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# Sentinel surveys 1995-1999: catch per unit effort in NAFO divisions 2J3KL 

D. Maddock Parsons, R. Stead, D. Stansbury

Science Branch
DFO Newfoundland Region
P.O. Box 5667

St. John's NF A1C 5X1
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#### Abstract

Sentinel enterprises collected catch rate and biological information on inshore cod resources in 2J3KL for 1995-1999. Data were presented on weekly catch rates and annual relative length frequencies (number at length divided by amount of gear) by year and gear type, grouped by division and also summarized for each participant. Catches in 2 J have remained very low since 1995 in all gears fished. Gillnet catch rates from Sentinel survey activity in 1999 declined from levels observed in 1998, which were generally the best observed since the inception of the surveys in 1995. Gill net ( $51 / 2^{\prime \prime}$ ) catch rates in 1999 were lower in 3K than in 3L but line trawl catch rates were similar. Line trawl catch rates were similar in 1999 to those in 1998 but lower than the highest catches observed in 1997. Trap catches were down in all areas in 1999, with only one trap site having a noteworthy catch.


## Résumé

Des entreprises de pêche sentinelle ont recueilli des données sur les taux de capture et des données biologiques sur les ressources côtières en morue dans 2J3KL pour la période 1995-1999. Les données, portant sur les taux de capture hebdomadaires et les fréquences annuelles des longueurs relatives (le nombre selon la longueur divisé par le nombre d'engins) selon l'année et le type d'engin, ont été groupées selon la division et résumées selon chaque participant. Les prises aux divers engins dans 2 J sont restées très faibles depuis 1995. Les taux de capture aux filets maillants en 1999 ont baissé par rapport aux taux observés en 1998, qui étaient généralement les meilleurs observés depuis le début des relevés, en 1995. Les taux de capture aux filets maillants en $1999(51 / 2 \mathrm{po})$ étaient plus faibles dans 3 K que dans 3 L , tandis que les taux de capture à la palangre dans ces deux divisions étaient semblables. Ces derniers se rapprochaient des taux obtenus en 1998, mais étaient plus faibles qu'en 1997, lorsque les prises observées étaient les plus fortes. Les captures à la trappe dans tous les secteurs ont fléchi en 1999, seul un secteur affichant des prises notables.

## Introduction

Sentinel survey projects were formally announced by the Minister of Fisheries and Oceans in October 1994. The surveys in the DFO Newfoundland Region are an extension of the index fishermen's project from the Northern Cod Science Project with modifications to allow for science activities achievable only under a fishing moratorium. Sentinel data collection has continued during the index fishery of 1998 and commercial fishery in 1999.

The sentinel survey has the following objectives:

1. To develop a catch rate series for use in resource assessments.
2. To incorporate the knowledge of inshore fishers in to the resource assessment process.
3. To describe the temporal-spatial distribution of cod in the inshore area over a number of years through, for example, the use of catch rate information, tagging studies, by-catch information and fishers' observations.
4. To gather length frequencies, sex and maturity data and sample ages for use in resource assessment.
5. To establish a long-term physical oceanographic and environmental monitoring program of the inshore areas.
6. To provide a source of biological material for other researchers. For example, tissue for genetic, physiological and toxicological analyses, cod stomachs for food and feeding studies and by-catch information.

## Participants

The primary collectors of data in the sentinel survey are inshore fishers. Through consultation with inshore fishers and fisheries organizations, traditional inshore fishing grounds have been identified and mapped, resulting in approximately 66 locations in NAFO Divisions 2J3KL.

Fishers from communities within the boundaries of the identified coastal areas and who met eligibility criteria were invited to apply to participate in the survey. Where more than one application was received from an area, the project partner conducted a draw or lottery to select the participant. While there was considerable interest in the project in most areas, there were many sites from which only one application was received and others where additional canvassing was required to enlist participants. Selected participants were required to complete a six-week course designed by the Marine Institute of Memorial University in consultation with DFO. Topics covered included scientific sampling methods and equipment, computer use, resource assessment basics and presentation skills.

In order to minimize inter-annual enterprise effects on data collection, participants are expected to remain with the survey over a number of years. It is also expected that most of the sampling activities will continue once commercial fishing operations resume and the sentinel participants will form a core of index fishers.

## Sites

Sampling was conducted at 66 sites in NAFO Divisions 2J3KL. The specific location of each site was chosen after consultation between DFO scientists, fishermen, the Fishermen, Food and Allied Workers Union (FFAW) and the Fogo Island and Petty Harbour Cooperatives (for Fogo Island and Petty Harbour). Site selection was based on the need to survey throughout inshore areas and targeted historical fishing areas and historical gear use patterns.

## Sampling Strategy

In 1999, sampling ran for a minimum of eight weeks. Many sites were allocated extra time as resources permitted. In 1996, 1997 and 1998 the survey covered a twelve-week period. In 1995, sampling was conducted over fifteen weeks. The timing of sampling was determined after discussions with fishers but was targeted for seasonally appropriate times based on historical fishing patterns. There was minimal disruption of these time frames in 1999 due to the opening of the index fishery.

The number of trap sites in 2J3KL was reduced from 35 in 1998 to 12 in 1999. Trap sites fished cod traps for a period up to four weeks. Participants used either baited trawl lines or gill nets for the remaining weeks of the survey. Non-trap sites fished either baited trawls or gill nets for the full survey. While traps are in the water continuously, they were hauled three days per week. Two sites at Petty Harbour fished baited handlines exclusively. Hook and line, handline and gill net crews fished up to three days per week. Fishing days in the week were selected at the discretion of the crew and depend primarily on weather conditions.

When a cod trap is hauled, the crew estimated how much fish by weight had been caught, removed a random sample for biological sampling and released the remaining catch. Meshed and/or dead, floating fish were retained and brought ashore. Fishers were instructed to release as much live fish as possible.

Hook and line crews fished two tubs of baited line trawl. Each tub consisted of approximately 500 hooks for a total of 1000 hooks per fishing day. Gill net crews fished a maximum of six fifty fathom 5 $1 / 2$ inch monofilament gill nets. Nets were rigged $2-3$ to a fleet and up to three fleets were fished per fishing day. In addition, selected sites fished one $3-1 / 4$ inch monofilament gill net one day per week. All fish caught in gill nets and on hooks were landed and measured. If catches exceeded 500 kg per week, the numbers of nets in a fleet were cut back. However, some consideration was given to bottom topography and net performance when reducing the number of nets in a fleet. Similarly, the number of hooks per tub was reduced if landings exceeded 500 kg per week. Other measures were considered if fish are particularly abundant in an area and catches appear to be excessive even with the minimal amounts of gear possible.

Prior to the start of sampling in 1995, a fixed (control) location on the fishing grounds was established for each site and will remain fixed for the duration of the project. Each fishing day, up to half of the gear was set at the control site. The remainder of the gear (experimental) was set at one or two other locations on the fishing grounds at the discretion of the crew. The location of each fishing set was plotted on a nautical chart. The time of the set and the soak time for the gear were recorded. Other environmental observations were recorded, including wind direction and speed, percent cloud cover, tide conditions, presence of invertebrates (bait) and other fish species in the area, marine mammals, sea birds and any other variables which might have influenced fishing behavior. Selected sites were equipped with a CTD (measuring temperature and salinity at depth). At these locations, casts were conducted in the vicinity of fishing sets each fishing day. CTD locations were fished for subsequent years if possible.

When the gear was retrieved, catches from the control and experimental gear were kept separate and sampled on shore. All fish from gill net, handline and line trawl, and a sample of the catch from traps, were measured for length and sex. Otoliths were sampled on a length-stratified basis and stored in manila envelopes with relevant information recorded on the outside. Every other week, selected sites collected a sample of up to 100 frozen fish. These were transported to St. John's for detailed biological sampling. All information was recorded on forms similar to those used by the Port Sampling Section and on DFO Research Vessels

Other biological samples were collected as needed.

## Data Presentation

The data were summarized for each NAFO division and presented by gear type. Summaries for each enterprise follow, in general, organized from north to south. This paper presents data for gill net ( $51 / 2^{\prime \prime}$ and $31 / 4$ ), line trawl and trap. The relative length frequency plot depicts the number of fish at length scaled by total amount of gear fished so that changes in length frequency distribution may be compared across years. Lengths, in 1 cm intervals, are from both control and experimental gear, and for gill net and line trawl represent every fish measured, as the total catch is measured. For trap catches, where only samples of fish were measured, the weekly length frequency was bumped up using the weekly estimated catch before being scaled by effort. Where estimated catches occurred in weeks with no frequencies taken, the catch was applied to the previous or subsequent week's frequency. Length frequency summaries for NAFO division are shown as an average of the relative length frequencies for each fisher in the division. The CPUE figures show control and experimental catches separately, in number of fish per net or 1000 hooks by week and are constructed by calculating a daily catch rate for each set and averaging all the CPUEs for all sets in a given week. The tables give catch details broken down by year, including number of fish measured (Nmeas), amount of gear fished (Ngear), total number of sets (Nhauls) and number of sets in which no fish were caught (Nzero). The first table contains data for control sets only and the second table on each sheet combines the data for all experimental sets.

## Results

Data summarizing Sentinel Survey activity in 2J3KL for 1995 through 1999 are presented in figures 1-405 and tables 1-268. Sixty-six inshore fishing enterprises representing communities from Black Tickle to St. Mary's Bay participated in the 2J3KL Sentinel Survey for 1999. Survey activity covered mostly summer and fall periods in all years, traditional fishing times for the areas involved. A total of 2453 sets of $51 / 2^{\prime \prime}$ gill net and 295 sets of $31 / 4^{\prime \prime}$ gill net resulted in total measurements of just over 90 000 fish. One hundred sixty-six sets of line trawl resulted in 5166 measurements. Otoliths from 3 235 fish were collected for aging purposes in 1999. Twelve cod traps were fished for a maximum period of 4 weeks at each site and a total of 6270 fish were sampled from 107 trap hauls. Sentinel Survey participants were again involved with inshore tagging experiments in 3K and 3L for 1999 in which 8825 fish were tagged in order to track migrations and provide data on cod abundance in inshore areas.

Figure 1 shows the control sites and trap berths that were surveyed in 1999 plotted by gear type. Control sites were generally consistent from year to year but shifts in location may have resulted due to weather or tide conditions or competition for sites by commercial activity.

Most line trawl sets in 2J3KL were fished for 6 hours or less (Fig. 2), with the second most frequent interval fished at 12-24 hours. Gear left longer than 24 hours was most likely not recovered earlier due to weather constraints. Gill nets were generally left overnight, fishing between 12 and 24 hours (Fig. 3).

## $51 / 2$ " Gill net

The summary data for 2J3KL in Figures 4-12 and tables 1-6 give an indication of catch rate change since inception of the Sentinel Survey in 1995. Gill nets show the narrowest range of selectivity of Sentinel Survey gears, targeting fish in the 50 cm to 80 cm range with full recruitment to the gear around 59 cm to 66 cm . According to age-length analysis (Stansbury et al.), these lengths mainly represent age 6 fish. In general, catch rates from $51 / 2 "$ gill nets were lowest in 1995, increased in 1996 and 1998 and decreased to a level comparable with 1997 in 1999. The relative length frequency plot (Fig. 4) shows the widest and strongest distribution in 1998 and probably reflects the relatively strong year-class of 1992. The second strongest signal overall is from the 1996 Sentinel Survey and may reflect the relative strength of the 1990 year-class. Weekly catch rate series (Figs 5 and 6) indicate a bimodal distribution in catch rates, with best catch rates in weeks 25-30 (June 13July 24 in 1999) and a second, mode in late fall. The enterprises which survey in the fall (primarily Summerford, Miles Cove, Ming's Bight, \& Petley) may be fishing on aggregations preparing to overwinter in inshore areas, which may partially explain the higher catch rates during this time frame.

Figures 7-15 and tables 5-10 give summary results broken down by NAFO division. In general, catch rates improve from north to south.

Catches in $2 \mathrm{~J} 51 / 2$ " gill nets were poor in all years. Of 456 sets in $1999,41 \%$ contained no fish (tables 5 and 6 ). Similar percentages of water hauls were reported in previous years. The relative length frequency plot reflects the scarcity of data in its jagged appearance. The period of time covered by the gill net survey in 2 J is the most condensed of all division, likely because all fishers have their gear in the water in the same weeks because of the shorter season in 2 J .

In 3 K catches from $51 / 2 "$ gill net were best in 1996 and 1998. Catch rates in 1999 were comparable to 1997 and the 1995 survey showed the lowest catch rate in the series. Fall catch rates were stronger than the summer peak and a drop in catches in weeks $39-42$ was observed in all years.

The best catch rates in $51 / 2$ " gill net were seen in 3L for all years, 1995 to 1999. The relative length frequency plot (Fig. 13) shows 1998 as the strongest peak, again probably reflecting the relative strength of the 1992 year-class. Peaks for 1996, 1997 and 1999 are comparable and 1995 again shows the lowest in the series.

Small mesh gill nets ( $31 / 4$ ") were used in 2 J3KL since 1996 in order to get information on smaller size ranges of fish. Figures $16-27$ and tables $11-18$ summarize the results. One $31 / 4$ " gill net ( 35 fathoms) was fished in combination with one $51 / 2^{\prime \prime}$ Gill net ( 50 fathoms) primarily on experimental
sites. A strong bimodal peak in length frequency distribution results from this mesh size as the gear selects two size ranges of fish. The first and strongest peak, in most cases, is between 35 cm and 47 cm . Fish in this size range are meshed while the larger fish ( 52 cm to 65 cm ) are caught by the lips and generally entangle as they twist around. Fish in the range of the first mode of selectivity for this gear ( 41 cm to 43 cm ), according to age at length tables in Stansbury et al. (2000), are 3 and 4 years.

Good catch rates from small mesh gill nets were observed in 2J, particularly in 1997 and 1998, but only in the range of the first peak of selectivity. No indications of the larger sizes or "lipped" fish were observed. The relatively strong peaks in 1997 and weaker signal in 1998 may both represent the 1993 year-class. The shift in frequency distribution in 1998 may reflect growth of this year-class and part of the year-class has moved out of range of gear selectivity.

The small mesh gear survey in 3 K shows the strongest peak of relative length frequency observed. The meshed peak in 1996 dominates and again, may reflect the relative strength of the 92 yearclass. The meshed peaks for other years are similar but the "lipped" mode shows continual decline from 1996 through 1999. The fact that lipped fish are probably not fully recruited to the gear at any particular length group makes it difficult to infer what this decline represents. Catch rates are generally good in small mesh gill nets and are best in the fall of the year in 3 K .

The two size ranges of fish in the relative length frequency for 3L small mesh gear are more equally represented than in other divisions. The gear catches more of the larger fish than other areas. The 1997 meshed mode is most dominant over other years and the "lipped" mode shows 1999 at the lowest in the series with other years comparable.

## Line trawl

Figures 28-39 and tables19-25 summarize the data from the line trawl portion of the 2J3KL Sentinel Survey. The line trawl survey generally takes place from weeks 34 to 48 . Line trawl shows a much wider selectivity curve than gill net and catches mainly fish between 29 cm and 83 cm . The majority of fish are selected between 41 cm and 65 cm and full recruitment is probably within that range. Overall, 1997 shows the broadest range of fish sizes caught and the highest weekly catch rates in the series.

Very few line trawl sets were conducted in 2 J . Only 52 sets were conducted over the course of the Sentinel Survey (1995-1999) and in 1999 of 3 sets fished, none caught fish (tables 21 and 22).

In 3 K , the line trawl survey had the best catch rates in all weeks fished in 1997. The relative length frequency plot for 1997 shows the widest size ranges of fish caught as well. The peak in size frequency occurs from about 52 cm to 59 cm , probably age 5 fish from the 1992 year-class. In 1999 there is a noticeable absence of smaller fish in the relative frequency plot and may be indicating the relatively poor recruitment of the 1995 year-class.

Similar to that seen in the gill net survey, line trawl in 3L appears to have more large fish available to the gear over the course of the survey as the relative length frequency plot shows a broader size range of fish caught (Figure 37). 1996 and 1997 frequency plots are dominant with modes representing the 1992 year-class shifting and moving out of range of gear selectivity in 1998. 1999
shows catch rates similar to other years, in contrast with 3K data, and although the absence of small fish isn't as pronounced as in 3 K , there is no indication of smaller fish becoming available to the gear.

## Trap

Trap has the broadest range of selectivity of all gears used in the Sentinel Survey. Fish from 34 to 86 cm were well represented in the frequency distributions and it is probably the most useful gear to track year-class strengths over the course of time. Trap data is presented in figures 40-48 and tables 27-30. The relative length frequency for all traps fished in 2J3KL (fig. 40) track the movement of a size range of fish from 1996 through 1998, which seem to correspond to the 1992 year-class. In 1999 the absence of larger fish available to the trap is noticeable. The pattern in size progression is driven mainly by the 3L trap data. 2 J had very little catch in 1995-1998 and no data for 1999. Catch rates in 3 K were less than half those for 3L in most years. Interestingly, there is a peak of relatively small fish indicated in the 1999 relative frequency plot for 3 K while 3 L shows very poor trap catches compared to previous years.

The relative length frequencies for trap are broken out in figure 48 to make it easier to track progression of length groups over the years.

## Data for Individual Enterprises

A summary sheet for each trip (Sentinel participant) is included following the summary sheets by NAFO division. Figures and tables for gill net and line trawl data are presented in general order of north to south distribution.

## References

Brattey, J. 2000. Stock structure and seasonal movement patterns of Atlantic cod (Gadus morhua) in NAFO Divs 3KL inferred from recent tagging experiments. DFO Can. Stock Assess. Sec. Res. Doc. 2000/084.
Stansbury, D., Shelton, P., and Maddock Parsons, D. 2000. An age disaggregate index from the Sentinel program for cod in NAFO divisions 2J3KL. DFO Can. Stock Assess. Sec. Res. Doc. 2000/090.


Figure 1. 1999 Sentinel Survey control sites for 5 1/2" gill net, line trawl and trap.


Figure 2. Frequency of hours fished for Linetrawl 2J3KL 1999 Sentinel Survey.


Figure 3. Frequency of hours fished for 5 1/2" Gillnet 2J3KL 1999 Sentinel Survey.


Table 3. Summary data for All sites (All) Control Sets Gillnet $51 / 2 \mathrm{In}$.

| Div | (All) |
| :--- | :--- |
| Trip | (All) |
| Type | F |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1998 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 12913 | 36675 | 36208 | 50816 | 30938 |
| Ngear | 2618 | 1998 | 2023 | 2043 | 1961 |
| Nhauls | 889 | 848 | 865 | 892 | 880 |
| Nzero | 192 | 152 | 110 | 111 | 116 |
| Table 4. | Summary data for All sites (All) Exp sets |  |  |  |  |
|  | Gillnet $51 / 2$ in. |  |  |  |  |


| Div | (All) |
| :--- | :--- |
| Trip | (All) |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 15873 | 61163 | 50734 | 73531 | 52666 |
| Ngear | 2652 | 3066 | 2923 | 2940 | 3031 |
| Nhauls | 892 | 1402 | 1427 | 1514 | 1573 |
| Nzero | 191 | 240 | 233 | 240 | 259 |

Figure 4. Relative length frequency (number at length / amount of gear) for control and experimental gears, (All) Gillnet $5 \mathbf{1 / 2}$ in.


Figure 5 . Average Catch per Unit Effort for Control Sites, (All) Gilinet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure 6 . Average Catch per Unit Effort for Experimental Sites, (All) Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Table 5. Summary data for All sites 2J Control Sets Gillinet $51 / 2 \mathrm{in}$.

| Div | 2 J |
| :--- | :--- |
| Trip | (All) |
| Type | F |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1986 | 1997 | 1998 | 1999 |
| Nmeas | 75 | 21 | 320 | 237 | 135 |
| Ngear | 323 | 250 | 249 | 204 | 237 |
| Nhauls | 110 | 115 | 117 | 96 | 114 |
| Nzero | 77 | 99 | 72 | 59 | 72 |
| Table 6. | Summary data for All sites 2J Exp sets |  |  |  |  |
|  | Gillnet 5 $1 / 2$ in. |  |  |  |  |


| Div | 2 J |
| :--- | :--- |
| Trip | (All) |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1896 | 1997 | 1998 | 1999 |
| Nmeas | 47 | 84 | 284 | 227 | 321 |
| Ngear | 323 | 484 | 380 | 323 | 359 |
| Nhauls | 110 | 228 | 213 | 198 | 227 |
| Nzero | 87 | 191 | 167 | 146 | 165 |

Figure 7. Relative length frequency (number at length / amount of gear) for control and experimental gears, 2J Gillnet $5 \mathbf{1 / 2}$ in.


Figure 8 . Average Catch per Unit Effort for Control Sites, 2J Gillnet $51 / 2$ in. (Number of Fish per Net)


Figure 9 . Average Catch per Unit Effort for Experimental Sites, 2 J Gillnet $5 \mathbf{1 / 2} \mathbf{i n}$. (Number of Fish per Net)


Table 7. Summary data for All sites 3 K Control Sets Gillnet $51 / 2 \mathrm{in}$.

| Div | $3 K$ |
| :--- | :--- |
| Trip | (All) |
| Type | $F$ |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 3724 | 11684 | 9245 | 13644 | 7811 |
| Ngear | 984 | 704 | 633 | 696 | 773 |
| Nhauls | 332 | 317 | 298 | 327 | 367 |
| Nzero | 91 | 38 | 36 | 27 | 28 |
| Table 8. | Summary data for All sites 3K Exp sets |  |  |  |  |
|  | Gillnet 5 $1 / 2$ in. |  |  |  |  |


| Div | 3 K |
| :--- | :--- |
| Trip | (All) |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 5436 | 23145 | 14680 | 23347 | 17611 |
| Ngear | 1005 | 1185 | 1145 | 1242 | 1418 |
| Nhauls | 331 | 586 | 573 | 667 | 746 |
| Nzero | 76 | 33 | 50 | 69 | 72 |

Figure 10 . Relative length frequency (number at length / amount of gear) for control and experimental gears, 3 K Gillnet $51 / 2 \mathrm{in}$.


Figure 11 . Average Catch per Unit Effort for Control Sites, $3 K$ Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure 12 . Average Catch per Unit Effort for Experimental Sites, 3K Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Tabie 9. Summary data for All sites 3L. Control Sets Gillnet $51 / 2 \mathrm{ln}$.


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 9114 | 24970 | 26643 | 36935 | 22992 |
| Ngear | 1311 | 1044 | 1141 | 1143 | 951 |
| Nhauls | 447 | 416 | 450 | 469 | 399 |
| Nzero | 24 | 15 | 2 | 25 | 16 |

Table 10.

| Div | 3 L |
| :--- | :--- |
| Trip | (All) |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 10390 | 37934 | 35770 | 49957 | 34734 |
| Ngear | 1324 | 1397 | 1398 | 1375 | 1254 |
| Nhauls | 451 | 588 | 641 | 649 | 600 |
| Nzero | 28 | 16 | 16 | 25 | 22 |

Figure 13. Relative length frequency (number at length / amount of gear) for control and experimental gears, 3L Gillnet $51 / 2 \mathrm{in}$.


Figure 14 . Average Catch per Unit Effort for Control Sites, 3L Gilinet $5 \mathbf{1 / 2} \mathbf{i n}$. (Number of Fish per Net)


Figure 15 . Average Catch per Unit Effort for Experimental Sites, 3L Gilinet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Table 11. Summary data for All sites (All) Control Sets Gillnet 3 1/4 in.


|  | Year |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |  |
| Nmeas |  | 11 | 212 | 178 |  |  |
| Ngear |  | 1 | 3 | 7 |  |  |
| Nhauls |  | 1 | 3 | 7 |  |  |
| Nzero |  | 0 | 0 | 3 |  |  |
| Table 12. | Summary data for All sites (All) Exp sets |  |  |  |  |  |
|  | Githet 3 $1 / 4$ in. |  |  |  |  |  |


| Div | (All) |
| :--- | :--- |
| Trip | (All) |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1985 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 2417 | 10968 | 11819 | 6409 |
| Ngear |  | 31 | 225 | 316 | 297 |
| Nhauls |  | 31 | 224 | 316 | 295 |
| Nzero |  | 0 | 18 | 21 | 50 |

Figure 16. Relative length frequency (number at length / amount of gear) for control and experimental gears, (All) Gillnet $31 / 4$ in.


Figure 17 . Average Catch per Unit Effort for Control Sites, (All) Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)



Table 13. Summary data for All altes 2 J Control Sets Gillinet $31 / 4$ in

| Div | 2 J |
| :--- | :--- |
| Trip | (All) |
| Type | F |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1895 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 11 | 203 |  |  |
| Ngear |  | 1 | 2 |  |  |
| Nhauls |  | 1 | 2 |  |  |
| Nzero |  | 0 | 0 |  |  |
| Table 14. | Summary data for All sites 2J Exp sets |  |  |  |  |
|  | Gillnet 3 1/4 in. |  |  |  |  |


| Div | 2 J |
| :--- | :--- |
| Trip | (All) |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 96 | 2773 | 2265 | 854 |
| Ngear |  | 7 | 67 | 89 | 109 |
| Nhauls |  | 7 | 66 | 89 | 109 |
| Nzero |  | 0 | 9 | 12 | 34 |

Figure 19. Relative length frequency (number at length / amount of gear) for control and experimental gears, 2 J Gillnet $31 / 4 \mathrm{in}$.


Figure 20 . Average Catch per Unit Effort for Control Sites, 2 J Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)


Figure 21 Average Catch per Unit Effort for Experimental Sites, 2J Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)


Table 15. Summary data for All sites 3 K Control Sets Gillnet $31 / 4 \mathrm{in}$.

| Div | $3 K$ |
| :--- | :--- |
| Trip | (All) |
| Type | F |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  | 9 | 87 |  |
| Ngear |  |  | 1 | 2 |  |
| Nhauls |  |  | 1 | 2 |  |
| Nzero |  |  | 0 | 0 |  |
| Table 16. |  |  |  |  |  |
|  | Summary data for All sites 3K Exp sets |  |  |  |  |
|  | Gillnet 3 1/4 in. |  |  |  |  |


| Div | 3K |
| :--- | :--- |
| Trip | (All) |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 1822 | 2526 | 3830 | 2762 |
| Ngear |  | 15 | 52 | 107 | 93 |
| Nhauls |  | 15 | 52 | 107 | 92 |
| Nzero |  | 0 | 2 | 7 | 7 |

Figure 22. Relative length frequency (number at length / amount of gear) for control and experimental gears, 3 K Gillnet $31 / 4 \mathrm{in}$.


Figure 23 . Average Catch per Unit Effort for Control Sites, 3 K Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)


Figure 24 . Average Catch per Unit Effort for Experimental Sites, 3K Gillnet $31 / 4$ in. (Number of Fish per Net)


Table 17. Summary data for All sites 3L Control Sets Gillnat $31 / 4 \mathrm{in}$.

| Div | 3 L |
| :--- | :--- |
| Trip | (All) |
| Type | F |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  | 91 |  |
| Ngear |  |  | 5 |  |  |
| Nhauls |  |  |  | 5 |  |
| Nzero |  |  | 3 |  |  |
| Table 18. |  |  |  |  |  |
|  | Summary data for All sites 3L Exp sets |  |  |  |  |
|  | Gillnet 3 1/4 in. |  |  |  |  |


| Div | 3L |
| :--- | :--- |
| Trip | (All) |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 499 | 5669 | 5724 | 2793 |
| Ngear |  | 9 | 106 | 120 | 95 |
| Nhauls |  | 9 | 106 | 120 | 94 |
| Nzero |  | 0 | 7 | 2 | 9 |

Figure 25. Relative length frequency (number at length / amount of gear) for control and experimental gears, 3L Gillnet $31 / 4 \mathrm{in}$.


Figure 26 . Average Catch per Unit Effort for Control Sites, 3L Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)


Figure 27 . Average Catch per Unit Effort for Experimental Sites, 3L Gillnet $3 \mathbf{1 / 4} \mathbf{i n}$. (Number of Fish per Net)


Table 19. Summary data for All sites (All) Control Sets LInetrawl


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1896 | 1897 | 1998 | 1899 |
| Nmeas | 16325 | 9358 | 14848 | 5101 | 2386 |
| Ngear | 144250 | 81922 | 70400 | 45952 | 21950 |
| Nhauls | 406 | 239 | 211 | 142 | 74 |
| Nzero | 50 | 19 | 10 | 12 | 5 |
| Table 20. | Summary data for All sites (All) Exp sets |  |  |  |  |
|  | Linetrawi |  |  |  |  |


| Div | (AII) |
| :--- | :--- |
| Trip | (All) |
| Type | (All) |
| Gear | 7 |
| Mesh Size | 0 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1985 | 1996 | 1997 | 1988 | 1999 |
| Nmeas | 20018 | 13797 | 18662 | 7249 | 2780 |
| Ngear | 144475 | 88200 | 79200 | 56114 | 26375 |
| Nhauls | 424 | 290 | 245 | 179 | 92 |
| Nzero | 32 | 23 | 11 | 11 | 4 |

Figure 28. Relative length frequency (number at length / amount of gear) for control and experimental gears, (All) Linetrawl


Figure 29 . Average Catch per Unit Effort for Control Sites, (All) Linetrawl (Number of Fish per 1000 hooks)


Figure 30 . Average Catch per Unit Effort for Experimental Sites, (All) Linetrawl (Number of Fish per 1000 hooks)


Table 21. Summary data for All sites 2J Control Sets Linetrawl

| Div | 2 J |
| :--- | :--- |
| Trip | (All) |
| Type | F |
| Gear | 7 |
| Mesh Size | 0 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 38 | 16 | 15 |  |
| Ngear |  | 3000 | 4200 | 1000 |  |
| Nhauls |  | 9 | 12 | 4 |  |
| Nzero |  | 2 | 6 | 0 |  |
| Table 22. | Summary data for All sites 2 J Exp sets |  |  |  |  |
|  | Linetrawl |  |  |  |  |


| Div | 2 J |
| :--- | :--- |
| Trip | (All) |
| Type | (All) |
| Gear | 7 |
| Mesh Size | 0 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 37 | 5 | 11 | 0 |
| Ngear |  | 4000 | 4950 | 1000 | 750 |
| Nhauls |  | 11 | 12 | 4 | 3 |
| Nzero |  | 3 | 9 | 1 | 3 |

Figure 31. Relative length frequency (number at length / amount of gear) for control and experimental gears, 2 J Linetrawl


Figure 32 . Average Catch per Unit Effort for Control Sites, 2J Linetrawl (Number of Fish per 1000 hooks)


Figure 33 . Average Catch per Unit Effort for Experimental Sites, 2J Linetrawl (Number of Fish per 1000 hooks)


Table 23. Summary data for All sites 3K Control Sets Linetrawi


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 10204 | 5894 | 9502 | 2994 | 1509 |
| Ngear | 66150 | 38300 | 36000 | 25470 | 15150 |
| Nhauls | 222 | 129 | 123 | 83 | 54 |
| Nzero | 22 | 6 | 4 | 6 | 3 |

Table 24.

| Div | 3K |
| :--- | :--- |
| Trip | (All) |
| Type | (All $)$ |
| Gear | 7 |
| Mesh Size | 0 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1996 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 12477 | 7686 | 12899 | 4023 | 1585 |
| Ngear | 72475 | 46190 | 40500 | 30440 | 16825 |
| Nhauls | 243 | 173 | 145 | 101 | 62 |
| Nzero | 12 | 9 | 2 | 3 | 0 |

Figure 34 . Relative length frequency (number at length / amount of gear) for control and experimental gears, 3K Linetrawl


Figure 35 . Average Catch per Unit Effort for Control Sites, 3K Linetrawl (Number of Fish per 1000 hooks)


Figure 36 . Average Catch per Unit Effort for Experimental Sites, 3K Linetrawl (Number of Fish per 1000 hooks)


Table 25. Summary data for All sltes 3L Control Sets Linetrawl

| Div | 3L |
| :--- | :--- |
| Trip | (All) |
| Type | F |
| Gear | 7 |
| Mesh Size | 0 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 6121 | 3426 | 5330 | 2092 | 877 |
| Ngear | 78100 | 40622 | 30200 | 19482 | 6800 |
| Nhauls | 184 | 101 | 76 | 55 | 20 |
| Nzero | 28 | 11 | 0 | 6 | 2 |
| Summary data for All sites 3L Exp sets |  |  |  |  |  |
|  | Linetrawl |  |  |  |  |


| Div | 3 L |
| :--- | :--- |
| Trip | (All) |
| Type | (All) |
| Gear | 7 |
| Mesh Size | 0 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 7541 | 6074 | 5758 | 3215 | 1195 |
| Ngear | 72000 | 38010 | 33750 | 24674 | 8800 |
| Nhauls | 181 | 106 | 88 | 74 | 27 |
| Nzero | 20 | 11 | 0 | 7 | 1 |

Figure 37. Relative length frequency (number at length / amount of gear) for control and experimental gears, 3L Linetrawl


Figure 38 . Average Ciatch per Unit Effort for Control Sites, 3L Linetrawl (Number of Fish per 1000 hooks)


Figure 39 . Average Catch per Unit Effort for Experimental Sites, 3L Linetrawl (Number of Fish per 1000 hooks)

Table 27. Summary data for (Ali) 1 rap

|  | Year |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: | :---: |
| Cata | 1985 | 1996 | 1997 | 1988 | 1999 |  |  |
| N/meas | 21310 | 32511 | 34217 | 33183 | 6270 |  |  |
| Ngear | 667 | 691 | 672 | 681 | 107 |  |  |
| Nhauls | 667 | 691 | 672 | 681 | 107 |  |  |
| Nzero | 166 | 132 | 156 | 138 | 44 |  |  |

Figure $\quad 40$. Relative length frequency (number at length / amount of gear) for control and experimental gears, (All) Trap






Figure 45 . Average Catch per Unit Effort for Control Sites. 3K Trap (Estimated Weight per Haul)



2 J3KL








Figure 48. Relative Length frequenies for trap (number at length scaled to number of times the trap was hauled) broken down by NAFO subdivision and year.


Figure 49. Relative length frequency (number at length / amount of gear) for control and experimental gears, Black Tickle Gillnet $51 / 2 \mathrm{in}$.


Figure 50 . Average Catch per Unit Effort for Control Sites, Black Tickle Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure 51 . Average Catch per Unit Effort for Experimental Sites, Black Tickle Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Table 33. Summary data for Williams Harbour 2.J
Control Sets Gillnet $51 / 2 \mathrm{in}$.


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 54 | 7 | 47 | 3 | 2 |
| Ngear | 81 | 48 | 52 | 36 | 27 |
| Nhauls | 27 | 16 | 18 | 12 | 9 |
| Nzero | 7 | 10 | 7 | 11 | 7 |

Table 34.

| Div | 2 J |
| :--- | :--- |
| Trip | 72 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 15 | 19 | 9 | 14 | 40 |
| Ngear | 81 | 96 | 68 | 64 | 47 |
| Nhauls | 27 | 32 | 29 | 28 | 21 |
| Nzero | 20 | 22 | 27 | 23 | 13 |

Figure 52. Relative length frequency (number at length / amount of gear) for control and experimental gears, Williams Harbour Gillnet $51 / 2 \mathrm{in}$.


Figure 53 . Average Catch per Unit Effort for Control Sites, Williams Harbour Gillnet $51 / 2$ in. (Number of Fish per Net)


Figure 54 . Average Catch per Unit Effort for Experimental Sites, Williams Harbour Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Table 35. Summary data for Tub Harbour 2J Control Sets Gilinet $51 / 2 \mathrm{In}$.


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 4 | 0 | 5 | 36 | 17 |
| Ngear | 33 | 14 | 7 | 8 | 18 |
| Nhauls | 11 | 5 | 4 | 4 | 9 |
| Nzero | 9 | 5 | 2 | 1 | 3 |

Table 36. Summary data for Tub Harbour 2J Exp

| Div | 2 J |
| :--- | :--- |
| Trip | 76 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: | :---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |  |  |
| Nmeas | 1 | 0 | 2 | 3 | 19 |  |  |
| Ngear | 33 | 13 | 13 | 12 | 27 |  |  |
| Nhauls | 11 | 5 | 8 | 8 | 18 |  |  |
| Nzero | 10 | 5 | 6 | 5 | 10 |  |  |

Figure 55. Relative length frequency (number at length / amount of gear) for control and experimental gears, Tub Harbour Gillnet $51 / 2 \mathrm{in}$.


Figure 56 . Average Catch per Unit Effort for Control Sites. Tub Harbour Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure 57 . Average Catch per Unit Effort for Experimental Sites, Tub Harbour Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Table 37. Summary data for Triangle 2J Control Sets GIllinet $51 / 2 \mathrm{in}$.


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 2 | 4 | 55 | 39 | 8 |
| Ngear | 33 | 14 | 16 | 14 | 32 |
| Nhauls | 11 | 7 | 8 | 7 | 16 |
| Nzero | 9 | 4 | 0 | 2 | 12 |
| Table 38. | Summary data for Triangle 2 J Exp sets |  |  |  |  |
|  | Gillnet 5 $1 / 2 \mathrm{in}$. |  |  |  |  |


| Div | 2 J |
| :--- | :--- |
| Trip | 75 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 12 | 26 | 77 | 99 | 134 |
| Ngear | 36 | 32 | 22 | 23 | 47 |
| Nhauls | 12 | 16 | 14 | 15 | 31 |
| Nzero | 11 | 11 | 4 | 3 | 21 |

Figure 58. Relative length frequency (number at length / amount of gear) for control and experimental gears, Triangle Gillnet 5 1/2 in.


Figure 59 . Average Catch per Unit Effort for Control Sites, Triangle Gillnet $5 \mathbf{1 / 2}$ in. (Number of Fish per Net)



Table 39. Summary data for Penny's Harbour 2 J Control Sets Gillnet 5 1/2 in.


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 3 | 1 | 2 | 8 | 6 |
| Ngear | 62 | 32 | 32 | 32 | 32 |
| Nhauls | 23 | 16 | 16 | 16 | 16 |
| Nzero | 21 | 15 | 14 | 10 | 10 |
| Table 40. Summary data for Penny's Harbour 2J |  |  |  |  |  |
|  | Exp sets Gillnet 5 $1 / 2$ in. |  |  |  |  |


| Div | 2 J |
| :--- | :--- |
| Trip | 74 |
| Type | (Ali) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 3 | 2 | 69 | 11 | 26 |
| Ngear | 59 | 62 | 47 | 45 | 48 |
| Nhauls | 22 | 32 | 26 | 30 | 32 |
| Nzero | 19 | 30 | 20 | 26 | 25 |

Figure 61 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Penny's Harbour Gillnet $51 / 2$ in.


Figure 62 . Average Catch per Unit Effort for Control Sites, Penny's Harbour Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure 63 . Average Catch per Unit Effort for Experimental Sites, Penny's Harbour Gillnet $51 / 2$ in. (Number of Fish per Net)


Table 41. Summary data for St. Lewls 2J Control Sets Gillnet $5 \mathbf{1 / 2}$ in.


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 3 | 0 | 1 | 4 |
| Ngear |  | 48 | 48 | 26 | 32 |
| Nhauls |  | 24 | 24 | 13 | 16 |
| Nzero | 21 |  |  |  | 24 |
| Table 42. | Summary data for St. Lewis 2J Exp sets |  |  |  |  |

Gillnet 5 1/2 in.

| Div | 2 J |
| :--- | :--- |
| Trip | 81 |
| Type | (All $)$ |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 7 | 19 | 18 | 5 |
| Ngear |  | 96 | 80 | 43 | 46 |
| Nhauls |  | 48 | 46 | 26 | 30 |
| Nzero |  | 42 | 40 | 22 | 26 |

Figure 64 . Relative length frequency (number at length / amount of gear) for control and experimental gears, St. Lewis Gillnet $51 / 2$ in.


Figure 65 . Average Catch per Unit Effort for Control Sites, St. Lewis Gillnet $51 / 2$ in. (Number of Fish per Net)


Figure 66 . Average Catch per Unit Effort for Experimental Sites, St. Lewis Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Table 43. Summary data for Spear Harbour 2J Control Sets Gillnet $51 / 2$ in.


|  | Year |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |  |
| Nmeas | 9 | 3 | 197 | 92 | 84 |  |
| Ngear | 72 | 46 | 46 | 46 | 32 |  |
| Nhauls | 24 | 23 | 23 | 23 | 16 |  |
| Nzero | 20 | 22 | 8 | 15 | 5 |  |
| Table 44. | Summary data for Spear Harbour 2J Exp |  |  |  |  |  |
|  | sets Gillnet $51 / 2$ in. |  |  |  |  |  |


| Div | 2 J |
| :--- | :--- |
| Trip | 67 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | $\mathbf{1 9 9 6}$ | $\mathbf{1 9 9 7}$ | 1998 | 1999 |
| Nmeas | 11 | 24 | 104 | 70 | 84 |
| Ngear | 72 | 89 | 78 | 72 | 48 |
| Nhauls | 24 | 47 | 45 | 48 | 32 |
| Nzero | 17 | 36 | 29 | 30 | 15 |

Figure 67 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Spear Harbour Gillnet $51 / 2 \mathrm{in}$.


Figure 68 . Average Catch per Unit Effort for Control Sites, Spear Harbour Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure 69 . Average Catch per Unit Effort for Experimental Sites. Spear Harbour Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Table 45. Summary data for Cape Charles 2J
Control Sets Gillnet $51 / 2$ in.


|  | Year |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |  |
| Nmeas | 3 | 2 | 2 | 2 | 7 |  |
| Ngear | 42 | 16 | 16 | 16 | 32 |  |
| Nhauls | 14 | 8 | 8 | 8 | 16 |  |
| Nzero | 11 | 7 | 6 | 6 | 11 |  |
| Table 46. | Summary data for Cape Charles 2J Exp |  |  |  |  |  |
|  | sets Gillnet $51 / 2$ in. |  |  |  |  |  |


| Div | 2 J |
| :--- | :--- |
| Trip | 71 |
| Type | (All $)$ |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 5 | 1 | 2 | 0 | 7 |
| Ngear | 42 | 32 | 27 | 24 | 48 |
| Nhauls | 14 | 16 | 15 | 16 | 31 |
| Nzero | 10 | 15 | 13 | 16 | 27 |

Figure 70. Relative length frequency (number at length / amount of gear) for control and experimental gears, Cape Charles Gillnet $51 / 2 \mathrm{in}$.


Figure 71 . Average Catch per Unit Effort for Control Sites, Cape Charles Gillnet $51 / 2$ in. (Number of Fish per Net)


Figure 72 . Average Catch per Unit Effort for Experimental Sites, Cape Charles Gillnet $51 / 2$ in. (Number of Fish per Net)

rable 47. Summary data for Lunare 3 K Control Sets Gillinet $51 / 2 \mathrm{in}$.

| Oiv | $3 K$ |
| :--- | :--- |
| Trip | 32 |
| Type | F |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: |
| Data | 1995 | 1996 | 1997 | 1898 | 1999 |  |
| Nmeas | 67 | 151 | 32 | 60 | 260 |  |
| Ngear | 57 | 34 | 30 | 28 | 40 |  |
| Nhauls | 19 | 17 | 15 | 14 | 20 |  |
| Nzero | 5 | 6 | 9 | 5 | 6 |  |
| Table 48. | Summary data for Lunaire 3K Exp sets |  |  |  |  |  |
|  | Gillnet 5 $1 / 2$ in. |  |  |  |  |  |


| Div | $3 K$ |
| :--- | :--- |
| Trip | 32 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 18 | 393 | 184 | 120 | 465 |
| Ngear | 57 | 67 | 59 | 55 | 78 |
| Nhauls | 19 | 34 | 30 | 32 | 40 |
| Nzero | 8 | 8 | 6 | 14 | 13 |

Figure $\quad 73$. Relative length frequency (number at length / amount of gear) for control and experimental gears, Lunaire Gillnet $51 / 2 \mathrm{in}$.


Figure $\quad 74$. Average Catch per Unit Effort for Control Sites, Lunaire Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure $\quad 75$. Average Catch per Unit Effort for Experimental Sites, Lunaire Gillnet $5 \mathbf{1 / 2} \mathbf{i n}$. (Number of Fish per Net)


Table 49. Summary data for Great Brohat 3K Control Sets Gillnet 5 1/2 in.


|  | Year |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |  |
| Nmeas | 43 | 106 | 62 | 107 | 62 |  |
| Ngear | 81 | 48 | 46 | 46 | 20 |  |
| Nhauls | 27 | 24 | 23 | 23 | 10 |  |
| Nzero | 17 | 8 | 9 | 10 | 7 |  |
| Table 50. | Summary data for Great Brehat 3K Exp |  |  |  |  |  |
|  | sets Gillnet $51 / 2$ in. |  |  |  |  |  |



|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1895 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 51 | 267 | 115 | 343 | 33 |
| Ngear | 84 | 96 | 84 | 88 | 40 |
| Nhauls | 28 | 48 | 42 | 47 | 20 |
| Nzero | 18 | 7 | 16 | 13 | 13 |

Figure 76 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Great Brehat Gillnet 5 1/2 in.


Figure $\quad 77$. Average Catch per Unit Effort for Control Sites, Great Brehat Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure 78 . Average Catch per Unit Effort for Experimental Sites, Great Brehat Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Table 51. Summary data for Goose Cove 3K Control Sets Gillinet $5 \mathbf{1 / 2} \mathbf{~ i n .}$

| Div | $3 K$ |
| :--- | :--- |
| Trjp | 54 |
| Type | $F$ |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 11 | 7 | 41 | 7 |
| Ngear |  | 16 | 24 | 16 | 12 |
| Nhauls |  | 8 | 12 | 8 | 6 |
| Nzero |  | 5 | 8 | 1 | 3 |


| Div | $3 K$ |
| :--- | :--- |
| Trip | 54 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1095 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 99 | 186 | 616 | 1195 |
| Ngear |  | 30 | 76 | 96 | 80 |
| Nhauls |  | 15 | 38 | 48 | 40 |
| Nzero |  | 2 | 6 | 8 | 6 |

Figure 79. Relative length frequency (number at length / amount of gear) for control and experimental gears, Goose Cove Gillnet $5 \mathbf{1 / 2}$ in.


Figure 80 . Average Catch per Unit Effort for Control Sites, Goose Cove Gillnet $5 \mathbf{1 / 2}$ in. (Number of Fish per Net)


Figure 81 . Average Catch per Unit Effort for Experimental Sites, Goose Cove Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Table 53. Summary data for Conche 3K Control Sets Gillnet $51 / 2 \mathrm{in}$.

| Div | 3 K |
| :--- | :--- |
| Trip | 16 |
| Type | F |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |  |  |  |  |
| Nmeas | 25 | 151 | 91 | 141 | 274 |  |  |  |  |
| Ngear | 57 | 30 | 32 | 32 | 40 |  |  |  |  |
| Nhauls | 19 | 15 | 16 | 16 | 20 |  |  |  |  |
| Nzero | 14 | 1 | 1 | 2 | 4 |  |  |  |  |
| Table 54. |  |  |  |  |  |  |  |  |  |
|  | Summary data for Conche 3K Exp sets |  |  |  |  |  |  |  |  |
|  | Gillnet $51 / 2$ in. |  |  |  |  |  |  |  |  |


| Div | 3 K |
| :--- | :--- |
| Trip | 16 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | $\mathbf{1 9 9 6}$ | $\mathbf{1 9 8 7}$ | $\mathbf{1 9 9 8}$ | $\mathbf{1 9 9 9}$ |
| Nmeas | 65 | 521 | 219 | $\mathbf{4 8 1}$ | 494 |
| Ngear | 57 | 64 | 62 | 64 | 80 |
| Nhauls | 19 | 32 | 31 | 32 | 40 |
| Nzero | 10 | 1 | 3 | 2 | 8 |

Figure $\quad 82$. Relative length frequency (number at length / amount of gear) for control and experimental gears, Conche Gillnet $51 / 2 \mathrm{in}$.


Figure 83. Average Catch per Unit Effort for Control Sites, Conche Gillnet $51 / 2$ in. (Number of Fish per Net)


Figure 84 . Average Catch per Unit Effort for Experimental Sites, Conche Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Table 56. Summary data for Englee 3K Control Sats GIIInot $51 / 2 \mathrm{in}$.

| Dlv | $3 K$ |
| :--- | :--- |
| Trip | 22 |
| Type | F |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Data | 1095 | 1996 | 1987 | 1998 | 1999 |
| Nmeas | 34 | 207 | 94 | 371 | 192 |
| Ngear | 60 | 34 | 32 | 32 | 32 |
| Nhauls | 20 | 16 | 16 | 16 | 16 |
| Nzoro | 9 | 1 | 2 | 5 | 0 |
| Table 56. | Summary Gillnet $51 /$ | ata for in. | glee | Exp |  |


| Div | $3 K$ |
| :--- | :--- |
| Trip | 22 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 25 | 398 | 281 | 292 | 615 |
| Ngear | 60 | 62 | 62 | 55 | 58 |
| Nhauls | 20 | 30 | 31 | 32 | 32 |
| Nzero | 15 | 3 | 3 | 13 | 2 |

Figure 85. Rolative length frequency (number at length / amount of gear) for control and experimental gears, Englee Gillnet 5 1/2 in.


Figure 86 . Average Catch per Unit Effort for Control Sites, Englee Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Flgure 87 . Average Catch per Unit Effort for Experimental Sites, Englee Gillnet $5 \mathbf{1 / 2}$ in. (Number of Fish per Net)


| Dly | $3 K$ |
| :--- | :--- |
| Tfip | 53 |
| Type | $F$ |
| Gear | 5 |
| Mesh size | 5.5 |


|  | Year |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: |
| Data | 1996 | 1996 | 1997 | 1998 | 1899 |  |  |  |  |  |
| Nmeas | 19 | 60 | 65 | 271 | 107 |  |  |  |  |  |
| Noear | 54 | 32 | 26 | 28 | 32 |  |  |  |  |  |
| Nhauls | 18 | 15 | 13 | 14 | 16 |  |  |  |  |  |
| Nzero | 7 | 6 | 2 | 1 | 3 |  |  |  |  |  |


| Div | $3 K$ |
| :--- | :--- |
| Trip | 53 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1097 | 1998 | 1999 |
| Nmaas | 353 | 736 | 347 | 861 | 336 |
| Ngear | 54 | 62 | 44 | 49 | 52 |
| Nhauls | 18 | 30 | 25 | 28 | 30 |
| Nzero | 4 | 1 | 2 | 5 | 5 |

Figure 88, Relative length frequency (number at length / amount of gear) for control and experimental gears, Harbour Deep Gillnet $5 \mathbf{1 / 2}$ in.


Figure 89 . Average Catch per Unit Effort for Control Sites, Harbour Deep Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure $\quad 90$. Average Catch par Unit Effort for Experimental Sites, Harbour Deep Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)

Table 58. Summary data for Jackson's Arm 3K Control Sets Gillnet $51 / 2 \mathrm{in}$.


| Div | 3 K |
| :--- | :--- |
| Trip | 65 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 247 | 2856 | 1191 | 1224 | 197 |
| Ngear | 63 | 80 | 65 | 83 | 52 |
| Nhauls | 21 | 38 | 33 | 48 | 30 |
| Nzero | 1 | 4 | 2 | 5 | 3 |

Figure $\quad 91$. Relative length frequency (number at length / amount of gear) for control and experimental gears, Jackson's Arm Gillnet $51 / 2$ in.


Figure 92 . Average Catch per Unit Effort for Control Sites, Jackson's Arm Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)



Table 61. Summary data for Coachman's Cove 3 K Control Sels Gilinet 5 1/2 in.

| Div | $3 K$ |
| :--- | :--- |
| Trip | 15 |
| Type | F |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1897 | 1998 | 1989 |
| Nmeas | 27 | 383 | 253 | 302 | 169 |
| Ngear | 30 | 16 | 20 | 20 | 26 |
| Nhauls | 10 | 8 | 10 | 10 | 13 |
| Nzero | 7 | 0 | 0 | 0 | 0 |


| Div | $3 K$ |
| :--- | :--- |
| Trip | 15 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1996 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 88 | 1139 | 1101 | 1234 | 419 |
| Ngear | 30 | 32 | 50 | 53 | 63 |
| Nhauls | 10 | 16 | 28 | 30 | 36 |
| Nzaro | 4 | 0 | 0 | 2 | 2 |

Figure 94. Relative length frequency (number at length / amount of gear) for control and experimental gears, Coachman's Cove Gilinet $51 / 2$ in.


Figure 95 . Average Catch per Unit Effort for Control Sites, Coachman's Cove Gillnet $51 / 2$ in. (Number of Fish per Net)


Figure 96 . Average Catch per Unit Effort for Experimental Sites, Coachman's Cove Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Table 03. Summary data for Ming's Bight 3 K Control Sets Gilinet $51 / 2 \mathrm{in}$.

| Dlv | $3 K$ |
| :--- | :--- |
| Trip | 20 |
| Type | $F$ |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | :--- | :--- | :--- | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  | 129 | 53 |
| Ngear |  |  | 10 | 18 |  |
| Nhauls |  |  | 5 | 9 |  |
| Nzero |  |  | 0 | 1 |  |


| Div | $3 K$ |
| :--- | :--- |
| Trip | 20 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | :---: | :---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  | 420 | 443 |
| Ngear |  |  |  | 26 | 54 |
| Nhauls |  |  |  | 12 | 23 |
| Nzero |  |  |  | 0 | 1 |

Figure $\quad 97$, Relative length frequency (number at length / amount of gear) for control and experimental gears, Ming's Bight Gillnet $51 / 2$ in.


Figure $\quad 98$. Average Catch per Unit Effort for Control Sites, Ming's Bight Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure $\quad 99$. Average Catch per Unit Effort for Experimental Sites, Ming's Bight Gilinet $5 \mathbf{1 / 2}$ in. (Number of Fish per Net)


Table 65. Summary data for La Scle 3K Control Sets Gillnet 5 t/2 in.

| Div | $3 K$ |
| :--- | :--- |
| Trip | 66 |
| Type | $F$ |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Data | 1995 | 1896 | 1997 | 1988 | 1999 |
| Nmeas |  | 353 | 112 | 863 | 325 |
| Ngear |  | 12 | 10 | 10 | 16 |
| Nhauls |  | 6 | 6 | 6 | 8 |
| Nzero |  | 0 | 0 | 0 | 0 |
| Table 66 | Summary data for La Scie 3K Exp sets Gillnet $51 / 2 \mathrm{in}$. |  |  |  |  |


| Dly | $3 K$ |
| :--- | :--- |
| Trip | 66 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 488 | 218 | 1411 | 455 |
| Ngear |  | 24 | 23 | 23 | 28 |
| Nhauls |  | 12 | 12 | 12 | 16 |
| Nzero |  | 0 | 1 | 0 | 0 |

Figure 100 . Relative length frequency (number at length / amount of gear) for control and experimental gears, La Scie Gillnet $51 / 2$ in.


Figure 101 . Average Catch par Unit Effort for Control Sites, La Scie Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)



Table 67. Summary data for Shoe Cove 3 K Control Sets Gillnet $51 / 2 \mathrm{in}$.

| Div | 3 K |
| :--- | :--- |
| Trip | 35 |
| Type | F |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 200 | 207 | 241 | 517 |
| Ngear |  | 12 | 10 | 10 | 20 |
| Nhauls |  | 6 | 5 | 5 | 10 |
| Nzero |  | 0 | 0 | 0 | 0 |
| Table 68. | Summary data for Shoe Cove 3K Exp |  |  |  |  |
|  | sets Gillnet $51 / 2$ in. |  |  |  |  |


| Div | $3 K$ |
| :--- | :--- |
| Trip | 35 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | $\mathbf{1 9 9 6}$ | $\mathbf{1 9 9 7}$ | $\mathbf{1 9 9 8}$ | $\mathbf{1 9 9 9}$ |
| Nmeas |  | 457 | 157 | 485 | 529 |
| Ngear |  | 24 | 20 | 24 | 40 |
| Nhauls |  | 12 | 10 | 12 | 20 |
| Nzero |  | 0 | 1 | 0 | 1 |

Figure 103. Relative length frequency (number at length / amount of gear) for control and experimental gears, Shoe Cove Gillnet $51 / 2$ in.


Figure 104 . Average Catch per Unit Effort for Control Sites, Shoe Cove Gillnet $51 / 2$ in. (Number of Fish per Net)


Figure $\quad 105$. Average Catch par Unit Effort for Experimental Sites, Shoe Cove Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


| Div | 3 K |
| :--- | :--- |
| Trip | 48 |
| Type | F |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 701 | 1916 | 2037 | 2090 | 547 |
| Ngear | 87 | 72 | 72 | 72 | 48 |
| Nhauls | 29 | 24 | 24 | 24 | 16 |
| Nzero | 3 | 0 | 1 | 0 | 0 |
| Table 70. | Summary <br> Exp sets | ata for ilnet 5 | mith's <br> 2 in. | arbou |  |


| Div | 3 K |
| :--- | :--- |
| Trip | 48 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 764 | 1152 | 1431 | 1515 | 389 |
| Ngear | 90 | 81 | 74 | 72 | 48 |
| Nhauls | 30 | 40 | 38 | 48 | 32 |
| Nzero | 3 | 1 | 3 | 1 | 3 |

Figure 106. Relative length frequency (number at length / amount of gear) for control and experimental gears, Smith's Harbour Gillnet $51 / 2$ in.


Figure 107 . Average Catch per Unit Effort for Control Sites, Smith's Harbour Gillnet $51 / 2$ in. (Number of Fish per Net)


Figure 108 . Average Catch per Unit Effort for Experimental Sites, Smith's Harbour Gillnet $5 \mathbf{1 / 2} \mathbf{i n}$. (Number of Fish per Net)


Table 71. Summary dala for Jackson's Cove 3 K
Control Sets Gillnet $51 / 2 \mathrm{in}$.

| Div | $3 K$ |
| :--- | :--- |
| Trip | 60 |
| Type | F |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: | :---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |  |  |
| Nmeas | 778 | 1171 | 1473 | 2120 | 350 |  |  |
| Ngear | 84 | 72 | 72 | 65 | 46 |  |  |
| Nhauls | 28 | 24 | 24 | 24 | 16 |  |  |
| Nzero | 1 | 7 | 1 | 0 | 1 |  |  |


| Div | $3 K$ |
| :--- | :--- |
| Trip | 60 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 1029 | 1364 | 1333 | 1614 | 474 |
| Ngear | 84 | 72 | 72 | 79 | 50 |
| Nhauls | 28 | 24 | 24 | 24 | 16 |
| Nzero | 1 | 1 | 0 | 3 | 1 |

Figure 109. Relative length frequency (number at length / amount of gear) for control and experimental gears, Jackson's Cove Gillnet $51 / 2$ in


Figure 110 . Average Catch per Unit Effort for Control Sites, Jackson's Cove Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure 111 . Average Catch per Unit Effort for Experimental Sites, Jackson's Cove Gillnet $5 \mathbf{1 / 2} \mathbf{i n}$. (Number of Fish per Net)



| Div | 3 K |
| :--- | :--- |
| Trip | 38 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 797 | 1620 | 2046 | 1646 | 213 |
| Ngear | 84 | 74 | 96 | 85 | 56 |
| Nhauls | 28 | 44 | 47 | 47 | 32 |
| Nzero | 0 | 1 | 1 | 1 | 1 |

Figure 112. Relative length frequency (number at length / amount of gear) for control and experimental gears, Miles Cove Gillnet $51 / 2$ in.


Figure 113 . Average Catch per Unit Effort for Control Sites, Miles Cove Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure 114 . Average Catch per Unit Effort for Experimental Sites, Miles Cove Gillnet $51 / 2$ in. (Number of Fish per Net)

Table 75. Summary data for Summeriord 3K Control Sets Gillnet $51 / 2$ in.

| Div | 3 K |
| :--- | :--- |
| Trip | 57 |
| Type | F |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Data | 1895 | 1996 | 1997 | 1998 | 1998 |
| Nmeas | 860 | 1055 | 1367 | 1557 | 544 |
| Ngear | 90 | 48 | 48 | 46 | 52 |
| Nhauls | 30 | 24 | 24 | 23 | 26 |
| Nzero | 0 | 0 | 0 | 0 | 1 |
| Table 76. | Summary data for Summerford 3K Exp sets Gillnet $5 \mathbf{1 / 2} \mathbf{i n}$. |  |  |  |  |


| Div | $3 K$ |
| :--- | :--- |
| Trip | 57 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 697 | 1890 | 1985 | 2095 | 763 |
| Ngear | 90 | 91 | 83 | 80 | 91 |
| Nhauls | 30 | 48 | 47 | 46 | 52 |
| Nzero | 1 | 0 | 0 | 0 | 6 |

Figure 115 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Summerford Gillnet $5 \mathbf{1 / 2}$ in.


Figure 116 . Average Catch per Unit Effort for Control Sites, Summerford Gilnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure 117 . Average Catch per Unit Effort for Experimental Sites, Summerford Gillnet $5 \mathbf{1 / 2} \mathbf{i n}$. (Number of Fish per Net)


Figure 118. Relative length frequency (number at length / amount of gear) for control and experimental gears, Durrell Gillnet 5 1/2 in.


Figure 119 . Average Catch per Unit Effort for Control Sites, Durrell Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure 120 . Average Catch per Unit Effort for Experimental Sites, Durrell Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)

rable 79. Summary data for Too Good Arm 3K Control Sets Gillnet $51 / 2 \mathrm{in}$.

| Dlv | $3 K$ |
| :--- | :--- |
| Trip | 13 |
| Type | F |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Data | 1895 | 1996 | 1997 | 1998 | 1899 |
| Nmeas | 293 | 626 | 493 | 639 | 187 |
| Ngear | 60 | 32 | 29 | 32 | 28 |
| Nhauls | 20 | 16 | 15 | 16 | 14 |
| Nzero | 1 | 0 | 0 | 0 | 0 |
| Table 80. | Summary data for Too Good Arm 3K Exp sets Gillnet $51 / 2 \mathrm{in}$. |  |  |  |  |


| Div | $3 K$ |
| :--- | :--- |
| Trip | 13 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1898 | 1998 |
| Nmeas | 508 | 2855 | 973 | 1514 | 453 |
| Ngear | 57 | 64 | 51 | 52 | 50 |
| Nhauls | 19 | 32 | 29 | 30 | 28 |
| Nzero | 0 | 0 | 0 | 0 | 1 |

Figure 121. Relative length frequency (number at length / amount of gear) for control and experimental gears, Too Good Arm Gillnet 5 1/2 in.


Figure 122 . Average Catch per Unit Effort for Control Sites, Too Good Arm Gillinet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure 123 . Average Catch per Unit Effort for Experimental Sites, Too Good Arm Gillnet $5 \mathbf{1 / 2} \mathbf{i n}$. (Number of Fish per Net)


Figure 124 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Deep Bay Gillnet $51 / 2$ in.


Figure 125 . Average Catch per Unit Effort for Control Sites, Deep Bay Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)



Table 83. Summary data for Fogo 3K Control Sets Gillnet 5 1/2 ln

| Div | $3 K$ |
| :--- | :--- |
| Trip | 88 |
| Type | F |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | :--- | :--- | :--- | ---: |
| Data | 1995 | 1896 | 1897 | 1998 | 1999 |
| Nmeas |  |  |  |  | 308 |
| Ngear |  |  | 31 |  |  |
| Nhauls |  |  | 16 |  |  |
| Nzero |  |  |  |  |  |


| Div | $3 K$ |
| :--- | :--- |
| Trip | 88 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | :--- | :--- | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  |  | 1533 |
| Ngear |  |  |  |  | 60 |
| Nhauls |  |  |  | 32 |  |
| Nzero |  |  |  |  |  |

Figure 127 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Fogo Gillinet $51 / 2$ in.


Figure $\quad 128$. Average Catch per Unit Effort for Control Sites, Fogo Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure 129 . Average Catch per Unit Effort for Experimental Sites, Fogo Gilinet $5 \mathbf{1 / 2} \mathbf{i n}$. (Number of Fish per Net)


| Div | $3 K$ |
| :--- | :--- |
| Trp | 29 |
| Type | F |
| Gear | 5 |
| Mesh Slze | 5.5 |


|  | Year |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |  |
| Nmeas | 54 | 454 | 17 | 270 | 383 |  |
| Ngear | 12 | 12 | 4 | 18 | 46 |  |
| Nhauls | 4 | 6 | 2 | 9 | 23 |  |
| Nzero | 0 | 1 | 1 | 1 | 1 |  |
| Table 86. | Summary data for Joe Batt's Arm 3K Exp |  |  |  |  |  |
|  | sets Glllnet $51 / 2 \mathrm{in}$. |  |  |  |  |  |


| Div | 3 K |
| :--- | :--- |
| Trip | 29 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1895 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 10 | 1671 | 0 | 492 | 820 |
| Ngear | 12 | 20 | 4 | 28 | 77 |
| Nhauls | 4 | 10 | 2 | 16 | 44 |
| Nzero | 0 | 0 | 2 | 0 | 2 |

Figure 130. Relative length frequency (number at length / amount of gear) for control and experimental gears, Joe Batt's Arm Gillnet $51 / 2 \mathrm{in}$.


Figure $\quad 131$. Average Catch per Unit Effort for Control Sites, Joe Batt's Arm Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


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Table 87. Summary data for Tiliting 3K Control Sets Gillnet $5 \mathbf{1 / 2} \mathbf{~ I n}$

| Dlv | 3 K |
| :--- | :--- |
| Trip | 31 |
| Type | F |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1996 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 44 | 512 | 182 | 454 | 1035 |
| Ngear | 18 | 22 | 20 | 20 | 50 |
| Nhauls | 6 | 11 | 10 | 10 | 25 |
| Nzero | 1 | 0 | 0 | 0 | 0 |
| Table 88. | Summary data for Tilling 3K Exp sets |  |  |  |  |
|  | Gillinet 5 $1 / 2 \mathrm{in}$. |  |  |  |  |


| Div | $3 K$ |
| :--- | :--- |
| Trip | 31 |
| Typa | (Ali) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1096 | 1997 | 1998 | 1999 |
| Nmeas | 42 | 645 | 304 | 1083 | 2943 |
| Ngear | 18 | 38 | 38 | 35 | 92 |
| Nhauls | 6 | 19 | 19 | 20 | 50 |
| Nzero | 2 | 0 | 1 | 0 | 1 |

Figure 133. Relative length frequency (number at length / amount of gear) for control and experimental gears, Tilting Gillnet $51 / 2$ in.


Figure 134 . Average Catch per Unit Effort for Control Sites, Tilting Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)



Figure 138. Relative length frequency (number at length / amount of gear) for control and experimental gears, Seldom Gillnet $51 / 2 \mathrm{in}$.


Table 89. Summary data for Seldom 3K Control Sets Gillnet $51 / 2 \mathrm{in}$.

| Div | 3 K |
| :--- | :--- |
| Trp | 17 |
| Type | F |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Data | 1995 | 1996 | 1997 | 1988 | 1999 |
| Nmeas | 73 | 218 | 49 | 294 | 326 |
| Ngear | 54 | 28 | 12 | 28 | 48 |
| Nhauls | 18 | 14 | 6 | 14 | 24 |
| Nzero | 7 | 0 | 0 | 1 | 0 |
| Table 8 | Summary data for Seldom 3K Exp sets Gillnet 5 1/2 in. |  |  |  |  |


| Div | $3 K$ |
| :--- | :--- |
| Trip | 17 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 73 | 980 | 210 | 1484 | 1867 |
| Ngear | 54 | 54 | 22 | 38 | 90 |
| Nhauls | 18 | 27 | 11 | 23 | 45 |
| Nzero | 5 | 1 | 0 | 0 | 1 |

Figure 137 . Average Catch per Unit Effort for Control Sites, Seldom Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)



Table 01. Summary data for Aspen Cove 3K Control Sets Gillnet $51 / 2 \mathrm{in}$.


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 594 | 50 | 320 | 133 |
| Ngear |  | 20 | 14 | 16 | 20 |
| Nhauls |  | 10 | 7 | 8 | 10 |
| Nzero |  | 0 | 0 | 0 | 0 |


| Div | $3 K$ |
| :--- | :--- |
| Trip | 33 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 613 | 398 | 722 | 310 |
| Ngear |  | 38 | 40 | 32 | 40 |
| Nhauls |  | 19 | 20 | 16 | 20 |
| Nzero |  | 1 | 1 | 0 | 1 |

Figure $\quad 139$. Relative length frequency (number at length / amount of gear) for control and experimental gears, Aspen Cove Gillnet $51 / 2$ in.


Figure $\quad 140$. Average Catch per Unit Effort for Control Sites, Aspen Cove Gillinet $5 \mathbf{1 / 2} \mathrm{in}$. (Number of Fish per Net)



Trable 93. Summary data for Lumsden 3 K Control Sets Gillnet 5 1/2 in.


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1996 | 1996 | 1997 | 1998 | 1999 |
| Nmaas | 330 | 1700 | 506 | 1095 | 471 |
| Ngear | 30 | 32 | 38 | 32 | 28 |
| Nhauls | 10 | 16 | 18 | 16 | 14 |
| Nzero | 0 | 0 | 0 | 0 | 0 |
| Table 94. |  |  |  |  |  |
|  | Summary data for Lumsden 3K Exp sets |  |  |  |  |
|  | Gillnet 5 $1 / 2$ in. |  |  |  |  |


| Div | $3 K$ |
| :--- | :--- |
| Trip | 37 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1996 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 338 | 2404 | 1558 | 1996 | 929 |
| Ngear | 30 | 64 | 70 | 64 | 56 |
| Nhauls | 10 | 32 | 34 | 32 | 28 |
| Nzero | 0 | 0 | 0 | 0 | 0 |

Figure 142 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Lumsden Gillnet $51 / 2$ in


Figure 143 . Average Catch per Unit Effort for Control Sites, Lumsden Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure 144 . Average Catch per Unit Effort for Experimental Sites, Lumsden Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)

$\left[\begin{array}{r}- \\ \cdots-98 \\ --97 \\ \cdots-98 \\ \cdots-99\end{array}\right]$
Table 95. Summary data for Wesleyville 3L. Control Sets Gillinet $51 / 2 \mathrm{ln}$.

| Div | $3 L$ |
| :--- | :--- |
| Trip | 41 |
| Type | F |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1095 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 203 | 819 | 892 | 987 | 766 |
| Ngear | 30 | 32 | 36 | 32 | 24 |
| Nhauls | 10 | 16 | 18 | 16 | 12 |
| Nzero | 0 | 0 | 0 | 0 | 0 |


| Div | $3 L$ |
| :--- | :--- |
| Trip | 41 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | $\mathbf{1 9 9 9}$ |
| Nmeas | 398 | 1348 | 1788 | 1664 | 1672 |
| Ngear | 30 | 62 | 56 | 47 | 40 |
| Nhauls | 10 | 31 | 36 | 31 | 26 |
| Nzero | 0 | 0 | 0 | 0 | 0 |

Figure 145. Relative length frequency (number at length / amount of gear) for control and experimental gears, Wesleyville Gillnet $51 / 2 \mathrm{in}$.


Figure $\quad 146$. Average Catch per Unit Effort for Control Sites, Wesleyville Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure 147 . Average Catch per Unit Effort for Experimental Sites, Wesleyville Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Table 97. Summary data for Centreville 3L Control Sets Gillnet $51 / 2 \mathrm{in}$.


|  | Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Data | 1995 | 1896 | 1997 | 1998 | 1999 |
| Nmeas | 891 | 825 | 1148 | 744 | 256 |
| Ngear | 56 | 48 | 48 | 48 | 30 |
| Nhauls | 20 | 16 | 16 | 16 | 10 |
| Nzero | 0 | 0 | 0 | 0 | 0 |
| Table 98. | Summary data for Centreville 3L Exp sets Gillnet 5 1/2 in. |  |  |  |  |



|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1996 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 712 | 748 | 862 | 691 | 191 |
| Ngear | 56 | 42 | 48 | 48 | 30 |
| Nhauls | 20 | 14 | 16 | 16 | 10 |
| Nzoro | 0 | 0 | 1 | 0 | 0 |

Figure 148. Relative length frequency (number at length / amount of gear) for control and experimental gears, Centreville Gillnet $51 / 2 \mathrm{in}$.


Figure 149 . Average Catch per Unit Effort for Control Sites, Centreville Gillnet $5 \mathbf{1 / 2} \mathbf{i n}$. (Number of Fish per Net)


Figure 150 . Average Catch per Unit Effort for Experimental Sites, Centreville Gillnet $5 \mathbf{1 / 2} \mathbf{i n}$. (Number of Fish per Net)


Table 90. Summary data for St Chad's 3L. Control Sets Gillnet $5 \mathbf{1 / 2} \mathbf{i n}$.


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1986 | 1997 | 1998 | 1999 |
| Nmeas | 515 | 1585 | 1647 | 2139 |  |
| Ngear | 90 | 84 | 83 | 82 |  |
| Nhauls | 30 | 36 | 37 | 34 |  |
| Nzero | 1 | 3 | 1 | 0 |  |

Figure 151 . Relative length frequency (number at length / amount of gear) for control and experimental gears, St. Chad's Gillnet $51 / 2$ in.


Figure 152 . Average Catch per Unit Effort for Control Sites, St. Chad's Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure
Average Catch per Unit Effort for Experimental Sites, St. Chad's Gillnet $51 / 2$ in. (Number of Fish per Net)


Table 101. Surmmary data for Plate Cove West 3 L . Control Sets Gillnet 5 1/2 in.

| Div | $3 L$ |
| :--- | :--- |
| Trip | 44 |
| Type | F |
| Gear | 5 |
| Mesh Size | 5.5 |


| Year |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 552 | 794 | 1780 | 2285 | 619 |
| Ngear | 39 | 33 | 32 | 32 | 28 |
| Nhauls | 13 | 16 | 16 | 16 | 14 |
| Nzero | 0 | 1 | 0 | 0 | 0 |


| Div | $3 L$ |
| :--- | :--- |
| Trip | 44 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 267 | 1768 | 1567 | 2170 | 982 |
| Ngear | 42 | 62 | 51 | 56 | 48 |
| Nhauls | 14 | 30 | 29 | 32 | 27 |
| Nzero | 0 | 2 | 2 | 5 | 2 |

Figure 154. Relative length frequency (number at length / amount of gear) for control and experimental gears, Plate Cove West Gillnet $51 / 2$ in.


Figure 155 . Average Catch per Unit Effort for Control Sites, Plate Cove West Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure 156 . Average Catch per Unit Effort for Experimental Sites, Plate Cove West Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Table 103. Summary data for Bonavista 32 Control Sets Gillnet $51 / 2 \mathrm{in}$

| Dlv | $3 L$ |
| :--- | :--- |
| Trip | 64 |
| Type | $F$ |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1998 |
| Nmeas |  | 953 | 884 | 1545 | 1779 |
| Ngear |  | 32 | 16 | 16 | 25 |
| Nhauls |  | 16 | 8 | 8 | 13 |
| Nzero |  | 1 | 0 | 0 | 0 |

Table 104.

| Div | 3 L |
| :--- | :--- |
| Trip | 64 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 1662 | 675 | 1352 | 1788 |
| Ngear |  | 48 | 16 | 16 | 33 |
| Nhauls |  | 24 | 8 | 8 | 17 |
| Nzero |  | 0 | 0 | 0 | 0 |

Figure 157. Relative length frequency (number at length / amount of gear) for control and experimental gears, Bonavista Gillnet $51 / 2$ in.


Figure 158 . Average Catch per Unit Effort for Control Sites, Bonavista Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure 159 . Average Catch per Unit Effort for Experimental Sites, Bonavista Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)



|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1896 | 1997 | 1998 | 1999 |
| Nmeas | 1582 | 2438 | 3377 | 3339 | 2475 |
| Ngear | 84 | 36 | 46 | 36 | 22 |
| Nhauls | 30 | 24 | 23 | 24 | 18 |
| Nzero | 0 | 0 | 0 | 0 | 0 |

Table 106. Summary data for Little Catalina 3L Exp

| Div | 3 3 |
| :--- | :--- |
| Trip | 26 |
| Type | (All) |
| Gear | 5 |
| Mesh Slze | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 1772 | 4090 | 2564 | 3157 | 1043 |
| Ngear | 83 | 58 | 49 | 40 | 11 |
| Nhauls | 30 | 35 | 31 | 30 | 10 |
| Nzero | 0 | 0 | 0 | 0 | 0 |

Figure 160. Relative length frequency (number at length / amount of gear) for control and experimental gears, Little Catalina Gillnet $51 / 2$ in.


Figure 161 . Average Catch per Unit Effort for Control Sites, Little Catalina Gillnet $5 \mathbf{1 / 2} \mathbf{i n .}$. (Number of Fish per Net)


Figure 162 Average Catch per Unit Effort for Experimental Sites, Little Catalina Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Table 107. Summary data for Petey 3L Control Sets Gillnet $5 \mathbf{1 / 2} \mathrm{in}$.


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 1085 | 2341 | 2846 | 2496 | 2748 |
| Ngear | 60 | 60 | 56 | 36 | 59 |
| Nhauls | 20 | 32 | 32 | 22 | 34 |
| Nzero | 0 | 0 | 0 | 0 | 0 |

Figure $\quad 163$. Relative length frequency (number at length / amount of gear) for control and experimental gears, Petley Gillnet $51 / 2 \mathrm{in}$.


Figure 164 . Average Catch per Unit Effort for Control Sites, Petley Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure $\quad 165$. Average Catch per Unit Effort for Experimental Sites, Petley Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Table 109.
Sets Gillnet $51 / 2 \mathrm{im}$


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1996 | 1996 | 1897 | 1998 | 1999 |
| Nmeas | 194 | 1391 | 1829 | 782 | 314 |
| Ngear | 90 | 96 | 92 | 88 | 64 |
| Nhauls | 30 | 48 | 46 | 44 | 32 |
| Nzero | 4 | 2 | 1 | 3 | 4 |

Figure 166. Relative length frequency (number at length / amount of gear) for control and experimental gears, Thornlea Gillnet $51 / 2$ in.


Figure $\quad 167$. Average Catch per Unit Effort for Control Sites, Thornlea Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure 168 . Average Catch per Unit Effort for Experimental Sites, Thornlea Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Table 111. Summary data for Hopeall IL Control Sets Gillnet $5 \mathbf{1 / 2} \mathbf{i n}$.

| Div | 3L |
| :--- | :--- |
| Trip | 27 |
| Type | F |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 40 | 468 | 237 | 408 | 208 |
| Ngear | 60 | 48 | 48 | 48 | 48 |
| Nhauls | 20 | 16 | 16 | 16 | 16 |
| Nzero | 3 |  | 0 | 0 | 0 |


| Div | 3 L |
| :--- | :--- |
| Trip | 27 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1996 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 130 | 624 | 593 | 952 | 403 |
| Noear | 60 | 48 | 47 | 48 | 48 |
| Nhauls | 20 | 16 | 16 | 16 | 16 |
| Nzero | 0 | 0 | 0 | 0 | 0 |

Figure 169. Relative length frequency (number at length / amount of gear) for control and experimental gears, Hopeall Gillnet $51 / 2$ in.


Figure $\quad 170$. Average Catch per Unit Effort for Control Sites, Hopeall Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure 171 . Average Catch per Unit Effort for Experimental Sites, Hopeall Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Table 113. Summary data for Hearts Content 3 L. Control Sets Gillinet $51 / 2 \mathrm{in}$.

| Div | $3 L$ |
| :--- | :--- |
| Trp | 50 |
| Type | $F$ |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 843 | 506 | 1957 | 790 |
| Ngear |  | 24 | 8 | 24 | 24 |
| Nhauls |  | 8 | 4 | 12 | 12 |
| Nzero |  | 0 | 0 | 0 | 1 |



|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1988 | 1999 |
| Nmeas |  | 411 | 698 | 1666 | 793 |
| Ngear |  | 24 | 12 | 36 | 36 |
| Nhauls |  | 8 | 8 | 24 | 24 |
| Nzero |  | 0 | 0 | 1 | 2 |

Figure 172. Relative length frequency (number at length / amount of gear) for control and experimental gears, Heart's Content Gillnet $5 \mathbf{1 / 2}$ in.


Figure 173 . Average Catch per Unit Effort for Control Sites, Heart's Content Gillnet $5 \mathbf{1 / 2}$ in. (Number of Fish per Net)


Figure $\quad 174$. Average Catch per Unit Effort for Experimental Sites, Heart's Content Gillnet $5 \mathbf{1 / 2} \mathbf{i n}$. (Number of Fish per Net)


Table 115. Summary data for Bay do Verde 3 . Control Sets Gilinet 5 1/2 $\mathbf{i n}$.

| Div | 3 L |
| :--- | :--- |
| Trip | 79 |
| Type | F |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1996 | 1996 | 1997 | 1998 | 1989 |
| Nmeas |  | 954 | 850 | 3283 | 1333 |
| Ngear |  | 22 | 26 | 26 | 28 |
| Nhauls |  | 11 | 13 | 13 | 14 |
| Nzero | 0 |  |  |  |  |


| Div | 3L |
| :--- | :--- |
| Trip | 79 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 1217 | 1852 | 3366 | 1750 |
| Ngear |  | 36 | 48 | 24 | 46 |
| Nhauls |  | 18 | 27 | 14 | 26 |
| Nzero |  | 0 | 0 | 0 | 0 |

Figure 175 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Bay de Verde Gillnet $5 \mathbf{1 / 2}$ in.


Figure 176 . Average Catch per Unit Effort for Control Sites, Bay de Verde Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure 177 . Average Catch per Unit Effort for Experimental Sites, Bay de Verde Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)



|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 92 | 639 | 410 | 1542 | 515 |
| Ngear | 60 | 50 | 64 | 64 | 64 |
| Nhauls | 20 | 25 | 32 | 32 | 32 |
| Nzero | 3 | 1 | 3 | 0 | 0 |

Figure 178 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Ochre Pitt Cove Gilinet $5 \mathbf{1 / 2}$ in.


Figure 179 . Average Catch per Unit Effort for Control Sites, Ochre Pitt Cove Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure 180 . Average Catch per Unit Effort for Experimental Sites, Ochre Pitt Cove Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Table 119. Summary data for Carbonear 3L Control Sels Gillnet $51 / 2 \mathrm{in}$.


|  | Year |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |  |
| Nmeas | 270 | 781 | 518 | 1237 | 263 |  |
| Ngear | 57 | 38 | 36 | 40 | 30 |  |
| Nhauls | 19 | 18 | 18 | 20 | 14 |  |
| Nzero | 0 | 0 | 0 | 0 | 0 |  |
| Table 120. |  |  |  |  |  |  |
|  | Summary data for Carbonear 3L. Exp sets |  |  |  |  |  |
|  | Gillnet 5 1/2 in. |  |  |  |  |  |


| Div | 3 L |
| :--- | :--- |
| Trip | 55 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1897 | 1998 | 1999 |
| Nmaas | 249 | 1097 | 715 | 1639 | 463 |
| Ngear | 60 | 69 | 70 | 80 | 54 |
| Nhauls | 20 | 34 | 35 | 40 | 26 |
| Nzero | 1 | 1 | 1 | 1 | 1 |

Figure 181. Relative length frequency (number at length / amount of gear) for control and experimental gears, Carbonear Gillnet $51 / 2$ in.


Figure
182. Average Catch per Unit Effort for Control Sites, Carbonear Gillnet $51 / 2$ in. (Number of Fish per Net)


Figure 183 . Average Catch per Unit Effort for Experimental Sites, Carbonear Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Table 121. Summary data for Port de Grave 3L Control Sets Gillnet 5 1/2 ln .


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 54 |  | 429 | 1031 | 583 |
| Ngear | 60 |  | 32 | 32 | 32 |
| Nhauls | 20 |  | 16 | 16 | 16 |
| Nzero | 5 | 0 | 0 | 0 |  |
| Table 122. |  |  |  |  |  |
|  | Summary data for Port de Grave 3L Exp |  |  |  |  |
|  | sets Gillnet 5 | $1 / 2$ in. |  |  |  |


| Div | 3L |
| :--- | :--- |
| Trip | 36 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 54 |  | 1741 | 2862 | 1472 |
| Ngear | 60 |  | 64 | 64 | 64 |
| Nhauls | 20 |  | 32 | 32 | 32 |
| Nzero | 4 |  | 1 | 0 | 0 |

Figure 184 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Port de Grave Gillnet $5 \mathbf{1 / 2}$ in.


Figure 185 . Average Catch per Unit Effort for Control Sites, Port de Grave Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure 186 . Average Catch per Unit Effort for Experimental Sites, Port de Grave Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Table 123. Summary data for Foxtrap 3L. Control Sets Gillnet 5 1/2 in.

| Dlv | 3L |
| :--- | :--- |
| Trip | 51 |
| Type | $F$ |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1996 | 1896 | 1997 | 1898 | 1999 |
| Nmeas | 80 | 1464 | 991 | 2087 | 1073 |
| Ngear | 48 | 54 | 48 | 48 | 42 |
| Nhauls | 16 | 18 | 16 | 16 | 14 |
| Nzero | 0 | 0 | 0 | 0 | 0 |


| Div | $3 L$ |
| :--- | :--- |
| Trip | 51 |
| Type | (All) |
| Geer | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1896 | 1996 | 1997 | 1998 | 1999 |
| Nmas | 72 | 1139 | 730 | 1449 | 853 |
| Ngear | 48 | 55 | 32 | 32 | 28 |
| Nhauls | 16 | 19 | 16 | 16 | 14 |
| Nzero | 2 | 0 | 0 | 0 | 0 |

Figure 187. Relative length frequency (number at length / amount of gear) for control and experimental gears, Foxtrap Gillnet $51 / 2 \mathrm{in}$.


Figure
188. Average Catch per Unit Effort for Control Sites, Foxtrap Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure 189 . Average Catch per Unit Effort for Experimental Sites, Foxtrap Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure 190 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Pouch Cove Gillnet $51 / 2$ in.


Figure 191 . Average Catch per Unit Effort for Control Sites, Pouch Cove Gillnet $5 \mathbf{1 / 2} \mathbf{i n .}$ (Number of Fish per Net)



Table 127. *N/A


|  | Year |  |  |  |  |
| :--- | ---: | :--- | :--- | :--- | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  |  | 2530 |
| Ngear |  |  |  |  | 60 |
| Nhauls |  |  |  |  | 30 |
| Nzero |  |  | 0 |  |  |

Figure 193 \#N/A


Figure
194 \#N/A


Figure 195 \#N/A


Table 129. Summary data for Bay Bulls 3L Control Sets Gillnet 5 1/2 in.


| Div | 3L |
| :--- | :--- |
| Trip | 69 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1896 | 1997 | 1998 | 1999 |
| Nmeas | 271 | 771 | 855 | 705 | 526 |
| Ngear | 87 | 66 | 60 | 48 | 32 |
| Nhauls | 29 | 22 | 24 | 24 | 16 |
| Nzero | 2 | 3 | 1 | 1 | 0 |

Figure 198. Relative length frequency (number at length / amount of gear) for control and experimental gears, Bay Bulls Gillnet $51 / 2$ in.


Figure 197 Average Catch per Unit Effort for Control Sites, Bay Bulls Gillnet $5 \mathbf{1 / 2}$ in. (Number of Fish per Net)


Figure 198 . Average Catch per Unit Effort for Experimental Sites, Bay Bulls Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Table 131. Summary data for Bay Bulls 3L Control Sets GIIInet $5 \mathbf{1 / 2} \mathbf{~ I n .}$




|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1895 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 232 | 1344 | 1132 | 1548 | 427 |
| Ngear | 57 | 65 | 75 | 72 | 48 |
| Nhauls | 19 | 23 | 25 | 24 | 16 |
| Nzero | 1 | 0 | 1 | 2 | 1 |

Figure $\quad 199$. Relative length frequency (number at length / amount of gear) for control and experimental gears, Bay Bulls Gillnet $51 / 2$ in.


Figure 200 Average Catch per Unit Effort for Control Sites, Bay Bulls Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure 201 . Average Catch per Unit Effort for Experimental Sites, Bay Bulls Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


| Div | 3 L |
| :--- | :--- |
| Trip | 58 |
| Type | F |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 396 | 585 | 885 | 1533 |
| Ngear |  | 8 | 8 | 11 | 20 |
| Nhauls |  | 4 | 4 | 5 | 10 |
| Nzero |  | 0 | 0 | 0 | 0 |


| Div | 3 L |
| :--- | :--- |
| Trip | 58 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 267 | 275 | 564 | 1573 |
| Ngear |  | 12 | 16 | 15 | 40 |
| Nhauls |  | 6 | 8 | 7 | 19 |
| Nzero |  | 0 | 0 | 0 | 1 |

Figure 202. Relative length frequency (number at length / amount of gear) for control and experimental gears, Calvert Gillnet $51 / 2$ in.


Figure 203 . Average Catch per Unit Effort for Control Sites, Calvert Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)



Table 135. Summary data for Ferryiand 3L Control Sets Gillinet $51 / 2$ in.

| Div | 3L |
| :--- | :--- |
| Trip | 73 |
| Type | F |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1095 | 1998 | 1997 | 1998 | 1999 |
| Nmeas | 317 | 310 | 209 | 529 | 620 |
| Ngear | 87 | 28 | 24 | 22 | 35 |
| Nhauls | 29 | 14 | 12 | 12 | 13 |
| Nzero | 1 | 0 | 0 | 2 | 2 |

Table 136. Summary data for Feryland 3L Exp sets
Gillnet 5 $1 / 2 \mathrm{in}$.

| Div | 3 L |
| :--- | :--- |
| Trip | 73 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 363 | 632 | 624 | 1544 | 1465 |
| Ngear | 87 | 54 | 41 | 47 | 47 |
| Nhauls | 29 | 28 | 23 | 24 | 22 |
| Nzero | 1 | 2 | 0 | 2 | 0 |

Figure 205. Relative length frequency (number at length / amount of gear) for control and experimental gears, Ferryland Gillnet $51 / 2$ in.


Figure 206 . Average Catch per Unit Effort for Control Sites, Ferryland Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)



Table 137. Summary data for Aquaforte 3L Control Sets Gillinet 5 1/2 in

| Div | 3 L |
| :--- | :--- |
| Trip | 24 |
| Type | F |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 472 | 2028 | 2700 | 2154 | 1058 |
| Ngear | 87 | 69 | 71 | 66 | 48 |
| Nhauls | 29 | 23 | 24 | 23 | 16 |
| Nzero | 2 | 0 | 0 | 0 | 0 |

Table 138.

| Div | 3 L |
| :--- | :--- |
| Trip | 24 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 578 | 1082 | 2529 | 1947 | 884 |
| Ngear | 90 | 66 | 72 | 67 | 48 |
| Nhauls | 30 | 22 | 24 | 24 | 16 |
| Nzero | 2 | 0 | 0 | 0 | 1 |

Figure 208. Relative length frequency (number at length / amount of gear) for control and experimental gears, Aquaforte Gillnet $5 \mathbf{1 / 2}$ in.


Figure 209 . Average Catch per Unit Effort for Control Sites, Aquaforte Gillnet $5 \mathbf{1 / 2}$ in. (Number of Fish per Net)


Figure 210 . Average Catch per Unit Effort for Experimental Sites, Aquaforte Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Table 130. Summary data for Renews 3L Control Sets Gillnet 5 1/2 in

| Div | $3 L$ |
| :--- | :--- |
| Trip | 43 |
| Type | F |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1895 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  | 374 | 423 | 463 |
| Naear |  |  | 39 | 39 | 48 |
| Nhauls |  | 13 | 13 | 16 |  |
| Nzero |  |  | 0 | 4 | 2 |



Figure 211. Relative length frequency (number at length / amount of gear) for control and experimental gears, Renews Gillnet $51 / 2$ in.


Figure 212 . Average Catch per Unit Effort for Control Sites, Renews Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure 213 . Average Catch per Unit Effort for Experimental Sites, Renews Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure 214 . Relative length frequency (number at length / amount of gear) for control and experimental gears, St. Shott's Gillnet $51 / 2 \mathrm{in}$.


Figure 215 . Average Catch per Unit Effort for Control Sites, St. Shott's Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure 216 . Average Catch per Unit Effort for Experimental Sites, St. Shott's Gilinet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Table 143. Summary data for Riverhead 3L Control Sets Gllinet $51 / 2 \mathrm{ln}$.


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1095 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 476 | 1925 | 968 | 1001 | 992 |
| Ngear | 40 | 75 | 66 | 54 | 57 |
| Nhauls | 14 | 25 | 22 | 18 | 19 |
| Nzero | 2 | 1 | 0 | 0 | 0 |
| Table 144. | Summary data for Riverhead 3L Exp sels |  |  |  |  |
|  | Gillnet 5 1/2 in. |  |  |  |  |


| Div | $3 L$ |
| :--- | :--- |
| Trip | 23 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 413 | 2968 | 2019 | 2728 | 3093 |
| Ngear | 40 | 90 | 63 | 53 | 57 |
| Nhauls | 14 | 30 | 21 | 18 | 19 |
| Nzero | 3 | 0 | 0 | 0 | 0 |

Figure 217 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Riverhead Gillnet $5 \mathbf{1 / 2}$ in.


Figure 218 . Average Catch per Unit Effort for Control Sites, Riverhead Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure 219 . Average Catch per Unit Effort for Experimental Sites, Riverhead Gilinet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Table 145. Summary data for Rlverhead 3L. Control Sets Gillnet $51 / 2 \mathrm{in}$.


|  | Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 163 | 284 | 758 | 34 |
| Ngear |  | 15 | 27 | 54 | 30 |
| Nhauls |  | 5 | 9 | 18 | 10 |
| Nzero |  | 1 | 0 | 3 | 4 |


| Div | 3 L |
| :--- | :--- |
| Trip | 63 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 43 | 280 | 989 | 548 |
| Ngear |  | 15 | 30 | 54 | 44 |
| Nhauls |  | 5 | 10 | 18 | 15 |
| Nzero |  | 2 | 0 | 3 | 2 |

Figure $\quad 220$. Relative length frequency (number at length / amount of gear) for control and experimental gears, Riverhead Gillnet $5 \mathbf{1 / 2}$ in.


Figure 221 . Average Catch per Unit Effort for Control Sites, Riverhead Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)




| Div | 3 L |
| :--- | :--- |
| Trip | 28 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 5.5 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1895 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 408 | 2786 | 1280 | 1341 | 690 |
| Ngear | 93 | 82 | 44 | 42 | 27 |
| Nhauls | 31 | 28 | 25 | 30 | 19 |
| Nzero | 3 | 0 | 0 | 0 | 3 |

Figure 223. Relative length frequency (number at length / amount of gear) for control and experimental gears, Admiral's Beach Gilinet $5 \mathbf{1 / 2}$ in.


Figure 224 . Average Catch per Unit Effort for Control Sites, Admiral's Beach Gilinet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure 225 . Average Catch per Unit Effort for Experimental Sites, Admiral's Beach Gillnet $5 \mathbf{1 / 2}$ in. (Number of Fish per Net)



|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 2495 | 4960 | 2682 | 4451 | 2 |
| Ngear | 74 | 82 | 78 | 77 | 9 |
| Nhauls | 30 | 28 | 26 | 25 | 3 |
| Nzero | 0 | 0 | 0 | 1 | 2 |

Figure 226 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Point Lance Gillnet $51 / 2$ in.


Figure 227 . Average Catch per Unit Effort for Control Sites, Point Lance Gillnet $51 / 2 \mathrm{in}$. (Number of Fish per Net)


Figure 228 . Average Catch per Unit Effort for Experimental Sites, Point Lance Gillnet $5 \mathbf{1 / 2} \mathbf{i n}$. (Number of Fish per Net)


Table 151. Summary data for Black Tickle 2J Control Sets Gllinet 3 1/4 In.


|  | Year |  |  |  |  |
| :--- | :---: | :--- | :--- | :--- | :--- |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  |  |  |
| Ngear |  |  |  |  |  |
| Nhauls |  |  |  |  |  |
| Nzero |  |  |  |  |  |


| Div | 2 J |
| :--- | :--- |
| Trip | 78 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  | 36 | 531 | 27 |
| Ngear |  |  | 16 | 14 | 16 |
| Nhauls |  |  | 16 | 14 | 16 |
| Nzero |  |  | 5 | 0 | 6 |

Figure 229 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Black Tickle Gillnet $31 / 4$ in.


Figure 230 . Average Catch per Unit Effort for Control Sites, Black Tickle Gillnet $31 / 4$ in. (Number of Fish per Net)


Figure 231 . Average Catch per Unit Effort for Experimental Sites, Black Tickle Gillnet $3 \mathbf{1 / 4} \mathrm{in}$. (Number of Fish per Net)


Table 153. Summary data for Whlliama Harbour 2J Control Sets Gillinet $31 / 4 \mathrm{in}$.

| Div | 2 J |
| :--- | :--- |
| Trip | 72 |
| Type | F |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  | 3 |  |  |
| Ngear |  |  | 1 |  |  |
| Nhauls |  |  | 1 |  |  |
| Nzero |  |  | 0 |  |  |
| Table 154. Summary data for Williams Harbour 2J |  |  |  |  |  |


| Div | 2 J |
| :--- | :--- |
| Trip | 72 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1996 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  | 379 | 224 | 94 |
| Ngear |  |  | 10 | 10 | 8 |
| Nhauls |  |  | 10 | 10 | 8 |
| Nzero |  |  | 2 | 4 | 1 |

Figure


Figure 233 . Average Catch per Unit Effort for Control Sites, Williams Harbour Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)



Table 155. Summary data for Tub Harbour 2.J Control Sets Gillnot $31 / 4$ in

| Div | 2 J |
| :--- | :--- |
| Trip | 76 |
| Type | F |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 11 | 200 |  |  |
| Ngear |  | 1 | 1 |  |  |
| Nhauls |  | 1 | 1 |  |  |
| Nzero |  | 0 | 0 |  |  |
| Table 156. Summary data for Tub Harbour 2J Exp |  |  |  |  |  |


| Div | 2 J |
| :--- | :--- |
| Trip | 76 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 5 | 27 | 98 | 27 |
| Ngear |  | 2 | 3 | 4 | 9 |
| Nhauls |  | 2 | 3 | 4 | 9 |
| Nzero |  | 0 | 0 | 0 | 3 |

Figure 235 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Tub Harbour Gillnet $31 / 4 \mathrm{in}$.


Figure 236 . Average Catch per Unit Effort for Control Sites, Tub Harbour Gilinet $31 / 4 \mathrm{in}$. (Number of Fish per Net)



| Div | 2 J |
| :--- | :--- |
| Trip | 75 |
| Type | F |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  |  |  |
| Ngear |  |  |  |  |  |
| Nhauls |  |  |  |  |  |
| Nzero |  |  |  |  |  |


| Div | 2 J |
| :--- | :--- |
| Trip | 75 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 74 | 1192 | 521 | 158 |
| Ngear |  | 2 | 8 | 7 | 15 |
| Nhauls |  | 2 | 7 | 7 | 15 |
| Nzero |  | 0 | 0 | 0 | 4 |


| 1 | $\square 95$ |
| :---: | :---: |
| 1 | $-96$ |
| 1 | 戡 97 |
| $\overrightarrow{9}$ | *98 |
| \% ${ }^{\text {\% }}$ | $\square 99$ |

Figure



| Div | 2 J |
| :--- | :--- |
| Trip | 74 |
| Type | F |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  |  |  |
| Ngear |  |  |  |  |  |
| Nhauls |  |  |  |  |  |
| Nzero |  |  |  |  |  |


| Div | 2 J |
| :--- | :--- |
| Trip | 74 |
| Type | $(\mathrm{All})$ |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1998 | 1997 | 1998 | 1999 |
| Nmeas |  | 11 | 17 | 175 | 50 |
| Ngear |  | 2 | 5 | 15 | 16 |
| Nhauls |  | 2 | 5 | 15 | 16 |
| Nzero |  | 0 | 1 | 3 | 5 |

Figure 241 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Penny's Harbour Gillnet $31 / 4 \mathrm{in}$.




Table 161. Summary data for SI. Lowle 2J Control Sets Gllinet $31 / 4 \mathrm{ln}$.


|  | Year |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  |  |  |
| Ngear |  |  |  |  |  |
| Nhauls |  |  |  |  |  |
| Nzero |  |  |  |  |  |



|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  | 233 | 107 | 62 |
| Ngear |  |  | 11 | 9 | 14 |
| Nhauls |  |  | 11 | 9 | 14 |
| Nzero |  |  | 1 | 4 | 10 |

Figure 244 . Relative length frequency (number at length / amount of gear) for control and experimental gears, St. Lewis Gillnet $31 / 4$ in.


Figure 245 . Average Catch per Unit Effort for Control Sites, St. Lewis Gillnet $31 / 4$ in. (Number of Fish per Net)


Figure $\quad 246$. Average Catch per Unit Effort for Experimental Sites, St. Lewis Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)


| Div | 2 J |
| :--- | :--- |
| Trip | 67 |
| Type | F |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  |  |  |
| Noear |  |  |  |  |  |
| Nhauls |  |  |  |  |  |
| Nzero |  |  |  |  |  |


| Div | 2 J |
| :--- | :--- |
| Trip | 67 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 6 | 777 | 330 | 235 |
| Ngear |  | 1 | 11 | 22 | 16 |
| Nhauls |  | 1 | 11 | 22 | 16 |
| Nzero |  | 0 | 0 | 1 | 2 |

Figure 247 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Spear Harbour Gillnet $31 / 4 \mathrm{in}$.


Figure $\quad 248$. Average Catch per Unit Effort for Control Sites, Spear Harbour Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)


Figure 249 . Average Catch per Unit Effort for Experimental Sites, Spear Harbour Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)



|  | Year |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  |  |  |
| Ngear |  |  |  |  |  |
| Nhauls |  |  |  |  |  |
| Nzero |  |  |  |  |  |


| Div | 2 J |
| :--- | :--- |
| Trip | 71 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1996 | 1996 | 1997 | 1998 | 1899 |
| Nmeas |  | 112 | 279 | 203 |  |
| Ngear |  | 3 | 8 | 15 |  |
| Nhauls |  | 3 | 8 | 15 |  |
| Nzero |  | 0 | 0 | 3 |  |



Figure 251 . Average Catch per Unit Effort for Control Sites, Cape Charles Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)



Table 167. Summary data for Lunaire 3K Control Sets Gillinet 3 1/4 in.


|  | Year |  |  |  |  |
| :--- | :---: | :---: | :--- | :--- | :--- |
| Oata | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  |  |  |
| Ngear |  |  |  |  |  |
| Nhauls |  |  |  |  |  |
| Nzero |  |  |  |  |  |


| Div | $3 K$ |
| :--- | :--- |
| Trip | 32 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 13 | 12 | 168 | 1 |
| Ngear |  | 1 | 1 | 9 | 4 |
| Nhauls |  | 1 | 1 | 9 | 4 |
| Nzero |  | 0 | 0 | 2 | 3 |

Figure
253



Figure



| Div | $3 K$ |
| :--- | :--- |
| Trip | 25 |
| Type | F |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  |  |  |
| Ngear |  |  |  |  |  |
| Nhauls |  |  |  |  |  |
| Nzero |  |  |  |  |  |


| Div | $3 K$ |
| :--- | :--- |
| Trip | 25 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  | 628 |  |
| Ngear |  |  | 6 |  |  |
| Nhauls |  |  | 6 |  |  |
| Nzero |  |  | 0 |  |  |

256. Relative length frequency (number at length / amount of gear) for control and experimental gears, Great Brehat Gillnet 3 1/4 in.


Figure 257 . Average Catch per Unit Effort for Control Sites, Great Brehat Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)



Table 171. Summary data for Englee 3K Control Sets Gllinet 3 1/4 in

| Div | $3 K$ |
| :--- | :--- |
| Trip | 22 |
| Type | F |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  |  |  |
| Ngear |  |  |  |  |  |
| Nhauls |  |  |  |  |  |
| Nzero |  |  |  |  |  |


| Div | $3 K$ |
| :--- | :--- |
| Trip | 22 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1996 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  | 91 | 349 |
| Ngear |  |  | 9 | 8 |  |
| Nhauls |  |  | 9 | 7 |  |
| Nzero |  |  |  | 4 | 0 |

Figure 259. Relative length frequency (number at length / amount of gear) for control and experimental gears, E:nglee Gillnet 3 1/4 in.


Figure 260 . Average Catch per Unit Effort for Control Sites, Englee Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)



Table 173. Summary data for Harbour Doep $3 K$ Control Sets Gillnet $31 / 4 \mathrm{In}$.

| Div | $3 K$ |
| :--- | :--- |
| Trip | 53 |
| Type | $F$ |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  |  |  |
| Ngear |  |  |  |  |  |
| Nhauls |  |  |  |  |  |
| Nzero |  |  |  |  |  |


| Div | $3 K$ |
| :--- | :--- |
| Trip | 53 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1986 | 1997 | 1998 | 1999 |
| Nmeas |  |  | 90 | 136 | 193 |
| Ngear |  |  | 6 | 7 | 8 |
| Nhauls |  | 6 | 7 | 8 |  |
| Nzero |  | 0 | 0 | 0 |  |

Figure 262, Relative length frequency (number at length / amount of gear) for control and experimental gears, Harbour Deep Gillnet 3 1/4 in.


Figure 263 . Average Catch per Unit Effort for Control Sites, Harbour Deep Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)



Table 175. Summary data for Jackson's Arm 3K Control Sets Gillnet 3 1/4 in.

| Div | 3 K |
| :--- | :--- |
| Trip | 65 |
| Type | F |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Data | 1995 | 1998 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  |  |  |
| Ngear |  |  |  |  |  |
| Nhauls |  |  |  |  |  |
| Nzero |  |  |  |  |  |


| Div | $3 K$ |
| :--- | :--- |
| Trip | 65 |
| Type | $($ All $)$ |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  | 229 | 238 | 135 |
| Ngear |  |  | 5 | 12 | 8 |
| Nhauls |  |  | 5 | 12 | 8 |
| Nzero |  |  | 0 | 0 | 2 |

Figure 265. Relative length frequency (number at length / amount of gear) for control and experimental gears, Jackson's Arm Gillnet $31 / 4$ in.


Figure 266 . Average Catch per Unit Effort for Control Sites, Jackson's Arm Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)



| Div | 3 K |
| :--- | :--- |
| Trip | 15 |
| Type | F |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Dala | 1996 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  |  |  |
| Ngear |  |  |  |  |  |
| Nhauls |  |  |  |  |  |
| Nzero |  |  |  |  |  |


| Div | $3 K$ |
| :--- | :--- |
| Trip | 15 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  | 327 | 166 | 144 |
| Ngear |  |  | 8 | 7 | 9 |
| Nhauls |  |  | 8 | 7 | 9 |
| Nzero |  |  | 1 | 1 | 0 |

Figure 268 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Coachman's Cove Gillnet $31 / 4 \mathrm{in}$.


Figure 269 . Average Catch per Unit Effort for Control Sites, Coachman's Cove Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)


Figure 270 . Average Catch per Unit Effort for Experimental Sites, Coachman's Cove Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)


Table 179. Summary data for La Scle 3K Control Sets Gillnet $31 / 4 \mathrm{ln}$.

| Div | $3 K$ |
| :--- | :--- |
| Trip | 66 |
| Type | F |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  | 9 | 87 |  |
| Ngear |  |  | 1 | 2 |  |
| Nhauls |  |  | 1 | 2 |  |
| Nzero |  | 0 | 0 |  |  |


| Div | 3K |
| :--- | :--- |
| Trip | 66 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  | 24 | 68 |
| Ngear |  |  |  | 1 | 4 |
| Nhauls |  |  |  | 1 | 4 |
| Nzero |  |  | 0 | 0 |  |

Figure $\quad 271$. Relative length frequency (number at length / amount of gear) for control and experimental gears, La Scie Gillnet 3 1/4 in.


Figure 272 . Average Catch per Unit Effort for Control Sites, La Scie Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)



| Div | $3 K$ |
| :--- | :--- |
| Trip | 38 |
| Type | F |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Data | 1996 | 1998 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  |  |  |
| Ngear |  |  |  |  |  |
| Nhauls |  |  |  |  |  |
| Nzero |  |  |  |  |  |


| Div | $3 K$ |
| :--- | :--- |
| Trip | 38 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Dala | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 1019 | 951 | 394 | 203 |
| Ngear |  | 8 | 12 | 12 | 8 |
| Nhauls |  | 8 | 12 | 12 | 8 |
| Nzero |  | 0 | 0 | 0 | 0 |

Figure 274. Relative length frequency (number at length / amount of gear) for control and experimental gears, Miles Cove Gillnet $3 \mathbf{1 / 4}$ in


Figure 275 . Average Catch per Unit Effort for Control Sites, Miles Cove Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)


Figure 276 . Average Catch per Unit Effort for Experimental Sites, Miles Cove Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)


Table 183. Summary data for Summerford 3 K Control Sets Gilinet $31 / 4 \mathrm{in}$.

| Div | $3 K$ |
| :--- | :--- |
| Trip | 57 |
| Type | F |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  |  |  |
| Ngear |  |  |  |  |  |
| Nhauls |  |  |  |  |  |
| Nzero |  |  |  |  |  |


| Div | $3 K$ |
| :--- | :--- |
| Trip | 57 |
| Type | $($ All $)$ |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 790 | 373 | 762 | 958 |
| Ngear |  | 6 | 12 | 12 | 13 |
| Nhauls |  | 6 | 12 | 12 | 13 |
| Nzero |  | 0 | 1 | 0 | 2 |

Figure 277 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Summerford Gillnet $3 \mathbf{1 / 4} \mathbf{i n}$.


Figure 278 . Average Catch per Unit Effort for Control Sites, Summerford Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)


Figure 279 . Average Catch per Unit Effort for Experimental Sites, Summerford Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)


Figure 280 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Too Good Arm Gillnet $31 / 4 \mathrm{in}$.


Figure 281 . Average Catch per Unit Effort for Control Sites, Too Good Arm Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)



Table 187. Summary data for Deep Bay 3K Control Sets Gillnet $3 \mathbf{1 / 4} \mathbf{~ i n .}$


|  | Year |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  |  |  |
| Ngear |  |  |  |  |  |
| Nhauls |  |  |  |  |  |
| Nzero |  |  |  |  |  |


| Div | $3 K$ |
| :--- | :--- |
| Trip | 21 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1996 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  | 181 | 142 |
| Ngear |  |  |  | 7 | 7 |
| Nhauls |  |  | 7 | 7 |  |
| Nzero |  |  | 0 | 0 |  |

Figure 283. Relative length frequency (number at length / amount of gear) for control and experimental gears, Deep Bay Gillnet $31 / 4 \mathrm{in}$.


Figure 284 . Average Catch per Unit Effort for Control Sites, Deep Bay Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)


Figure 285 . Average Catch per Unit Effort for Experimental Sites, Deep Bay Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)


Table 189. Summary data for Joo Batt's Arm 3K Control Sets Gllinet 3 1/4 in.


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  | 77 | 115 |
| Ngear |  |  |  | 4 | 11 |
| Nhauls |  |  |  | 4 | 11 |
| Nzero |  |  |  | 0 | 0 |

Figure 286. Relative length frequency (number at length / amount of gear) for control and experimental gears, Joe Batt's Arm Gillnet $3 \mathbf{1 / 4} \mathrm{in}$.


Figure 287 . Average Catch per Unit Effort for Control Sites, Joe Batt's Arm Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)


Figure 288 . Average Catch per Unit Effort for Experimental Sites, Joe Batt's Arm Gilinet $31 / 4 \mathrm{in}$. (Number of Fish per Net)


Table 191. Summary data for Tilting 3K Control Sets Gillinet 3 1/4 in

| Div | $3 K$ |
| :--- | :--- |
| Trip | 31 |
| Type | $F$ |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Data | 1995 | 1998 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  |  |  |
| Ngear |  |  |  |  |  |
| Nhauls |  |  |  |  |  |
| Nzero |  |  |  |  |  |


| Div | $3 K$ |
| :--- | :--- |
| Trip | 31 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1998 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  | 150 | 129 |
| Ngear |  |  |  | 5 | 7 |
| Nhauls |  |  |  | 5 | 7 |
| Nzero |  |  |  | 0 | 0 |

Figure 289 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Tilting Gillnet $31 / 4$ in.


Figure 290 . Average Catch per Unit Effort for Control Sites, Tilting Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)



Table 193. Summary deta for Seldom 3K Control Sets Gillnet $31 / 4 \mathrm{in}$.


| Div | 3K |
| :--- | :--- |
| Trip | 17 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  | 323 |  |
| Ngear |  |  |  | 8 |  |
| Nhauls |  |  | 8 |  |  |
| Nzero |  |  | 0 |  |  |

Figure 292 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Seldom Gillnet $31 / 4$ in.


Figure 293 . Average Catch per Unit Effort for Control Sites, Seldom Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)



Figure 295 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Wesleyvilie Gillnet $31 / 4$ in.


Figure 296 . Average Catch per Unit Effort for Control Sites, Wesleyville Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)


Figure 297 . Average Catch per Unit Effort for Experimental Sites, Wesleyville Gilinet $31 / 4 \mathrm{in}$. (Number of Fish per Net)


Table 197. Summary data for Plate Cove West 3L Control Sets Gillinet 3 1/4 in.

| Div | 3L |
| :--- | :--- |
| Trip | 44 |
| Type | F |
| Gear | 5 |
| Mesh Size | 3.25 |



| Div | 3L |
| :--- | :--- |
| Trip | 44 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  | 370 | 555 | 141 |
| Ngear |  |  | 7 | 8 | 7 |
| Nhauls |  |  | 7 | 8 | 7 |
| Nzero |  |  | 1 | 0 | 1 |

Figure 298 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Plate Cove West Gillnet $31 / 4 \mathrm{in}$.


Figure 299 . Average Catch per Unit Effort for Control Sites, Plate Cove West Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)


Figure $\quad 300$. Average Catch per Unit Effort for Experimental Sites, Plate Cove West Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)


Figure 301. Relative length frequency (number at length / amount of gear) for control and experimental gears, Little Catalina Gillnet $31 / 4$ in.


Figure $\quad 302$. Average Catch per Unit Effort for Control Sites, Little Catalina Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)



Table 201. Summary data for Petley 3L Control Seta Gillnet $3 \mathbf{1 / 4} \mathrm{ln}$.


|  | Year |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  |  |  |
| Ngear |  |  |  |  |  |
| Nhauls |  |  |  |  |  |
| Nzero |  |  |  |  |  |


| Div | 3 L |
| :--- | :--- |
| Trip | 42 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 380 | 573 | 671 | 588 |
| Ngear |  | 4 | 8 | 8 | 9 |
| Nhauls |  | 4 | 8 | 8 | 9 |
| Nzero |  | 0 | 0 | 0 | 0 |

Figure

| - | 304 | Relative leng |
| :---: | :---: | :---: |
| 1 |  | $\square 95$ |
| 1 |  | -96 |
|  |  | 497 |
| 3 |  | N98 |
|  |  | $\square 99$ |

Figure


Figure 306 Average Catch per Unit Effort for Experimental Sites, Petley Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)


Figure 307 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Heart's Content Gillnet $31 / 4$ in.


Figure 308 . Average Catch per Unit Effort for Control Sites, Heart's Content Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)


Figure 309 . Average Catch per Unit Effort for Experimental Sites, Heart's Content Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)

Table 205. Summary data for Bay de Verde 3 L
Control Sets Gillnet $31 / 4 \mathrm{in}$.


|  | Year |  |  |  |  |
| :--- | :---: | :--- | :--- | :--- | :--- |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  |  |  |
| Ngear |  |  |  |  |  |
| Nhauls |  |  |  |  |  |
| Nzero |  |  |  |  |  |


| Div | 3 L |
| :--- | :--- |
| Trip | 79 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1898 | 1999 |
| Nmeas |  |  | 545 | 310 | 179 |
| Ngear |  | 8 | 4 | 6 |  |
| Nhauls |  | 8 | 4 | 6 |  |
| Nzero |  | 2 | 0 | 0 |  |

Figure 310 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Bay de Verde Gillnet $31 / 4$ in.


Figure 311 . Average Catch per Unit Effort for Control Sites, Bay de Verde Gillnet $31 / 4$ in. (Number of Fish per Net)


Figure 312 . Average Catch per Unit Effort for Experimental Sites, Bay de Verde Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)


Table 207. Summary data for Foxtrap 3L Control Sets Gillinet 3 1/4 in.


|  | Year |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  |  |  |
| Ngear |  |  |  |  |  |
| Nhauls |  |  |  |  |  |
| Nzero |  |  |  |  |  |


| Div | 3 L |
| :--- | :--- |
| Trip | 51 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 10 | 271 | 264 | 213 |
| Ngear |  | 1 | 8 | 8 | 7 |
| Nhauls |  | 1 | 8 | 8 | 7 |
| Nzero |  | 0 | 1 | 0 | 0 |

Figure $\quad 313$. Relative length frequency (number at length / amount of gear) for control and experimental gears, Foxtrap Gillnet $31 / 4$ in.


Figure 314 . Average Catch per Unit Effort for Control Sites, Foxtrap Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)


Figure $\quad 315$. Average Catch per Unit Effort for Experimental Sites, Foxtrap Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)


| Div | 3 L |
| :--- | :--- |
| Trip | 61 |
| Type | F |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  |  |  |
| Ngear |  |  |  |  |  |
| Nhauls |  |  |  |  |  |
| Nzero |  |  |  |  |  | | Table 210. |
| :--- | | Summary data for Pouch Cove 3L Exp |
| :--- |
| sets Gillnet 3 $1 / 4 \mathrm{in}$. |


| Div | 3 L |
| :--- | :--- |
| Trip | 61 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  | 238 | 356 | 401 |
| Ngear |  |  | 8 | 8 | 8 |
| Nhauls |  |  | 8 | 8 | 8 |
| Nzero |  |  | 0 | 0 | 0 |

Figure 316 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Pouch Cove Gillnet $31 / 4 \mathrm{in}$.


Figure 317 . Average Catch per Unit Effort for Control Sites, Pouch Cove Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)


Figure $\quad 318$. Average Catch per Unit Effort for Experimental Sites, Pouch Cove Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)


Table 211. Summary data for Bay Bulls 3L. Control Sets Gillnet 3 1/4 in.


|  | Year |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Data | 1995 | 1998 | 1897 | 1898 | 1998 |
| Nmeas |  |  |  |  |  |
| Ngear |  |  |  |  |  |
| Nhauls |  |  |  |  |  |
| Nzero |  |  |  |  |  |


| Dlv | $3 L$ |
| :--- | :--- |
| Trip | 69 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  | 543 | 569 | 49 |
| Ngear |  |  | 6 | 12 | 8 |
| Nhauls |  | 6 | 12 | 8 |  |
| Nzero |  |  | 0 | 0 | 1 |

Figure


320


$$
\stackrel{1}{m}
$$




| Div | 3 L |
| :--- | :--- |
| Trip | 73 |
| Type | $F$ |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1906 | 1997 | 1998 | 1999 |
| Nmeas |  |  | 91 |  |  |
| Ngear |  |  | 2 |  |  |
| Nhauls |  |  | 2 |  |  |
| Nzero |  | 0 |  |  |  |



Figure 322 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Ferryland Gillnet $31 / 4$ in.


Figure $\quad 323$. Average Catch per Unit Effort for Control Sites, Ferryland Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)


Figure 324 . Average Catch per Unit Effort for Experimental Sites, Ferryland Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)


Figure 325 . Relative length frequency (number at length / amount of gear) for control and experimental gears, St. Shott's Gillnet $31 / 4 \mathrm{in}$.


Figure 326 . Average Catch per Unit Effort for Control Sites, St. Shott's Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)



Table 217. Summary datu for Adimiral's Beach 3L Control Sets Gilinet 3 1/4 in

| Div | 3 L |
| :--- | :--- |
| Trip | 28 |
| Type | F |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  |  |  |
| Ngear |  |  |  |  |  |
| Nhauls |  |  |  |  |  |
| Nzero |  |  |  |  |  |


| Div | 3 L |
| :--- | :--- |
| Trip | 28 |
| Type | (All) |
| Gear | 5 |
| Mesh Size | 3.25 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1998 | 1997 | 1998 | 1999 |
| Nmeas |  | 47 | 678 | 644 | 252 |
| Ngear |  | 2 | 18 | 24 | 15 |
| Nhauls |  | 2 | 18 | 24 | 14 |
| Nzero |  | 0 | 0 | 0 | 3 |

Figure 328 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Admiral's Beach Gillnet $31 / 4 \mathrm{in}$.


Figure 329 . Average Catch per Unit Effort for Control Sites, Admiral's Beach Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)


[^1]

| Div | $2 J$ |
| :--- | :--- |
| Trip | 76 |
| Type | $F$ |
| Gear | 7 |
| Mesh Size | 0 |


|  | Year |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 18 | 7 | 15 |  |
| Ngear |  | 1500 | 1500 | 1000 |  |
| Nhauls |  | 6 | 6 | 4 |  |
| Nzero | 2 |  |  |  | 4 | | Table 220. |
| :--- |
|  |
|  |
| Summary data for Tub Harbour 2J Exp |


| Div | 2 J |
| :--- | :--- |
| Trip | 76 |
| Type | (All) |
| Gear | 7 |
| Mesh Size | 0 |


|  | Year |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 17 | 0 | 11 | 0 |
| Ngear |  | 1500 | 2250 | 1000 | 750 |
| Nhauls |  | 6 | 6 | 4 | 3 |
| Nzero |  | 3 | 6 | 1 | 3 |

Figure $\quad 331$. Relative length frequency (number at length / amount of gear) for control and experimental gears, Tub Harbour Linetrawl


Figure $\quad 332$. Average Catch per Unit Effort for Control Sites, Tub Harbour Linetrawl (Number of Fish per 1000 hooks)


Figure 333 . Average Catch per Unit Effort for Experimental Sites, Tub Harbour Linetrawl (Number of Fish per 1000 hooks)


| Div | $2 J$ |
| :--- | :--- |
| Trip | 71 |
| Type | F |
| Gear | 7 |
| Mesh Size | 0 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 20 | 9 |  |  |
| Ngear |  | 1500 | 2700 |  |  |
| Nhauls |  | 3 | 6 |  |  |
| Nzero | 0 |  |  |  | 2 |


| Div | 2 J |
| :--- | :--- |
| Trip | 71 |
| Type | (All) |
| Gear | 7 |
| Mesh Size | 0 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1095 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 20 | 5 |  |  |
| Ngear |  | 2500 | 2700 |  |  |
| Nhauls |  | 5 | 6 |  |  |
| Nzero |  | 0 | 3 |  |  |

Figure $\quad 334$. Relative length frequency (number at length / amount of gear) for control and experimental gears, Cape Charles Linetrawl


Figure 335 . Average Catch per Unit Effort for Control Sites, Cape Charles Linetrawl (Number of Fish per 1000 hooks)


Figure $\quad 336$. Average Catch per Unit Effort for Experimental Sites, Cape Charles Linetrawl (Number of Fish per 1000 hooks)


Table 223. Summary data for Goose Cove 3 K Control Sets Linetrawl


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1898 | 1999 |
| Nmeas | 102 | 58 | 25 |  |  |
| Ngear | 8300 | 4640 | 1000 |  |  |
| Nhauls | 30 | 16 | 4 |  |  |
| Nzero | 9 | 5 | 0 |  |  |

Figure $\quad 337$. Relative length frequency (number at length / amount of gear) for control and experimental gears, Goose Cove Linetrawl


Figure 338 . Average Catch per Unit Effort for Control Sites, Goose Cove Linetrawl (Number of Fish per 1000 hooks)


Figure 339 . Average Catch per Unit Effort for Experimental Sites, Goose Cove Linetrawl (Number of Fish per 1000 hooks)


Figure $\quad 341$. Average Catch per Unit Effort for Control Sites, Coachman's Cove Linetrawl (Number of Fish per 1000 hooks)


Figure $\quad 342$. Average Catch per Unit Effort for Experimental Sites, Coachman's Cove Linetrawl (Number of Fish per 1000 hooks)


Table 227. Summary data for Ming's Blght 3 K Control Sets Linetrawl

| Div | $3 K$ |
| :--- | :--- |
| Trip | 20 |
| Type | F |
| Gear | 7 |
| Mesh Size | 0 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 1054 | 622 | 891 | 181 | 14 |
| Ngear | 9950 | 6300 | 6650 | 3150 | 700 |
| Nhauls | 28 | 18 | 19 | 9 | 2 |
| Nzero | 0 | 0 | 0 | 0 | 0 |



| Year |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: |
| Data | 1995 | 1996 | 1997 | 1898 | 1999 |  |  |  |  |
| Nmeas | 1541 | 1097 | 2091 | 697 | 66 |  |  |  |  |
| Ngear | 9950 | 9800 | 9450 | 7350 | 3500 |  |  |  |  |
| Nhauls | 28 | 28 | 27 | 21 | 10 |  |  |  |  |
| Nzero | 0 | 0 | 0 | 0 | 0 |  |  |  |  |

Figure $\quad 343$. Relative length frequency (number at length / amount of gear) for control and experimental gears, Ming's Bight Linetrawl


Figure $\quad 344$. Average Catch per Unit Effort for Control Sites, Ming's Bight Linetrawl (Number of Fish per 1000 hooks)



Figure 346 . Relative length frequency (number at length / amount of gear) for control and experimental gears, La Scie Linetrawl


Figure 347 . Average Catch per Unit Effort for Control Sites, La Scie Linetrawl (Number of Fish per 1000 hooks)



Table 231. Summary data for Shoe Cove 3K Control Sets Linetrawl

| Div | $3 K$ |
| :--- | :--- |
| Trip | 35 |
| Type | F |
| Gear | 7 |
| Mesh Size | 0 |


|  | Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Data | 1995 | 1996 | 1997 | 1988 | 1998 |
| Nmeas | 2338 | 1268 | 2351 | 1161 | 413 |
| Ngear | 12000 | 7200 | 7200 | 6850 | 3850 |
| Nhauls | 30 | 18 | 18 | 18 | 9 |
| Nzaro | 0 | 0 | 0 | 0 | 0 |
| Table 232 | Summary data for Shoe Cove 3K Exp sets Linetrawl |  |  |  |  |


| Div | $3 K$ |
| :--- | :--- |
| Trip | 35 |
| Type | (All) |
| Gear | 7 |
| Mesh Size | 0 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | $\mathbf{1 9 9 6}$ | $\mathbf{1 9 9 7}$ | 1998 | 1999 |
| Nmeas | 2285 | 1467 | 2824 | 1069 | 449 |
| Ngear | 12000 | 6800 | 6650 | 6400 | 4550 |
| Nhauls | 30 | 17 | 18 | 18 | 13 |
| Nzero | 0 | 0 | 0 | 1 | 0 |

Figure 349 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Shoe Cove Linetrawl


Figure 350 . Average Catch per Unit Effort for Control Sites, Shoe Cove Linetrawl (Number of Fish per 1000 hooks)


Figure 351 . Average Catch per Unit Effort for Experimental Sites, Shoe Cove Linetrawl (Number of Fish per 1000 hooks)


Figure $\quad 353$. Average Catch per Unit Effort for Control Sites, Durreil Linetrawl (Number of Fish per 1000 hooks)


Figure 354 . Average Catch per Unit Effort for Experimental Sites, Durrell Linetrawl (Number of Fish per 1000 hooks)


Table 235. Summary data for Deep Bay 3K Control Sets Linetrawl

| Div | 3 K |
| :--- | :--- |
| Trip | 21 |
| Type | F |
| Gear | 7 |
| Mesh Size | 0 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 132 | 105 | 288 |  |  |
| Ngear | 1350 | 900 | 1050 |  |  |
| Nhauls | 9 | 6 | 7 |  |  |
| Nzero | 0 | 0 | 0 |  |  |


| Div | $3 K$ |
| :--- | :--- |
| Trip | 21 |
| Type | (All) |
| Gear | 7 |
| Mesh Size | 0 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1998 | 1997 | 1998 | 1999 |
| Nmeas | 84 | 238 | 495 |  |  |
| Ngear | 1350 | 1650 | 2100 |  |  |
| Nhauls | 9 | 11 | 14 |  |  |
| Nzero | 1 | 0 | 2 |  |  |

Figure 355 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Deep Bay Linetrawl


Figure $\quad 356$. Average Catch per Unit Effort for Control Sites, Deep Bay Linetrawl (Number of Fish per 1000 hooks)


Figure 357 . Average Catch per Unit Effort for Experimental Sites, Deep Bay Linetrawl (Number of Fish per 1000 hooks)


Table 237. Summary data for Fogo 3 K Control Sets L.inetrawl

| Div | 3K |
| :--- | :--- |
| Trip | 88 |
| Type | F |
| Gear | 7 |
| Mesh Size | 0 |


|  | Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Data | 1995 | 1998 | 1997 | 1898 | 1998 |
| Nmeas |  |  |  |  | 269 |
| Ngear |  |  |  |  | 1800 |
| Nhauls |  |  |  |  | 8 |
| Nzero |  |  |  |  | 0 |
| Table 238 | Summary data for Fogo 3K Exp sets Linetrawl |  |  |  |  |


| Div | 3K |
| :--- | :--- |
| Trip | 88 |
| Type | (All) |
| Gear | 7 |
| Mesh Size | 0 |


|  | Year |  |  |  |  |
| :--- | ---: | :--- | :--- | :--- | ---: |
| Data | 1895 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  |  |  | 184 |
| Ngear |  |  |  |  | 1600 |
| Nhauls |  |  |  | 8 |  |
| Nzero |  |  |  |  |  |

Figure $\quad 358$. Relative length frequency (number at length / amount of gear) for control and experimental gears, Fogo Linetrawl


Figure $\quad 359$. Average Catch per Unit Effort for Control Sites, Fogo Linetrawl (Number of Fish per 1000 hooks)



Table 239. Summary data for Joo Batt's Arm 3K Control Sets Linetrawl

| Div | $3 K$ |
| :--- | :--- |
| Trip | 29 |
| Type | F |
| Gear | 7 |
| Mesh Size | 0 |


|  | Year |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 1310 | 280 | 713 | 262 |  |
| Ngear | 6000 | 2700 | 2750 | 1500 |  |
| Nhauls | 20 | 9 | 11 | 6 |  |
| Nzero | 0 | 1 | 0 | 0 |  |


| Div | $3 K$ |
| :--- | :--- |
| Trip | 29 |
| Type | (All) |
| Gear | 7 |
| Mesh Size | 0 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 1067 | 143 | 778 | 234 |  |
| Ngear | 6000 | 1500 | 2750 | 1500 |  |
| Nhauls | 20 | 5 | 11 | 6 |  |
| Nzero | 0 | 0 | 0 | 0 |  |

Figure $\quad 361$. Relative length frequency (number at length / amount of gear) for control and experimental gears, Joe Batt's Arm Linetrawl


Figure 362 . Average Catch per Unit Effort for Control Sites, Joe Batt's Arm Linetrawl (Number of Fish per 1000 hooks)


Figure $\quad 363$. Average Catch per Unit Effort for Experimental Sites, Joe Batt's Arm Linetrawl (Number of Fish per 1000 hooks)


Figure $\quad 364$. Relative length frequency (number at length / amount of gear) for control and experimental gears, Tilting Linetrawl



Figure 365 . Average Catch per Unit Effort for Control Sites, Tilting Linetrawl (Number of Fish per 1000 hooks)


Figure 366 Average Catch per Unit Effort for Experimental Sites, Tilting Linetrawl (Number of Fish per 1000 hooks)


Table 243. Summary data for Seldom 3K Control Sets Linetrawl

| Div | $3 K$ |
| :--- | :--- |
| Trip | 17 |
| Type | $F$ |
| Gear | 7 |
| Mesh Size | 0 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1895 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 192 |  |  |  |
| Ngear |  | 600 |  |  |  |
| Nhauls |  | 3 |  |  |  |
| Nzero |  | 0 |  |  |  |


| Div | $3 K$ |
| :--- | :--- |
| Trip | 17 |
| Type | $(A l l)$ |
| Gear | 7 |
| Mesh Size | 0 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  |  | 204 |  |  |
| Ngear |  | 800 |  |  |  |
| Nhauls |  |  | 4 |  |  |
| Nzero |  |  | 0 |  |  |

Figure 367 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Seldom Linetrawl
 368 . Average Catch per Unit Effort for Control Sites, Seldom Linetrawl (Number of Fish per 1000 hooks)



Figure $\quad 370$. Relative length frequency (number at length / amount of gear) for control and experimental gears, Aspen Cove Linetrawl


Figure $\quad 371$. Average Catch per Unit Effort for Control Sites, Aspen Cove Linetrawl (Number of Fish per 1000 hooks)


Figure 372 . Average Catch per Unit Effort for Experimental Sites, Aspen Cove Linetrawl (Number of Fish per 1000 hooks)


Table 247. Summary data for Lumadon 3 K Control Sets Linetrawl


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 1141 | 1156 | 1061 | 568 | 339 |
| Ngear | 6750 | 3000 | 2750 | 2000 | 1500 |
| Nhauls | 27 | 12 | 11 | 8 | 6 |
| Nzero | 0 | 0 | 0 | 0 | 0 |


| Div | $3 K$ |
| :--- | :--- |
| Trip | 37 |
| Type | (AlI) |
| Gear | 7 |
| Mesh Size | 0 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 1790 | 1352 | 1094 | 471 | 355 |
| Ngear | 6750 | 3000 | 2750 | 1750 | 1500 |
| Nhauls | 27 | 12 | 11 | 7 | 6 |
| Nzero | 0 | 0 | 0 | 0 | 0 |

Figure $\quad 373$. Relative length frequency (number at length / amount of gear) for control and experimental gears, Lumsden Linetrawl


Figure $\quad 374$. Average Catch per Unit Effort for Control Sites, Lumsden Linetrawl (Number of Fish per 1000 hooks)


Figure 375 . Average Catch per Unit Effort for Experimental Sites, Lumsden Linetrawl (Number of Fish per 1000 hooks)


Figure $\quad 376$. Relative length frequency (number at length / amount of gear) for control and experimental gears, Wesleyville Linetrawl


Figure $\quad 377$. Average Catch per Unit Effort for Control Sites, Wesleyville Linetrawl (Number of Fish per 1000 hooks)


Figure $\quad 378$. Average Catch per Unit Effort for Experimental Sites, Wesleyville Linetrawl (Number of Fish per 1000 hooks)


Table 251. Summary data for Bonaviata 3L Control Sets Linatrawl

| Div | $3 L$ |
| :--- | :--- |
| Trip | 64 |
| Type | F |
| Gear | 7 |
| Mesh Size | 0 |



| Div | $3 L$ |
| :--- | :--- |
| Trio | 64 |
| Type | (All) |
| Gear | 7 |
| Mesh Size | 0 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 126 | 946 | 533 |  |
| Ngear |  | 300 | 2350 | 3000 |  |
| Nhauls |  | 1 | 5 | 4 |  |
| Nzero |  | 0 | 0 | 0 |  |

Figure 379 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Eonavista Linetrawl


Figure 380 . Average Catch per Unit Effort for Control Sites, Bonavista Linetrawl (Number of Fish per 1000 hooks)



Table 253. Summary data for Heart's Content 3L Control Sets Linetrawl


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 529 | 478 | 186 |  |  |
| Ngear | 11200 | 6000 | 2718 |  |  |
| Nhauls | 28 | 12 | 6 |  |  |
| Nzero | 0 | 0 | 0 |  |  |
| Table 254. | Summary data for Heart's Content 3L. Exp |  |  |  |  |
|  | sets Linetrawl |  |  |  |  |


| Div | 3 L |
| :--- | :--- |
| Trip | 50 |
| Type | (All) |
| Gear | 7 |
| Mesh Size | 0 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 933 |  | 591 | 251 |  |
| Ngear | 11600 | 6000 | 2706 |  |  |
| Nhauls | 29 | 12 | 12 |  |  |
| Nzero | 0 | 0 | 1 |  |  |

Figure 382 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Heart's Content Linetrawl


Figure
383 . Average Catch per Unit Effort for Control Sites, Heart's Content Linetrawl (Number of Fish per 1000 hooks)


Figure 384 . Average Catch per Unit Effort for Experimental Sites, Heart's Content Linetrawl (Number of Fish per 1000 hooks)


Figure 385 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Carbonear Linetrawl


Figure $\quad 386$. Average Catch per Unit Effort for Control Sites, Carbonear Linetrawl (Number of Fish per 1000 hooks)


Figure 387 . Average Catch per Unit Effort for Experimental Sites, Carbonear Linetrawl (Number of Fish per 1000 hooks)


Table 257. Summary data for Foxirap 3L Control Sets Linetrawl

| Div | 3 L |
| :--- | :--- |
| Trip | 51 |
| Type | F |
| Gear | 7 |
| Mesh Size | 0 |


|  | Year |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |  |  |  |  |
| Nmeas | 739 | 1065 | 1416 | 319 | 169 |  |  |  |  |
| Ngear | 10500 | 6000 | 6000 | 6000 | 1500 |  |  |  |  |
| Nhauls | 21 | 12 | 12 | 12 | 3 |  |  |  |  |
| Nzero | 0 | 0 | 0 | 4 | 0 |  |  |  |  |


| Div | 3L |
| :--- | :--- |
| Trip | 51 |
| Type | (All) |
| Gear | 7 |
| Mesh Size | 0 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | $\mathbf{1 9 9 9}$ |
| Nmeas | 1355 | 1538 | 1575 | 416 | 211 |
| Ngear | 10500 | 6000 | 6000 | 6000 | 1500 |
| Nhauls | 21 | 12 | 12 | 12 | 3 |
| Nzero | 0 | 0 | 0 | 1 | 0 |

Figure 388 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Foxtrap Linetrawl


Figure 389 . Average Catch per Unit Effort for Control Sites, Foxtrap Linetrawl (Number of Fish per 1000 hooks)



Table 259. Summary data for Bay Bulls 3L Control Sets LInetrawl

| Div | $3 L$ |
| :--- | :--- |
| Trip | 52 |
| Type | F |
| Gear | 7 |
| Mesh Size | 0 |


|  | Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Data | 1895 | 1998 | 1987 | 1998 | 1999 |
| Nmeas | 605 |  |  |  |  |
| Ngear | 3000 |  |  |  |  |
| Nhauls | 9 |  |  |  |  |
| Nzero | 0 |  |  |  |  |
| Table 260 | Summary data for Bay Bulls 3L Exp sets Linetrawl |  |  |  |  |


| Div | $3 L$ |
| :--- | :--- |
| Trip | 52 |
| Type | (All) |
| Gear | 7 |
| Mesh Size | 0 |


|  | Year |  |  |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- |
| Data | 1996 | 1998 | 1997 | 1098 | 1999 |
| Nmeas | 411 |  |  |  |  |
| Ngear | 2400 |  |  |  |  |
| Nhauls | 8 |  |  |  |  |
| Nzero | 0 |  |  |  |  |

Figure $\quad 391$. Relative length frequency (number at length / amount of gear) for control and experimental gears, Bay Bulls Linetrawl


Figure $\quad 392$. Average Catch per Unit Effort for Control Sites, Bay Bulls Linetrawl (Number of Fish per 1000 hooks)


Figure $\quad 393$. Average Catch per Unit Effort for Experimental Sites, Bay Bulls Linetrawl (Number of Fish per 1000 hooks)


| Div | 3 L |
| :--- | :--- |
| Trip | 58 |
| Type | F |
| Gear | 7 |
| Mesh Size | 0 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 1441 | 350 | 726 | 754 | 12 |
| Ngear | 10800 | 4500 | 3900 | 5100 | 1550 |
| Nhauls | 30 | 15 | 13 | 17 | 5 |
| Nzero | 0 | 0 | 0 | 2 | 2 |


| Div | 3L |
| :--- | :--- |
| Trip | 58 |
| Type | (All) |
| Gear | 7 |
| Mesh Size | 0 |


| Year |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 1325 | 1287 | 889 | 888 | 149 |
| Ngear | 7200 | 6300 | 6000 | 6800 | 3550 |
| Nhauls | 30 | 20 | 20 | 23 | 12 |
| Nzero | 3 | 0 | 0 | 1 | 1 |

Figure 394 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Calvert Linetrawl


Figure 395 . Average Catch per Unit Effort for Control Sites, Calvert Linetrawl (Number of Fish per 1000 hooks)


Figure $\quad 396$. Average Catch per Unit Effort for Experimental Sites, Calvert Linetrawl (Number of Fish per 1000 hooks)


Table 263. Summary data for Aquaforte 3L Control Sets Linetrawl


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1897 | 1898 | 1998 |
| Nmeas |  | 24 |  |  |  |
| Ngear |  | 150 |  |  |  |
| Nhauls |  | 1 |  |  |  |
| Nzero |  | 0 |  |  |  |


| Div | 3 L |
| :--- | :--- |
| Trip | 24 |
| Type | (All) |
| Gear | 7 |
| Mesh Size | 0 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas |  | 21 |  |  |  |
| Ngear |  | 350 |  |  |  |
| Nhauls |  | 1 |  |  |  |
| Nzero |  | 0 |  |  |  |

Figure 397 . Relative length frequency (number at length / amount of gear) for control and experimental gears, Aquaforte Linetrawl


Figure $\quad 398$. Average Catch per Unit Effort for Control Sites, Aquaforte Linetrawl (Number of Fish per 1000 hooks)


Figure 399 . Average Catch per Unit Effort for Experimental Sites, Aquaforte Linetrawl (Number of Fish per 1000 hooks)


Table 265. Summary data for Renews 3L Control Sets Linetrawl

| Div | 3L |
| :--- | :--- |
| Trip | 43 |
| Type | F |
| Gear | 7 |
| Mesh Size | 0 |


|  | Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 0 | 336 | 54 |  |  |
| Ngear | 3500 | 6200 | 300 |  |  |
| Nhauls | 5 | 17 | 1 |  |  |
| Nzero | 5 | 5 | 0 |  |  |


| Div | 3L |
| :--- | :--- |
| Trip | 43 |
| Type | (All) |
| Gear | 7 |
| Mesh Size | 0 |


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 0 | 544 |  |  |  |
| Ngear | 1000 | 7050 |  |  |  |
| Nhauls | 2 | 20 |  |  |  |
| Nzero | 2 | 6 |  |  |  |

Figure $\quad 400$. Relative length frequency (number at length / amount of gear) for control and experimental gears, Renews Linetrawl


Figure 401 . Average Catch per Unit Effort for Control Sites, Renews Linetrawi (Number of Fish per 1000 hooks)


Figure 402 . Average Catch per Unit Effort for Experimental Sites, Renews Linetrawl (Number of Fish per 1000 hooks)
 Sets Linetrawl


|  | Year |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Data | 1995 | 1996 | 1997 | 1998 | 1999 |
| Nmeas | 406 | 539 |  |  |  |
| Ngear | 8100 | 6000 |  |  |  |
| Nhauls | 17 | 12 |  |  |  |
| Nzero | 8 | 0 |  |  |  |



| Year |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: |
| Data | 1995 | 1986 | 1997 | 1998 | 1999 |  |  |  |  |  |
| Nmeas | 799 | 917 |  |  |  |  |  |  |  |  |
| Ngear | 8000 | 6000 |  |  |  |  |  |  |  |  |
| Nhauls | 16 | 12 |  |  |  |  |  |  |  |  |
| Nzero | 3 | 0 |  |  |  |  |  |  |  |  |

Figure $\quad 403$. Relative length frequency (number at length / amount of gear) for control and experimental gears, St. Shott's Linetrawl


Figure 404 . Average Catch per Unit Effort for Control Sites, St. Shott's Linetrawl (Number of Fish per 1000 hooks)



Figure $\quad 406$. Relative length frequency (number at length / amount of gear) for control and experimental gears, Riverhead Linetrawl


Figure 407 . Average Catch per Unit Effort for Control Sites, Riverhead Linetrawl (Number of Fish per 1000 hooks)


Figure $\quad 408$. Average Catch per Unit Effort for Experimental Sites, Riverhead Linetrawl (Number of Fish per 1000 hooks)


Figure $\quad 409$. Relative length frequency (number at length / amount of gear) for control and experimental gears, Riverhead Linetrawl

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Figure $\quad 410$. Average Catch per Unit Effort for Control Sites, Riverhead Linetrawl (Number of Fish per 1000 hooks)


[^2]
[^0]:    Figur
    . Average Catch per Unit Effort for Experimental Sites, Joe Batt's Arm Gilinet $51 / 2 \mathrm{in}$. (Number of Fish per Net)

[^1]:    Figur
    Average Catch per Unit Effort for Experimental Sites, Admiral's Beach Gillnet $31 / 4 \mathrm{in}$. (Number of Fish per Net)

[^2]:    Figure 411 . Average Catch per Unit Effort for Experimental Sites, Riverhead Linetrawl (Number of Fish per 1000 hooks)

