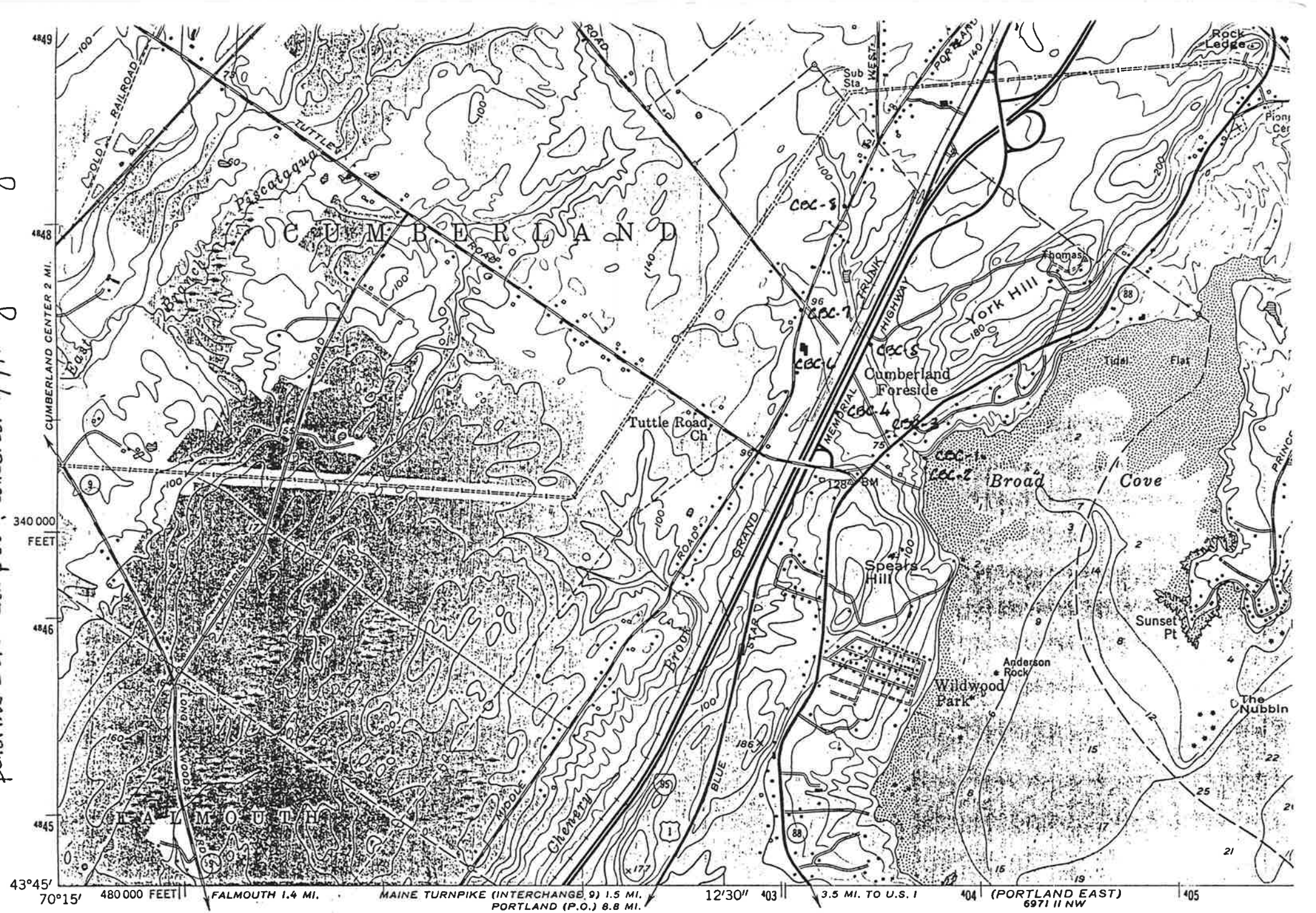
Let this letter be our formal request to your office to open this area in the future for the August-September and December-February periods.

Thank you very much for your consideration.

Sincerely

Jim Higgins

Chairman
Cumberland Shellfish Conservation Commission
6 Brookside Drive
Cumberland Me. 04021



Mapped by the Army Map Service
Edited and published by the Geological Survey

Control by USGS, USC&GS, and USCE

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DEPARTMENT OF MARINE RESOURCES

Telephone (207) 633-5572

Pollution Source Survey

Surveyed By: Dan Newberg
Date Surveyed: August 18, 1994
Examined By: B.H.
Date Examined: 8-19-94
Time of Low/High Tide: _____ (Circle One)

Area Name: Cumberland
Area No. I (near I-31, Broad Cove)
Area Status: _____
Area Class: _____
Other: _____
Runoff Conditions: (Sampled immed. after rain)

Source #	Time	Type Samp W/C	Cond.* / Sal. 0/00 / temp	LAB Test: Sal.	LAB Extra Dil.	RESULTS TC / FC	Location (Address)	IMPACT Dir./Ind.	IMPACT Pot./Act.	Description/Remarks
CBC-1	17:00	W	250/18	0		>1100				50' above NHW in stream discharging at I-31
CBC-2	17:10	W	160/15	0		460				discharging groundwater, u/s at NHW 275' north of Town Landing Road
" 3	16:43	W	200/18	0		>1100				culvert, east end: Powell Rd. at pump station
" 4	16:30	W	160/19	0		>1100				1st culvert beneath U.S. Rte #1 north of Tuttle Rd. east end of culvert
5	16:34	W	90/17	0		>1100				2nd culvert north of Tuttle Rd., east end
6	16:15	W	115/18	0		>1100				500' +- south of R.C. Hazleton — east end of culvert beneath Middle Rd.
7	16:05	W	145/18	0		>1100				west end of culvert beneath Middle Rd., immediately south of Greeley Rd.
8	15:55	W	110/18	0		>1100				culvert beneath Middle Rd., west end opposite pond
9	17:20	W	165/18.5	0		1100				run-off along south side of Town Landing Rd.

* conductivity & temp. measured in situ with YSI, model #33, S-C-T meter

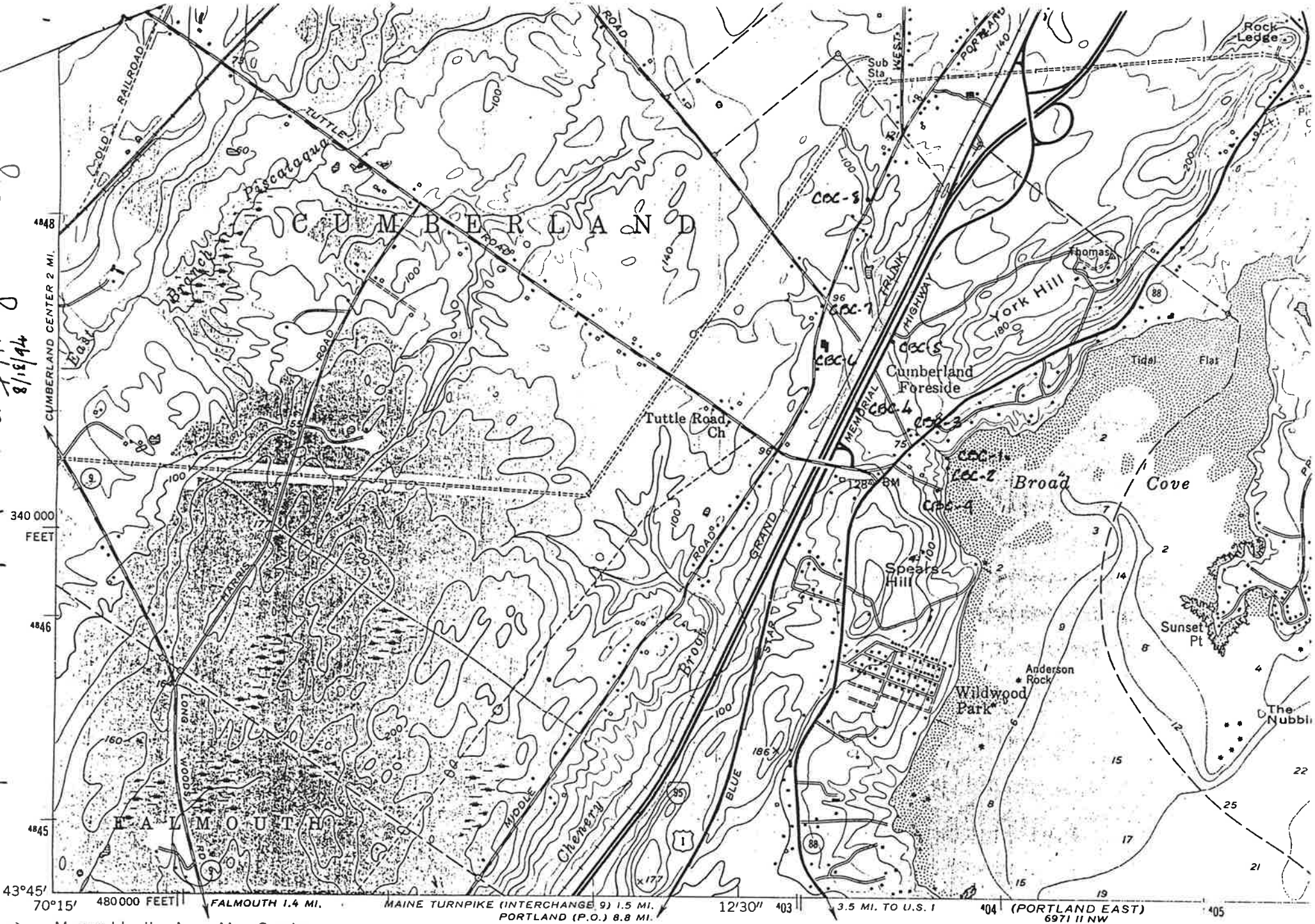
Tests: A-1 (FC); MFC (FC); MTFT (TC/FC)

Samples are freshwater taken at various points within drainage basin west of Broad Cove.

Description of source should include: Type of source (pipe, culvert, failing septic, etc); Size of source; Estimate of flow; Other pertinent info.

Relinquished by: Dan Newberg date/time: 8/19, 0810

Received by: [illegible] date/time: 08:10



Mapped by the Army Map Service
Edited and published by the Geological Survey

Control by USGS, USC&GS, and USCE

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Appendix IV

Survey form and Results of 1994 Recreational Shellfishing Survey
Town of Cumberland, Maine

1. Have you used your license yet this year? ____ yes; _____ no (If your answer is no you may stop here.)

2. How many times did you use your license this year? _____

3. On the average, how many clams do you dig each time you use your license? _____ peck.

4. Where do you normally dig? mainland _____ location

   Islands _____ location

5. The Shellfish Commission is considering giving to purchasing a license to people who volunteer 10 hours per year for shellfish management; would you be interested in participating in this program? ___ yes; _____ no If yes either call the Town Office or if you choose put your name and phone number on this survey.

to return - turn over, fold, and staple or tape

To All Cumberland Shellfish License Holders,

Your Cumberland Shellfish Committee needs your feedback to best match our limited resource of shellfish to the number of licenses sold each year. The Commission has been working hard to sustain and improve the shellfish populations on both the mainland and the Island.

Please take a few minutes now and fill out the answers below as honestly as you can. Your answers are anonymous, and in no way will be used to determine who gets a license for 1995. A stamp has been included to encourage your response.

YOUR COOPERATION IN COMPLETING THIS SURVEY IS CRITICAL TO THE MANAGEMENT OF THE RESOURCE. THANK YOU FOR YOUR RESPONSE!

detach here to remove your name

CUMBERLAND SHELLFISH COMMISSION
P.O. BOX 128
CUMBERLAND, ME 04021

Recreational Clam License Holders
1994 Survey Results

On September 9, 1994, a survey was sent to every person holding a recreational shellfish license in the Town of Cumberland. The goal of the survey was to determine how many clams are harvested by recreational diggers, how many license holders do not use their license over the course of the year, where people tend to dig and if they would be willing to volunteer to work with the Shellfish Commission to maintain and improve the resource.

The survey was kept short and simple; the layout was such that by refolding, a respondent could send the survey back without needing an envelope. The survey was self-addressed and stamped to encourage responses.

As of October 21, 1994, 104 surveys of the 200 which were mailed out were returned; resulting in a response rate of 52%. With such a high rate of return, extrapolations to the entire group of 200 can be calculated with a high degree of accuracy.

The first question was to determine how many people who bought a license did not use it. Why they didn't use it was not considered. Of the 104 surveys returned, 15 did not use their license, or 14% of the total. Therefore, it could be deduced that of the 200 licenses issued, 28 would not be used.

The next two question were asked to determine how many bushels of clams recreational diggers harvest in the course of the year. One question asked how many times people go clamming, the second question asked what portion of a peck they dug each time. Most people use their license 3 to 7 times, on the high end 3 people reported using their license 25 times.

Based on this data, the total number of times license holders went clamming in the Town of Cumberland, so far this year, was 682. To determine the amount of clams dug per year, per person, the number of times someone went digging was multiplied by the average amount dug each time, for each person. The total amount of clams dug for the 89 people who reported using their license was 527 pecks, or an average of 6 pecks per person per year. If it is assumed that of the 200 licenses issued, only 172 would be used, and they dug 6 pecks per license, the total harvest would be 1,032 pecks, or 258 bushels*.

The Town issued 10 commercial licenses in 1994. Each license holder was required to submit a log of how many clams they dug, and where they dug them. The commercial diggers were limited to open flats on Chebeague Island, and digging was only during the month of April. A total of 133 bushels were reported dug by this group. The combined

---

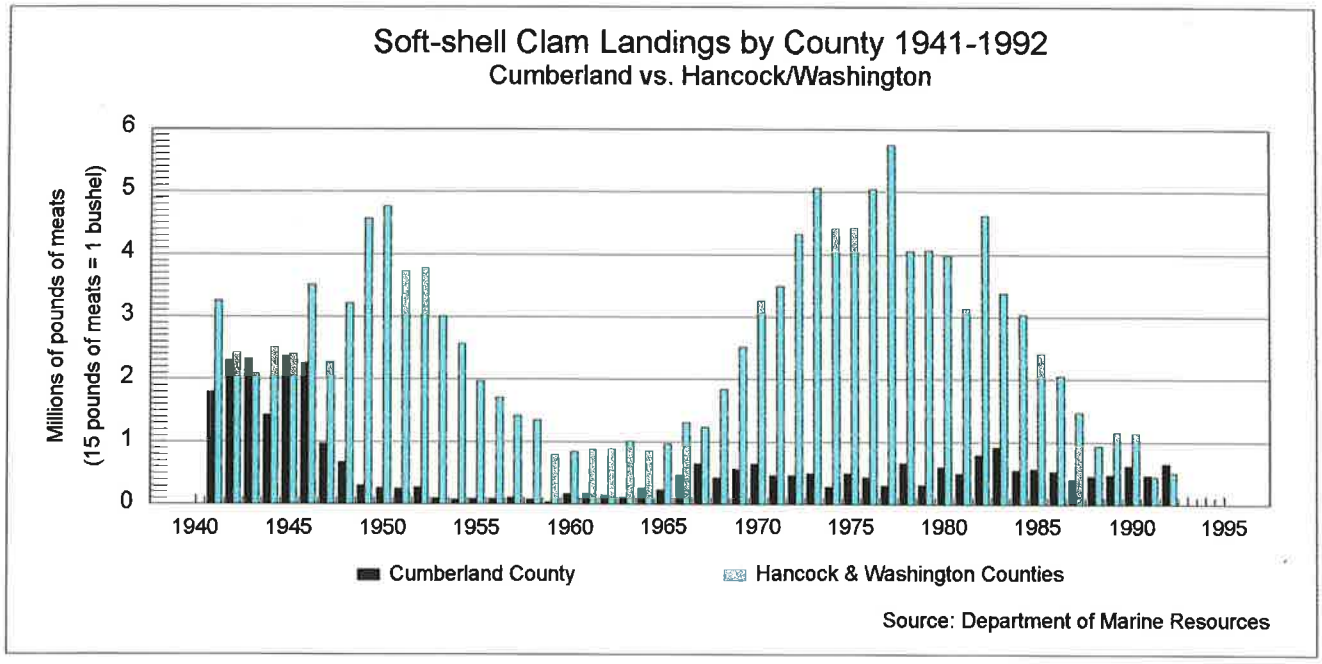
* The total bushels harvested was also calculated by: dividing total pecks (527) by the total number of times every license holder went clamming (682), to equal .77 pecks per dig, and the average # of times any one person would go digging is 7.66 (682 times/89 respondents = 7.66. The total number of people using their license but not responding is estimated at 83 ((200 - 28) - 89). Therefore if 83 people dig 7.66 times an additional 636 digs can be estimated, at .77 pecks per dig an additional 489 pecks have been harvested, resulting in a total of 1,016 pecks or 254 bushels

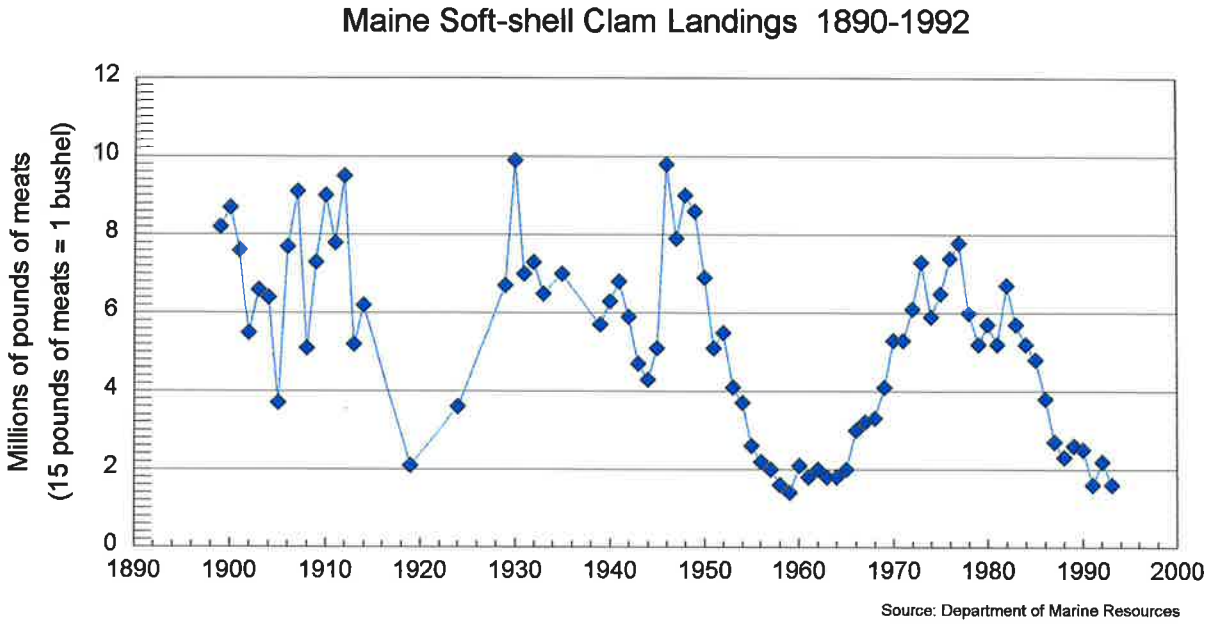
total of clams harvested in 1994; is therefore, estimated at ~~1,165~~ 391 bushels. Commercial digging represents ~~11~~ 34% of the total amount of clams dug in the Town of Cumberland.

The survey also asked where people typically dig. On the mainland, 50 people responded that they typically go clamming in the area starting at Wildwood Beach up through Broadcove. Eight others responded to locations south of Wildwood Beach. Forty respondents listed eight different location along the coast of Chebeague Island, 2 people said they went clamming on Bangs Island.

The survey also asked whether people would be interested in volunteering hours for shellfish management in return for priority status when permits are issued. Fifty one people responded they would be interested, 31 responded no and 22 had no response. This question could have been misread by some to assume that they would be given a license free of charge. The Intent was that the license would be the same price but that volunteers would be given preference in purchasing a license.

One of the goals of the Cumberland Shellfish Commission is to base the number of licenses issued per year on the estimated clam population. This survey has given a clear indication of how many clams recreational diggers have harvested in the last year. The next step is to continue clam assessment surveys to determine what the actual clam populations are for an area. This combination of this data will give the Shellfish Commission the information necessary to recommend the amount of licenses to be issued, and will help ensure that the clam populations are consistent and healthy.


Soft-shell Clam Landings by County 1941-1992
Cumberland vs. Hancock/Washington
Millions of pounds of meats
(15 pounds of meats = 1 bushel)
0
1
2
3
4
5
6
1940
1945
1950
1955
1960
1965
1970
1975
1980
1985
1990
1995
Cumberland County
Hancock & Washington Counties
Source: Department of Marine Resources


Maine Soft-shell Clam Landings 1890-1992
Millions of pounds of meats
(15 pounds of meats = 1 bushel)
0
2
4
6
8
10
12
1890
1900
1910
1920
1930
1940
1950
1960
1970
1980
1990
2000
Source: Department of Marine Resources