

**Rock lobster catch and effort data: summaries and CPUE
standardisations, 1979–80 to 2009–10**

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EXECUTIVE SUMMARY

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Commercial catch and effort data are an important source of information for stock assessments of rock lobster. Summaries of these data are provided for fishing years (1 April to 31 March) 1979–80 to 2009–10 as well as standardisations of catch per unit effort (CPUE) for each of the nine rock lobster Quota Management Areas (QMAs) for the same period. Summaries of the half-year (seasonal) standardisation procedures performed in CRA 3, CRA 4, and CRA 5, which were used to provide advice to stakeholders and the Ministry of Fisheries, as well as the CRA 5 stock assessment, are included. Annual CPUE standardisations based on a 1 October–30 September year (“offset year”) are provided for CRA 3, CRA 5, CRA 7, and CRA 8 because these analyses, along with the seasonal analysis for CRA 4, are used as input to management procedure decision rules that form the basis for TAC changes in these QMAs.

The spatial distribution of catch by statistical area has varied in most QMAs over the 31 years of available data. For example, in CRA 3, Area 911 (Mahia) rose to more than 50% of the landed catch in the early 2000s after being less than 30% of the catch in the mid 1990s. In CRA 5, catch taken in Area 916 increased substantially from 2000–01 with a corresponding drop in the proportion of catch taken in Area 917. These changes have since reversed, showing that the relative importance of statistical areas within a QMA is dynamic. In some other QMAs, notably CRA 2 and CRA 6, the distribution between statistical areas has remained relatively consistent over time. There has been an increase in the proportion of catch taken during autumn and winter in most QMAs, including recent shifts in CRA 7, CRA 8, and CRA 9. The shift from a spring-summer (October to March) to an autumn-winter fishery occurred quite rapidly in the 1990s in most of the east coast QMAs, first in the North Island, followed by CRA 5 in the South Island east coast. For example, in CRA 2, the proportion of catch taken in July rose from 8% to 35% in the six years from 1990–91 to 1996–97. In CRA 5, the proportion of catch taken during spring and summer (October to March) decreased from a peak of 83% in 1990–91 to 10% in 2001–02. This shift has now reversed in CRA 2, CRA 3, and CRA 4 and may be changing in CRA 5. There is evidence in the two most recent fishing years that CRA 7 and CRA 8 are becoming July and August fisheries. A recent development in CRA 8 is the landing of more than 10% of the annual catch in April in the four most recent fishing years.

There is consistency in the trends shown by the unstandardised CPUE series among the component statistical areas within most QMAs. This consistency exists in spite of considerable year-to-year variation in these series. CRA 3 has the greatest similarity in the CPUE trends among statistical areas.

The standardisation procedure applied to each QMA did not usually result in much change relative to the arithmetic and unstandardised annual indices of CPUE. However, there was a general tendency for the standardisation procedure to upwardly adjust the relative peak CPUE in the late 1990s. This occurred because unstandardised catch rates tended to be lower in winter and these fisheries shifted to predominantly winter fishing when catch rates were high. Standardised CPUE for CRA 1 to CRA 5 show a similar pattern: peaking in the early to mid 1980s, then declining steadily to the early 1990s, then followed by a rapid rise in CPUE. In CRA 2, CRA 3, and CRA 4, CPUEs peaked towards the end of the decade, and these series then declined to low levels by the early 2000s. CPUE for these three QMAs has now either levelled out or is increasing, with CRA 4 changing in 2008–09. CPUE in CRA 1 and CRA 5 increased beyond the end of 1990s, although there was a drop in the CRA 5 CPUE from 2004–05 which reversed in 2008–09 and 2009–10. CRA 2 reached its lowest CPUE in 1987–88 but the other north and east coast QMAs recorded nadirs in 1992–93. The year of peak CPUE and its relative magnitude also differ between these QMAs.

Standardised CPUE in CRA 7 and CRA 8 declined steadily from 1979–80 to a low in the mid to late 1990s. Relative CPUEs in both QMAs then rose to the highest levels in each series, with the increases beginning after the first of two TACC (Total Allowable Commercial Catch) reductions were made in 1999–2000. CRA 7, however, has shown a strong decrease in spring-summer from the 2008–09 fishing year.

0. TABLE OF ABBREVIATIONS AND DEFINITIONS OF TERMS

| Term/Abbreviation | Definition |
|---------------------------|---|
| arithmetic CPUE | Eq. 1 |
| autumn/winter (AW) season | 1 April – 30 September period |
| CELR | catch/effort landing return: MFish reporting form for rock lobster fishermen since July 1989 (all catch/effort data for rock lobster are currently reported on this form) |
| CPUE | catch per unit effort |
| CRACE | name of shadow database holding groomed rock lobster catch and effort data |
| FSU | Fisheries Statistics Unit: format used to report rock lobster catches, January 1979 to June 1989 |
| LFR | Licensed Fish Receiver: processors legally allowed to receive commercially caught rock lobster |
| MFish | New Zealand Ministry of Fisheries |
| MHR | Monthly Harvest Return: monthly returns used after 1 October 2001. Replaced QMRs but have same definition and utility |
| MLS | Minimum Legal Size: tail width measurement below which rock lobster are required by law to be released. These size limits vary between sexes and among QMAs |
| NRLMG | National Rock Lobster Management Group: stakeholder committee charged with giving the Minister of Fisheries advice on the management of rock lobster |
| offset year | 1 October – 30 September period |
| potlift | unit of effort in rock lobster potting fishery: one lift for a single trap (usually daily) |
| QMA | Quota Management Area: legally defined unit area used for rock lobster management (see Figure 1) |
| QMR | Quota Management Report: monthly harvest reports submitted by commercial fishermen to MFish. Considered to be best estimates of commercial harvest. In use from 1986 to 2001. |
| QMS | Quota Management System: name of the management system used in New Zealand to control commercial and non-commercial catches |
| raw catches or potlifts | unadjusted catches or potlifts (observed from catch/effort data) |
| raw CPUE | synonym for arithmetic CPUE |
| replug | data extract identifier issued by MFish data unit |
| scaled catches | Eq. 5: raw catches adjusted to sum to QMR/MHR totals |
| scaled potlifts | Eq. 6: raw potlifts adjusted because of missing or discarded records |
| spring/summer (SS) season | 1 October – 31 March period |
| standardised CPUE | Eq. 3 and Eq. 4 |
| statistical area | sub-areas contained within a rock lobster QMA which are identified in catch/effort returns (see Figure 1). These statistical areas differ from those used for finfish. |
| statutory fishing year | 1 April – 31 March period |
| TAC | Total Allowable Catch: catch limit for a QMA set by the Minister of Fisheries that includes allowances from all sources of fishery-related mortalities, including commercial, recreational, illegal and customary |
| TACC | Total Allowable Commercial Catch: catch limit set by the Minister of Fisheries for a QMA that applies to commercial fishing |
| unstandardised CPUE | Eq. 2 |

1. INTRODUCTION

Commercial catch and effort data are an important source of information for stock assessments of rock lobster. They are used to provide an annual index of vulnerable biomass for each stock and to estimate the distribution of catch between seasons and among month/statistical area strata. There have been continuing refinements to the way in which rock lobster catch and effort data are checked and corrected (Booth et al. 1994, Vignaux & Kendrick 1998, Sullivan 2004) and the way in which standardised indices of vulnerable biomass are calculated from them (Maunder & Starr 1995). Earlier versions of this report have been published by Starr & Bentley (2005) and Starr (2006, 2007, 2009a, 2009b, 2010).

While the primary use of catch and effort data in stock assessments is to estimate annual indices that are assumed to be proportional to vulnerable biomass, the same data can also be used to examine the spatial and temporal distribution of catch and effort. Such analyses can be important for interpreting changes in catches and catch rates from a QMA (see Figure 1). They can also provide information for use in monitoring the fishery. For example, the proportion of catch by month and statistical area is used as a guideline for the allocation of catch sampling effort.

The annual abundance indices generated from these data are also used to manage 5 of the 9 QMAs which support active commercial and non-commercial fisheries (Breen et al. 2009b). These index series are used as input to management procedures which set TAC levels. Management procedures are formal rules which set TACs based on changes in the abundance indices, based on an operating model which simulates the population as it responds to the rule-based TAC changes and evaluates the changes against agreed-upon management targets.

In this report, summaries of the spatial and temporal distribution of the catch and standardised indices of vulnerable biomass are presented. The following information is presented for each QMA:

- (a) The number of vessels targeting rock lobster using pots by statistical area and fishing year;
- (b) The percentage and tonnage of catch by statistical area and fishing year,
- (c) The percentage and number of potlifts by statistical area and fishing year,
- (d) The percentage of catch by month and fishing year,
- (e) The percentage of catch by month and statistical area for the 2009–10 fishing year,
- (f) The cumulative monthly catch by fishing year,
- (g) The arithmetic catch per unit effort by statistical area and fishing year,
- (h) Arithmetic, unstandardised, and standardised indices of CPUE for each fishing year.

This report also documents half-year (seasonal) standardisation procedures performed for CRA 3, CRA 4, and CRA 5, which are used to provide advice to stakeholders and the Ministry of Fisheries. The CRA 4 seasonal CPUE estimate was also used as input to a management procedure that sets catch limits for the following fishing year for this QMA; the CRA 5 seasonal CPUE series was used as biomass indices in an assessment completed in 2010 (Haist et al. 2011). This report also documents annual CPUE standardisations based on a 1 October–30 September year (“offset year”) for CRA 3, CRA 5, CRA 7, and CRA 8, which are used as inputs to management procedures (Breen et al. 2009b) to set the TAC (Total Allowable Catch) in the following fishing year.

The standardised indices of CPUE are assumed to reflect changes in vulnerable biomass by stock assessments and management procedures. The vulnerable biomass is the total weight of lobsters that can be captured by the fishery and legally retained. Vulnerable biomass will be affected by changes in management of the fishery (e.g., changes in the size limit or changes to the escape gap regulations) in addition to other factors such as changes in abundance and the spatial and temporal distribution of fishing effort. The standardisation procedure takes into account these latter changes (at the scale of statistical area and month), but cannot adjust for changes in vulnerable biomass caused by

management or regulatory changes, such as size limit or escape gap changes. Therefore, the CPUE indices within each series will not be comparable across the entire series if regulations such as these have changed the component of the stock that is vulnerable to commercial fishing during the period of analysis. Adjustments are made explicitly in the stock assessments to account for the effect of regulation changes on the vulnerable biomass.

Changes in the definition of vulnerable biomass because of management actions need to be considered when interpreting the CPUE indices presented in this report. For example, there were significant management changes to the CRA 3 fishery in 1993–94, including a change in the size limit for males in the winter. The CPUE indices will reflect the changes in the definitions of the vulnerable biomass caused by this management initiative. It is not possible to draw conclusions directly about the state of the stock based solely on the CPUE series presented in this report, largely because of changes over time in the definition of vulnerable biomass. The stock assessment model is better able to make these comparisons because it includes additional information such as catch sampling lengths and tagging data as well as the information in CPUE about stock abundance.

2. METHODS

2.1 Data

Catch and effort data from 1 April 1979 to 30 June 1989 were obtained from the FSU, and equivalent data from 1 July 1989 to 31 March 2010 were obtained from the CELR (MFish replot 7903). These data sources were documented by Bentley et al. (2005) and the data were stored and maintained in the CRACE database (Bentley et al. 2005). A further data extract (MFish replot 7903A), covering the period 1 April 2010 to 30 September 2010, was used to extend several CPUE analyses for an additional one-half year for use in management procedures. Past management procedure evaluations (Breen et al. 2008, 2009a, 2009b) found that adding an additional half year of data greatly improved the capacity of the rule to react to stock abundance changes, thus reducing risk to the stock .

Total annual landings, TACCs, TACs were obtained from the QMR from 1 April 1990 to 31 March 2001 and from the MHR after 1 April 2001 (Table 1). The catch totals from these two sources are considered to be the best available information for lobster removals for each QMA in any year.

2.2 Error checking

All records with error ratings equal to or greater than 2, for the fields FSU statistical area, CELR pots lifted, and CELR statistical area, were excluded from this analysis. The documentation of these error designations, including how they were defined and generated, was described by Bentley et al. (2005).

All records for vessel 4548 (a coded value), which fishes exclusively in CRA 2, have been dropped from this analysis because of a high number of outliers from this vessel. All other data have been retained in the analyses.

2.3 Catch correction

The FSU and CELR data nominally contain records for every event that occurs on a trip, where an event is defined as a day of fishing within a single statistical area using the method of rock lobster potting. Practically, many rock lobster trips consist of a single event because they take a single day and do not include more than one statistical area. This practice will vary between QMAs, with trips longer than a single day being common, for instance, in CRA 8. The historical FSU data, while requesting daily catch records, were only collected on a monthly basis, leading to the practice of reporting the effort expended by day of fishing but only reporting the monthly total catch. This effectively meant that the data from the FSU system were reliable on a monthly basis and, for this

reason, the daily CELR data have been analysed on the same basis, by rolling up the data so that each record is the summary of one vessel fishing for one month in one statistical area.

A corrected catch weight for each month/area/vessel record was calculated by proportionately adjusting the estimated catch weight in the effort part of the CELR form by the corresponding landed weight from the landing part of the form. Note that there will frequently be multiple effort records associated with fewer landing records. The procedure followed is method B4 of Bentley et al. (2005) which corrects the estimated catch based on the landed catch for the month after excluding records where catches may not be correctly aligned with the effort. The B4 procedure excludes data from vessels in months where the landed catch was zero but the effort was not zero, as well as the data from the following month for the same vessel. This step is made to prevent linking the effort in the second month to catch which had been landed in the previous month.

2.4 Calculation of number of vessels fishing

The number of vessels that fished within each statistical area is determined for each fishing year using the same data set that was used to generate the catch summaries and CPUE standardisation. This data set was based on vessels that targeted rock lobster using the rock lobster potting method.

Many vessels report small quantities of rock lobster in an area during a fishing year. For example, on the landings part of CELR forms, 67 vessels reported landing rock lobsters in CRA 5 during 2001–02. However, 30 of these vessels had a total catch for the year of less than 1 t (5 had less than 10 kg). These vessels may have caught lobster accidentally as bycatch or mistakenly recorded CRA on returns. A “rock lobster” vessel is arbitrarily defined to be a vessel which reported at least 1 t of CRA from the statistical areas that make up the QMA within a fishing year.

For some Quota Management Areas, there is uncertainty in the estimated number of vessels for the 1989–90 fishing year. This fishing year had two different data sources (FSU and CELR), switching between systems on 1 July 1989. It is possible that, in some instances, each data source may have used different vessel identifiers for the same vessel, causing some duplicate counting. This problem appears to be restricted to the 1989–90 fishing year, and estimates of vessel numbers for that fishing year should be considered less accurate than for other years.

2.5 Annual indices of CPUE

Arithmetic, unstandardised, and standardised indices of annual CPUE were calculated for each QMA. Arithmetic CPUE (\hat{A}_y) for a QMA in year y , or for the set of data applicable to statistical area a within the QMA ($\hat{A}_{a,y}$) in year y , were calculated as the total catch for the year divided by the total number of potlifts in the year:

$$\hat{A}_y = \frac{\sum_{i=1}^{n_y} C_{i,y}}{\sum_{i=1}^{n_y} P_{i,y}} \quad ; \quad \hat{A}_{a,y} = \frac{\sum_{i \in k_{a,y}} C_{i,y}}{\sum_{i \in k_{a,y}} P_{i,y}} \quad \text{Eq. 1}$$

where $C_{i,y}$ and $P_{i,y}$ are the catch and potlifts for the vessel-month-area record i in year y , and n_y is the number of vessel-month-area records in year y ; $k_{a,y}$ is the set of the vessel-month-area records i that are from area a in year y .

Unstandardised CPUE (\hat{G}_y) for a QMA in year y is the geometric mean of the ratio of catch to potlifts for each vessel-month-area record:

$$\hat{G}_y = \exp \left[\frac{\sum_{i=1}^{n_y} \ln \left(\frac{C_{i,y}}{P_{i,y}} \right)}{n_y} \right] \quad \text{Eq. 2}$$

where C_i , $P_{i,y}$ and n_y are as defined for Eq. 1. Unstandardised CPUE has the same log-normal distributional assumption as the standardised CPUE, but does not take into account changes in the seasonal and spatial distribution of fishing effort. This index is the same as the “year index” calculated by the standardisation procedure when not using additional explanatory variables. Presenting the arithmetic and unstandardised CPUE indices in this report provides measures of how much the standardisation procedure has modified the series from these two sets of indices.

Standardised CPUE (Eq. 3) is calculated from a generalised linear model (GLM) (Maunder & Starr 1995) using fishing year, month, and statistical area as explanatory variables:

$$\ln(I_i) = B + Y_{y_i} + M_{m_i} + T_{t_i} + \varepsilon \quad \text{Eq. 3}$$

where I_i is CPUE for the i th vessel-month-area record, Y_{y_i} is the year coefficient for the year corresponding to the i th record, M_{m_i} is the month coefficient for the month corresponding to the i th record, T_{t_i} is the area coefficient for the area corresponding to the i th record, B is the intercept and ε is an error term.

Maunder & Starr (1995) examined alternative methods for standardising rock lobster catch and effort data to obtain indices of abundance. They found that vessel effects were small and suggested that a standardisation based on year, month, and area was adequate for these data. The lack of a vessel effect may be because vessels tend to fish in relatively few statistical areas and consequently any difference among vessels has been captured using the area and month explanatory variables.

Canonical coefficients and standard errors were calculated for each categorical variable (Francis 1999). Standardised analyses typically set one of the coefficients to 1.0 without an error term and estimate the remaining coefficients and the associated error relative to the fixed coefficient. This is required because of parameter confounding. The Francis (1999) procedure rescales all coefficients by forcing the geometric mean of the coefficients to equal 1.0 and also calculates a standard error for each coefficient, including the fixed coefficient. For comparability, the normalised unstandardised and the canonical standardised coefficients were multiplied by the geometric mean of the appropriate arithmetic CPUE index (Eq. 1) so that all three sets of indices were scaled to the same mean in terms of kg/potlift.

Annual CPUE standardisations based on the offset year definition (1 October to 30 September) were prepared for CRA 3, CRA 5, CRA 7, and CRA 8. The methodology used to estimate these series is identical to the methodology used for the statutory fishing year (Eq. 3) and makes use of data up to 30 September 2010.

2.6 Indices by assessment (seasonal) period for CRA 3, CRA 4, and CRA 5

Seasonal CPUE standardisations based on the AW and SS periods instead of complete years have been prepared for CRA 3, CRA 4, and CRA 5 (Eq. 4). Thus, the fishing year explanatory variable is replaced in the standardisation model by a period explanatory variable. The model becomes:

$$\ln(I_i) = B + R_r + M_{m_i} + T_{t_i} + \varepsilon \quad \text{Eq. 4}$$

where I_i is CPUE for the i th vessel-month-area record, R_r is the period coefficient for the period corresponding to the i th record, M_{m_i} is the month coefficient for the month corresponding to the i th

record, T_i is the area coefficient for the area corresponding to the i th record, B is the intercept, and ε is an error term.

The interpretation of the *month* explanatory variable in the model defined by Eq. 4 differs from the annual model described by Maunder & Starr (1995) and in Section 2.5. When the fishing year is split into two seasons, additional confounding occurs with the *month* effects within each season, requiring that one of the *month* coefficients be set to 1.0 in each period. The indices are slightly sensitive to the choice of the month dropped, with the estimated coefficients changing by small amounts when different months are fixed. A convention has been adopted which sets the month with the most records in each six-month period equal to 1.0 because this month should generally have the lowest standard error. The *month* coefficients in the seasonal model do not show as much variation as the *month* effects in an annual model because part of the seasonal variation is explained by differences between periods. In the seasonal standardisation, *month* effect will take into account only the within-period variation, rather than the full seasonal variation within a fishing year.

The geometric mean of each seasonal standardised CPUE series (AW and SS) was scaled to equal 1.0 and then scaled to the geometric mean of the arithmetic series (Eq. 1) for each season; this scales the seasonal CPUE correctly between the two seasons for stock assessment modelling.

The final data point for two (CRA 3 and CRA 4) of the three seasonal standardisations presented in this report (AW 2010–11) was based on an analysis of data from an incomplete year (1 April 2009 to 30 September 2010; see Section 2.1).

2.7 Annual QMA catch and potlift totals by statistical area

Scaled annual catch totals (Eq. 5) for each statistical area a in a QMA ($\hat{Q}_{a,y}$) were obtained by multiplying the estimated proportion, using the catch/effort data set, taken in a statistical area by the total QMA catches from the QMR/MHR (see Section 2.1):

$$\hat{Q}_{a,y} = Q_y \frac{\sum_{i \in k_{a,y}} C_{i,y}}{\sum_{i=1}^{n_y} C_{i,y}} \quad \text{Eq. 5}$$

where Q_y is the QMR/MHR annual catch estimate in year y ; $C_{i,y}$ and $k_{a,y}$ are as defined for Eq. 1.

Scaled potlifts for the total QMA (\hat{P}_y) and for each statistical area a ($\hat{P}_{a,y}$) were calculated using Eq. 6:

$$\hat{P}_y = \sum_{i=1}^{n_y} P_{i,y} \frac{Q_y}{\sum_{i=1}^{n_y} C_{i,y}} \quad ; \quad \hat{P}_{a,y} = \sum_{i \in k_{a,y}} P_{i,y} \frac{Q_y}{\sum_{i=1}^{n_y} C_{i,y}} \quad \text{Eq. 6}$$

where $P_{i,y}$, $C_{i,y}$ and $k_{a,y}$ are as defined for Eq. 1; Q_y is defined for Eq. 5.

3. RESULTS

3.1 Landed catch and TACC

Total landed catch in 2009–10 rose about 50 t from the 2008–09 total to nearly 2700 t, the highest level since 2000–01 (Table 1). This increase occurred in spite of a 25 t reduction in catch in CRA 3 (due to a TACC reduction), through increases in the CRA 4, CRA 7, and CRA 8 landings. The latter

two increases were in response to TACC increases resulting from the operation of management procedures in each of these QMAs. There was also a small increase in landings in CRA 4 (13 t) even the TACC was reduced from 577 t to 266 t, again through the operation of the CRA 4 management procedure (note that for the previous two years, the CRA 4 landings were constrained through voluntary quota withdrawal, also known as ‘shelving’ – MFish 2010) . The remaining QMAs reported landings that were close to the specified TACCs (Table 1).

There is reasonable correspondence in all QMAs between the catch reported to the QMR/MHR system and the sum of the landings from the bottom section of the CELR form (Table 2). Over all the data from 1990–91, CELR catches have averaged 94% of the QMR/MHR catches. In the most recent five years this has been 91%. All QMAs recorded a shortfall in 2009–10 when the totals landed to the LFRs were compared to the official QMR/MHR landing totals. These shortfalls were in part due to the grooming procedure used to prepare the data for analysis as well as the exclusion of some landings through the operation of method B4 (see Section 2.3) (Bentley et al. 2005). There appears to be some year-to-year variation in the ratio of LFR landings to reported QMR/MHR catches: for instance, in CRA 8 ratios were larger in 2005–06 to 2008–09 than in 2004–05 and earlier or in 2009–10. CRA 3 increased from a low value observed for this ratio in 2004–05, but the 2009–10 ratio has dropped again to nearly the 2004–05 level. In CRA 5 the ratio dropped after 2007–08 compared to the preceding 4 years, with the final three ratios similar to those observed in the late 1990s and the early 2000s. All QMAs have ratios of LFR landings relative to MHR reports in 2009–10 near 0.9, with the exception of CRA 4 and CRA 8, which are 0.80 and 0.84 respectively (Table 2).

The number of vessels by QMA generally decreased from the early 1990s (Table 3), with vessel numbers being higher in the 1980s in all QMAs. In 1989–90, there was inaccurate recording of vessels in some QMAs in the change-over of recording system (see Section 2.4). The total number of vessels has declined by 50% since the early 1990s after rock lobster was placed in the QMS (comparing the 1990–91 to 1992–93 average number of vessels to the 2006–07 to 2009–10 vessel average, see Table 3).

3.2 CRA 1

Only 13 vessels reported catch from CRA 1 in 2006–07 to 2009–10, extending a decline to about one-third of the vessels reporting in the 1979–80 fishing year (Table 4). There was a large increase in the proportion of the CRA 1 catch taken from Area 901 during the late 1990s, and a corresponding drop in the proportion of catch taken in Areas 902 and 903 (Table 5). This pattern changed in 2003–04 when over 45% of the catch was taken in Area 902, but the predominance of Area 901 returned over the next few years, with over 40% of the catch taken from Area 901 since 2005–06 (Table 5). The remaining four statistical areas each account for less than 20% of the remaining catch. Potlifts tended to be more evenly distributed across the statistical areas, without showing a predominance in Area 901 in recent years (Table 6).

Cumulative monthly catch by fishing year was relatively stable in the early 1980s, with most catch taken in the late winter and spring months (Table 7, Figure 2). There was a shift towards a winter–spring fishery in the mid 1990s, with July–October accounting for 67–83% of the total annual catches since 1995–96, up from 25–45% before that fishing year. The July–October percentage of catch was 73% in 2009–10 (Table 8). Catches extended into February 2010 in Area 901 and into January for Area 939 (Table 8).

Arithmetic CPUE trajectories from 1979–80 to 2001–02 was variable between areas, although Areas 901 and 939 consistently increased since the mid 1990s (Table 9, Figure 3). Area 902 had quite high CPUE values in the early 2000s, but these have since dropped, although the CPUEs from this statistical area are currently exceeded only by Area 901 (Table 9). CPUE from all areas combined had a shallow peak in 1982–83 followed by a long steady decline to 1992–93 (Table 10, Figure 4). Catch rates then increased rapidly to just above 1 kg/potlift in 1995–96 and remained at this level up to 2003–04 when catch rates again increased. The standardised index dropped to about 1.6 kg/potlift in 2009–10, after being near 1.8 kg/potlift in 2008–09 (Table 10). These high CPUE levels appear to be

driven by Area 901, which had a consistent increase (see Table 9). The two unstandardised series (Eq. 1 and Eq. 2) are similar to the strong CPUE values seen in the standardised series since 2007–08 (Figure 4).

3.3 CRA 2

Thirty-two vessels have reported catch greater than 1 t from CRA 2 since 2007–08, which is a drop of 4–5 vessels compared to those reporting in the early 2000s and less than half the number reporting in 1979–80 (Table 11). The relative importance in terms of catch contribution of the four statistical areas in this QMA has been consistent over the last decade, with Area 906 (western Bay of Plenty) continuing to be the most important statistical area, recording 35–45% of the annual catch since 1990–91, except for 2009–10 when the percentage dropped to 31% (Table 12). The percentage of catch coming from the eastern Bay of Plenty (combined Areas 907 and 908) has remained relatively constant between 40 and 50% since the mid 1990s, but the relative contribution between these two statistical areas has varied between years. The distribution of potlifts among statistical areas is similar to that of the catch, but with greater proportional representation in Area 906 (Table 13).

Cumulative monthly catch by fishing year was stable in the early 1980s, with most of the catch taken in the spring and summer, apart from a high level of catch in July 1989 (Table 14, Figure 5). There was a gradual shift towards a winter fishery in the early 1990s, with about 60% of the 1994–95 catch taken from April to September. This shift peaked between 1996–97 and 1998–99 with over 85% of the catch in each of these three fishing years taken between April and September. The shift then reversed, with over 40% of the catch being taken from November onwards in the most recent eight fishing years, while in the latter half of the 1990s less than 10% of the catch was taken after October (Table 14). In 2009–10, 94% of the catch was taken between July and February, spread between the four statistical areas, with Area 906 predominating (Table 15).

Arithmetic CPUE increased in all areas from the early 1990s, most strongly in Area 907 (Table 16, Figure 6). Arithmetic CPUE for the QMA increased from the early 1990s to a peak in 1997–98 and 1998–99, then declined to 2002–03 where they have remained (Table 17, Figure 7). Arithmetic and standardised CPUE were similar, except that the standardised analysis estimated a somewhat higher peak for 1997–98 and 1998–99. This was likely caused by the shift in effort towards the winter months which reduced the arithmetic and unstandardised CPUEs. The standardised indices reached a minor peak in 2006–07 and appeared to have since declined. CPUE has not returned to the high levels observed between 1995–96 and 2000–01 (Table 17, Figure 7).

3.4 CRA 3

There has been a decrease since the 1979–80 fishing year in the number of vessels that reported catch from CRA 3 (Table 18) from about 80 in the early 1980s to about 30 in the late 1990s. Vessel numbers increased to 38–39 in 2002–03 and 2004–04 but then dropped to fewer than 30 by 2005–06 (Table 18). Relatively high numbers of vessels (near 50 or more) continued to report catch in this QMA until the 1993–94 fishing year, the year after the TACC was cut by 50% and the main fishery shifted to the winter months.

The relative importance in terms of total annual catch among the three statistical areas in this QMA remained consistent to 2000–01, with Area 910 (Gisborne) being the most important (Table 19). Area 911 (Mahia Peninsula) then became the statistical area with the highest catch from the 2001–02 to 2003–04 fishing years, possibly because of higher catch rates in this area. However, the proportion of the catch recorded in Area 911 dropped in 2004–05 to about 40% and stayed at this level until 2008–09, when there was another drop to less than 35% (Table 19). The distribution of potlifts is similar, with about 50% of the effort in Area 910 taking about 50% of the catch in 2009–10 (Table 20). Proportionately, more effort was recorded in Area 911 and less in Area 909 in 2009–10.

This fishery was primarily a summer fishery until regulations were changed for the 1993–94 fishing year to encourage the development of a winter fishery targeted at males. Regulation changes included lowering the minimum size limit for males in June to August from 54 to 52 mm tail width, prohibiting the take of females in the same period, and closing the fishery from the beginning of September to the end of November (Sullivan 2004). The cumulative monthly catch proportions by fishing year demonstrated the shift to a winter fishery, with 65% of the catch taken by the end of August in 1993–94, which then rose to over 95% in 1995–96 and remained above 80% up to 1999–2000 (Table 21, Figure 8). This shift then reversed, with the winter catch (June–August) dropping to 58% in 2000–01 and has since fluctuated around 50% (but 62% was taken in these months in 2009–10, Table 22). There have been significant catches in November and December since 2002–03, when these months were reopened to commercial fishing. June, July, and August have remained important months for catch, especially in Area 910, with 40% of the total 2009–10 catch coming from that statistical area in those three months (Table 22). The effect of a voluntary commercial closure in Areas 909 and 910 from the beginning of September to mid January can be seen in Table 22, with virtually no catch reported from these two statistical areas in September to December (less than 0.5% of the total 2009–10 landings came from these three months for these two statistical areas).

Arithmetic CPUE increased strongly in all statistical areas beginning in the early 1990s, with Area 909 increasing to a higher level than the other two statistical areas (Table 23, Figure 9). CPUE in all statistical areas peaked in 1997–98 and has since declined. Area 909 dropped less (to about 0.8 kg/potlift in the early 2000s and rising to above 1.0 kg/potlift from 2006–07) while Areas 910 and 911 dropped to about 0.5–0.6 kg/potlift, except in 2004–05 when Area 911 dropped to about 0.4 kg/potlift. All statistical areas (909, 910, and 911) have shown increasing unstandardised CPUE since 2006–07 (Table 23). CPUE for the QMA increased from the early 1990s to a peak in 1997–98, followed by a decline to a level somewhat higher than was observed in the early 1990s (Table 24, Figure 10). The CPUE trends were all similar, except that the standardised analysis estimated a relatively higher peak for 1997–98 (Table 24, Figure 10), probably caused by the shift in effort towards winter months causing a reduction in average CPUE in the arithmetic series. All three sets of indices increased from about 0.6 in 2007–08 to about 0.9 kg/potlift in 2009–10 (Table 24, Figure 10).

3.5 CRA 4

The decrease in the number of vessels reporting catch from CRA 4 since the 1979–80 fishing year was less than that observed in CRA 1, CRA 2, and CRA 3 (Table 25; see Table 3). There was a jump in the number of vessels in 2006–07, going from 54 to 66 in a single year, reversing a drop of 7 vessels in the previous year. Vessel numbers declined in 2007–08, dropping to 53 and then to 42 and 43 in 2008–09 and 2009–10. The single count of 131 vessels in 1989 is probably an artefact of the changeover from the FSU to CELR systems where vessels may have been double-counted because vessel codes were not properly transferred between the systems (see Section 2.4).

The relative importance of the five statistical areas in this QMA has remained consistent, with Area 914 (South Wairarapa) being the most important in terms of total catch (Table 26). However, there has been a decrease in the proportion of catch reported from this area since the peak (55%) observed in 2005–06, with commensurate increases in Area 913 (North Wairarapa) and Area 915 (Palliser). The distribution of effort was similar to the distribution of catch, but with a somewhat greater proportion of potlifts in Area 914 compared to 913 and 915 relative to the distribution of catches (Table 27).

Before 1993–94, most fishing took place in the spring and summer months, with only about 25–30% of the catch taken from April to August (Table 28, Figure 11). From 1994–95, the period from April to August accounted for over 50% of the total catch and these five months continued to account for over 50% of the catch up to 2002–03, peaking at 86% in 1997–98 (Table 28, Figure 11). This trend has since reversed, with only 43% of the catch taken by the end of August in 2004–05 and 36% in 2005–06, followed by a drop to below 20% for these same five months from 2006–07 to 2008–09. However, this trend reversed again in 2009–10, with 37% of the catch taken from April to August. Concurrently, the proportion of catch taken from November to March has increased from 41% in 2004–05, to 50% in 2005–06 and to near to or above 60% from 2006–07 to 2008–09. Even in 2009–10, 51% of the catch

was taken from November to March. Forty-six percent of the total catch in 2009–10 was taken between April and September in Areas 912, 913, 914, and 915 (Table 29).

Arithmetic CPUE increased in all statistical areas (the data for Area 934 are too sparse to draw a conclusion), beginning from 1992–93 (Table 30, Figure 12). The increase in CPUE for Area 914 ended by the 1996–97 fishing year, well below the peak catch rates observed in the two more northerly areas, and then remained relatively constant near 1.0 kg/potlift while Areas 912 and 913 increased to much higher levels (Table 30, Figure 12). CPUE in the four main statistical areas declined to about the same mean catch per potlift by 2001–02, with all being near 1.0 kg/potlift (Table 30). CPUEs in these statistical areas dropped to below 1.0 kg/potlift in 2005–06 and have remained below that level since then. Area 914 has shown the greatest drop, going below 0.5 kg/potlift in 2007–08 but returning to above 1.0 kg/potlift in the most recent fishing year. The patterns of increase and the peak year for mean catch rate in Areas 912 and 913 resembled similar patterns observed in the CRA 2 and CRA 3 statistical areas (compare Figure 6 and Figure 9 with Figure 12). Peak catch rates in CRA 3 occurred one to two years earlier than in Areas 912 and 913.

CPUE for the QMA was similar to that for CRA 3, showing a steady increase from the early 1990s to a peak in 1998–99, one year later than in CRA 3 (Table 31, Figure 13). The relative decline since the peak fishing year (1997–98 for CRA 3 and 1998–99 for CRA 4) was slightly less than for CRA 3: the 2009–10 decline from the peak year is 34% compared with 66% in CRA 3. However, CRA 4 was much closer to the minimum CPUE recorded for the series, with the 2007–08 CPUE 23% greater and the 2009–10 CPUE 113% greater than the minimum. The equivalent value for CRA 3 in 2009–10 was 260%. The CPUE trends for CRA 4 were all similar, except that the standardised analysis estimated a higher peak for 1998–99 (Table 31, Figure 13), probably because of the shift in effort towards winter months, causing a reduction in average CPUE in the arithmetic and unstandardised series. The standardised CPUE index for CRA 4 was 1.03 kg/potlift in 2009–10, up from 0.59 kg/potlift in 2007–08 and reversing a decline that began in 2004–05 (Figure 13).

3.6 CRA 5

The number of vessels fishing in CRA 5 declined substantially since the 1979–80 fishing year, with fewer than 40 vessels reporting in this QMA since 2000–01, compared to the 80 to 90 vessels during the 1980s (Table 32). The number of vessels continued to decline since 2000–01, dropping to below 30 in 2006–07. There are six statistical areas in this QMA, but most of the catch was reported from Area 916 (Cape Campbell) and Area 917 (Kaikoura-Motunau) and a lesser amount from Area 933 (Marlborough Sounds; Table 33). The relative catch proportions between these areas has changed somewhat, with Area 916 rising in importance in the early 2000s, peaking at 48% of the total annual catch in 2003–04. Since then, this statistical area declined in relative importance to about 30% of the total annual catch in 2009–10 (Table 33). There has been a corresponding increase in the importance of Area 917, which exceeded 50% of the total catch for 2009–10 (Table 33). The other three statistical areas accounted for about 20% of the annual catch, with most of that occurring in Area 933. The distribution of effort is slightly different, with 40% of the effort taking 50% of the catch in Area 917 and 22% of the effort taking 29% of the catch in Area 916 (Table 34).

This fishery remained predominantly a summer fishery for longer than any of the North Island QMAs, not shifting to a winter fishery until 1996–97 when the proportion of the annual catch taken in April to September exceeded 50% (Table 35, Figure 14). Also, unlike the more northerly QMAs, the relative proportion of the catch taken in the winter months continued to stay high, exceeding 80% in the AW up to 2003–04. The AW now accounts for 61 to 73% of the annual catch (73% for 2009–10). About 54% of the catch was taken between April and July in Areas 916 and 917 in 2009–10, with the peak catch month being May in Area 916 and July in Area 917 (Table 36). Historically May has been a strong catch month in this QMA, with this month accounting for 14–28% of the annual catch since 1996–97 (see Table 35).

Arithmetic CPUE trajectories showed similar trends in each of the statistical areas up to 1997–98. At that time, CPUE increased in all areas, especially in Area 916 (Table 37, Figure 15). CPUE in

Area 916 increased to much higher levels and more quickly than in other statistical areas, peaking in 2000–01. The arithmetic catch rate for Area 916 dropped to below 2 kg/potlift in 2005–06 and was around 1.7 kg/potlift in both 2006–07 and 2007–08 before increasing to 2.0 and 1.9 kg/potlift in 2008–09 and 2009–10. CPUE for this QMA increased until 2003–04, then dropped in three successive fishing years and finally stabilised between 2006–07 and 2007–08 before rising from 2008–09 (Table 38, Figure 16). The unstandardised and standardised CPUE were nearly identical, while the arithmetic CPUE lagged behind these two series (Table 38, Figure 16).

3.7 CRA 6

The number of vessels fishing in CRA 6 fluctuated between 39 and 59 during the 1980s and most of the 1990s. In 1999–2000, vessel numbers dropped to 34 and have since fluctuated around 35 (Table 39). The relative decline in vessels has been much less than in the other QMAs.

There are four statistical areas in the Chatham Islands QMA, with Area 942 (Southeast Chatham Islands) generally having about 40–50% of the total landings for the QMA since 1990–91 (Table 40). The proportion of the total CRA 6 landings in Area 942 dropped to about 40% in 2006–07, with most of this catch shifting to Area 940 and some to Area 943. The percentage of catch in Area 941 has dropped below 20% since 2007–08 and to 15% in 2009–10 (Table 40). The two northern statistical areas (940 and 941) have accounted for about 40% of the annual catch in recent years. The distribution of potlifts by statistical area is similar to the distribution of catch (Table 41).

This fishery has been predominantly a spring-summer fishery for its entire history, with little tendency to shift to a winter fishery (Table 42, Figure 17). In 2009–10, 77% of the catch was taken between October and February, with 35% of the annual catch coming from Area 942 during those same months (Table 43).

Arithmetic CPUE declined in the early to mid 1980s for all statistical areas, except for Area 941 which never had the high catch rates seen in the other three statistical areas (Table 44, Figure 18). Area 942 consistently had the highest mean catch rate beginning in the mid 1980s, probably accounting for the high catch (Table 44). Mean catch rates in all four statistical areas, although variable, stabilised during the mid to late 1990s and now appear to be increasing in all statistical areas, with variability between years. CPUE for the QMA dropped in the early 1980s, was relatively stable near 1.0 kg/potlift through the 1990s (Table 45, Figure 19). CPUE then increased to over 1.6 kg/potlift in 2006–07, and remained at this level to 2008–09 before dropping to 1.4 kg/potlift in 2009–10. The standardised and unstandardised indices were slightly higher than the arithmetic index in recent years, with all three series showing a gradual increase since the late 1990s or the early 2000s.

3.8 CRA 7

The number of vessels reporting in CRA 7 dropped precipitously in this QMA, with 70–90 vessels participating in the early 1980s compared to a low of 7 in 1997–98 (Table 46). The number of vessels then increased to 25 by 2000–01, dropped to 14 in 2004–05 to 2006–07, increased to 20 in 2007–08 before dropping to 15 in 2008–09 and rising again to 19 in 2009–10. There are only two statistical areas in this QMA, with Area 920 accounting for about two-thirds of the catch in most years up to 2003–04, but with a shift towards more equal distribution of catch between the two areas from 2004–05 to 2006–07. This period was followed by a shift to about 60% of the catch coming from Area 920 after 2007–08 (Table 47). The distribution of effort is much more skewed to Area 920 than catch, implying lower catch rates in this statistical area (Table 48).

The seasonal distribution for this fishery has tended to be consistent over most of the reported period because this fishery has been restricted by regulation to 21 June to 19 November since the 1992–93 fishing year for the take of “concession” sized lobsters (Sullivan 2004) (Table 49, Figure 20). However, catches accumulated quickly in 2004–05 (Figure 20) and even more quickly in both 2005–06 and 2006–07, with 55% of the 2005–06 and 44% of the 2006–07 annual catch taken by the end of

July compared to a more usual expectation of 20 to 36% taken to the end of that month. This trend has changed again, with only 30% of the annual catch accumulated in these two months in 2007–08, 13% in 2008–09, and 9% in 2009–10 by the end of July. Ninety-one percent of the catch was taken from August to October 2009 in combined Areas 920 and 921 (Table 50).

Arithmetic CPUE declined in the early 1980s, then was variable, declining to a low in 1999–2000 (Table 51, Figure 21). Area 921 consistently had higher mean catch rates, but they tended also to be more variable. Both areas had declines to the end of the 1990s, although this pattern was variable and has reversed, particularly in Area 921 (Figure 21). CPUE for this QMA also reflected this downward trend, but there were notable increases in mean CPUE in 1986–87, 1991–92, and 1993–94 (Table 52, Figure 22). Mean CPUE rose consistently after 1997–98, the nadir of the series, to a peak of 2.0 kg/potlift (in 2008–09), the highest in the series (Figure 22). This CPUE value halved in 2009–10 to near 1.0 kg/potlift, a 50% drop that led to a drop in TACC but which is still higher than most of the observations in the series. The CPUE series were similar, with the arithmetic series lying below the others (Table 52, Figure 22).

3.9 CRA 8

Historically, CRA 8 had more vessels fishing than any other QMA (Table 53, see Table 3) and the decline in the number of vessels was almost as great as in CRA 7 (see Table 3). Seven statistical areas make up this QMA, with about 80% of the catch reported from Areas 926 to 928 (Fiordland) since the mid 1990s (Table 54). Area 926 (Puysegur) increased in relative importance among the other Fiordland statistical areas, accounting for about 50% of the total CRA 8 landings from 2002–03 to 2004–05. This proportion declined to less than 30% of total landings by 2008–09 and 2009–10, with proportionate increases in relative catch in Areas 927 and 928. Area 924 (Stewart Island) contributed between 12 and 23% of the annual landings, with recent levels near 12–16% (Table 54). Distribution of effort among statistical areas is similar to the distribution of catch (Table 55), with relatively less effort in Area 924 and more in Area 926.

The seasonal distribution of catch for this fishery has been consistent except for the most recent three to four years, with about 60–80% of catch taken from August to November (Table 56, Figure 23). In some years, over 15% of the annual catch was taken in December and up to 13% in January, probably reflecting earlier poor catches (Table 56). After 2003–04 catch shifted towards an earlier fishery (similar to that observed in the east coast QMAs). Catches from April to the end of July accounted for over 40% of the annual catch in 2006–07, 45% in 2007–08, 49% in 2008–09, then dropping to 39% in 2009–10, compared to a more usual cumulative total of less than 10% of the annual catch in the same four months before 2003–04 (Figure 23). Over 70% of the annual catch was taken by the end of September in the seven years since 2003–04, including 90% in 2006–07, 83% in 2007–08, and 91% in 2008–09. Seventy-two percent was taken by the end of September in 2009–10, possibly presaging a shift in this pattern. Only 3% of the total annual catch was taken in April 2005, but the percentage of catch taken in April increased dramatically after that year, ranging from 11% in April 2006 to 14% in April 2009 (and peaking at 15% in April 2008). The amount of catch coming from this month is much larger than in earlier years, when only a small percentage of the total catch was taken in April (usually less than 1%). Some of these recent April landings may have included lobsters captured in the previous fishing year and held over in holding pots. Thirty-one percent of the total annual catch for CRA 8 was taken in Areas 926 to 928 in from April to June 2009 (Table 57).

Arithmetic CPUE by statistical area showed a gradual decline during the 1980s and early 1990s (Table 58, Figure 24). CPUE was stable up to the early 2000s, with Areas 924 and 926 having the highest mean catch rates among the statistical areas with high total catch (Table 58). Catch rates then improved at a great rate, with rises in all statistical areas up to 2008–09 (Table 58), followed by a levelling off or drop in 2009–10. CPUE for this QMA dropped from the early 1980s to the early 1990s, then was stable. A rising trend began in 1999–2000, with a strong rise in 2003–04 and successive rises from 2005–06 to 2008–09, all with large standard errors (Table 59, Figure 25). The value for 2009–10 is the same as that calculated for 2008–09. The lowest CPUE values were recorded

in 1992–93 and 1997–98 (Table 59). The CPUEs were all similar, with the standardised index rising the most steeply of the three (Table 59, Figure 25).

3.10 CRA 9

The number of vessels reporting lobster catch in CRA 9 more than halved, from above 20 in the early 1980s to fewer than 10 after 2002–03, and then to only 6 in 2008–09 and 2009–10 (Table 60). Many of the statistical area or month cells in this QMA had no vessels reporting catch at all or had fewer than the MFish criterion of at least three vessels reporting before summary data can be presented, so the summary tables are missing a considerable amount of information. There are seven statistical areas in CRA 9, with Areas 931 and 935 the most important in landings, and lower proportions of landings in Areas 930, 936, and 937 (Table 61). Relative catches among statistical areas have fluctuated widely, but Area 935 consistently had the highest proportion of landings, possibly reflecting the distribution of effort rather than any underlying changes in the relative abundance between statistical areas (Table 61). Effort is similarly concentrated in this statistical area (Table 62), but. None of the statistical area cells met the MFish reporting criterion in 2009–10.

Catch in this fishery shifted away from the summer to the late winter in the mid 1990s, with the cumulative catch to the end of September increasing past 50% in 1995–96 (Table 63, Figure 26). This shift has been particularly strong beginning in 2004–05, with over 80% of the annual catch taken by the end of September in that year, increasing to over 90% from 2005–06 to 2007–08 (Table 63). This trend may be reversing, because the total percentage catch taken from April to September dropped to 79% and 62% in 2008–09 and 2009–10 respectively, possibly indicating a shift to later months (57% was taken in Areas 931 and 935 from August to October 2009; Table 64). All the cells in Table 64 fail the MFish criterion of at least 3 vessels reporting.

The arithmetic CPUE trajectories by statistical area from 1979–80 to 2009–10 are difficult to interpret because many of the year/statistical area combinations cannot be reported (Table 65, Figure 27). Areas 931 and 935 have shown the highest catch rates in most years (Table 65). CPUE for this QMA increased strongly from 2002–03 to 2004–05 after a long period of stability. This was followed by a flattening of the series in 2005–06 and 2006–07, and then by a decline to 2009–10 (Table 66, Figure 28). CPUE trends are similar throughout the series, except for 2008–09 and 2009–10, where the arithmetic series shows a continuous declining trend not matched by the two geometric series (Table 66, Figure 28).

3.11 Comparison of standardised CPUE among the nine QMAs

CRA 1, CRA 2, CRA 6, and CRA 7 each had drops in standardised CPUE (see Figure 1) in 2009–10 from the 2008–09 values, with the declines in CRA 1, CRA 2, and CRA 6 being 8, 9, and 12% respectively (Figure 29). However, the CRA 7 drop was 51%, the largest of all changes, either up or down. The other five QMAs showed no change or an increase in 2009–10 from 2008–09, ranging from 0% (CRA 8) to 46% (CRA 4). CRA 3, CRA 4, and CRA 5 appear to be increasing after reaching nadirs in the mid 2000s. The lowest value for CPUE in 2009–10 was observed in CRA 2, at 0.46 kg/potlift. All other CPUE values were above 0.9 kg/potlift, with CRA 3 the next lowest at 0.91 kg/potlift, followed by CRA 7 at 0.98 kg/potlift. The remaining QMAs ranged from 1.03 kg/potlift for CRA 4 to a high of 3.9 kg/potlift for CRA 8.

3.12 CRA 3: standardised CPUE indices by period

Standardised indices by season were calculated for CRA 3 (Table 67; Figure 30) up to AW 2010–11 and used to provide advice to CRA 3 stakeholders and to the NRLMG. As well, the AW CPUE observation from this series is used by managers as a reference value for evaluating the status of CRA3 population. The trends for the AW and SS standardised series and the annual CPUE series (see Figure 10) are similar: all three series declined slowly to the early 1990s, followed by a steep increase

to a peak in 1997–98, then a decline to a nadir in 2004–05. Since that year, all three series have shown a gradual increase.

The total deviance explained by the standardisation analysis was high (47%, Table 68), with most of the explanatory power lying with the variable *period*. The residual patterns showed some deviation from the lognormal assumption at the extreme tails of the residual distribution, but were acceptable over most of the distribution. There was some contrast in the *month* variable, with higher monthly coefficients in June and November, and with a drop in the relative coefficients at the end of each season (Figure 31). Catch rates are lowest in Area 910, which is near Gisborne and which accounts for most of the catch in the QMA (see Table 22), but the contrast in the relative coefficients between the three statistical areas is low (Figure 31).

3.13 CRA 4: standardised CPUE indices by period

Standardised indices by season were calculated for CRA 4 (Table 69, Figure 32) up to AW 2010–11 and were used to provide advice to the Minister of Fisheries and to the CRA 4 stakeholders and also for the operation of a management procedure (Breen & Kim 2006, Breen et al. 2009b) used to set the 2011–12 Total Allowable Catch. The trends for the AW and SS standardised series were similar to each other and the AW series was similar to the annual CPUE series reported in Figure 13. These series declined slowly from the beginning of the series to the early 1990s, followed by a steep increase to a peak in 1998–99 and then another decline to 2007–08. The declines may now have been reversed in response to substantial cutbacks in commercial catches in recent years (see Table 1).

The total deviance explained by the standardisation analysis was good (27%, Table 70), with most of the explanatory power lying with the variable *period*. The residual patterns showed some deviation from the lognormal assumption at the extreme tails of the residual distribution, but were acceptable throughout most of the distribution. There was contrast in the *month* variable, with higher relative monthly coefficients in May-June and November-December, and with the relative coefficients dropping to below 1.0 at the end of each season (Figure 33). Relative catch rates were slightly higher in the more northerly statistical areas of CRA 4 compared to the statistical areas near and in Cook Strait (the coefficients for Areas 912 to 914 were greater than 1.0 while the coefficients for Areas 915 and 934 were below 1.0; Figure 33).

3.14 CRA 5: standardised CPUE indices by period

Standardised indices by season were calculated for CRA 5 (Table 71, Figure 34) to AW 2009–10 and used as biomass indices in an assessment (Haist et al. 2011). The trends for the AW and SS standardised series differed somewhat, with the AW series showing a relatively smaller increase to a peak in 2003–04 than did the SS series, followed by a slightly greater proportional drop by the SS series to a nadir in 2007–08 (the AW series reached its nadir a year earlier in 2006–07) (Figure 34). Both series show an upturn in the most recent one to three fishing years, depending on which seasonal series is being examined. The annual CPUE series (see Figure 16) more closely resembled the SS series, showing a nadir in both 2006–07 and 2007–08 and two successive recovery years in 2008–09 and 2009–10 (see Table 38).

The total deviance explained by the model was good (35%, Table 72), with most of the explanatory power lying with the *period* variable. The residual patterns showed deviation from the lognormal assumption at the extreme tails of the residual distribution, but were acceptable throughout most of the distribution. There was contrast in the *month* variable, with high relative coefficients over most of the AW season (May was highest) and with high relative coefficients in December and January. The relative coefficients dropped to less than 1.0 at the end of each season, as with the other seasonal standardised analyses (Figure 35). Relative catch rates were above 1.0 for Areas 916 and 918 while the remainder were near to or below 1.0 (Figure 35). However, the contrast among all five statistical areas was low.

3.15 CRA 3 standardised CPUE: offset year

Annual standardised indices for CRA 3 were calculated for the offset year (Table 73, Figure 36). Data were available for this series up to 30 September 2010 (see Section 2.1) and this series formed the input for the management procedure decision rule developed in 2009 for CRA 3 (Breen et al. 2009a). This series closely resembled the fishing year series (Figure 10), but the upturn observed in 2009–10 was slightly stronger in the offset year series (compare Table 24 with Table 73).

The total deviance explained by the standardisation analysis was good (45%, Table 74), with most of the explanatory power lying with the *offset year* variable and some in the *month* variable. The standardised residuals showed some deviation from the lognormal assumption at the extreme tails of the residual distribution, but were acceptable for about 95% of the distribution. There was strong contrast in the *month* variable, with quite high relative coefficients for October to January and June and low coefficients for March to May and August and September (Figure 37). As with the analysis presented in Section 3.4, Area 910 had the lowest relative catch rate, but there was little contrast between the three statistical areas that make up this QMA (Figure 37).

3.16 CRA 5 standardised CPUE: offset year

Annual standardised indices for CRA 5 were calculated based for the offset year (Table 75, Figure 38). Data were available for this series up to 30 September 2010 (see Section 2.1) and this series formed the input for the management procedure decision rule developed for CRA 5 in 2008 (Breen et al. 2009b). This series closely resembled the fishing year series (Figure 16), but the upturn observed for the 2009–10 index was much stronger in the offset year series (compare Table 38 with Table 75).

The total deviance explained by the standardisation analysis was good (34%, Table 76), with most of the explanatory power lying with the *offset year* variable and lesser amounts with the *month* and *statistical area* variables. The standardised residuals showed some deviation from the lognormal assumption at the extreme tails of the residual distribution, but were acceptable for at least 95% of the distribution. There was contrast in the *month* variable, with high relative coefficients estimated from November to February (Figure 39). None of the winter months had coefficients greater than 1.0 except May, slightly above 1.0. As with the analysis presented in Section 3.6, Areas 916 and 918 had higher catch rates than the other statistical areas in this QMA, with the remainder all having coefficients less than 1.0 (Figure 39).

3.17 CRA 7 standardised CPUE: offset year

Annual standardised indices for CRA 7 were calculated for the offset year (Table 77, Figure 40). Data were available for this series up to 30 September 2010 (see Section 2.1) and this series formed the input for the management procedure decision rule developed for CRA 7 (Breen et al. 2008, 2009b). This series showed a strong drop in the penultimate year (1 October 2008 to 30 September 2009), followed by almost no change in the next year, compared to the fishing year analysis with the drop in the final year (compare Figure 22 and Figure 40). Therefore, this change in direction for the CRA 7 QMA occurred with the addition of data from 1 October 2008, and the direction of this change in signal has been consistent since then.

The total deviance explained by the standardisation analysis was good (29%, Table 78), with most of the explanatory power lying with the *offset year* variable. The standardised residuals showed deviation from the lognormal assumption at the extreme tails of the residual distribution, but were acceptable for at least 95% of the distribution. There was almost no contrast in the *month* variable, except for the March and April relative coefficients, which were well below 1.0. Fishermen cannot land lobster using the concession MLS from December, resulting in little fishing in these months and low relative catch rates (Figure 41). Area 921 had a much higher catch rate than Area 920 (Figure 41).

3.18 CRA 8 standardised CPUE: offset year

Annual standardised indices for CRA 8 were calculated for the offset year (Table 79, Figure 42). Data were available for this series up to 30 September 2010 (see Section 2.1) and this series formed the input for the management procedure decision rule developed for CRA 8 (Breen et al. 2008, 2009b). This series is similar to the fishing year series (see Figure 25) except that the increase seen over the past five years was more rapid in the offset year series, and the final index shows a 16% drop compared to no change in the fishing year series (compare Table 59 with Table 79).

The total deviance explained by this standardisation analysis was lower than the other three offset year models (23% compared to 29–45%, Table 80), again with most of the explanatory power lying with the *offset year* variable. The standardised residuals showed some deviation from the lognormal assumption at both tails of the residual distribution, but were acceptable in the central 90–95% of the distribution. The peak catching months extended from September to February, with considerably lower relative catch rates in the winter (Figure 43). Area 925 (Snares) had the highest relative catch rate, but little catch has been taken from there (see Table 54). The relative catch rates for the other four important statistical areas (Area 924: Stewart Island; Areas 926 to 928: Fiordland) showed some contrast, with Areas 924 and 926 being above 1.0 while Areas 927 and 928 were less than 1.0 (Figure 43).

4. ACKNOWLEDGMENTS

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Table 1: Reported commercial catch, TACC and TAC (all t) of *Jasus edwardsii* by QMA for each fishing year since the species was included in the QMS on 1 April 1990. -: TAC not set. N/A: current (incomplete) fishing year (Sources: QMR for 1990–91 to 2000–01 and MHR for 2001–02 to 2010–11)

| Fishing Year | CRA 1 | | | CRA 2 | | | CRA 3 | | |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | Catch | TACC | TAC | Catch | TACC | TAC | Catch | TACC | TAC |
| 1990–91 | 131.1 | 160.1 | – | 237.6 | 249.5 | – | 324.1 | 437.1 | – |
| 1991–92 | 128.3 | 146.8 | – | 229.7 | 229.4 | – | 268.8 | 397.7 | – |
| 1992–93 | 110.5 | 137.4 | – | 190.3 | 214.6 | – | 191.5 | 327.5 | – |
| 1993–94 | 127.4 | 130.5 | – | 214.9 | 214.6 | – | 179.5 | 163.7 | – |
| 1994–95 | 130.0 | 130.5 | – | 212.8 | 214.6 | – | 160.7 | 163.7 | – |
| 1995–96 | 126.7 | 130.5 | – | 212.5 | 214.6 | – | 156.9 | 163.7 | – |
| 1996–97 | 129.4 | 130.5 | – | 213.2 | 214.6 | – | 203.5 | 204.7 | – |
| 1997–98 | 129.3 | 130.5 | – | 234.4 | 236.1 | 452.6 | 223.4 | 224.9 | 379.4 |
| 1998–99 | 128.7 | 131.1 | – | 232.3 | 236.1 | 452.6 | 325.7 | 327.0 | 453.0 |
| 1999–00 | 125.7 | 131.1 | – | 235.1 | 236.1 | 452.6 | 326.1 | 327.0 | 453.0 |
| 2000–01 | 130.9 | 131.1 | – | 235.4 | 236.1 | 452.6 | 328.1 | 327.0 | 453.0 |
| 2001–02 | 130.6 | 131.1 | – | 225.0 | 236.1 | 452.6 | 289.9 | 327.0 | 453.0 |
| 2002–03 | 130.8 | 131.1 | – | 205.7 | 236.1 | 452.6 | 291.3 | 327.0 | 453.0 |
| 2003–04 | 128.7 | 131.1 | – | 196.0 | 236.1 | 452.6 | 215.9 | 327.0 | 453.0 |
| 2004–05 | 130.8 | 131.1 | – | 197.3 | 236.1 | 452.6 | 162.0 | 327.0 | 453.0 |
| 2005–06 | 130.5 | 131.1 | – | 225.2 | 236.1 | 452.6 | 170.1 | 190.0 | 319.0 |
| 2006–07 | 130.8 | 131.1 | – | 226.7 | 236.1 | 452.6 | 178.7 | 190.0 | 319.0 |
| 2007–08 | 129.8 | 131.1 | – | 229.7 | 236.1 | 452.6 | 172.4 | 190.0 | 319.0 |
| 2008–09 | 131.0 | 131.1 | – | 232.3 | 236.1 | 452.6 | 189.8 | 190.0 | 319.0 |
| 2009–10 | 130.9 | 131.1 | – | 235.0 | 236.1 | 452.6 | 164.0 | 164.0 | 293.0 |
| 2010–11 | N/A | 131.1 | – | N/A | 236.1 | 452.6 | N/A | 164.0 | 293.0 |
| Fishing Year | CRA 4 | | | CRA 5 | | | CRA 6 | | |
| | Catch | TACC | TAC | Catch | TACC | TAC | Catch | TACC | TAC |
| 1990–91 | 523.2 | 576.3 | – | 308.6 | 465.2 | – | 369.7 | 518.2 | – |
| 1991–92 | 530.5 | 529.8 | – | 287.4 | 426.8 | – | 388.3 | 503.0 | – |
| 1992–93 | 495.7 | 495.7 | – | 258.8 | 336.9 | – | 329.4 | 503.0 | – |
| 1993–94 | 492.0 | 495.7 | – | 311.0 | 303.2 | – | 341.8 | 530.6 | – |
| 1994–95 | 490.4 | 495.7 | – | 293.9 | 303.2 | – | 312.5 | 530.6 | – |
| 1995–96 | 487.2 | 495.7 | – | 297.6 | 303.2 | – | 315.3 | 530.6 | – |
| 1996–97 | 493.6 | 495.7 | – | 300.3 | 303.2 | – | 378.3 | 530.6 | – |
| 1997–98 | 490.4 | 495.7 | – | 299.6 | 303.2 | – | 338.7 | 400.0 | 480.0 |
| 1998–99 | 493.3 | 495.7 | – | 298.2 | 303.2 | – | 334.2 | 360.0 | 370.0 |
| 1999–00 | 576.5 | 577.0 | 771.0 | 349.5 | 350.0 | 467 | 322.4 | 360.0 | 370.0 |
| 2000–01 | 573.8 | 577.0 | 771.0 | 347.4 | 350.0 | 467 | 342.7 | 360.0 | 370.0 |
| 2001–02 | 574.1 | 577.0 | 771.0 | 349.1 | 350.0 | 467 | 328.7 | 360.0 | 370.0 |
| 2002–03 | 575.7 | 577.0 | 771.0 | 348.7 | 350.0 | 467 | 336.3 | 360.0 | 370.0 |
| 2003–04 | 575.7 | 577.0 | 771.0 | 349.9 | 350.0 | 467 | 290.4 | 360.0 | 370.0 |
| 2004–05 | 569.9 | 577.0 | 771.0 | 345.1 | 350.0 | 467 | 323.0 | 360.0 | 370.0 |
| 2005–06 | 504.1 | 577.0 | 771.0 | 349.5 | 350.0 | 467 | 351.7 | 360.0 | 370.0 |
| 2006–07 | 444.6 | 577.0 | 771.0 | 349.8 | 350.0 | 467 | 352.1 | 360.0 | 370.0 |
| 2007–08 | 315.2 | 577.0 | 771.0 | 349.8 | 350.0 | 467 | 356.0 | 360.0 | 370.0 |
| 2008–09 | 249.4 | 577.0 | 771.0 | 349.7 | 350.0 | 467 | 355.3 | 360.0 | 370.0 |
| 2009–10 | 262.0 | 266.0 | 461.0 | 349.9 | 350.0 | 467 | 344.8 | 360.0 | 370.0 |
| 2010–11 | N/A | 415.6 | 610.6 | N/A | 350.0 | 467 | N/A | 360.0 | 370.0 |

Table 1 (cont.): Reported commercial catch (t), TACC and TAC for CRA 7, CRA 8, CRA 9 and for all New Zealand. -: TAC not set for QMA.

| Fishing Year | CRA 7 | | | CRA 8 | | | CRA 9 | | |
|--------------|--------------------|-------------------|------------------|--------|--------|--------|-------|------|-----|
| | Catch | TACC | TAC | Catch | TACC | TAC | Catch | TACC | TAC |
| 1990-91 | 133.4 | 179.4 | - | 834.5 | 1152.4 | - | 45.3 | 54.7 | - |
| 1991-92 | 177.7 | 164.7 | - | 962.7 | 1054.6 | - | 47.5 | 50.2 | - |
| 1992-93 | 131.6 | 153.1 | - | 876.5 | 986.8 | - | 45.7 | 47.0 | - |
| 1993-94 | 138.1 | 138.7 | - | 896.1 | 888.1 | - | 45.5 | 47.0 | - |
| 1994-95 | 120.3 | 138.7 | - | 855.6 | 888.1 | - | 45.2 | 47.0 | - |
| 1995-96 | 81.3 | 138.7 | - | 825.6 | 888.1 | - | 45.4 | 47.0 | - |
| 1996-97 | 62.9 | 138.7 | - | 862.4 | 888.1 | - | 46.9 | 47.0 | - |
| 1997-98 | 36.0 | 138.7 | - | 785.6 | 888.1 | - | 46.7 | 47.0 | - |
| 1998-99 | 58.6 | 138.7 | - | 808.1 | 888.1 | - | 46.9 | 47.0 | - |
| 1999-00 | 56.5 | 111.0 | 131.0 | 709.8 | 711.0 | 798.0 | 47.0 | 47.0 | - |
| 2000-01 | 87.2 | 111.0 | 131.0 | 703.4 | 711.0 | 798.0 | 47.0 | 47.0 | - |
| 2001-02 | 76.9 | 89.0 | 109.0 | 572.1 | 568.0 | 655.0 | 46.8 | 47.0 | - |
| 2002-03 | 88.6 | 89.0 | 109.0 | 567.1 | 568.0 | 655.0 | 47.0 | 47.0 | - |
| 2003-04 | 81.4 | 89.0 | 109.0 | 567.6 | 568.0 | 655.0 | 45.9 | 47.0 | - |
| 2004-05 | 94.2 | 94.9 | 114.9 | 603.0 | 603.4 | 690.4 | 47.0 | 47.0 | - |
| 2005-06 | 95.0 | 94.9 | 114.9 | 603.2 | 603.4 | 690.4 | 46.6 | 47.0 | - |
| 2006-07 | 120.2 | 120.2 | 140.2 | 754.9 | 755.2 | 842.2 | 47.0 | 47.0 | - |
| 2007-08 | 120.1 | 120.2 | 140.2 | 752.4 | 755.2 | 842.2 | 47.0 | 47.0 | - |
| 2008-09 | 120.3 | 123.9 | 143.9 | 966.0 | 966.0 | 1053.0 | 47.0 | 47.0 | - |
| 2009-10 | 136.5 | 189.0 | 209.0 | 1018.3 | 1019.0 | 1110.0 | 46.6 | 47.0 | - |
| 2010-11 | N/A | 84.5 | 104.5 | N/A | 1019.0 | 1110.0 | N/A | 47.0 | - |
| | Total NZ | | | | | | | | |
| Fishing Year | Catch ¹ | TACC ² | TAC ³ | | | | | | |
| 1990-91 | 2907.4 | 3793.0 | - | | | | | | |
| 1991-92 | 3020.9 | 3502.9 | - | | | | | | |
| 1992-93 | 2629.9 | 3201.9 | - | | | | | | |
| 1993-94 | 2746.2 | 2912.1 | - | | | | | | |
| 1994-95 | 2621.5 | 2912.1 | - | | | | | | |
| 1995-96 | 2548.6 | 2912.1 | - | | | | | | |
| 1996-97 | 2690.5 | 2953.1 | - | | | | | | |
| 1997-98 | 2584.2 | 2864.1 | 1312.0 | | | | | | |
| 1998-99 | 2726.0 | 2926.8 | 1275.6 | | | | | | |
| 1999-00 | 2748.5 | 2850.2 | 3442.6 | | | | | | |
| 2000-01 | 2795.9 | 2850.2 | 3442.6 | | | | | | |
| 2001-02 | 2593.0 | 2685.2 | 3277.6 | | | | | | |
| 2002-03 | 2591.1 | 2685.2 | 3277.6 | | | | | | |
| 2003-04 | 2451.5 | 2685.2 | 3277.6 | | | | | | |
| 2004-05 | 2472.3 | 2726.4 | 3318.8 | | | | | | |
| 2005-06 | 2475.8 | 2589.4 | 3184.8 | | | | | | |
| 2006-07 | 2604.8 | 2766.6 | 3362.0 | | | | | | |
| 2007-08 | 2472.5 | 2766.6 | 3362.0 | | | | | | |
| 2008-09 | 2640.7 | 2981.0 | 3576.5 | | | | | | |
| 2009-10 | 2688.1 | 2762.2 | 3362.6 | | | | | | |
| 2010-11 | N/A | 2807.3 | 3407.7 | | | | | | |

¹ Catch totals exclude CRA 10 and ET catches (outside EEZ).

² TACC totals exclude CRA 10 (TACC=0.1 t)

³ There is no TAC for CRA 10

Table 2: Ratio of the sum of landed catch from the bottom portion of the CELR forms to the reported QMR/MHR catch for each QMA and fishing year. Landed catches from CELRs include only records with error ratings less than or equal to 1 and records not excluded by the B4 algorithm (Bentley et al. 2005).

| Fishing Year | CRA 1 | CRA 2 | CRA 3 | CRA 4 | CRA 5 | CRA 6 | CRA 7 | CRA 8 | CRA 9 |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1990-91 | 0.96 | 0.86 | 1.00 | 0.99 | 0.94 | 0.81 | 0.89 | 0.86 | 1.03 |
| 1991-92 | 1.12 | 0.91 | 0.99 | 0.99 | 1.00 | 0.84 | 0.94 | 0.93 | 1.02 |
| 1992-93 | 1.08 | 0.96 | 0.99 | 1.00 | 0.98 | 0.83 | 0.97 | 0.92 | 1.04 |
| 1993-94 | 1.06 | 0.99 | 1.03 | 1.00 | 0.97 | 0.85 | 0.98 | 0.89 | 1.17 |
| 1994-95 | 0.99 | 0.93 | 1.00 | 1.01 | 0.96 | 0.92 | 0.98 | 0.90 | 1.35 |
| 1995-96 | 0.93 | 0.93 | 1.02 | 0.98 | 0.95 | 0.94 | 0.96 | 0.88 | 1.24 |
| 1996-97 | 1.01 | 0.89 | 0.93 | 0.94 | 0.94 | 0.88 | 0.92 | 0.86 | 1.84 |
| 1997-98 | 0.87 | 0.87 | 0.91 | 0.95 | 0.94 | 0.87 | 0.92 | 0.85 | 1.55 |
| 1998-99 | 0.87 | 0.90 | 0.87 | 0.94 | 0.92 | 0.83 | 0.86 | 0.85 | 1.45 |
| 1999-00 | 0.98 | 0.86 | 0.97 | 0.94 | 0.90 | 0.75 | 0.58 | 0.84 | 1.74 |
| 2000-01 | 0.91 | 0.93 | 0.96 | 0.96 | 0.87 | 0.82 | 0.95 | 0.87 | 1.02 |
| 2001-02 | 0.95 | 0.93 | 0.94 | 0.96 | 0.87 | 0.85 | 0.97 | 0.85 | 0.93 |
| 2002-03 | 0.96 | 0.93 | 0.91 | 0.98 | 0.86 | 0.82 | 0.95 | 0.79 | 0.94 |
| 2003-04 | 0.96 | 0.94 | 0.91 | 0.92 | 0.94 | 0.83 | 1.00 | 0.83 | 0.92 |
| 2004-05 | 0.96 | 0.92 | 0.88 | 0.92 | 1.00 | 0.86 | 0.91 | 0.82 | 0.89 |
| 2005-06 | 0.92 | 0.94 | 0.95 | 0.87 | 0.97 | 0.86 | 0.94 | 0.90 | 1.01 |
| 2006-07 | 0.92 | 0.99 | 0.95 | 0.91 | 0.97 | 0.89 | 0.95 | 0.90 | 0.94 |
| 2007-08 | 0.95 | 0.91 | 0.95 | 0.88 | 0.92 | 0.88 | 0.95 | 0.88 | 0.89 |
| 2008-09 | 0.94 | 0.91 | 0.93 | 0.87 | 0.93 | 0.85 | 0.90 | 0.89 | 0.84 |
| 2009-10 | 0.89 | 0.92 | 0.90 | 0.80 | 0.91 | 0.87 | 0.95 | 0.84 | 0.88 |

Table 3: Summary table showing the number of vessels reporting at least 1 t in each QMA by QMA and for all of New Zealand, 1979–80 to 2009–10. Vessels catching less than 1 t in a year for an entire QMA were excluded (along with vessel=4548). The problem fishing year with overlapping vessel codes from the previous FSU and the current CELR catch reporting systems is in bold.

| Fishing year | CRA1 | CRA2 | CRA3 | CRA4 | CRA5 | CRA6 | CRA7 | CRA8 | CRA9 | All QMAs |
|-----------------------|-----------|-----------|-----------|------------|-----------|-----------|-----------|------------|-----------|------------|
| 1979–80 | 34 | 80 | 70 | 86 | 88 | 39 | 90 | 271 | 23 | 768 |
| 1980–81 | 34 | 89 | 85 | 86 | 86 | 42 | 86 | 253 | 23 | 778 |
| 1981–82 | 33 | 88 | 77 | 88 | 85 | 45 | 79 | 221 | 20 | 728 |
| 1982–83 | 33 | 82 | 85 | 89 | 93 | 54 | 42 | 214 | 19 | 708 |
| 1983–84 | 31 | 75 | 84 | 89 | 93 | 50 | 40 | 208 | 22 | 690 |
| 1984–85 | 30 | 73 | 86 | 90 | 95 | 53 | 59 | 212 | 21 | 715 |
| 1985–86 | 34 | 78 | 83 | 88 | 92 | 57 | 66 | 208 | 20 | 721 |
| 1986–87 | 35 | 70 | 76 | 88 | 91 | 48 | 58 | 187 | 20 | 663 |
| 1987–88 | 30 | 59 | 72 | 85 | 84 | 47 | 51 | 173 | 19 | 618 |
| 1988–89 | 26 | 55 | 58 | 87 | 71 | 42 | 38 | 135 | 10 | 518 |
| 1989–90 | 27 | 17 | 77 | 131 | 66 | 55 | 17 | 178 | 18 | 577 |
| 1990–91 | 27 | 57 | 58 | 85 | 62 | 40 | 37 | 134 | 12 | 503 |
| 1991–92 | 33 | 51 | 65 | 88 | 68 | 45 | 46 | 143 | 13 | 542 |
| 1992–93 | 31 | 47 | 54 | 94 | 59 | 50 | 35 | 144 | 12 | 519 |
| 1993–94 | 27 | 46 | 48 | 100 | 59 | 53 | 37 | 143 | 12 | 518 |
| 1994–95 | 22 | 47 | 41 | 89 | 51 | 59 | 32 | 122 | 16 | 474 |
| 1995–96 | 23 | 44 | 34 | 80 | 49 | 51 | 27 | 112 | 14 | 429 |
| 1996–97 | 26 | 40 | 32 | 74 | 47 | 50 | 22 | 111 | 18 | 410 |
| 1997–98 | 21 | 42 | 30 | 72 | 45 | 50 | 7 | 107 | 19 | 386 |
| 1998–99 | 19 | 35 | 30 | 65 | 41 | 42 | 18 | 104 | 16 | 361 |
| 1999–00 | 20 | 34 | 32 | 70 | 39 | 34 | 17 | 91 | 17 | 347 |
| 2000–01 | 18 | 39 | 33 | 61 | 36 | 33 | 25 | 87 | 9 | 336 |
| 2001–02 | 18 | 36 | 33 | 62 | 34 | 32 | 22 | 74 | 11 | 316 |
| 2002–03 | 17 | 37 | 38 | 65 | 34 | 32 | 20 | 69 | 10 | 316 |
| 2003–04 | 16 | 34 | 39 | 65 | 34 | 35 | 17 | 66 | 9 | 312 |
| 2004–05 | 15 | 31 | 33 | 61 | 32 | 34 | 14 | 62 | 8 | 284 |
| 2005–06 | 15 | 36 | 29 | 54 | 31 | 35 | 14 | 60 | 8 | 276 |
| 2006–07 | 13 | 35 | 28 | 66 | 28 | 36 | 14 | 57 | 7 | 281 |
| 2007–08 | 13 | 32 | 28 | 53 | 27 | 35 | 20 | 59 | 7 | 269 |
| 2008–09 | 13 | 32 | 26 | 42 | 26 | 35 | 15 | 64 | 6 | 258 |
| 2009–10 | 13 | 32 | 24 | 43 | 25 | 35 | 19 | 62 | 6 | 258 |
| Mean: | | | | | | | | | | |
| 1979–80 to 1983–84 | 33.0 | 82.8 | 80.2 | 87.6 | 89.0 | 46.0 | 67.4 | 233.4 | 21.4 | 734.4 |
| Mean: | | | | | | | | | | |
| 2005–06 to 2009–10 | 13.4 | 33.4 | 27.0 | 51.6 | 27.4 | 35.2 | 16.4 | 60.4 | 6.8 | 268.4 |
| Percent drop | -59% | -60% | -66% | -41% | -69% | -23% | -76% | -74% | -68% | -63% |

Table 4: Number of vessels by statistical area from CRA 1, 1979–80 to 2009–10. Vessels catching less than 1 t in a year for the QMA were excluded.

| Fishing year | 901 | 902 | 903 | 904 | 939 | All |
|--------------|-----|-----|-----|-----|-----|-----|
| 1979–80 | 5 | 9 | 8 | 7 | 10 | 34 |
| 1980–81 | 3 | 9 | 10 | 11 | 9 | 34 |
| 1981–82 | 3 | 8 | 10 | 9 | 8 | 33 |
| 1982–83 | 3 | 10 | 8 | 9 | 9 | 33 |
| 1983–84 | 5 | 14 | 6 | 8 | 7 | 31 |
| 1984–85 | 5 | 14 | 4 | 8 | 7 | 30 |
| 1985–86 | 5 | 10 | 8 | 10 | 8 | 34 |
| 1986–87 | 5 | 11 | 12 | 9 | 9 | 35 |
| 1987–88 | 4 | 10 | 13 | 8 | 9 | 30 |
| 1988–89 | 5 | 6 | 8 | 6 | 8 | 26 |
| 1989–90 | 7 | 7 | 5 | 8 | 9 | 27 |
| 1990–91 | 12 | 10 | 7 | 7 | 8 | 27 |
| 1991–92 | 8 | 16 | 13 | 12 | 8 | 33 |
| 1992–93 | 3 | 11 | 7 | 10 | 8 | 31 |
| 1993–94 | 6 | 8 | 6 | 9 | 6 | 27 |
| 1994–95 | 4 | 6 | 5 | 9 | 4 | 22 |
| 1995–96 | 4 | 6 | 5 | 9 | 5 | 23 |
| 1996–97 | 3 | 3 | 8 | 11 | 5 | 26 |
| 1997–98 | 2 | 3 | 4 | 7 | 6 | 21 |
| 1998–99 | 2 | 3 | 3 | 6 | 6 | 19 |
| 1999–00 | 5 | 3 | 3 | 6 | 6 | 20 |
| 2000–01 | 4 | 3 | 3 | 6 | 5 | 18 |
| 2001–02 | 4 | 4 | 3 | 5 | 5 | 18 |
| 2002–03 | 6 | 6 | 3 | 3 | 6 | 17 |
| 2003–04 | 2 | 6 | 3 | 3 | 6 | 16 |
| 2004–05 | 3 | 5 | 4 | 2 | 5 | 15 |
| 2005–06 | 3 | 5 | 3 | 2 | 5 | 15 |
| 2006–07 | 5 | 2 | 3 | 2 | 3 | 13 |
| 2007–08 | 5 | 4 | 4 | 2 | 3 | 13 |
| 2008–09 | 6 | 3 | 3 | 2 | 3 | 13 |
| 2009–10 | 5 | 3 | 2 | 2 | 3 | 13 |

Table 5: Distribution and annual catch by statistical area from CRA 1, 1979–80 to 2009–10. An ‘x’ indicates fewer than 3 vessels in the year/statistical area cell.

| Fishing Year | Distribution (%) | | | | | Annual Catch (t) | | | | | |
|--------------|------------------|------|------|------|------|------------------|------|------|------|------|-------|
| | 901 | 902 | 903 | 904 | 939 | 901 | 902 | 903 | 904 | 939 | CRA 1 |
| 1979–80 | 16.9 | 23.6 | 19.8 | 15.3 | 24.4 | 19.4 | 27.2 | 22.8 | 17.6 | 28.0 | 115.0 |
| 1980–81 | 12.5 | 31.0 | 13.4 | 17.8 | 25.2 | 22.4 | 55.8 | 24.1 | 32.1 | 45.4 | 179.8 |
| 1981–82 | 11.1 | 35.4 | 20.6 | 12.1 | 20.8 | 20.4 | 65.0 | 37.8 | 22.1 | 38.1 | 183.3 |
| 1982–83 | 18.3 | 32.4 | 12.1 | 14.1 | 23.1 | 40.8 | 72.3 | 26.9 | 31.4 | 51.4 | 222.9 |
| 1983–84 | 21.3 | 31.7 | 7.9 | 14.3 | 24.7 | 49.4 | 73.5 | 18.4 | 33.2 | 57.2 | 231.7 |
| 1984–85 | 16.4 | 39.6 | 7.4 | 14.7 | 21.9 | 34.8 | 83.7 | 15.8 | 31.0 | 46.3 | 211.6 |
| 1985–86 | 17.4 | 31.1 | 8.6 | 19.2 | 23.7 | 38.0 | 68.0 | 18.8 | 42.1 | 51.9 | 218.8 |
| 1986–87 | 11.0 | 25.0 | 19.5 | 22.2 | 22.2 | 23.3 | 52.9 | 41.2 | 47.0 | 47.0 | 211.4 |
| 1987–88 | 18.3 | 23.9 | 15.7 | 18.3 | 23.8 | 34.3 | 44.8 | 29.5 | 34.4 | 44.7 | 187.7 |
| 1988–89 | 20.1 | 25.2 | 12.0 | 19.6 | 23.1 | 35.9 | 45.0 | 21.4 | 35.0 | 41.2 | 178.6 |
| 1989–90 | 28.3 | 20.4 | 11.3 | 19.7 | 20.4 | 49.2 | 35.5 | 19.6 | 34.2 | 35.5 | 174.0 |
| 1990–91 | 27.2 | 27.9 | 10.0 | 14.0 | 20.9 | 35.7 | 36.5 | 13.0 | 18.4 | 27.4 | 131.1 |
| 1991–92 | 7.9 | 30.7 | 16.7 | 18.4 | 26.3 | 10.2 | 39.3 | 21.4 | 23.5 | 33.8 | 128.3 |
| 1992–93 | 15.5 | 28.6 | 14.0 | 20.1 | 21.8 | 17.2 | 31.5 | 15.4 | 22.2 | 24.1 | 110.5 |
| 1993–94 | 27.0 | 27.9 | 11.7 | 16.8 | 16.6 | 34.4 | 35.6 | 14.8 | 21.4 | 21.2 | 127.4 |
| 1994–95 | 25.2 | 20.7 | 13.6 | 24.4 | 16.2 | 32.7 | 26.9 | 17.7 | 31.7 | 21.0 | 130.0 |
| 1995–96 | 15.3 | 16.6 | 17.0 | 31.9 | 19.2 | 19.4 | 21.0 | 21.5 | 40.4 | 24.4 | 126.7 |
| 1996–97 | 16.3 | 16.1 | 19.1 | 30.6 | 18.0 | 21.1 | 20.9 | 24.7 | 39.5 | 23.3 | 129.4 |
| 1997–98 | 13.8 | 19.4 | 16.0 | 22.9 | 27.9 | 17.8 | 25.1 | 20.7 | 29.6 | 36.1 | 129.3 |
| 1998–99 | x | 18.5 | 12.0 | 15.7 | 30.6 | x | 23.8 | 15.4 | 20.2 | 39.4 | 128.7 |
| 1999–00 | 45.1 | 8.3 | 5.3 | 10.3 | 30.9 | 56.7 | 10.4 | 6.7 | 13.0 | 38.9 | 125.7 |
| 2000–01 | 51.5 | 10.9 | 8.0 | 10.2 | 19.4 | 67.4 | 14.3 | 10.5 | 13.4 | 25.4 | 130.9 |
| 2001–02 | 49.2 | 9.5 | 8.5 | 8.6 | 24.1 | 64.3 | 12.5 | 11.1 | 11.2 | 31.5 | 130.6 |
| 2002–03 | 36.8 | 21.1 | 7.0 | 6.9 | 28.3 | 48.1 | 27.6 | 9.1 | 9.0 | 37.0 | 130.8 |
| 2003–04 | x | 47.0 | 6.1 | 10.2 | 21.5 | . | 60.5 | 7.9 | 13.1 | 27.7 | 128.7 |
| 2004–05 | 28.2 | 30.7 | 7.8 | 9.3 | 24.0 | 36.9 | 40.1 | 10.2 | 12.2 | 31.4 | 130.8 |
| 2005–06 | 40.3 | 19.1 | 8.8 | x | 21.2 | 52.5 | 25.0 | 11.5 | x | 27.6 | 130.5 |
| 2006–07 | 44.8 | x | 13.9 | x | 15.7 | 58.6 | x | 18.2 | x | 20.6 | 130.8 |
| 2007–08 | 52.7 | 15.4 | 10.8 | 9.1 | 12.1 | 68.4 | 20.0 | 14.0 | 11.8 | 15.7 | 129.8 |
| 2008–09 | 45.0 | 16.2 | 11.1 | x | 16.5 | 58.9 | 21.2 | 14.6 | x | 21.6 | 131.0 |
| 2009–10 | 42.2 | 16.3 | 10.3 | x | 21.0 | 55.3 | 21.4 | 13.5 | x | 27.5 | 130.9 |

Table 6: Distribution and annual potlifts by statistical area from CRA 1, 1979–80 to 2009–10. An ‘x’ indicates fewer than 3 vessels in the year/statistical area cell.

| Fishing Year | Distribution (%) | | | | | Annual Potlifts (000's) | | | | | |
|--------------|------------------|------|------|------|------|-------------------------|------|------|------|------|-------|
| | 901 | 902 | 903 | 904 | 939 | 901 | 902 | 903 | 904 | 939 | CRA 1 |
| 1979–80 | 6.5 | 12.3 | 21.0 | 21.8 | 38.5 | 10.2 | 19.2 | 32.8 | 34.0 | 60.2 | 156.5 |
| 1980–81 | 6.2 | 17.5 | 19.3 | 23.8 | 33.2 | 11.0 | 31.0 | 34.3 | 42.2 | 58.9 | 177.2 |
| 1981–82 | 6.0 | 21.7 | 24.8 | 18.3 | 29.1 | 10.1 | 36.5 | 41.8 | 30.9 | 49.1 | 168.4 |
| 1982–83 | 7.1 | 17.6 | 23.3 | 21.8 | 30.2 | 14.2 | 35.1 | 46.4 | 43.4 | 60.2 | 199.4 |
| 1983–84 | 12.6 | 23.9 | 14.7 | 24.3 | 24.6 | 26.2 | 49.9 | 30.5 | 50.6 | 51.2 | 208.4 |
| 1984–85 | 9.4 | 27.7 | 11.3 | 24.4 | 27.3 | 20.7 | 61.0 | 24.8 | 53.7 | 60.1 | 220.2 |
| 1985–86 | 13.3 | 21.3 | 11.5 | 27.5 | 26.4 | 32.7 | 52.3 | 28.2 | 67.7 | 64.9 | 245.8 |
| 1986–87 | 6.1 | 19.3 | 19.7 | 31.4 | 23.5 | 17.3 | 54.4 | 55.7 | 88.7 | 66.3 | 282.4 |
| 1987–88 | 8.6 | 18.9 | 18.2 | 26.6 | 27.8 | 21.7 | 47.7 | 46.1 | 67.2 | 70.2 | 252.9 |
| 1988–89 | 10.0 | 20.8 | 20.6 | 23.3 | 25.3 | 22.1 | 46.1 | 45.8 | 51.6 | 56.2 | 221.9 |
| 1989–90 | 14.1 | 13.4 | 16.7 | 30.1 | 25.6 | 32.9 | 31.3 | 39.0 | 70.0 | 59.7 | 232.8 |
| 1990–91 | 16.7 | 27.7 | 11.9 | 19.9 | 23.7 | 32.4 | 53.7 | 23.0 | 38.7 | 46.0 | 193.8 |
| 1991–92 | 3.3 | 22.7 | 22.7 | 26.8 | 24.5 | 7.0 | 48.4 | 48.5 | 57.2 | 52.3 | 213.3 |
| 1992–93 | 4.7 | 23.0 | 15.6 | 33.1 | 23.5 | 9.9 | 48.4 | 32.8 | 69.7 | 49.5 | 210.4 |
| 1993–94 | 9.3 | 17.5 | 18.3 | 33.2 | 21.7 | 18.3 | 34.4 | 35.9 | 65.2 | 42.5 | 196.3 |
| 1994–95 | 11.0 | 13.3 | 17.1 | 39.9 | 18.8 | 18.5 | 22.5 | 28.9 | 67.4 | 31.7 | 169.1 |
| 1995–96 | 7.8 | 12.0 | 17.7 | 44.7 | 17.7 | 10.6 | 16.2 | 24.0 | 60.4 | 24.0 | 135.2 |
| 1996–97 | 6.3 | 14.8 | 21.6 | 43.7 | 13.6 | 8.7 | 20.3 | 29.6 | 59.8 | 18.6 | 137.0 |
| 1997–98 | 5.8 | 13.9 | 19.3 | 38.9 | 22.1 | 8.4 | 20.2 | 28.2 | 56.9 | 32.3 | 146.0 |
| 1998–99 | x | 16.4 | 15.6 | 30.3 | 29.5 | x | 20.2 | 19.3 | 37.4 | 36.4 | 123.2 |
| 1999–00 | 17.4 | 8.1 | 12.3 | 33.2 | 29.1 | 19.9 | 9.2 | 14.1 | 38.1 | 33.4 | 114.8 |
| 2000–01 | 21.4 | 10.4 | 13.1 | 29.7 | 25.3 | 23.9 | 11.7 | 14.7 | 33.3 | 28.4 | 112.0 |
| 2001–02 | 22.0 | 4.5 | 14.5 | 22.4 | 36.6 | 22.0 | 4.5 | 14.5 | 22.5 | 36.6 | 100.1 |
| 2002–03 | 21.5 | 8.3 | 11.7 | 23.1 | 35.3 | 23.4 | 9.1 | 12.7 | 25.2 | 38.4 | 108.9 |
| 2003–04 | x | 17.4 | 9.5 | 34.1 | 32.4 | x | 18.4 | 10.0 | 36.1 | 34.3 | 105.9 |
| 2004–05 | 10.0 | 18.8 | 8.8 | 19.7 | 42.6 | 10.6 | 20.0 | 9.3 | 20.9 | 45.2 | 106.0 |
| 2005–06 | 14.4 | 9.9 | 12.4 | x | 42.6 | 16.5 | 11.4 | 14.2 | x | 48.8 | 114.5 |
| 2006–07 | 20.5 | x | 15.7 | x | 26.4 | 20.3 | x | 15.6 | x | 26.2 | 99.4 |
| 2007–08 | 26.3 | 12.9 | 15.8 | 26.5 | 18.4 | 20.8 | 10.2 | 12.5 | 21.0 | 14.6 | 79.0 |
| 2008–09 | 19.6 | 13.7 | 16.1 | x | 19.3 | 16.4 | 11.4 | 13.4 | x | 16.1 | 83.4 |
| 2009–10 | 20.3 | 13.3 | 19.2 | x | 19.1 | 16.3 | 10.7 | 15.4 | x | 15.3 | 80.2 |

Table 7: Percentage of annual catch by month from CRA 1, 1979–80 to 2009–10. An ‘x’ indicates fewer than 3 vessels, and a ‘.’ indicates no fishing, in the year/month cell.

| Fishing year | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar |
|--------------|-----|-----|-----|------|------|------|------|------|------|------|------|-----|
| 1979–80 | 0.9 | x | 0.1 | 4.4 | 9.4 | 7.3 | 10.1 | 16.5 | 15.8 | 14.9 | 16.4 | 4.2 |
| 1980–81 | 2.1 | 0.3 | 0.7 | 3.7 | 6.8 | 4.4 | 11.9 | 10.0 | 19.1 | 23.9 | 11.1 | 5.9 |
| 1981–82 | 1.2 | x | x | 2.6 | 6.4 | 7.1 | 11.1 | 13.4 | 22.1 | 22.3 | 8.9 | 4.6 |
| 1982–83 | 0.2 | 0.4 | 0.4 | 2.8 | 6.3 | 9.6 | 9.7 | 16.1 | 19.6 | 15.1 | 12.5 | 7.2 |
| 1983–84 | 2.0 | x | 0.3 | 5.5 | 9.0 | 7.8 | 15.8 | 14.8 | 14.2 | 15.1 | 10.6 | 4.9 |
| 1984–85 | 1.8 | 0.7 | 0.6 | 4.0 | 5.1 | 11.1 | 13.5 | 15.4 | 16.0 | 14.5 | 10.1 | 7.2 |
| 1985–86 | 1.4 | 0.8 | 1.1 | 6.3 | 8.2 | 6.6 | 10.4 | 13.9 | 15.0 | 17.6 | 12.8 | 5.7 |
| 1986–87 | 1.7 | 0.6 | 1.0 | 6.1 | 10.1 | 10.3 | 14.5 | 14.3 | 13.1 | 11.4 | 11.9 | 5.1 |
| 1987–88 | 1.1 | 0.4 | 0.6 | 3.7 | 9.1 | 6.6 | 14.7 | 14.2 | 13.9 | 17.3 | 12.0 | 6.4 |
| 1988–89 | 2.4 | 1.4 | 1.0 | 1.8 | 7.2 | 2.4 | 12.8 | 18.3 | 20.7 | 15.4 | 9.0 | 7.6 |
| 1989–90 | 1.1 | 0.4 | 0.5 | 4.0 | 5.3 | 8.9 | 5.9 | 18.6 | 20.9 | 16.9 | 12.2 | 5.2 |
| 1990–91 | 0.1 | 0.2 | 0.7 | 4.3 | 14.9 | 12.0 | 14.3 | 14.8 | 15.9 | 11.3 | 7.1 | 4.5 |
| 1991–92 | 0.2 | 0.4 | 1.1 | 8.0 | 9.5 | 10.3 | 10.3 | 9.8 | 19.7 | 16.8 | 9.9 | 3.9 |
| 1992–93 | 0.1 | 1.1 | 1.9 | 6.3 | 9.5 | 8.3 | 14.0 | 13.9 | 14.2 | 14.9 | 11.0 | 4.9 |
| 1993–94 | 0.1 | 0.3 | 1.8 | 7.2 | 9.2 | 7.2 | 18.4 | 14.7 | 17.7 | 12.9 | 7.9 | 2.6 |
| 1994–95 | 0.1 | 0.5 | 2.4 | 9.5 | 15.0 | 7.6 | 10.8 | 17.1 | 17.2 | 8.9 | 7.7 | 3.1 |
| 1995–96 | 1.2 | 2.1 | 2.8 | 11.9 | 19.0 | 18.9 | 16.8 | 10.6 | 6.8 | 2.4 | 3.4 | 4.1 |
| 1996–97 | 1.2 | 5.0 | 3.9 | 18.5 | 13.9 | 18.9 | 15.7 | 12.2 | 5.9 | 2.3 | 1.7 | 1.0 |
| 1997–98 | 5.3 | 6.7 | 5.4 | 20.8 | 20.0 | 18.4 | 12.2 | 4.0 | 2.4 | 0.4 | 0.3 | 4.0 |
| 1998–99 | 4.8 | 6.3 | 7.7 | 21.1 | 17.3 | 20.7 | 10.9 | 4.3 | 3.3 | 2.9 | 0.3 | 0.4 |
| 1999–00 | 3.1 | 4.4 | 5.0 | 19.5 | 25.7 | 20.1 | 13.1 | 4.7 | 2.6 | 0.7 | x | 0.9 |
| 2000–01 | 2.3 | 2.2 | 4.9 | 13.4 | 23.6 | 23.3 | 22.6 | 4.8 | 0.9 | 1.0 | 0.6 | 0.5 |
| 2001–02 | 3.3 | 4.1 | 5.6 | 14.8 | 20.5 | 26.8 | 11.4 | 7.5 | 3.9 | 1.3 | x | 0.4 |
| 2002–03 | 4.1 | 5.0 | 2.5 | 15.5 | 19.0 | 16.9 | 21.0 | 8.4 | 4.0 | 3.0 | x | 0.4 |
| 2003–04 | 3.1 | 0.7 | 0.5 | 19.5 | 15.7 | 10.3 | 24.1 | 8.5 | 9.9 | 4.2 | 2.3 | 1.0 |
| 2004–05 | 1.9 | 2.8 | 3.8 | 17.9 | 14.4 | 13.0 | 21.5 | 8.9 | 2.7 | 4.5 | 7.2 | 1.4 |
| 2005–06 | x | 1.0 | 1.6 | 9.8 | 17.7 | 19.0 | 21.1 | 13.5 | 8.5 | 3.9 | 0.9 | 0.6 |
| 2006–07 | 1.4 | 2.5 | 2.2 | 20.6 | 19.9 | 14.6 | 14.1 | 8.8 | 4.6 | 5.7 | 4.5 | 1.0 |
| 2007–08 | 3.5 | 4.1 | 2.7 | 14.5 | 17.9 | 18.6 | 11.7 | 9.9 | 6.3 | 6.1 | 2.7 | 1.8 |
| 2008–09 | 7.1 | 4.5 | 1.2 | 12.3 | 16.9 | 24.9 | 17.2 | 6.5 | 5.8 | 3.7 | . | . |
| 2009–10 | 8.3 | 1.5 | 2.0 | 14.7 | 17.3 | 20.3 | 20.3 | 7.6 | 1.6 | 2.8 | 3.3 | x |

Table 8: Percentage of catch from CRA 1 by statistical area and month for 2009–10. An ‘x’ indicates fewer than 3 vessels in the month/statistical area cell (33 instances representing 31.2% of the annual catch). A ‘.’ indicates no fishing in the month/statistical area cell.

| Month | 901 | 902 | 903 | 904 | 939 |
|-------|------|-----|-----|-----|-----|
| Apr | x | . | x | . | 7.6 |
| May | x | . | x | . | 1.1 |
| Jun | x | x | x | x | x |
| Jul | 6.8 | 2.3 | x | x | x |
| Aug | 7.4 | 3.9 | x | x | x |
| Sep | 7.5 | 5.2 | x | x | 4.3 |
| Oct | 10.9 | 3.8 | x | x | 2.1 |
| Nov | 3.9 | x | 2.0 | x | . |
| Dec | x | . | x | x | . |
| Jan | x | . | x | x | x |
| Feb | x | . | x | x | . |
| Mar | x | . | x | . | . |

Table 9: Arithmetic CPUE (kg/potlift) for CRA 1 by fishing year and statistical area, 1979–80 to 2009–10. An ‘x’ indicates fewer than 3 vessels in the year/statistical area cell.

| Fishing year | 901 | 902 | 903 | 904 | 939 |
|--------------|------|------|------|------|------|
| 1979–80 | 1.91 | 1.42 | 0.70 | 0.52 | 0.47 |
| 1980–81 | 2.05 | 1.80 | 0.71 | 0.76 | 0.77 |
| 1981–82 | 2.01 | 1.78 | 0.90 | 0.72 | 0.78 |
| 1982–83 | 2.87 | 2.06 | 0.58 | 0.72 | 0.86 |
| 1983–84 | 1.89 | 1.47 | 0.60 | 0.66 | 1.12 |
| 1984–85 | 1.68 | 1.37 | 0.64 | 0.58 | 0.77 |
| 1985–86 | 1.16 | 1.30 | 0.67 | 0.62 | 0.80 |
| 1986–87 | 1.34 | 0.97 | 0.74 | 0.53 | 0.71 |
| 1987–88 | 1.58 | 0.94 | 0.64 | 0.51 | 0.64 |
| 1988–89 | 1.62 | 0.98 | 0.47 | 0.68 | 0.73 |
| 1989–90 | 1.49 | 1.14 | 0.50 | 0.49 | 0.60 |
| 1990–91 | 1.10 | 0.68 | 0.57 | 0.48 | 0.60 |
| 1991–92 | 1.45 | 0.81 | 0.44 | 0.41 | 0.65 |
| 1992–93 | 1.73 | 0.65 | 0.47 | 0.32 | 0.49 |
| 1993–94 | 1.88 | 1.03 | 0.41 | 0.33 | 0.50 |
| 1994–95 | 1.76 | 1.19 | 0.61 | 0.47 | 0.66 |
| 1995–96 | 1.83 | 1.30 | 0.90 | 0.67 | 1.02 |
| 1996–97 | 2.42 | 1.03 | 0.83 | 0.66 | 1.25 |
| 1997–98 | 2.12 | 1.24 | 0.74 | 0.52 | 1.12 |
| 1998–99 | x | 1.18 | 0.80 | 0.54 | 1.08 |
| 1999–00 | 2.85 | 1.13 | 0.48 | 0.34 | 1.16 |
| 2000–01 | 2.82 | 1.22 | 0.72 | 0.40 | 0.89 |
| 2001–02 | 2.92 | 2.77 | 0.77 | 0.50 | 0.86 |
| 2002–03 | 2.05 | 3.04 | 0.72 | 0.36 | 0.96 |
| 2003–04 | x | 3.29 | 0.79 | 0.36 | 0.81 |
| 2004–05 | 3.48 | 2.01 | 1.09 | 0.58 | 0.69 |
| 2005–06 | 3.19 | 2.19 | 0.81 | x | 0.57 |
| 2006–07 | 2.88 | x | 1.17 | x | 0.78 |
| 2007–08 | 3.29 | 1.97 | 1.12 | 0.56 | 1.08 |
| 2008–09 | 3.60 | 1.85 | 1.09 | x | 1.34 |
| 2009–10 | 3.40 | 2.01 | 0.88 | x | 1.79 |

Table 10: Annual arithmetic, unstandardised, and standardised (with standard error) CPUE indices for CRA 1 (kg/potlift) for 1979–80 to 2009–10.

| Fishing year | Arithmetic | Unstandardised | Standardised | s.e. |
|--------------|------------|----------------|--------------|-------|
| 1979–80 | 0.74 | 0.76 | 0.80 | 0.041 |
| 1980–81 | 1.01 | 0.88 | 0.96 | 0.043 |
| 1981–82 | 1.09 | 0.89 | 0.91 | 0.046 |
| 1982–83 | 1.12 | 0.93 | 0.98 | 0.044 |
| 1983–84 | 1.11 | 0.97 | 0.93 | 0.043 |
| 1984–85 | 0.96 | 0.91 | 0.86 | 0.043 |
| 1985–86 | 0.89 | 0.81 | 0.80 | 0.041 |
| 1986–87 | 0.75 | 0.78 | 0.79 | 0.041 |
| 1987–88 | 0.74 | 0.73 | 0.74 | 0.042 |
| 1988–89 | 0.80 | 0.67 | 0.65 | 0.049 |
| 1989–90 | 0.75 | 0.71 | 0.64 | 0.047 |
| 1990–91 | 0.68 | 0.62 | 0.54 | 0.046 |
| 1991–92 | 0.60 | 0.63 | 0.64 | 0.041 |
| 1992–93 | 0.53 | 0.52 | 0.54 | 0.043 |
| 1993–94 | 0.65 | 0.60 | 0.62 | 0.044 |
| 1994–95 | 0.77 | 0.77 | 0.79 | 0.048 |
| 1995–96 | 0.94 | 1.04 | 1.20 | 0.054 |
| 1996–97 | 0.94 | 0.96 | 1.16 | 0.053 |
| 1997–98 | 0.89 | 0.94 | 1.16 | 0.058 |
| 1998–99 | 1.04 | 1.13 | 1.34 | 0.061 |
| 1999–00 | 1.09 | 1.03 | 1.11 | 0.064 |
| 2000–01 | 1.17 | 1.07 | 1.11 | 0.063 |
| 2001–02 | 1.30 | 1.22 | 1.27 | 0.064 |
| 2002–03 | 1.20 | 1.20 | 1.12 | 0.062 |
| 2003–04 | 1.22 | 1.11 | 1.12 | 0.068 |
| 2004–05 | 1.23 | 1.38 | 1.26 | 0.067 |
| 2005–06 | 1.14 | 1.46 | 1.31 | 0.072 |
| 2006–07 | 1.32 | 1.58 | 1.40 | 0.071 |
| 2007–08 | 1.64 | 2.13 | 1.71 | 0.068 |
| 2008–09 | 1.57 | 2.05 | 1.78 | 0.076 |
| 2009–10 | 1.63 | 1.83 | 1.63 | 0.074 |

Table 11: Number of vessels by statistical area from CRA 2, 1979–80 to 2009–10. Vessels catching less than 1 t in a year for the entire QMA were excluded.

| Fishing year | 905 | 906 | 907 | 908 | All |
|--------------|-----|-----|-----|-----|-----|
| 1979–80 | 12 | 31 | 14 | 27 | 80 |
| 1980–81 | 12 | 41 | 17 | 25 | 89 |
| 1981–82 | 16 | 38 | 15 | 26 | 88 |
| 1982–83 | 16 | 34 | 13 | 24 | 82 |
| 1983–84 | 14 | 29 | 15 | 20 | 75 |
| 1984–85 | 10 | 29 | 14 | 24 | 73 |
| 1985–86 | 14 | 30 | 15 | 23 | 78 |
| 1986–87 | 12 | 29 | 13 | 18 | 70 |
| 1987–88 | 6 | 25 | 15 | 18 | 59 |
| 1988–89 | 8 | 27 | 16 | 11 | 55 |
| 1989–90 | 14 | 3 | 1 | 1 | 17 |
| 1990–91 | 13 | 29 | 16 | 20 | 57 |
| 1991–92 | 12 | 27 | 15 | 17 | 51 |
| 1992–93 | 9 | 20 | 7 | 18 | 47 |
| 1993–94 | 8 | 24 | 11 | 15 | 46 |
| 1994–95 | 9 | 22 | 9 | 14 | 47 |
| 1995–96 | 9 | 23 | 8 | 15 | 44 |
| 1996–97 | 8 | 17 | 7 | 13 | 40 |
| 1997–98 | 12 | 16 | 8 | 10 | 42 |
| 1998–99 | 10 | 12 | 5 | 10 | 35 |
| 1999–00 | 8 | 14 | 7 | 9 | 34 |
| 2000–01 | 11 | 16 | 7 | 12 | 39 |
| 2001–02 | 11 | 14 | 7 | 10 | 36 |
| 2002–03 | 9 | 15 | 10 | 9 | 37 |
| 2003–04 | 8 | 13 | 7 | 9 | 34 |
| 2004–05 | 5 | 13 | 8 | 11 | 31 |
| 2005–06 | 12 | 13 | 9 | 9 | 36 |
| 2006–07 | 9 | 16 | 5 | 11 | 35 |
| 2007–08 | 9 | 12 | 6 | 10 | 32 |
| 2008–09 | 10 | 13 | 4 | 10 | 32 |
| 2009–10 | 9 | 13 | 5 | 7 | 32 |

Table 12: Distribution and annual catch by statistical area for CRA 2, 1979–80 to 2009–10.

| Fishing year | Distribution (%) | | | | Annual Catch (t) | | | | |
|-----------------|------------------|------|------|------|------------------|-------|-------|-------|-------|
| | 905 | 906 | 907 | 908 | 905 | 906 | 907 | 908 | CRA 2 |
| 1979–80 | 10.6 | 31.4 | 25.0 | 32.9 | 31.0 | 92.1 | 73.4 | 96.5 | 292.9 |
| 1980–81 | 9.8 | 38.6 | 24.0 | 27.6 | 43.5 | 172.3 | 106.9 | 123.2 | 446.0 |
| 1981–82 | 12.0 | 40.0 | 18.6 | 29.4 | 47.0 | 156.3 | 72.7 | 115.0 | 391.0 |
| 1982–83 | 14.0 | 42.9 | 18.9 | 24.3 | 45.6 | 140.1 | 61.7 | 79.2 | 326.6 |
| 1983–84 | 13.8 | 41.5 | 18.7 | 26.0 | 37.9 | 114.0 | 51.4 | 71.3 | 274.6 |
| 1984–85 | 11.0 | 38.8 | 18.2 | 31.9 | 29.8 | 104.9 | 49.2 | 86.3 | 270.3 |
| 1985–86 | 11.2 | 38.4 | 25.1 | 25.3 | 37.9 | 129.5 | 84.8 | 85.5 | 337.7 |
| 1986–87 | 9.8 | 44.1 | 19.6 | 26.5 | 27.0 | 121.1 | 53.8 | 72.9 | 274.9 |
| 1987–88 | 8.2 | 50.2 | 17.3 | 24.3 | 20.8 | 127.7 | 44.0 | 61.9 | 254.4 |
| 1988–89 | 10.5 | 49.8 | 18.3 | 21.4 | 23.2 | 110.7 | 40.6 | 47.6 | 222.2 |
| 1989–90 | 68.1 | 15.2 | 5.8 | 10.9 | 172.0 | 38.5 | 14.7 | 27.5 | 252.7 |
| 1990–91 | 14.9 | 41.8 | 17.3 | 26.1 | 35.4 | 99.2 | 41.1 | 62.0 | 237.6 |
| 1991–92 | 11.1 | 44.8 | 19.3 | 24.9 | 25.5 | 102.8 | 44.2 | 57.1 | 229.7 |
| 1992–93 | 14.6 | 44.0 | 11.7 | 29.8 | 27.7 | 83.6 | 22.2 | 56.7 | 190.3 |
| 1993–94 | 15.2 | 45.1 | 14.4 | 25.3 | 32.7 | 97.0 | 30.8 | 54.4 | 214.9 |
| 1994–95 | 14.8 | 46.4 | 17.9 | 20.9 | 31.4 | 98.7 | 38.2 | 44.5 | 212.8 |
| 1995–96 | 13.8 | 47.6 | 14.7 | 23.9 | 29.4 | 101.2 | 31.2 | 50.7 | 212.5 |
| 1996–97 | 15.7 | 48.9 | 14.8 | 20.6 | 33.4 | 104.2 | 31.6 | 44.0 | 213.2 |
| 1997–98 | 15.0 | 45.9 | 21.4 | 17.7 | 35.1 | 107.7 | 50.2 | 41.5 | 234.4 |
| 1998–99 | 19.3 | 39.8 | 21.6 | 19.3 | 44.9 | 92.5 | 50.1 | 44.9 | 232.3 |
| 1999–00 | 15.7 | 41.7 | 25.2 | 17.4 | 37.0 | 97.9 | 59.4 | 40.8 | 235.1 |
| 2000–01 | 16.3 | 42.3 | 23.0 | 18.4 | 38.4 | 99.6 | 54.1 | 43.4 | 235.4 |
| 2001–02 | 15.9 | 41.7 | 21.2 | 21.2 | 35.8 | 93.7 | 47.8 | 47.7 | 225.0 |
| 2002–03 | 14.6 | 34.7 | 21.8 | 29.0 | 30.0 | 71.3 | 44.7 | 59.6 | 205.7 |
| 2003–04 | 17.2 | 35.6 | 24.5 | 22.7 | 33.7 | 69.7 | 48.1 | 44.6 | 196.0 |
| 2004–05 | 11.2 | 38.3 | 23.4 | 27.1 | 22.1 | 75.6 | 46.1 | 53.5 | 197.3 |
| 2005–06 | 16.7 | 37.7 | 24.1 | 21.6 | 37.5 | 84.8 | 54.2 | 48.6 | 225.2 |
| 2006–07 | 15.4 | 38.2 | 21.4 | 25.0 | 35.0 | 86.5 | 48.6 | 56.6 | 226.7 |
| 2007–08 | 15.6 | 39.8 | 21.3 | 23.3 | 35.9 | 91.3 | 48.8 | 53.6 | 229.7 |
| 2008–09 | 14.9 | 36.5 | 23.5 | 25.1 | 34.5 | 84.9 | 54.5 | 58.4 | 232.3 |
| 2009–10 | 17.3 | 31.4 | 26.9 | 24.4 | 40.8 | 73.8 | 63.1 | 57.3 | 235.0 |

Table 13: Distribution and annual potlifts by statistical area from CRA 2, 1979–80 to 2009–10.

| Fishing year | Distribution (%) | | | | Annual Potlifts (000's) | | | | |
|-----------------|------------------|------|------|------|-------------------------|-------|-------|-------|-------|
| | 905 | 906 | 907 | 908 | 905 | 906 | 907 | 908 | CRA 2 |
| 1979–80 | 8.1 | 41.3 | 19.0 | 31.6 | 45.7 | 232.2 | 106.7 | 178.0 | 562.6 |
| 1980–81 | 8.1 | 42.6 | 18.6 | 30.7 | 59.2 | 311.4 | 136.1 | 224.9 | 731.5 |
| 1981–82 | 11.8 | 42.0 | 15.3 | 30.9 | 83.3 | 297.1 | 108.6 | 219.0 | 708.0 |
| 1982–83 | 11.8 | 44.2 | 16.3 | 27.7 | 86.1 | 322.5 | 119.2 | 202.1 | 729.9 |
| 1983–84 | 11.2 | 45.4 | 16.5 | 27.0 | 79.2 | 322.4 | 117.2 | 191.5 | 710.4 |
| 1984–85 | 9.5 | 44.4 | 16.3 | 29.8 | 69.0 | 323.2 | 118.5 | 216.6 | 727.2 |
| 1985–86 | 10.5 | 42.2 | 20.8 | 26.5 | 82.2 | 331.8 | 163.5 | 208.0 | 785.5 |
| 1986–87 | 8.4 | 46.1 | 17.8 | 27.7 | 61.6 | 339.9 | 131.1 | 204.4 | 737.0 |
| 1987–88 | 7.0 | 49.3 | 16.9 | 26.9 | 51.8 | 363.4 | 124.3 | 198.1 | 737.7 |
| 1988–89 | 10.2 | 48.8 | 19.9 | 21.1 | 62.7 | 300.3 | 122.1 | 129.8 | 614.9 |
| 1989–90 | 56.4 | 22.3 | 10.0 | 11.3 | 378.7 | 149.4 | 67.1 | 75.7 | 670.9 |
| 1990–91 | 14.7 | 44.2 | 17.2 | 24.0 | 71.2 | 214.3 | 83.5 | 116.4 | 485.3 |
| 1991–92 | 9.8 | 44.6 | 18.3 | 27.2 | 52.6 | 239.6 | 98.2 | 146.2 | 536.7 |
| 1992–93 | 11.9 | 44.3 | 13.0 | 30.9 | 57.1 | 212.6 | 62.4 | 148.3 | 480.5 |
| 1993–94 | 14.0 | 44.3 | 11.3 | 30.3 | 68.0 | 214.6 | 54.9 | 146.8 | 484.3 |
| 1994–95 | 17.0 | 45.6 | 10.9 | 26.6 | 66.6 | 178.9 | 42.7 | 104.2 | 392.5 |
| 1995–96 | 12.9 | 47.4 | 8.0 | 31.7 | 39.5 | 145.0 | 24.5 | 97.0 | 306.0 |
| 1996–97 | 14.4 | 52.7 | 6.4 | 26.4 | 37.1 | 135.4 | 16.5 | 68.0 | 257.0 |
| 1997–98 | 14.5 | 48.8 | 8.5 | 28.2 | 39.9 | 134.0 | 23.2 | 77.3 | 274.4 |
| 1998–99 | 18.3 | 43.8 | 8.9 | 29.0 | 46.8 | 111.8 | 22.8 | 74.0 | 255.4 |
| 1999–00 | 15.0 | 43.8 | 15.1 | 26.1 | 49.6 | 145.3 | 50.2 | 86.6 | 331.7 |
| 2000–01 | 16.2 | 46.4 | 18.4 | 18.9 | 53.6 | 153.2 | 60.7 | 62.2 | 329.7 |
| 2001–02 | 15.0 | 49.1 | 18.3 | 17.7 | 60.8 | 198.8 | 74.1 | 71.6 | 405.3 |
| 2002–03 | 14.6 | 42.3 | 19.3 | 23.8 | 69.0 | 199.9 | 91.2 | 112.3 | 472.4 |
| 2003–04 | 13.9 | 42.1 | 22.7 | 21.2 | 63.5 | 192.7 | 104.0 | 97.1 | 457.4 |
| 2004–05 | 8.7 | 43.0 | 21.7 | 26.6 | 39.7 | 195.7 | 98.8 | 121.4 | 455.5 |
| 2005–06 | 15.2 | 37.2 | 24.0 | 23.7 | 73.4 | 180.0 | 116.2 | 114.5 | 484.1 |
| 2006–07 | 13.9 | 40.7 | 20.9 | 24.5 | 57.8 | 169.3 | 87.2 | 102.1 | 416.3 |
| 2007–08 | 14.4 | 38.3 | 18.7 | 28.6 | 62.6 | 166.6 | 81.5 | 124.2 | 434.8 |
| 2008–09 | 13.2 | 44.0 | 15.3 | 27.5 | 57.5 | 191.3 | 66.7 | 119.4 | 434.9 |
| 2009–10 | 15.9 | 38.4 | 19.1 | 26.6 | 76.1 | 183.1 | 91.2 | 126.9 | 477.3 |

Table 14: Distribution of annual catch by month (%) from CRA 2, 1979–80 to 2009–10. An ‘x’ indicates fewer than 3 vessels, and a ‘.’ indicates no fishing, in the year/month cell.

| Fishing year | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar |
|--------------|-----|-----|-----|------|------|------|------|------|------|------|-----|-----|
| 1979–80 | 0.6 | 0.2 | 0.3 | 5.8 | 11.1 | 11.6 | 14.0 | 15.9 | 14.4 | 13.0 | 8.3 | 4.9 |
| 1980–81 | 1.1 | 0.8 | 2.3 | 9.8 | 13.6 | 10.4 | 17.0 | 10.1 | 13.1 | 12.1 | 6.6 | 3.1 |
| 1981–82 | 1.5 | 0.7 | 1.3 | 7.4 | 10.1 | 9.7 | 16.1 | 15.4 | 14.9 | 11.5 | 6.4 | 4.8 |
| 1982–83 | 1.7 | 0.2 | 1.2 | 7.8 | 11.5 | 11.1 | 15.2 | 15.1 | 14.9 | 10.3 | 6.9 | 4.1 |
| 1983–84 | 1.4 | 0.2 | 1.6 | 9.7 | 8.7 | 9.1 | 16.8 | 15.9 | 12.3 | 12.4 | 8.2 | 3.8 |
| 1984–85 | 1.5 | 0.3 | 1.0 | 7.7 | 8.9 | 14.6 | 18.0 | 13.1 | 13.9 | 11.7 | 6.0 | 3.2 |
| 1985–86 | 0.6 | 0.2 | 0.5 | 6.4 | 9.4 | 9.2 | 18.1 | 15.8 | 14.0 | 13.4 | 8.5 | 4.0 |
| 1986–87 | 1.0 | 0.2 | 0.5 | 6.4 | 10.2 | 11.6 | 17.5 | 15.5 | 15.9 | 11.3 | 6.1 | 3.6 |
| 1987–88 | 0.6 | 0.1 | 0.6 | 9.5 | 10.8 | 10.3 | 16.7 | 16.9 | 14.3 | 11.5 | 6.1 | 2.6 |
| 1988–89 | 1.2 | 0.1 | 0.9 | 8.2 | 13.9 | 13.1 | 16.5 | 11.4 | 13.3 | 10.1 | 6.9 | 4.2 |
| 1989–90 | 2.2 | 0.7 | 2.6 | 24.3 | 9.3 | 10.4 | 8.9 | 17.7 | 10.1 | 11.1 | 2.3 | 0.4 |
| 1990–91 | x | 0.1 | 0.5 | 7.9 | 16.7 | 14.7 | 16.4 | 14.6 | 12.4 | 8.3 | 5.8 | 2.6 |
| 1991–92 | 0.5 | 0.8 | 1.4 | 11.5 | 12.9 | 12.9 | 19.0 | 15.0 | 10.3 | 7.7 | 5.4 | 2.5 |
| 1992–93 | 0.4 | 0.5 | 2.6 | 9.8 | 10.3 | 11.2 | 16.6 | 13.3 | 13.7 | 9.3 | 7.2 | 5.1 |
| 1993–94 | 0.3 | 0.1 | 2.7 | 13.4 | 15.6 | 15.4 | 18.3 | 10.9 | 9.4 | 8.2 | 3.7 | 2.0 |
| 1994–95 | 0.3 | 0.3 | 5.2 | 18.6 | 18.6 | 16.0 | 20.5 | 10.6 | 5.0 | 2.6 | 1.7 | 0.8 |
| 1995–96 | 0.4 | 0.9 | 7.2 | 22.4 | 24.6 | 19.7 | 16.7 | 3.4 | 1.8 | 0.6 | 0.9 | 1.3 |
| 1996–97 | 3.2 | 5.8 | 7.0 | 35.1 | 19.6 | 16.0 | 6.8 | 1.8 | 1.1 | 1.4 | 1.1 | 0.9 |
| 1997–98 | 5.3 | 3.8 | 9.3 | 32.0 | 18.9 | 19.8 | 9.1 | 0.4 | 1.0 | . | x | x |
| 1998–99 | 1.7 | 4.3 | 8.0 | 21.8 | 21.8 | 29.7 | 5.6 | 2.5 | 0.6 | 0.1 | 2.2 | 1.6 |
| 1999–00 | 2.1 | 4.4 | 3.7 | 21.2 | 20.3 | 23.0 | 19.0 | 2.0 | 0.6 | 1.2 | 1.0 | 1.3 |
| 2000–01 | 4.7 | 1.8 | 1.2 | 10.6 | 18.8 | 19.1 | 24.2 | 7.7 | 2.9 | 1.4 | 3.2 | 4.6 |
| 2001–02 | 3.8 | 2.5 | 1.6 | 13.9 | 14.3 | 16.9 | 23.6 | 9.1 | 3.9 | 2.6 | 3.8 | 4.1 |
| 2002–03 | 2.8 | 1.2 | 1.2 | 10.4 | 10.5 | 9.0 | 23.5 | 13.4 | 9.7 | 6.1 | 6.8 | 5.5 |
| 2003–04 | 2.0 | 0.6 | 1.1 | 7.8 | 10.7 | 12.6 | 19.9 | 12.6 | 9.3 | 12.1 | 6.5 | 4.9 |
| 2004–05 | 2.0 | 1.5 | 2.2 | 12.6 | 9.7 | 10.4 | 16.6 | 14.3 | 7.4 | 9.5 | 7.6 | 6.2 |
| 2005–06 | 1.8 | 0.9 | 0.5 | 7.5 | 11.1 | 14.1 | 16.2 | 12.5 | 11.1 | 10.2 | 9.4 | 4.8 |
| 2006–07 | 1.6 | 0.5 | 1.2 | 10.2 | 11.6 | 14.2 | 18.1 | 11.5 | 10.6 | 9.9 | 6.0 | 4.5 |
| 2007–08 | 1.4 | 0.6 | 1.1 | 8.8 | 11.4 | 14.0 | 14.5 | 15.9 | 10.2 | 10.4 | 7.4 | 4.3 |
| 2008–09 | 2.3 | 0.7 | 0.8 | 8.3 | 12.4 | 13.5 | 18.3 | 15.9 | 10.2 | 8.6 | 4.7 | 4.4 |
| 2009–10 | 0.9 | 0.6 | 1.7 | 11.4 | 9.2 | 11.6 | 19.7 | 13.7 | 12.2 | 10.2 | 6.3 | 2.5 |

Table 15: Distribution of catch (%) from CRA 2 by statistical area and month for 2009–10. An ‘x’ indicates fewer than 3 vessels in the month/statistical area cell (3 instances representing 1.2% of the annual catch). A ‘.’ indicates no fishing in the month/statistical area cell.

| Month | 905 | 906 | 907 | 908 |
|-------|-----|-----|-----|-----|
| Apr | 0.3 | 0.6 | . | . |
| May | 0.5 | x | x | . |
| Jun | 0.3 | 0.1 | 1.3 | . |
| Jul | 1.2 | 3.3 | 4.5 | 2.4 |
| Aug | 1.9 | 2.5 | 2.1 | 2.7 |
| Sep | 2.3 | 3.1 | 3.0 | 3.3 |
| Oct | 2.2 | 5.6 | 6.5 | 5.3 |
| Nov | 1.7 | 4.7 | 4.6 | 2.7 |
| Dec | 2.5 | 4.3 | 2.8 | 2.6 |
| Jan | 2.2 | 3.9 | 1.0 | 3.2 |
| Feb | 1.2 | 2.3 | x | 1.7 |
| Mar | 1.0 | 0.9 | . | 0.5 |

Table 16: Arithmetic CPUE (kg/potlift) for CRA 2 by fishing year and statistical area, 1979–80 to 2009–10.

| Fishing year | 905 | 906 | 907 | 908 |
|--------------|------|------|------|------|
| 1979–80 | 0.68 | 0.40 | 0.69 | 0.54 |
| 1980–81 | 0.74 | 0.55 | 0.79 | 0.55 |
| 1981–82 | 0.57 | 0.53 | 0.67 | 0.53 |
| 1982–83 | 0.53 | 0.43 | 0.52 | 0.39 |
| 1983–84 | 0.48 | 0.35 | 0.44 | 0.37 |
| 1984–85 | 0.43 | 0.33 | 0.42 | 0.40 |
| 1985–86 | 0.46 | 0.39 | 0.52 | 0.41 |
| 1986–87 | 0.44 | 0.36 | 0.41 | 0.36 |
| 1987–88 | 0.40 | 0.35 | 0.35 | 0.31 |
| 1988–89 | 0.37 | 0.37 | 0.33 | 0.37 |
| 1989–90 | 0.45 | 0.26 | 0.22 | 0.36 |
| 1990–91 | 0.50 | 0.46 | 0.49 | 0.53 |
| 1991–92 | 0.49 | 0.43 | 0.45 | 0.39 |
| 1992–93 | 0.49 | 0.39 | 0.36 | 0.38 |
| 1993–94 | 0.48 | 0.45 | 0.56 | 0.37 |
| 1994–95 | 0.47 | 0.55 | 0.89 | 0.43 |
| 1995–96 | 0.74 | 0.70 | 1.28 | 0.52 |
| 1996–97 | 0.90 | 0.77 | 1.91 | 0.65 |
| 1997–98 | 0.88 | 0.80 | 2.16 | 0.54 |
| 1998–99 | 0.96 | 0.83 | 2.19 | 0.61 |
| 1999–00 | 0.75 | 0.67 | 1.18 | 0.47 |
| 2000–01 | 0.72 | 0.65 | 0.89 | 0.70 |
| 2001–02 | 0.59 | 0.47 | 0.65 | 0.67 |
| 2002–03 | 0.43 | 0.36 | 0.49 | 0.53 |
| 2003–04 | 0.53 | 0.36 | 0.46 | 0.46 |
| 2004–05 | 0.56 | 0.39 | 0.47 | 0.44 |
| 2005–06 | 0.51 | 0.47 | 0.47 | 0.43 |
| 2006–07 | 0.61 | 0.51 | 0.56 | 0.55 |
| 2007–08 | 0.57 | 0.55 | 0.60 | 0.43 |
| 2008–09 | 0.60 | 0.44 | 0.82 | 0.49 |
| 2009–10 | 0.54 | 0.40 | 0.69 | 0.45 |

Table 17: Annual arithmetic, unstandardised, and standardised (with standard error) CPUE indices for CRA 2 (kg/potlift).

| Fishing year | Arithmetic | Unstandardised | Standardised | s.e. |
|--------------|------------|----------------|--------------|-------|
| 1979–80 | 0.52 | 0.53 | 0.52 | 0.024 |
| 1980–81 | 0.61 | 0.62 | 0.62 | 0.023 |
| 1981–82 | 0.55 | 0.52 | 0.52 | 0.022 |
| 1982–83 | 0.45 | 0.43 | 0.43 | 0.023 |
| 1983–84 | 0.39 | 0.36 | 0.35 | 0.023 |
| 1984–85 | 0.37 | 0.35 | 0.34 | 0.023 |
| 1985–86 | 0.43 | 0.40 | 0.40 | 0.024 |
| 1986–87 | 0.37 | 0.37 | 0.36 | 0.025 |
| 1987–88 | 0.34 | 0.32 | 0.31 | 0.025 |
| 1988–89 | 0.36 | 0.35 | 0.34 | 0.028 |
| 1989–90 | 0.38 | 0.35 | 0.35 | 0.040 |
| 1990–91 | 0.49 | 0.49 | 0.47 | 0.029 |
| 1991–92 | 0.43 | 0.44 | 0.43 | 0.029 |
| 1992–93 | 0.40 | 0.42 | 0.42 | 0.032 |
| 1993–94 | 0.44 | 0.44 | 0.44 | 0.031 |
| 1994–95 | 0.54 | 0.52 | 0.53 | 0.036 |
| 1995–96 | 0.69 | 0.72 | 0.76 | 0.040 |
| 1996–97 | 0.83 | 0.81 | 0.90 | 0.043 |
| 1997–98 | 0.85 | 0.93 | 1.01 | 0.045 |
| 1998–99 | 0.91 | 1.02 | 1.10 | 0.044 |
| 1999–00 | 0.71 | 0.79 | 0.83 | 0.043 |
| 2000–01 | 0.71 | 0.74 | 0.74 | 0.040 |
| 2001–02 | 0.56 | 0.53 | 0.53 | 0.037 |
| 2002–03 | 0.44 | 0.43 | 0.42 | 0.036 |
| 2003–04 | 0.43 | 0.43 | 0.42 | 0.036 |
| 2004–05 | 0.43 | 0.47 | 0.47 | 0.036 |
| 2005–06 | 0.47 | 0.49 | 0.48 | 0.036 |
| 2006–07 | 0.54 | 0.56 | 0.56 | 0.036 |
| 2007–08 | 0.53 | 0.55 | 0.55 | 0.038 |
| 2008–09 | 0.53 | 0.51 | 0.50 | 0.039 |
| 2009–10 | 0.49 | 0.47 | 0.46 | 0.037 |

Table 18: Number of vessels by statistical area from CRA 3, 1979–80 to 2009–10. Vessels catching less than 1 t in a year for the entire QMA were excluded.

| Fishing year | 909 | 910 | 911 | All |
|--------------|-----|-----|-----|-----|
| 1979–80 | 8 | 45 | 30 | 70 |
| 1980–81 | 11 | 46 | 36 | 85 |
| 1981–82 | 15 | 39 | 28 | 77 |
| 1982–83 | 16 | 44 | 29 | 85 |
| 1983–84 | 14 | 47 | 32 | 84 |
| 1984–85 | 14 | 49 | 33 | 86 |
| 1985–86 | 14 | 43 | 33 | 83 |
| 1986–87 | 12 | 38 | 29 | 76 |
| 1987–88 | 11 | 42 | 25 | 72 |
| 1988–89 | 11 | 30 | 22 | 58 |
| 1989–90 | 10 | 46 | 24 | 77 |
| 1990–91 | 9 | 30 | 23 | 58 |
| 1991–92 | 8 | 32 | 35 | 65 |
| 1992–93 | 6 | 24 | 32 | 54 |
| 1993–94 | 7 | 24 | 20 | 48 |
| 1994–95 | 7 | 21 | 16 | 41 |
| 1995–96 | 4 | 18 | 12 | 34 |
| 1996–97 | 4 | 18 | 11 | 32 |
| 1997–98 | 6 | 17 | 9 | 30 |
| 1998–99 | 7 | 16 | 9 | 30 |
| 1999–00 | 6 | 17 | 10 | 32 |
| 2000–01 | 5 | 17 | 12 | 33 |
| 2001–02 | 5 | 16 | 13 | 33 |
| 2002–03 | 5 | 20 | 14 | 38 |
| 2003–04 | 5 | 19 | 16 | 39 |
| 2004–05 | 4 | 15 | 16 | 33 |
| 2005–06 | 4 | 15 | 11 | 29 |
| 2006–07 | 4 | 13 | 12 | 28 |
| 2007–08 | 3 | 13 | 12 | 28 |
| 2008–09 | 4 | 13 | 9 | 26 |
| 2009–10 | 3 | 13 | 9 | 24 |

Table 19: Distribution and annual catch by statistical area from CRA 3, 1979–80 to 2009–10.

| Fishing Year | Distribution (%) | | | Annual Catch (t) | | | |
|--------------|------------------|------|------|------------------|-------|-------|-------|
| | 909 | 910 | 911 | 909 | 910 | 911 | CRA 3 |
| 1979–80 | 12.3 | 53.0 | 34.7 | 59.1 | 254.6 | 166.5 | 480.3 |
| 1980–81 | 16.1 | 44.8 | 39.1 | 97.5 | 271.7 | 237.2 | 606.3 |
| 1981–82 | 19.2 | 48.3 | 32.5 | 110.3 | 277.4 | 186.4 | 574.1 |
| 1982–83 | 16.8 | 51.9 | 31.3 | 123.6 | 380.7 | 229.7 | 733.9 |
| 1983–84 | 11.7 | 52.9 | 35.4 | 89.3 | 404.1 | 270.3 | 763.7 |
| 1984–85 | 16.7 | 41.7 | 41.7 | 118.1 | 295.5 | 295.4 | 708.9 |
| 1985–86 | 15.4 | 41.8 | 42.8 | 100.6 | 273.3 | 280.1 | 654.1 |
| 1986–87 | 13.2 | 51.1 | 35.7 | 75.3 | 291.2 | 203.5 | 570.0 |
| 1987–88 | 19.8 | 47.6 | 32.6 | 70.5 | 169.2 | 115.8 | 355.4 |
| 1988–89 | 14.9 | 42.0 | 43.1 | 42.1 | 118.4 | 121.3 | 281.8 |
| 1989–90 | 11.8 | 52.8 | 35.4 | 45.4 | 203.7 | 136.8 | 385.9 |
| 1990–91 | 11.0 | 49.8 | 39.3 | 35.6 | 161.2 | 127.2 | 324.1 |
| 1991–92 | 11.8 | 41.1 | 47.1 | 31.7 | 110.5 | 126.6 | 268.8 |
| 1992–93 | 12.1 | 40.1 | 47.9 | 23.1 | 76.7 | 91.7 | 191.5 |
| 1993–94 | 17.9 | 46.1 | 36.0 | 32.2 | 82.7 | 64.5 | 179.5 |
| 1994–95 | 16.8 | 47.7 | 35.5 | 26.9 | 76.7 | 57.1 | 160.7 |
| 1995–96 | 13.4 | 54.4 | 32.2 | 21.0 | 85.3 | 50.6 | 156.9 |
| 1996–97 | 14.9 | 55.6 | 29.4 | 30.3 | 113.3 | 59.9 | 203.5 |
| 1997–98 | 17.2 | 54.9 | 27.9 | 38.4 | 122.6 | 62.4 | 223.4 |
| 1998–99 | 17.3 | 59.3 | 23.4 | 56.4 | 193.0 | 76.4 | 325.7 |
| 1999–00 | 17.2 | 54.6 | 28.1 | 56.2 | 178.2 | 91.7 | 326.1 |
| 2000–01 | 15.0 | 45.4 | 39.6 | 49.3 | 149.0 | 129.8 | 328.1 |
| 2001–02 | 15.5 | 35.5 | 49.1 | 44.8 | 102.8 | 142.2 | 289.9 |
| 2002–03 | 12.0 | 36.3 | 51.8 | 34.8 | 105.7 | 150.8 | 291.3 |
| 2003–04 | 13.9 | 36.1 | 50.0 | 30.0 | 77.9 | 108.0 | 215.9 |
| 2004–05 | 18.5 | 41.0 | 40.4 | 30.1 | 66.4 | 65.5 | 162.0 |
| 2005–06 | 13.5 | 45.6 | 40.9 | 22.9 | 77.6 | 69.6 | 170.1 |
| 2006–07 | 15.3 | 41.2 | 43.5 | 27.3 | 73.6 | 77.8 | 178.7 |
| 2007–08 | 16.0 | 45.8 | 38.2 | 27.6 | 78.9 | 66.0 | 172.4 |
| 2008–09 | 20.9 | 44.9 | 34.2 | 39.6 | 85.2 | 65.0 | 189.8 |
| 2009–10 | 15.9 | 51.1 | 33.0 | 26.1 | 83.8 | 54.1 | 164.0 |

Table 20: Distribution and annual potlifts by statistical area from CRA 3, 1979–80 to 2009–10.

| Fishing Year | Distribution (%) | | | Annual Potlifts (000's) | | | |
|--------------|------------------|------|------|-------------------------|-------|-------|-------|
| | 909 | 910 | 911 | 909 | 910 | 911 | CRA 3 |
| 1979–80 | 11.2 | 50.8 | 38.0 | 58.8 | 267.1 | 199.5 | 525.4 |
| 1980–81 | 12.5 | 49.4 | 38.1 | 81.5 | 322.9 | 248.8 | 653.2 |
| 1981–82 | 13.5 | 50.4 | 36.1 | 83.3 | 311.6 | 223.1 | 618.0 |
| 1982–83 | 16.9 | 53.5 | 29.6 | 129.1 | 408.6 | 226.5 | 764.3 |
| 1983–84 | 12.6 | 55.9 | 31.6 | 111.4 | 494.4 | 279.2 | 885.0 |
| 1984–85 | 16.4 | 49.2 | 34.4 | 154.3 | 462.4 | 322.8 | 939.6 |
| 1985–86 | 17.0 | 48.0 | 35.0 | 152.5 | 430.4 | 313.6 | 896.5 |
| 1986–87 | 12.9 | 53.0 | 34.1 | 109.2 | 448.7 | 288.4 | 846.3 |
| 1987–88 | 17.7 | 53.7 | 28.7 | 143.5 | 435.9 | 232.7 | 812.1 |
| 1988–89 | 14.3 | 53.3 | 32.4 | 90.0 | 334.9 | 203.3 | 628.3 |
| 1989–90 | 10.8 | 62.7 | 26.5 | 81.3 | 474.1 | 200.4 | 755.9 |
| 1990–91 | 10.8 | 53.7 | 35.6 | 77.6 | 387.0 | 256.3 | 720.9 |
| 1991–92 | 12.1 | 47.6 | 40.4 | 99.9 | 393.0 | 333.5 | 826.3 |
| 1992–93 | 9.8 | 41.7 | 48.5 | 68.2 | 289.0 | 336.3 | 693.5 |
| 1993–94 | 14.6 | 48.2 | 37.2 | 54.8 | 181.5 | 139.9 | 376.2 |
| 1994–95 | 14.1 | 49.4 | 36.5 | 25.9 | 90.9 | 67.1 | 183.9 |
| 1995–96 | 14.2 | 45.0 | 40.8 | 17.1 | 54.3 | 49.2 | 120.7 |
| 1996–97 | 13.0 | 52.4 | 34.6 | 15.1 | 60.7 | 40.0 | 115.8 |
| 1997–98 | 14.3 | 56.9 | 28.8 | 14.7 | 58.4 | 29.5 | 102.6 |
| 1998–99 | 14.6 | 61.7 | 23.7 | 29.1 | 123.1 | 47.4 | 199.5 |
| 1999–00 | 15.9 | 56.9 | 27.3 | 33.2 | 118.8 | 57.0 | 209.0 |
| 2000–01 | 12.3 | 58.3 | 29.3 | 34.0 | 160.9 | 80.9 | 275.8 |
| 2001–02 | 14.6 | 47.5 | 38.0 | 44.7 | 145.6 | 116.4 | 306.6 |
| 2002–03 | 10.8 | 48.5 | 40.7 | 43.1 | 193.7 | 162.7 | 399.5 |
| 2003–04 | 9.8 | 37.8 | 52.4 | 34.0 | 130.5 | 181.0 | 345.5 |
| 2004–05 | 11.8 | 38.7 | 49.5 | 36.8 | 120.5 | 154.4 | 311.7 |
| 2005–06 | 10.2 | 47.9 | 42.0 | 27.9 | 131.0 | 114.9 | 273.8 |
| 2006–07 | 8.9 | 50.1 | 41.0 | 27.5 | 154.9 | 126.5 | 308.9 |
| 2007–08 | 9.4 | 45.5 | 45.1 | 27.0 | 130.8 | 129.5 | 287.3 |
| 2008–09 | 13.9 | 44.2 | 42.0 | 37.3 | 118.8 | 112.9 | 269.0 |
| 2009–10 | 11.5 | 48.6 | 40.0 | 22.2 | 93.8 | 77.2 | 193.1 |

Table 21: Percentage of annual catch by month from CRA 3, 1979–80 to 2009–10. An 'x' indicates fewer than 3 vessels, and a '.' indicates no fishing, in the year/month cell.

| Fishing year | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar |
|--------------|------|-----|------|------|------|------|------|------|------|------|------|------|
| 1979–80 | 1.4 | 0.3 | 5.3 | 7.2 | 3.1 | 4.8 | 14.8 | 26.6 | 16.7 | 12.1 | 4.8 | 2.9 |
| 1980–81 | 2.4 | 0.5 | 3.3 | 8.1 | 6.5 | 4.8 | 11.6 | 18.5 | 18.0 | 14.7 | 6.4 | 5.2 |
| 1981–82 | 2.6 | 0.3 | 4.7 | 9.5 | 4.4 | 5.3 | 8.4 | 12.3 | 23.4 | 16.1 | 5.7 | 7.3 |
| 1982–83 | 1.6 | 0.5 | 4.7 | 7.6 | 7.0 | 3.8 | 8.7 | 24.4 | 17.7 | 11.4 | 6.2 | 6.4 |
| 1983–84 | 2.4 | 1.2 | 9.1 | 7.4 | 7.0 | 5.2 | 11.2 | 19.6 | 13.9 | 12.2 | 5.3 | 5.5 |
| 1984–85 | 1.5 | 0.4 | 11.2 | 6.8 | 3.7 | 3.7 | 17.1 | 21.5 | 15.7 | 11.0 | 5.7 | 1.5 |
| 1985–86 | 1.8 | 0.2 | 6.1 | 8.1 | 4.0 | 3.4 | 12.8 | 20.2 | 17.5 | 13.1 | 8.9 | 3.8 |
| 1986–87 | 1.4 | 0.1 | 4.9 | 5.3 | 2.7 | 3.8 | 18.1 | 26.0 | 20.1 | 11.5 | 4.5 | 1.5 |
| 1987–88 | 1.2 | 0.9 | 7.7 | 4.7 | 5.2 | 4.4 | 22.5 | 15.6 | 19.4 | 10.8 | 4.7 | 2.8 |
| 1988–89 | 1.1 | 0.4 | 4.4 | 4.1 | 2.3 | 8.3 | 22.3 | 17.4 | 16.9 | 9.1 | 5.0 | 8.7 |
| 1989–90 | 1.9 | 1.1 | 3.6 | 4.1 | 1.7 | 6.4 | 10.1 | 21.8 | 23.1 | 14.8 | 5.9 | 5.4 |
| 1990–91 | 2.0 | 1.1 | 4.0 | 7.3 | 3.8 | 6.5 | 19.0 | 22.3 | 16.7 | 8.3 | 6.2 | 2.8 |
| 1991–92 | 3.7 | 0.5 | 2.4 | 7.9 | 5.2 | 4.2 | 14.4 | 21.2 | 20.6 | 11.2 | 5.0 | 3.7 |
| 1992–93 | 1.6 | 0.8 | 6.5 | 6.3 | 4.8 | 1.9 | 7.1 | 19.0 | 22.5 | 17.8 | 5.9 | 5.9 |
| 1993–94 | 3.1 | 2.8 | 27.1 | 23.6 | 8.4 | x | x | x | x | x | 29.5 | 4.1 |
| 1994–95 | 7.5 | . | 42.9 | 24.0 | 14.9 | x | x | x | x | x | 7.7 | 1.6 |
| 1995–96 | 6.1 | x | 38.2 | 37.7 | 13.4 | x | x | x | x | . | 3.3 | 0.6 |
| 1996–97 | 9.2 | . | 37.5 | 35.5 | 15.2 | 0.5 | x | x | . | . | x | 0.7 |
| 1997–98 | 7.2 | . | 32.3 | 42.9 | 16.2 | x | . | . | . | . | x | 0.6 |
| 1998–99 | 14.4 | . | 27.9 | 24.5 | 21.8 | x | x | . | x | . | 8.5 | 0.9 |
| 1999–00 | 4.6 | x | 32.1 | 31.5 | 18.3 | x | x | . | . | . | 8.8 | 3.0 |
| 2000–01 | 8.4 | . | 24.2 | 20.0 | 13.4 | 10.8 | x | . | . | x | 15.5 | 7.8 |
| 2001–02 | 9.1 | x | 25.7 | 16.9 | 11.7 | x | x | . | . | x | 17.3 | 18.6 |
| 2002–03 | 2.2 | . | 24.8 | 16.9 | 8.4 | 5.8 | 8.0 | 6.6 | 3.7 | 5.9 | 11.1 | 6.7 |
| 2003–04 | 1.1 | . | 28.6 | 15.7 | 5.2 | 5.1 | 8.0 | 14.4 | 7.2 | 4.5 | 4.9 | 5.3 |
| 2004–05 | 1.7 | . | 30.8 | 13.1 | 8.2 | 1.2 | 4.4 | 11.3 | 5.8 | 9.0 | 8.5 | 6.0 |
| 2005–06 | 0.3 | . | 21.2 | 21.2 | 7.9 | 3.1 | 9.2 | 14.3 | 8.1 | 4.5 | 7.1 | 3.1 |
| 2006–07 | 1.8 | . | 16.3 | 16.2 | 13.1 | 2.6 | 7.5 | 15.5 | 5.0 | 7.5 | 6.3 | 8.3 |
| 2007–08 | 0.6 | . | 15.7 | 23.8 | 10.0 | 2.6 | 6.0 | 15.5 | 5.5 | 4.8 | 7.5 | 8.0 |
| 2008–09 | 2.7 | . | 21.6 | 21.1 | 11.3 | 1.4 | 3.8 | 6.1 | 4.7 | 12.2 | 12.3 | 2.7 |
| 2009–10 | . | . | 11.8 | 29.8 | 20.2 | 2.8 | 1.6 | 3.6 | 4.4 | 16.8 | 8.7 | 0.3 |

Table 22: Percentage of catch from CRA 3 by statistical area and month for 2009–10. An ‘x’ indicates fewer than 3 vessels in the month/statistical area cell (5 instances representing 2.7% of the catch). A ‘.’ indicates no fishing in the month/statistical area cell.

| Month | 909 | 910 | 911 |
|-------|-----|------|-----|
| Apr | . | . | . |
| May | . | . | . |
| Jun | x | 8.9 | 1.1 |
| Jul | 6.9 | 19.4 | 3.6 |
| Aug | 3.5 | 12.0 | 4.7 |
| Sep | . | x | 2.8 |
| Oct | . | . | 1.6 |
| Nov | . | . | 3.6 |
| Dec | . | . | 4.4 |
| Jan | 3.1 | 6.3 | 7.4 |
| Feb | x | 4.4 | 3.7 |
| Mar | . | x | x |

Table 23: Arithmetic CPUE (kg/potlift) for CRA 3 by fishing year and statistical area, 1979–80 to 2009–10.

| Fishing year | 909 | 910 | 911 |
|--------------|------|------|------|
| 1979–80 | 1.01 | 0.95 | 0.84 |
| 1980–81 | 1.20 | 0.84 | 0.95 |
| 1981–82 | 1.32 | 0.89 | 0.84 |
| 1982–83 | 0.96 | 0.93 | 1.01 |
| 1983–84 | 0.80 | 0.82 | 0.97 |
| 1984–85 | 0.77 | 0.64 | 0.92 |
| 1985–86 | 0.66 | 0.64 | 0.89 |
| 1986–87 | 0.69 | 0.65 | 0.71 |
| 1987–88 | 0.49 | 0.39 | 0.50 |
| 1988–89 | 0.47 | 0.35 | 0.60 |
| 1989–90 | 0.56 | 0.43 | 0.68 |
| 1990–91 | 0.46 | 0.42 | 0.50 |
| 1991–92 | 0.32 | 0.28 | 0.38 |
| 1992–93 | 0.34 | 0.27 | 0.27 |
| 1993–94 | 0.59 | 0.46 | 0.46 |
| 1994–95 | 1.04 | 0.84 | 0.85 |
| 1995–96 | 1.22 | 1.57 | 1.03 |
| 1996–97 | 2.02 | 1.87 | 1.50 |
| 1997–98 | 2.62 | 2.10 | 2.12 |
| 1998–99 | 1.94 | 1.57 | 1.61 |
| 1999–00 | 1.69 | 1.50 | 1.61 |
| 2000–01 | 1.45 | 0.93 | 1.61 |
| 2001–02 | 1.00 | 0.71 | 1.22 |
| 2002–03 | 0.81 | 0.55 | 0.93 |
| 2003–04 | 0.88 | 0.60 | 0.60 |
| 2004–05 | 0.82 | 0.55 | 0.42 |
| 2005–06 | 0.82 | 0.59 | 0.61 |
| 2006–07 | 0.99 | 0.48 | 0.62 |
| 2007–08 | 1.02 | 0.60 | 0.51 |
| 2008–09 | 1.06 | 0.72 | 0.58 |
| 2009–10 | 1.18 | 0.89 | 0.70 |

Table 24: Annual arithmetic, unstandardised, and standardised (with standard error) CPUE indices for CRA 3 (kg/potlift).

| Fishing year | Arithmetic | Unstandardised | Standardised | s.e. |
|--------------|------------|----------------|--------------|-------|
| 1979–80 | 0.91 | 0.85 | 0.80 | 0.022 |
| 1980–81 | 0.93 | 0.92 | 0.89 | 0.021 |
| 1981–82 | 0.93 | 0.91 | 0.88 | 0.021 |
| 1982–83 | 0.96 | 0.97 | 0.95 | 0.021 |
| 1983–84 | 0.86 | 0.88 | 0.87 | 0.020 |
| 1984–85 | 0.75 | 0.72 | 0.70 | 0.020 |
| 1985–86 | 0.73 | 0.69 | 0.67 | 0.021 |
| 1986–87 | 0.67 | 0.61 | 0.58 | 0.022 |
| 1987–88 | 0.44 | 0.42 | 0.41 | 0.022 |
| 1988–89 | 0.45 | 0.44 | 0.43 | 0.025 |
| 1989–90 | 0.51 | 0.46 | 0.46 | 0.023 |
| 1990–91 | 0.45 | 0.43 | 0.43 | 0.023 |
| 1991–92 | 0.33 | 0.31 | 0.30 | 0.022 |
| 1992–93 | 0.28 | 0.26 | 0.25 | 0.022 |
| 1993–94 | 0.48 | 0.45 | 0.50 | 0.033 |
| 1994–95 | 0.87 | 0.88 | 0.92 | 0.043 |
| 1995–96 | 1.30 | 1.37 | 1.42 | 0.048 |
| 1996–97 | 1.76 | 1.79 | 1.90 | 0.049 |
| 1997–98 | 2.18 | 2.49 | 2.67 | 0.052 |
| 1998–99 | 1.63 | 1.86 | 2.03 | 0.047 |
| 1999–00 | 1.56 | 1.75 | 1.89 | 0.045 |
| 2000–01 | 1.19 | 1.26 | 1.40 | 0.040 |
| 2001–02 | 0.95 | 1.00 | 1.07 | 0.040 |
| 2002–03 | 0.73 | 0.72 | 0.73 | 0.032 |
| 2003–04 | 0.62 | 0.60 | 0.57 | 0.032 |
| 2004–05 | 0.52 | 0.51 | 0.49 | 0.035 |
| 2005–06 | 0.62 | 0.62 | 0.59 | 0.035 |
| 2006–07 | 0.58 | 0.59 | 0.57 | 0.034 |
| 2007–08 | 0.60 | 0.63 | 0.60 | 0.036 |
| 2008–09 | 0.71 | 0.72 | 0.70 | 0.041 |
| 2009–10 | 0.85 | 0.92 | 0.91 | 0.046 |

Table 25: Number of vessels by statistical area from CRA 4, 1979–80 to 2009–10. Vessels catching less than 1 t in a year for the entire QMA were excluded. A ‘.’ indicates no fishing in the statistical area/fishing year cell. A ‘0’ indicates that fishing took place but no qualified vessels fished.

| Fishing year | 912 | 913 | 914 | 915 | 934 | All |
|--------------|-----|-----|-----|-----|-----|-----|
| 1979–80 | 25 | 32 | 31 | 17 | 0 | 86 |
| 1980–81 | 26 | 20 | 30 | 19 | 0 | 86 |
| 1981–82 | 30 | 25 | 27 | 17 | 0 | 88 |
| 1982–83 | 28 | 22 | 29 | 18 | 0 | 89 |
| 1983–84 | 26 | 23 | 32 | 17 | 1 | 89 |
| 1984–85 | 25 | 24 | 32 | 19 | 1 | 90 |
| 1985–86 | 27 | 21 | 39 | 17 | 1 | 88 |
| 1986–87 | 25 | 23 | 35 | 17 | 2 | 88 |
| 1987–88 | 24 | 19 | 35 | 17 | 0 | 85 |
| 1988–89 | 22 | 24 | 42 | 16 | 0 | 87 |
| 1989–90 | 33 | 40 | 57 | 19 | 0 | 131 |
| 1990–91 | 26 | 25 | 32 | 18 | 0 | 85 |
| 1991–92 | 25 | 33 | 35 | 13 | 1 | 88 |
| 1992–93 | 31 | 29 | 33 | 11 | 1 | 94 |
| 1993–94 | 32 | 33 | 38 | 13 | 2 | 100 |
| 1994–95 | 23 | 29 | 41 | 14 | 4 | 89 |
| 1995–96 | 19 | 21 | 36 | 14 | 2 | 80 |
| 1996–97 | 19 | 15 | 35 | 16 | 1 | 74 |
| 1997–98 | 18 | 15 | 35 | 9 | . | 72 |
| 1998–99 | 22 | 15 | 32 | 11 | . | 65 |
| 1999–00 | 18 | 15 | 33 | 12 | 1 | 70 |
| 2000–01 | 21 | 13 | 25 | 11 | 1 | 61 |
| 2001–02 | 22 | 18 | 25 | 13 | 2 | 62 |
| 2002–03 | 16 | 16 | 25 | 13 | 1 | 65 |
| 2003–04 | 15 | 16 | 27 | 13 | . | 65 |
| 2004–05 | 16 | 16 | 27 | 10 | 2 | 61 |
| 2005–06 | 12 | 12 | 25 | 12 | 2 | 54 |
| 2006–07 | 14 | 15 | 33 | 11 | 4 | 66 |
| 2007–08 | 10 | 11 | 24 | 11 | 6 | 53 |
| 2008–09 | 10 | 13 | 18 | 7 | 1 | 42 |
| 2009–10 | 10 | 12 | 16 | 10 | 1 | 43 |

Table 26: Distribution and annual catch by statistical area from CRA 4, 1979–80 to 2009–10. An ‘x’ indicates fewer than 3 vessels, and a ‘.’ indicates no fishing, in the year/statistical area cell.

| Fishing Year | Distribution (%) | | | | | Annual Catch (t) | | | | | |
|-----------------|------------------|------|------|------|-----|------------------|-------|-------|-------|------|-------|
| | 912 | 913 | 914 | 915 | 934 | 912 | 913 | 914 | 915 | 934 | CRA 4 |
| 1979–80 | 21.4 | 30.2 | 38.2 | 10.1 | x | 107.6 | 152.3 | 192.3 | 50.9 | x | 503.7 |
| 1980–81 | 32.4 | 21.7 | 33.5 | 12.2 | 0.2 | 197.1 | 131.6 | 203.6 | 74.4 | 1.0 | 607.7 |
| 1981–82 | 35.6 | 22.6 | 29.3 | 12.4 | x | 218.9 | 138.9 | 180.1 | 76.4 | x | 614.2 |
| 1982–83 | 25.7 | 21.8 | 37.6 | 14.8 | x | 219.6 | 186.1 | 321.1 | 125.9 | x | 853.5 |
| 1983–84 | 19.8 | 27.8 | 40.0 | 12.2 | x | 185.9 | 261.7 | 376.5 | 115.0 | x | 940.4 |
| 1984–85 | 25.1 | 25.7 | 37.1 | 11.6 | x | 216.6 | 222.1 | 320.0 | 100.5 | x | 863.3 |
| 1985–86 | 27.0 | 21.2 | 36.7 | 14.7 | 0.4 | 228.9 | 180.1 | 310.9 | 124.3 | 3.8 | 848.0 |
| 1986–87 | 21.9 | 29.3 | 37.4 | 11.2 | x | 207.3 | 277.8 | 354.0 | 106.0 | x | 947.5 |
| 1987–88 | 19.3 | 25.0 | 44.3 | 11.4 | x | 179.2 | 232.5 | 411.3 | 106.2 | x | 929.3 |
| 1988–89 | 17.6 | 27.0 | 45.5 | 9.9 | x | 134.7 | 206.7 | 347.9 | 76.1 | x | 765.3 |
| 1989–90 | 23.0 | 35.3 | 33.8 | 7.9 | x | 174.5 | 267.4 | 256.3 | 60.1 | x | 758.4 |
| 1990–91 | 28.3 | 29.5 | 31.7 | 10.5 | x | 147.9 | 154.2 | 165.7 | 54.8 | x | 523.2 |
| 1991–92 | 31.6 | 29.3 | 30.0 | 8.8 | x | 167.5 | 155.3 | 159.3 | 46.9 | x | 530.5 |
| 1992–93 | 30.1 | 26.3 | 32.6 | 10.6 | 0.4 | 149.3 | 130.4 | 161.5 | 52.6 | 1.8 | 495.7 |
| 1993–94 | 23.8 | 28.8 | 36.7 | 9.9 | x | 116.9 | 141.5 | 180.6 | 48.8 | x | 492.0 |
| 1994–95 | 21.9 | 24.5 | 41.7 | 9.7 | 2.1 | 107.5 | 120.3 | 204.6 | 47.5 | 10.5 | 490.4 |
| 1995–96 | 22.9 | 23.1 | 46.8 | 6.3 | 0.9 | 111.4 | 112.5 | 228.2 | 30.6 | 4.5 | 487.2 |
| 1996–97 | 24.6 | 19.6 | 46.0 | 9.2 | x | 121.3 | 96.7 | 227.2 | 45.2 | x | 493.6 |
| 1997–98 | 25.5 | 22.0 | 45.0 | 7.5 | . | 125.2 | 107.7 | 220.6 | 36.9 | . | 490.4 |
| 1998–99 | 31.3 | 21.9 | 38.2 | 8.5 | . | 154.6 | 108.2 | 188.5 | 42.0 | . | 493.3 |
| 1999–00 | 26.5 | 22.4 | 39.7 | 10.6 | 0.8 | 153.0 | 129.2 | 228.7 | 60.8 | 4.8 | 576.5 |
| 2000–01 | 26.9 | 23.5 | 37.8 | 10.9 | 0.9 | 154.5 | 134.6 | 216.8 | 62.7 | 5.2 | 573.8 |
| 2001–02 | 22.2 | 21.6 | 42.3 | 12.8 | 1.3 | 127.3 | 123.7 | 242.6 | 73.2 | 7.2 | 574.1 |
| 2002–03 | 23.4 | 27.0 | 36.5 | 12.5 | x | 134.8 | 155.6 | 210.1 | 72.0 | x | 575.7 |
| 2003–04 | 19.3 | 31.9 | 40.8 | 8.0 | . | 110.9 | 183.9 | 234.8 | 46.1 | . | 575.7 |
| 2004–05 | 15.6 | 28.4 | 48.8 | 6.3 | x | 88.7 | 162.1 | 277.9 | 35.8 | x | 569.9 |
| 2005–06 | 9.7 | 21.1 | 55.0 | 12.9 | x | 48.9 | 106.5 | 277.2 | 65.0 | x | 504.1 |
| 2006–07 | 12.1 | 23.3 | 43.9 | 16.9 | 3.9 | 53.6 | 103.4 | 195.3 | 74.9 | 17.4 | 444.6 |
| 2007–08 | 15.9 | 21.0 | 38.4 | 21.1 | 3.6 | 50.1 | 66.1 | 121.1 | 66.6 | 11.3 | 315.2 |
| 2008–09 | 18.8 | 28.8 | 35.6 | 14.5 | x | 46.8 | 71.9 | 88.9 | 36.3 | x | 249.4 |
| 2009–10 | 17.1 | 25.9 | 33.3 | 22.4 | x | 44.9 | 67.7 | 87.3 | 58.7 | x | 262.0 |

Table 27: Distribution and annual potlifts by statistical area from CRA 4, 1979–80 to 2009–10. An ‘x’ indicates fewer than 3 vessels, and a ‘.’ indicates no fishing, in the year/statistical area cell.

| Fishing Year | Distribution (%) | | | | | Annual Potlifts (000's) | | | | | |
|-----------------|------------------|------|------|------|-----|-------------------------|-------|-------|-------|------|---------|
| | 912 | 913 | 914 | 915 | 934 | 912 | 913 | 914 | 915 | 934 | CRA 4 |
| 1979–80 | 20.1 | 27.0 | 37.1 | 15.8 | x | 116.1 | 155.9 | 214.1 | 91.1 | x | 577.6 |
| 1980–81 | 25.5 | 23.2 | 33.6 | 17.5 | 0.1 | 187.1 | 170.2 | 246.3 | 128.0 | 1.1 | 732.7 |
| 1981–82 | 27.0 | 22.6 | 33.0 | 17.4 | x | 200.3 | 168.1 | 244.9 | 128.9 | x | 742.4 |
| 1982–83 | 26.3 | 21.2 | 31.8 | 20.6 | x | 244.8 | 197.7 | 297.0 | 192.1 | x | 932.6 |
| 1983–84 | 23.2 | 24.7 | 34.3 | 17.4 | x | 241.3 | 257.2 | 357.1 | 180.4 | x | 1,039.5 |
| 1984–85 | 22.6 | 23.8 | 36.9 | 16.3 | x | 252.4 | 265.5 | 412.0 | 182.1 | x | 1,116.5 |
| 1985–86 | 24.7 | 20.0 | 37.1 | 17.7 | 0.4 | 288.6 | 232.8 | 433.2 | 206.6 | 5.0 | 1,166.3 |
| 1986–87 | 21.6 | 26.8 | 35.8 | 15.5 | x | 243.8 | 302.5 | 403.2 | 174.2 | x | 1,127.0 |
| 1987–88 | 21.6 | 23.3 | 40.8 | 14.2 | x | 275.0 | 297.2 | 520.5 | 181.4 | x | 1,274.3 |
| 1988–89 | 21.4 | 26.4 | 40.7 | 11.6 | x | 264.7 | 327.3 | 503.7 | 143.1 | x | 1,238.9 |
| 1989–90 | 21.2 | 28.1 | 39.2 | 11.5 | x | 271.4 | 359.3 | 500.6 | 146.5 | x | 1,278.5 |
| 1990–91 | 18.7 | 27.9 | 40.0 | 13.3 | x | 197.2 | 293.9 | 421.9 | 140.1 | x | 1,054.0 |
| 1991–92 | 21.3 | 27.3 | 39.6 | 11.6 | x | 226.2 | 289.7 | 419.7 | 122.8 | x | 1,061.2 |
| 1992–93 | 24.8 | 27.0 | 35.8 | 12.0 | 0.4 | 236.9 | 257.6 | 341.0 | 114.1 | 3.9 | 953.6 |
| 1993–94 | 25.1 | 25.7 | 34.3 | 14.1 | x | 212.4 | 217.9 | 290.8 | 119.3 | x | 847.8 |
| 1994–95 | 19.3 | 24.5 | 37.9 | 14.7 | 3.6 | 137.1 | 173.7 | 268.8 | 104.3 | 25.3 | 709.2 |
| 1995–96 | 20.7 | 24.1 | 44.0 | 9.1 | 2.1 | 117.5 | 136.8 | 249.4 | 51.6 | 12.1 | 567.4 |
| 1996–97 | 20.8 | 19.5 | 45.9 | 12.8 | x | 99.9 | 93.6 | 220.7 | 61.4 | x | 481.0 |
| 1997–98 | 18.5 | 18.2 | 52.2 | 11.1 | . | 73.2 | 72.1 | 207.0 | 44.0 | . | 396.3 |
| 1998–99 | 23.9 | 11.5 | 49.1 | 15.5 | . | 89.9 | 43.0 | 184.5 | 58.2 | . | 375.7 |
| 1999–00 | 24.3 | 15.8 | 47.8 | 10.8 | 1.3 | 110.8 | 71.9 | 217.6 | 49.3 | 5.8 | 455.4 |
| 2000–01 | 29.1 | 15.5 | 41.8 | 12.4 | 1.2 | 132.9 | 70.7 | 190.8 | 56.3 | 5.5 | 456.1 |
| 2001–02 | 25.2 | 19.5 | 41.4 | 12.2 | 1.6 | 136.7 | 105.8 | 223.8 | 66.1 | 8.9 | 541.3 |
| 2002–03 | 23.6 | 24.9 | 39.1 | 11.3 | x | 124.7 | 131.5 | 206.6 | 59.5 | x | 528.0 |
| 2003–04 | 20.0 | 26.8 | 43.1 | 10.1 | . | 100.5 | 135.0 | 216.9 | 51.0 | . | 503.5 |
| 2004–05 | 20.3 | 23.7 | 46.2 | 9.0 | x | 115.4 | 134.7 | 262.9 | 51.4 | x | 569.3 |
| 2005–06 | 14.1 | 19.7 | 51.5 | 14.0 | x | 81.4 | 113.3 | 296.5 | 80.8 | x | 575.4 |
| 2006–07 | 13.4 | 19.7 | 49.6 | 15.7 | 1.6 | 92.0 | 135.8 | 341.2 | 107.9 | 11.2 | 687.9 |
| 2007–08 | 14.4 | 17.8 | 49.2 | 16.0 | 2.6 | 76.2 | 93.9 | 260.3 | 84.3 | 14.0 | 528.7 |
| 2008–09 | 18.7 | 24.0 | 43.7 | 12.4 | x | 66.1 | 84.8 | 154.3 | 43.7 | x | 352.7 |
| 2009–10 | 22.3 | 25.2 | 32.9 | 18.9 | x | 57.4 | 64.9 | 84.6 | 48.5 | x | 257.2 |

Table 28: Percentage of annual catch by month from CRA 4, 1979–80 to 2009–10. An ‘x’ indicates fewer than 3 vessels, and a ‘.’ indicates no fishing, in the month/year cell.

| Fishing year | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar |
|--------------|-----|------|------|------|------|------|------|------|------|------|------|-----|
| 1979–80 | 0.3 | 0.5 | 9.4 | 9.8 | 4.6 | 7.1 | 13.5 | 23.4 | 13.1 | 10.8 | 5.3 | 2.1 |
| 1980–81 | 0.8 | 3.3 | 8.6 | 8.3 | 7.1 | 8.8 | 14.3 | 13.4 | 12.8 | 13.5 | 6.8 | 2.4 |
| 1981–82 | 1.4 | 3.2 | 7.4 | 9.6 | 5.8 | 10.0 | 11.8 | 10.0 | 13.5 | 14.9 | 9.0 | 3.6 |
| 1982–83 | 0.4 | 5.4 | 6.6 | 8.5 | 8.2 | 6.9 | 11.7 | 13.8 | 15.3 | 12.9 | 8.2 | 2.3 |
| 1983–84 | 0.4 | 3.3 | 13.1 | 8.4 | 8.7 | 5.8 | 12.5 | 16.4 | 11.5 | 11.8 | 5.7 | 2.6 |
| 1984–85 | 0.2 | 6.3 | 13.8 | 7.1 | 4.3 | 7.8 | 15.4 | 16.1 | 13.4 | 9.9 | 4.6 | 1.1 |
| 1985–86 | 0.4 | 1.4 | 11.4 | 8.3 | 5.3 | 5.3 | 12.9 | 14.8 | 17.5 | 14.6 | 6.5 | 1.6 |
| 1986–87 | 0.3 | 3.4 | 10.7 | 4.9 | 2.8 | 6.6 | 17.8 | 17.3 | 17.0 | 14.0 | 4.3 | 1.1 |
| 1987–88 | 0.5 | 4.4 | 10.2 | 3.7 | 6.4 | 4.8 | 22.7 | 18.2 | 14.4 | 9.3 | 4.0 | 1.5 |
| 1988–89 | 0.5 | 5.1 | 8.9 | 4.4 | 3.4 | 9.3 | 16.9 | 21.5 | 14.4 | 8.5 | 4.3 | 2.6 |
| 1989–90 | 1.4 | 3.3 | 8.0 | 6.7 | 2.2 | 9.0 | 11.5 | 19.6 | 15.1 | 14.5 | 6.0 | 2.6 |
| 1990–91 | 0.3 | 2.7 | 8.1 | 6.4 | 2.7 | 11.4 | 19.2 | 18.3 | 13.6 | 8.6 | 7.0 | 1.6 |
| 1991–92 | 1.6 | 4.3 | 5.7 | 11.7 | 4.7 | 4.7 | 17.0 | 17.9 | 15.2 | 11.6 | 3.8 | 1.7 |
| 1992–93 | 0.9 | 2.6 | 17.2 | 8.7 | 3.7 | 4.0 | 11.5 | 17.2 | 16.2 | 10.7 | 4.7 | 2.5 |
| 1993–94 | 1.1 | 14.2 | 17.1 | 9.5 | 3.7 | 1.9 | 15.3 | 15.3 | 14.5 | 4.6 | 2.1 | 0.6 |
| 1994–95 | 3.2 | 17.5 | 13.3 | 10.3 | 6.6 | 4.3 | 13.1 | 17.2 | 8.2 | 4.3 | 0.8 | 1.2 |
| 1995–96 | 3.9 | 25.1 | 12.1 | 11.9 | 6.1 | 11.8 | 13.2 | 7.3 | 3.1 | 1.6 | 1.8 | 2.1 |
| 1996–97 | 9.3 | 30.3 | 18.9 | 11.1 | 11.2 | 10.7 | 4.4 | 2.1 | 0.7 | 0.5 | x | 1.1 |
| 1997–98 | 7.3 | 30.6 | 19.3 | 18.3 | 10.0 | 8.4 | 3.2 | 0.2 | 0.5 | 1.5 | 0.3 | 0.5 |
| 1998–99 | 4.3 | 21.5 | 13.2 | 19.3 | 18.2 | 14.0 | 4.6 | 1.4 | 0.5 | 0.8 | 1.7 | 0.5 |
| 1999–00 | 2.4 | 19.7 | 20.4 | 19.9 | 11.5 | 19.4 | 2.1 | 0.6 | 2.9 | 0.5 | 0.3 | 0.4 |
| 2000–01 | 5.5 | 24.3 | 24.4 | 16.6 | 6.2 | 10.8 | 6.4 | 2.9 | 0.7 | 0.4 | 0.8 | 1.1 |
| 2001–02 | 5.9 | 14.2 | 25.2 | 11.9 | 9.2 | 16.9 | 5.3 | 4.6 | 2.0 | 2.4 | 1.1 | 1.3 |
| 2002–03 | 5.6 | 11.9 | 22.9 | 13.6 | 9.1 | 13.8 | 2.7 | 5.5 | 2.9 | 6.2 | 4.2 | 1.5 |
| 2003–04 | 4.6 | 9.1 | 17.8 | 15.4 | 6.2 | 10.9 | 11.6 | 7.3 | 2.9 | 6.6 | 2.4 | 5.1 |
| 2004–05 | 3.5 | 9.9 | 18.1 | 7.8 | 3.2 | 3.3 | 13.3 | 7.7 | 6.2 | 17.5 | 7.7 | 1.9 |
| 2005–06 | 1.4 | 11.0 | 10.0 | 8.5 | 4.9 | 3.7 | 10.2 | 8.0 | 17.8 | 12.2 | 8.4 | 3.8 |
| 2006–07 | 0.8 | 3.0 | 6.0 | 5.6 | 4.1 | 5.4 | 11.9 | 16.8 | 13.3 | 18.5 | 8.9 | 5.6 |
| 2007–08 | . | 2.8 | 3.8 | 6.1 | 3.9 | 6.8 | 10.6 | 19.4 | 13.9 | 15.5 | 11.7 | 5.5 |
| 2008–09 | 0.1 | x | 7.5 | 6.8 | 5.5 | 7.7 | 14.1 | 15.4 | 18.5 | 19.8 | 4.3 | 0.3 |
| 2009–10 | 1.0 | 0.6 | 7.2 | 12.1 | 16.2 | 9.0 | 2.7 | 4.6 | 10.9 | 21.6 | 12.6 | 1.6 |

Table 29: Percentage of catch from CRA 4 by statistical area and month for 2009–10. An ‘x’ indicates fewer than 3 vessels in the month/statistical area cell (10 instances representing 3.6% of the annual catch). A ‘.’ indicates no fishing in the month/statistical area cell.

| Month | 912 | 913 | 914 | 915 | 934 |
|-------|-----|-----|-----|-----|-----|
| Apr | . | 0.4 | x | . | . |
| May | 0.1 | x | x | . | . |
| Jun | 0.3 | 1.7 | 3.6 | 1.7 | . |
| Jul | 0.7 | 4.6 | 3.5 | 3.2 | x |
| Aug | 2.2 | 4.9 | 4.6 | 4.0 | x |
| Sep | 1.0 | 0.8 | 3.6 | 3.0 | x |
| Oct | 0.4 | 0.8 | 0.3 | 1.1 | x |
| Nov | 3.5 | x | . | 0.2 | . |
| Dec | 4.4 | 3.9 | 1.4 | 1.2 | . |
| Jan | 2.9 | 5.7 | 8.6 | 4.4 | . |
| Feb | 1.4 | 1.9 | 6.0 | 3.3 | . |
| Mar | x | 0.4 | 0.8 | x | . |

Table 30: Arithmetic CPUE (kg/potlift) for CRA 4 by fishing year and statistical area, 1979–80 to 2009–10. An ‘x’ indicates fewer than 3 vessels, and a ‘.’ indicates no fishing, in the year/statistical area cell.

| | | | | | |
|--------------|------|------|------|------|------|
| Fishing year | 912 | 913 | 914 | 915 | 934 |
| 1979–80 | 0.93 | 0.98 | 0.90 | 0.56 | x |
| 1980–81 | 1.05 | 0.77 | 0.83 | 0.58 | 0.93 |
| 1981–82 | 1.09 | 0.83 | 0.74 | 0.59 | x |
| 1982–83 | 0.90 | 0.94 | 1.08 | 0.66 | x |
| 1983–84 | 0.77 | 1.02 | 1.05 | 0.64 | x |
| 1984–85 | 0.86 | 0.84 | 0.78 | 0.55 | x |
| 1985–86 | 0.79 | 0.77 | 0.72 | 0.60 | 0.75 |
| 1986–87 | 0.85 | 0.92 | 0.88 | 0.61 | x |
| 1987–88 | 0.65 | 0.78 | 0.79 | 0.59 | x |
| 1988–89 | 0.51 | 0.63 | 0.69 | 0.53 | x |
| 1989–90 | 0.64 | 0.74 | 0.51 | 0.41 | x |
| 1990–91 | 0.75 | 0.53 | 0.39 | 0.39 | x |
| 1991–92 | 0.74 | 0.54 | 0.38 | 0.38 | x |
| 1992–93 | 0.63 | 0.51 | 0.47 | 0.46 | 0.46 |
| 1993–94 | 0.55 | 0.65 | 0.62 | 0.41 | x |
| 1994–95 | 0.78 | 0.69 | 0.76 | 0.46 | 0.41 |
| 1995–96 | 0.95 | 0.82 | 0.92 | 0.59 | 0.37 |
| 1996–97 | 1.21 | 1.03 | 1.03 | 0.74 | x |
| 1997–98 | 1.71 | 1.49 | 1.07 | 0.84 | . |
| 1998–99 | 1.72 | 2.51 | 1.02 | 0.72 | . |
| 1999–00 | 1.38 | 1.80 | 1.05 | 1.23 | 0.84 |
| 2000–01 | 1.16 | 1.91 | 1.14 | 1.11 | 0.95 |
| 2001–02 | 0.93 | 1.17 | 1.08 | 1.11 | 0.81 |
| 2002–03 | 1.08 | 1.18 | 1.02 | 1.21 | x |
| 2003–04 | 1.10 | 1.36 | 1.08 | 0.90 | . |
| 2004–05 | 0.77 | 1.20 | 1.06 | 0.70 | x |
| 2005–06 | 0.60 | 0.94 | 0.94 | 0.81 | x |
| 2006–07 | 0.58 | 0.76 | 0.57 | 0.70 | 1.55 |
| 2007–08 | 0.66 | 0.70 | 0.47 | 0.79 | 0.81 |
| 2008–09 | 0.71 | 0.85 | 0.58 | 0.83 | x |
| 2009–10 | 0.78 | 1.04 | 1.03 | 1.21 | x |

Table 31: Annual arithmetic, unstandardised, and standardised (with standard error) CPUE indices for CRA 4 (kg/potlift).

| Fishing year | Arithmetic | Unstandardised | Standardised | s.e. |
|--------------|------------|----------------|--------------|-------|
| 1979–80 | 0.87 | 0.86 | 0.82 | 0.021 |
| 1980–81 | 0.83 | 0.82 | 0.80 | 0.020 |
| 1981–82 | 0.83 | 0.86 | 0.85 | 0.021 |
| 1982–83 | 0.92 | 0.94 | 0.92 | 0.020 |
| 1983–84 | 0.90 | 0.85 | 0.83 | 0.020 |
| 1984–85 | 0.77 | 0.78 | 0.76 | 0.020 |
| 1985–86 | 0.73 | 0.74 | 0.72 | 0.020 |
| 1986–87 | 0.84 | 0.79 | 0.77 | 0.020 |
| 1987–88 | 0.73 | 0.69 | 0.67 | 0.021 |
| 1988–89 | 0.62 | 0.58 | 0.56 | 0.021 |
| 1989–90 | 0.59 | 0.57 | 0.54 | 0.020 |
| 1990–91 | 0.50 | 0.51 | 0.50 | 0.021 |
| 1991–92 | 0.50 | 0.52 | 0.50 | 0.020 |
| 1992–93 | 0.52 | 0.50 | 0.48 | 0.020 |
| 1993–94 | 0.58 | 0.56 | 0.54 | 0.021 |
| 1994–95 | 0.69 | 0.68 | 0.67 | 0.022 |
| 1995–96 | 0.86 | 0.84 | 0.86 | 0.025 |
| 1996–97 | 1.03 | 1.08 | 1.18 | 0.028 |
| 1997–98 | 1.24 | 1.29 | 1.40 | 0.030 |
| 1998–99 | 1.31 | 1.43 | 1.56 | 0.030 |
| 1999–00 | 1.27 | 1.35 | 1.47 | 0.029 |
| 2000–01 | 1.26 | 1.17 | 1.26 | 0.030 |
| 2001–02 | 1.06 | 1.04 | 1.10 | 0.028 |
| 2002–03 | 1.09 | 1.14 | 1.19 | 0.027 |
| 2003–04 | 1.14 | 1.19 | 1.22 | 0.027 |
| 2004–05 | 1.00 | 0.96 | 0.96 | 0.026 |
| 2005–06 | 0.88 | 0.84 | 0.82 | 0.027 |
| 2006–07 | 0.65 | 0.70 | 0.68 | 0.025 |
| 2007–08 | 0.60 | 0.61 | 0.59 | 0.028 |
| 2008–09 | 0.71 | 0.74 | 0.71 | 0.033 |
| 2009–10 | 1.02 | 1.02 | 1.03 | 0.035 |

Table 32: Number of vessels by statistical area from CRA 5, 1979–80 to 2009–10. Vessels catching less than 1 t in a year for the entire QMA were excluded. A ‘.’ indicates no fishing in the statistical area/fishing year cell. A ‘0’ indicates fishing but no qualified vessels fished.

| Fishing year | 916 | 917 | 918 | 919 | 932 | 933 | All |
|--------------|-----|-----|-----|-----|-----|-----|-----|
| 1979–80 | 21 | 51 | 13 | 3 | 1 | 9 | 88 |
| 1980–81 | 19 | 50 | 12 | 1 | 1 | 11 | 86 |
| 1981–82 | 15 | 51 | 12 | 0 | 2 | 11 | 85 |
| 1982–83 | 19 | 60 | 13 | 3 | 1 | 13 | 93 |
| 1983–84 | 16 | 59 | 11 | 1 | . | 13 | 93 |
| 1984–85 | 16 | 60 | 10 | 2 | 0 | 14 | 95 |
| 1985–86 | 13 | 56 | 11 | 2 | 2 | 15 | 92 |
| 1986–87 | 11 | 55 | 11 | 4 | 5 | 11 | 91 |
| 1987–88 | 11 | 51 | 10 | 3 | 2 | 12 | 84 |
| 1988–89 | 7 | 44 | 9 | 3 | 1 | 9 | 71 |
| 1989–90 | 15 | 44 | 10 | 0 | 0 | 7 | 66 |
| 1990–91 | 11 | 40 | 10 | 1 | 3 | 11 | 62 |
| 1991–92 | 11 | 37 | 21 | 1 | 1 | 11 | 68 |
| 1992–93 | 12 | 31 | 13 | 0 | . | 11 | 59 |
| 1993–94 | 9 | 35 | 12 | . | 0 | 13 | 59 |
| 1994–95 | 9 | 27 | 8 | . | 0 | 11 | 51 |
| 1995–96 | 12 | 25 | 6 | 1 | 2 | 12 | 49 |
| 1996–97 | 10 | 22 | 9 | 2 | 1 | 12 | 47 |
| 1997–98 | 8 | 21 | 7 | 1 | 1 | 12 | 45 |
| 1998–99 | 6 | 18 | 5 | . | 1 | 13 | 41 |
| 1999–00 | 7 | 20 | 7 | 1 | 1 | 12 | 39 |
| 2000–01 | 8 | 18 | 6 | . | . | 10 | 36 |
| 2001–02 | 10 | 17 | 2 | . | 0 | 8 | 34 |
| 2002–03 | 10 | 16 | 2 | . | . | 9 | 34 |
| 2003–04 | 12 | 14 | 2 | . | . | 11 | 34 |
| 2004–05 | 12 | 13 | 1 | . | 2 | 9 | 32 |
| 2005–06 | 11 | 14 | 2 | . | 0 | 8 | 31 |
| 2006–07 | 10 | 14 | 2 | . | . | 8 | 28 |
| 2007–08 | 8 | 14 | 2 | . | 0 | 7 | 27 |
| 2008–09 | 6 | 12 | 5 | 1 | . | 7 | 26 |
| 2009–10 | 6 | 11 | 1 | . | . | 8 | 25 |

Table 33: Distribution and annual catch by statistical area from CRA 5, 1979–80 to 2009–10. An ‘x’ indicates fewer than 3 vessels, and a ‘.’ indicates no fishing, in the year/statistical area cell.

| Year | Distribution (%) | | | | | | Annual Catch (t) | | | | | | |
|---------|------------------|------|------|-----|-----|------|------------------|-------|------|------|-----|-------|-------|
| | 916 | 917 | 918 | 919 | 932 | 933 | 916 | 917 | 918 | 919 | 932 | 933 | CRA 5 |
| 1979–80 | 26.7 | 47.9 | 12.8 | 1.1 | x | 10.4 | 107.4 | 192.6 | 51.5 | 4.5 | x | 41.9 | 402.0 |
| 1980–81 | 29.3 | 50.2 | 6.3 | 0.4 | x | 13.5 | 147.9 | 253.5 | 31.7 | 1.9 | x | 68.3 | 505.1 |
| 1981–82 | 23.0 | 52.0 | 7.3 | x | x | 16.1 | 109.6 | 247.5 | 34.6 | x | x | 76.6 | 476.0 |
| 1982–83 | 19.9 | 57.3 | 4.0 | 0.7 | x | 18.0 | 124.4 | 358.3 | 25.1 | 4.2 | x | 112.5 | 625.5 |
| 1983–84 | 19.2 | 57.5 | 5.6 | 0.3 | . | 17.4 | 114.8 | 344.8 | 33.5 | 1.6 | . | 104.4 | 599.1 |
| 1984–85 | 19.5 | 61.4 | 4.7 | 0.7 | x | 13.6 | 140.6 | 443.5 | 33.8 | 5.2 | x | 98.2 | 721.9 |
| 1985–86 | 19.4 | 62.1 | 6.7 | 0.7 | 0.3 | 10.8 | 140.2 | 450.1 | 48.6 | 5.2 | 2.5 | 78.0 | 724.6 |
| 1986–87 | 15.9 | 65.3 | 7.3 | 1.9 | 1.6 | 8.0 | 99.8 | 408.9 | 45.8 | 11.7 | 9.8 | 50.1 | 626.1 |
| 1987–88 | 22.4 | 58.0 | 6.3 | 3.2 | x | 9.4 | 111.2 | 288.1 | 31.4 | 15.8 | x | 46.5 | 496.5 |
| 1988–89 | 19.3 | 58.6 | 8.2 | 3.2 | x | 10.0 | 68.0 | 206.3 | 29.0 | 11.1 | x | 35.0 | 351.7 |
| 1989–90 | 28.7 | 56.1 | 9.5 | x | x | 5.6 | 89.6 | 175.1 | 29.7 | x | x | 17.4 | 312.4 |
| 1990–91 | 28.4 | 57.6 | 4.9 | x | 0.6 | 8.4 | 87.6 | 177.8 | 15.3 | x | 1.9 | 26.0 | 308.6 |
| 1991–92 | 29.9 | 46.2 | 10.9 | x | 0.1 | 13.0 | 86.0 | 132.7 | 31.2 | x | 0.2 | 37.3 | 287.4 |
| 1992–93 | 24.9 | 58.4 | 7.0 | x | . | 9.6 | 64.3 | 151.2 | 18.1 | x | . | 24.8 | 258.8 |
| 1993–94 | 23.5 | 54.3 | 8.1 | . | x | 14.1 | 73.0 | 168.8 | 25.2 | . | x | 43.8 | 311.0 |
| 1994–95 | 28.0 | 50.5 | 4.3 | . | x | 17.2 | 82.1 | 148.4 | 12.8 | . | x | 50.5 | 293.9 |
| 1995–96 | 26.9 | 43.2 | 3.2 | x | x | 25.3 | 80.2 | 128.7 | 9.5 | x | x | 75.2 | 297.6 |
| 1996–97 | 24.4 | 45.0 | 4.8 | x | x | 23.7 | 73.3 | 135.1 | 14.3 | x | x | 71.2 | 300.3 |
| 1997–98 | 23.9 | 42.4 | 4.4 | x | x | 26.9 | 71.7 | 126.9 | 13.2 | x | x | 80.7 | 299.6 |
| 1998–99 | 23.3 | 41.7 | 5.8 | . | x | 25.7 | 69.4 | 124.5 | 17.4 | . | x | 76.7 | 298.2 |
| 1999–00 | 29.6 | 41.7 | 4.0 | x | x | 24.7 | 103.4 | 145.8 | 14.1 | x | x | 86.2 | 349.5 |
| 2000–01 | 31.0 | 40.1 | 2.8 | . | . | 26.1 | 107.9 | 139.3 | 9.7 | . | . | 90.5 | 347.4 |
| 2001–02 | 42.8 | 39.2 | 1.5 | . | x | 16.4 | 149.3 | 136.9 | 5.3 | . | x | 57.1 | 349.1 |
| 2002–03 | 45.8 | 35.6 | 1.0 | . | . | 17.6 | 159.7 | 124.0 | 3.5 | . | . | 61.5 | 348.7 |
| 2003–04 | 47.8 | 32.4 | 0.9 | . | . | 18.9 | 167.2 | 113.4 | 3.2 | . | . | 66.1 | 349.9 |
| 2004–05 | 43.4 | 39.7 | 0.9 | . | x | 16.0 | 149.9 | 136.9 | 3.1 | . | x | 55.1 | 345.1 |
| 2005–06 | 44.4 | 40.8 | 1.4 | . | x | 13.4 | 155.1 | 142.6 | 5.1 | . | x | 46.8 | 349.5 |
| 2006–07 | 41.2 | 45.6 | x | . | . | 12.4 | 144.1 | 159.6 | x | . | . | 43.2 | 349.8 |
| 2007–08 | 37.4 | 45.3 | x | . | x | 16.2 | 130.7 | 158.4 | x | . | x | 56.6 | 349.8 |
| 2008–09 | 30.5 | 48.6 | 3.6 | x | . | 17.3 | 106.7 | 169.9 | 12.6 | x | . | 60.4 | 349.7 |
| 2009–10 | 29.1 | 50.6 | x | . | . | 18.8 | 101.9 | 177.1 | x | . | . | 65.9 | 349.9 |

Table 34: Distribution and annual potlifts by statistical area from CRA 5, 1979–80 to 2009–10. An ‘x’ indicates fewer than 3 vessels, and a ‘.’ indicates no fishing, in the year/statistical area cell.

| Year | Distribution (%) | | | | | | Annual Potlifts (000's) | | | | | | CRA 5 |
|---------|------------------|------|-----|-----|-----|------|-------------------------|-------|------|------|------|-------|---------|
| | 916 | 917 | 918 | 919 | 932 | 933 | 916 | 917 | 918 | 919 | 932 | 933 | |
| 1979–80 | 24.2 | 53.5 | 8.8 | 0.9 | x | 10.7 | 128.9 | 284.7 | 46.9 | 4.8 | x | 57.1 | 532.2 |
| 1980–81 | 26.6 | 52.1 | 6.6 | 0.3 | x | 13.6 | 148.5 | 291.3 | 37.2 | 1.6 | x | 76.2 | 559.1 |
| 1981–82 | 28.5 | 48.1 | 7.1 | x | x | 15.7 | 171.3 | 289.6 | 42.4 | x | x | 94.5 | 601.7 |
| 1982–83 | 25.1 | 51.3 | 5.5 | 0.8 | x | 16.8 | 186.6 | 381.8 | 41.0 | 6.3 | x | 125.3 | 744.7 |
| 1983–84 | 22.5 | 53.7 | 5.8 | 0.5 | . | 17.5 | 180.5 | 430.3 | 46.1 | 4.0 | . | 140.4 | 801.3 |
| 1984–85 | 19.7 | 57.7 | 5.1 | 1.3 | x | 16.0 | 187.4 | 547.8 | 48.1 | 12.1 | x | 151.7 | 949.0 |
| 1985–86 | 17.0 | 60.2 | 6.1 | 1.1 | 0.5 | 15.1 | 181.4 | 641.8 | 64.7 | 11.7 | 5.5 | 160.6 | 1,065.8 |
| 1986–87 | 16.3 | 60.9 | 5.7 | 2.0 | 1.2 | 13.9 | 162.7 | 607.5 | 57.3 | 19.9 | 11.7 | 139.0 | 998.1 |
| 1987–88 | 17.9 | 61.4 | 4.2 | 2.6 | x | 13.1 | 188.1 | 645.1 | 44.2 | 27.7 | x | 138.1 | 1,051.4 |
| 1988–89 | 15.8 | 62.3 | 4.6 | 3.9 | x | 13.1 | 141.1 | 555.7 | 40.7 | 34.9 | x | 116.4 | 892.1 |
| 1989–90 | 21.6 | 62.8 | 6.9 | x | x | 8.2 | 159.5 | 464.3 | 50.9 | x | x | 61.0 | 739.9 |
| 1990–91 | 27.4 | 58.8 | 4.5 | x | 0.5 | 8.8 | 197.8 | 424.3 | 32.2 | x | 3.5 | 63.4 | 721.3 |
| 1991–92 | 25.0 | 54.8 | 7.3 | x | 0.1 | 12.8 | 195.6 | 428.6 | 56.8 | x | 1.0 | 100.5 | 782.7 |
| 1992–93 | 23.7 | 59.9 | 5.4 | x | . | 10.9 | 174.0 | 439.4 | 39.8 | x | . | 80.0 | 733.8 |
| 1993–94 | 21.3 | 58.2 | 6.4 | . | x | 14.0 | 170.3 | 465.5 | 51.1 | . | x | 112.2 | 800.6 |
| 1994–95 | 20.9 | 60.2 | 4.8 | . | x | 14.0 | 147.1 | 424.3 | 34.1 | . | x | 98.5 | 704.9 |
| 1995–96 | 20.7 | 54.9 | 3.8 | x | x | 19.5 | 125.8 | 334.3 | 23.1 | x | x | 118.7 | 608.6 |
| 1996–97 | 19.9 | 54.2 | 4.1 | x | x | 20.1 | 106.8 | 291.0 | 22.1 | x | x | 108.1 | 537.3 |
| 1997–98 | 17.9 | 50.7 | 5.6 | x | x | 22.2 | 68.6 | 194.0 | 21.6 | x | x | 85.0 | 382.4 |
| 1998–99 | 18.5 | 49.4 | 5.9 | . | x | 22.0 | 62.1 | 166.1 | 19.8 | . | x | 74.0 | 335.9 |
| 1999–00 | 13.8 | 54.4 | 4.6 | x | x | 27.1 | 48.4 | 190.6 | 16.1 | x | x | 94.8 | 350.2 |
| 2000–01 | 10.4 | 56.1 | 2.3 | . | . | 31.2 | 31.0 | 167.8 | 6.9 | . | . | 93.3 | 299.1 |
| 2001–02 | 19.1 | 59.9 | 1.2 | . | x | 19.7 | 52.5 | 164.7 | 3.2 | . | x | 54.2 | 275.0 |
| 2002–03 | 25.7 | 48.0 | 1.0 | . | . | 25.3 | 71.1 | 132.8 | 2.7 | . | . | 70.1 | 276.7 |
| 2003–04 | 28.1 | 40.6 | 0.9 | . | . | 30.4 | 70.7 | 102.2 | 2.3 | . | . | 76.6 | 251.9 |
| 2004–05 | 24.8 | 51.2 | 0.8 | . | x | 23.2 | 67.7 | 139.9 | 2.3 | . | x | 63.3 | 273.4 |
| 2005–06 | 27.4 | 49.3 | 1.0 | . | x | 22.4 | 81.5 | 146.6 | 2.9 | . | x | 66.5 | 297.6 |
| 2006–07 | 29.0 | 49.2 | x | . | . | 21.3 | 85.9 | 145.9 | x | . | . | 63.2 | 296.6 |
| 2007–08 | 25.8 | 45.2 | x | . | x | 28.2 | 75.6 | 132.6 | x | . | x | 82.9 | 293.4 |
| 2008–09 | 19.6 | 45.7 | 3.0 | x | . | 31.6 | 53.4 | 124.4 | 8.3 | x | . | 86.2 | 272.3 |
| 2009–10 | 22.6 | 39.3 | x | . | . | 36.8 | 55.1 | 95.8 | x | . | . | 89.7 | 243.7 |

Table 35: Percentage of annual catch by month from CRA 5, 1979–80 to 2009–10.

| Fishing year | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar |
|--------------|------|------|------|------|------|------|------|------|------|------|------|-----|
| 1979–80 | 0.7 | 7.0 | 6.4 | 6.2 | 4.6 | 7.5 | 11.6 | 17.9 | 13.5 | 15.6 | 7.6 | 1.5 |
| 1980–81 | 1.2 | 9.0 | 2.6 | 3.2 | 4.5 | 6.6 | 13.2 | 20.4 | 14.6 | 16.1 | 7.6 | 1.1 |
| 1981–82 | 0.9 | 6.2 | 2.6 | 3.4 | 2.4 | 4.8 | 12.1 | 18.7 | 21.2 | 16.4 | 8.2 | 3.1 |
| 1982–83 | 1.3 | 6.7 | 3.1 | 2.9 | 4.3 | 5.0 | 10.5 | 20.1 | 20.3 | 16.0 | 7.7 | 2.1 |
| 1983–84 | 1.2 | 4.8 | 5.0 | 4.3 | 5.5 | 5.4 | 8.5 | 8.8 | 17.1 | 23.6 | 11.8 | 4.0 |
| 1984–85 | 1.9 | 8.2 | 6.0 | 4.3 | 2.7 | 3.8 | 8.5 | 19.9 | 20.0 | 16.5 | 6.1 | 2.0 |
| 1985–86 | 2.7 | 4.7 | 2.1 | 2.8 | 3.6 | 4.4 | 12.4 | 14.8 | 21.0 | 20.8 | 8.0 | 2.7 |
| 1986–87 | 3.1 | 7.7 | 3.6 | 2.4 | 2.0 | 4.6 | 9.8 | 22.3 | 21.4 | 16.9 | 5.2 | 0.9 |
| 1987–88 | 2.3 | 4.4 | 5.1 | 2.8 | 4.7 | 4.2 | 13.6 | 18.6 | 22.2 | 15.7 | 4.9 | 1.3 |
| 1988–89 | 1.5 | 4.9 | 3.5 | 2.7 | 3.6 | 6.4 | 7.9 | 20.6 | 20.6 | 21.6 | 4.6 | 2.1 |
| 1989–90 | 2.2 | 5.1 | 2.4 | 2.4 | 2.0 | 4.0 | 6.9 | 15.8 | 20.8 | 25.4 | 10.4 | 2.5 |
| 1990–91 | 2.7 | 3.8 | 1.6 | 2.8 | 2.1 | 3.9 | 13.4 | 24.8 | 22.8 | 14.7 | 6.2 | 1.3 |
| 1991–92 | 0.4 | 3.4 | 1.9 | 3.8 | 3.6 | 4.0 | 10.8 | 19.9 | 19.1 | 22.1 | 8.9 | 2.1 |
| 1992–93 | 0.9 | 2.5 | 5.7 | 3.5 | 3.7 | 2.3 | 7.9 | 12.0 | 21.1 | 25.0 | 12.2 | 3.1 |
| 1993–94 | 0.7 | 6.7 | 7.3 | 7.6 | 5.6 | 3.8 | 10.0 | 13.0 | 19.9 | 15.3 | 7.7 | 2.2 |
| 1994–95 | 1.8 | 9.9 | 4.6 | 5.2 | 5.7 | 5.1 | 7.0 | 19.0 | 17.0 | 13.3 | 7.9 | 3.6 |
| 1995–96 | 1.8 | 10.9 | 5.1 | 5.5 | 5.0 | 5.9 | 10.9 | 14.3 | 15.3 | 10.6 | 8.2 | 6.5 |
| 1996–97 | 8.3 | 20.9 | 7.4 | 5.9 | 7.7 | 9.0 | 10.7 | 8.8 | 10.2 | 6.1 | 3.2 | 1.6 |
| 1997–98 | 15.2 | 24.1 | 10.9 | 7.6 | 7.3 | 7.4 | 7.7 | 5.6 | 5.1 | 4.5 | 3.2 | 1.3 |
| 1998–99 | 7.7 | 18.0 | 14.1 | 11.5 | 12.9 | 12.3 | 9.3 | 4.0 | 3.7 | 2.0 | 2.2 | 2.2 |
| 1999–00 | 11.1 | 19.0 | 11.7 | 13.3 | 12.1 | 11.6 | 8.2 | 2.8 | 3.1 | 2.8 | 2.1 | 2.1 |
| 2000–01 | 7.6 | 24.1 | 16.7 | 13.9 | 10.6 | 10.7 | 9.1 | 2.2 | 1.5 | 2.5 | 0.2 | 1.1 |
| 2001–02 | 9.0 | 21.3 | 13.1 | 17.2 | 17.2 | 12.4 | 4.6 | 2.3 | 0.5 | 0.6 | 0.9 | 0.9 |
| 2002–03 | 9.1 | 21.7 | 15.9 | 13.4 | 15.8 | 10.1 | 3.3 | 2.3 | 1.0 | 2.8 | 2.3 | 2.3 |
| 2003–04 | 1.4 | 14.3 | 19.7 | 18.7 | 12.7 | 13.9 | 7.8 | 2.0 | 2.1 | 3.9 | 1.8 | 1.7 |
| 2004–05 | 3.7 | 22.6 | 13.2 | 13.9 | 7.1 | 6.7 | 7.0 | 7.9 | 4.1 | 10.1 | 1.9 | 1.7 |
| 2005–06 | 3.1 | 28.4 | 12.9 | 10.5 | 8.3 | 5.6 | 8.8 | 7.3 | 6.2 | 6.6 | 1.4 | 1.0 |
| 2006–07 | 8.7 | 25.8 | 11.3 | 5.9 | 5.1 | 4.1 | 5.5 | 11.6 | 7.8 | 10.7 | 3.1 | 0.4 |
| 2007–08 | 10.0 | 25.7 | 8.4 | 6.2 | 4.3 | 6.1 | 6.9 | 4.9 | 8.8 | 13.7 | 3.9 | 1.1 |
| 2008–09 | 10.9 | 24.0 | 15.8 | 7.0 | 3.2 | 6.8 | 8.5 | 4.6 | 3.5 | 14.5 | 0.9 | 0.3 |
| 2009–10 | 8.5 | 19.1 | 13.1 | 18.7 | 6.7 | 7.0 | 3.8 | 4.5 | 2.6 | 9.7 | 5.8 | 0.6 |

Table 36: Percentage of catch from CRA 5 by statistical area and month for 2009–10. An ‘x’ indicates fewer than 3 vessels in the month/statistical area cell (13 instances representing 3.5% of the annual catch). A ‘.’ indicates no fishing in the month/statistical area cell.

| Month | 916 | 917 | 918 | 919 | 932 | 933 |
|-------|-----|------|-----|-----|-----|-----|
| Apr | 3.9 | 4.3 | . | . | . | x |
| May | 9.3 | 9.3 | . | . | . | 0.6 |
| Jun | 3.3 | 8.3 | . | . | . | 1.5 |
| Jul | x | 14.9 | x | . | . | 2.5 |
| Aug | x | 4.0 | x | . | . | 2.0 |
| Sep | 3.3 | 2.0 | x | . | . | 1.4 |
| Oct | x | 0.4 | . | . | . | 3.0 |
| Nov | x | 0.9 | . | . | . | 3.6 |
| Dec | x | 1.1 | . | . | . | 1.2 |
| Jan | 5.1 | 3.0 | x | . | . | 1.5 |
| Feb | 2.7 | 1.9 | x | . | . | 1.1 |
| Mar | x | 0.4 | . | . | . | x |

Table 37: Arithmetic CPUE (kg/potlift) for CRA 5 by fishing year and statistical area, 1979–80 to 2009–10. An ‘x’ indicates fewer than 3 vessels, and a ‘.’ indicates no fishing, in the year/statistical area cell.

| Fishing year | 916 | 917 | 918 | 919 | 932 | 933 |
|--------------|------|------|------|------|------|------|
| 1979–80 | 0.83 | 0.68 | 1.10 | 0.95 | x | 0.73 |
| 1980–81 | 1.00 | 0.87 | 0.85 | 1.22 | x | 0.90 |
| 1981–82 | 0.64 | 0.86 | 0.82 | x | x | 0.81 |
| 1982–83 | 0.67 | 0.94 | 0.61 | 0.67 | x | 0.90 |
| 1983–84 | 0.64 | 0.80 | 0.73 | 0.40 | . | 0.74 |
| 1984–85 | 0.75 | 0.81 | 0.70 | 0.43 | x | 0.65 |
| 1985–86 | 0.77 | 0.70 | 0.75 | 0.44 | 0.45 | 0.49 |
| 1986–87 | 0.61 | 0.67 | 0.80 | 0.59 | 0.84 | 0.36 |
| 1987–88 | 0.59 | 0.45 | 0.71 | 0.57 | x | 0.34 |
| 1988–89 | 0.48 | 0.37 | 0.71 | 0.32 | x | 0.30 |
| 1989–90 | 0.56 | 0.38 | 0.58 | x | x | 0.29 |
| 1990–91 | 0.44 | 0.42 | 0.48 | x | 0.55 | 0.41 |
| 1991–92 | 0.44 | 0.31 | 0.55 | x | 0.24 | 0.37 |
| 1992–93 | 0.37 | 0.34 | 0.45 | x | . | 0.31 |
| 1993–94 | 0.43 | 0.36 | 0.49 | . | x | 0.39 |
| 1994–95 | 0.56 | 0.35 | 0.37 | . | x | 0.51 |
| 1995–96 | 0.64 | 0.39 | 0.41 | x | x | 0.63 |
| 1996–97 | 0.69 | 0.46 | 0.65 | x | x | 0.66 |
| 1997–98 | 1.05 | 0.65 | 0.61 | x | x | 0.95 |
| 1998–99 | 1.12 | 0.75 | 0.88 | . | x | 1.04 |
| 1999–00 | 2.13 | 0.77 | 0.87 | x | x | 0.91 |
| 2000–01 | 3.48 | 0.83 | 1.40 | . | . | 0.97 |
| 2001–02 | 2.84 | 0.83 | 1.64 | . | x | 1.06 |
| 2002–03 | 2.25 | 0.93 | 1.31 | . | . | 0.88 |
| 2003–04 | 2.36 | 1.11 | 1.38 | . | . | 0.86 |
| 2004–05 | 2.21 | 0.98 | 1.37 | . | x | 0.87 |
| 2005–06 | 1.90 | 0.97 | 1.72 | . | x | 0.70 |
| 2006–07 | 1.68 | 1.09 | x | . | . | 0.68 |
| 2007–08 | 1.73 | 1.20 | x | . | x | 0.68 |
| 2008–09 | 2.00 | 1.37 | 1.52 | x | . | 0.70 |
| 2009–10 | 1.85 | 1.85 | x | . | . | 0.74 |

Table 38: Annual arithmetic, unstandardised, and standardised (with standard error) CPUE indices for CRA 5 (kg/potlift).

| Fishing year | Arithmetic | Unstandardised | Standardised | s.e. |
|--------------|------------|----------------|--------------|--------|
| 1979–80 | 0.76 | 0.67 | 0.63 | 0.024 |
| 1980–81 | 0.90 | 0.79 | 0.77 | 0.026 |
| 1981–82 | 0.79 | 0.72 | 0.69 | 0.027 |
| 1982–83 | 0.84 | 0.77 | 0.75 | 0.025 |
| 1983–84 | 0.75 | 0.69 | 0.67 | 0.025 |
| 1984–85 | 0.76 | 0.69 | 0.68 | 0.026 |
| 1985–86 | 0.68 | 0.57 | 0.56 | 0.025 |
| 1986–87 | 0.63 | 0.50 | 0.49 | 0.026 |
| 1987–88 | 0.47 | 0.42 | 0.41 | 0.027 |
| 1988–89 | 0.39 | 0.37 | 0.36 | 0.029 |
| 1989–90 | 0.42 | 0.41 | 0.39 | 0.030 |
| 1990–91 | 0.43 | 0.40 | 0.37 | 0.029 |
| 1991–92 | 0.37 | 0.33 | 0.31 | 0.027 |
| 1992–93 | 0.35 | 0.32 | 0.30 | 0.028 |
| 1993–94 | 0.39 | 0.38 | 0.37 | 0.030 |
| 1994–95 | 0.42 | 0.39 | 0.38 | 0.032 |
| 1995–96 | 0.49 | 0.46 | 0.46 | 0.033 |
| 1996–97 | 0.56 | 0.60 | 0.61 | 0.035 |
| 1997–98 | 0.78 | 0.84 | 0.87 | 0.038 |
| 1998–99 | 0.89 | 1.05 | 1.12 | 0.041 |
| 1999–00 | 1.00 | 1.09 | 1.13 | 0.040 |
| 2000–01 | 1.16 | 1.24 | 1.33 | 0.046 |
| 2001–02 | 1.27 | 1.35 | 1.48 | 0.051 |
| 2002–03 | 1.26 | 1.46 | 1.56 | 0.049 |
| 2003–04 | 1.39 | 1.62 | 1.69 | 0.048 |
| 2004–05 | 1.26 | 1.51 | 1.53 | 0.047 |
| 2005–06 | 1.17 | 1.38 | 1.39 | 0.047 |
| 2006–07 | 1.18 | 1.31 | 1.34 | 0.048 |
| 2007–08 | 1.19 | 1.32 | 1.34 | 0.048 |
| 2008–09 | 1.28 | 1.41 | 1.46 | 0.0512 |
| 2009–10 | 1.44 | 1.76 | 1.83 | 0.0536 |

Table 39: Number of vessels by statistical area from CRA 6, 1979–80 to 2009–10. Vessels catching less than 1 t in a year for the entire QMA were excluded.

| Fishing year | 940 | 941 | 942 | 943 | All |
|--------------|-----|-----|-----|-----|-----|
| 1979–80 | 11 | 13 | 17 | 8 | 39 |
| 1980–81 | 13 | 12 | 15 | 11 | 42 |
| 1981–82 | 11 | 16 | 21 | 19 | 45 |
| 1982–83 | 18 | 17 | 27 | 15 | 54 |
| 1983–84 | 12 | 16 | 24 | 9 | 50 |
| 1984–85 | 18 | 18 | 26 | 9 | 53 |
| 1985–86 | 14 | 19 | 26 | 17 | 57 |
| 1986–87 | 20 | 14 | 22 | 12 | 48 |
| 1987–88 | 15 | 17 | 24 | 12 | 47 |
| 1988–89 | 12 | 13 | 18 | 8 | 42 |
| 1989–90 | 18 | 18 | 20 | 9 | 55 |
| 1990–91 | 15 | 14 | 20 | 5 | 40 |
| 1991–92 | 15 | 19 | 28 | 5 | 45 |
| 1992–93 | 14 | 20 | 25 | 6 | 50 |
| 1993–94 | 16 | 19 | 28 | 9 | 53 |
| 1994–95 | 19 | 15 | 31 | 15 | 59 |
| 1995–96 | 17 | 15 | 24 | 12 | 51 |
| 1996–97 | 21 | 14 | 23 | 10 | 50 |
| 1997–98 | 20 | 11 | 23 | 8 | 50 |
| 1998–99 | 16 | 11 | 17 | 8 | 42 |
| 1999–00 | 12 | 9 | 16 | 4 | 34 |
| 2000–01 | 14 | 8 | 17 | 5 | 33 |
| 2001–02 | 11 | 10 | 14 | 6 | 32 |
| 2002–03 | 11 | 8 | 15 | 5 | 32 |
| 2003–04 | 12 | 12 | 15 | 6 | 35 |
| 2004–05 | 11 | 10 | 15 | 3 | 34 |
| 2005–06 | 13 | 10 | 19 | 6 | 35 |
| 2006–07 | 11 | 13 | 16 | 9 | 36 |
| 2007–08 | 10 | 11 | 12 | 7 | 35 |
| 2008–09 | 15 | 10 | 15 | 5 | 35 |
| 2009–10 | 10 | 10 | 15 | 7 | 35 |

Table 40: Distribution and annual catch by statistical area from CRA 6, 1979–80 to 2009–10.

| Fishing Year | Distribution (%) | | | | Annual Catch (t) | | | | |
|-----------------|------------------|------|------|------|------------------|-------|-------|-------|-------|
| | 940 | 941 | 942 | 943 | 940 | 941 | 942 | 943 | CRA 6 |
| 1979–80 | 21.5 | 24.6 | 38.4 | 15.5 | 86.0 | 98.5 | 153.8 | 62.0 | 400.3 |
| 1980–81 | 28.5 | 21.3 | 31.2 | 19.0 | 101.5 | 75.8 | 110.9 | 67.7 | 355.9 |
| 1981–82 | 19.6 | 29.0 | 34.8 | 16.6 | 91.4 | 134.8 | 162.1 | 77.1 | 465.4 |
| 1982–83 | 24.6 | 19.1 | 40.1 | 16.1 | 116.2 | 90.3 | 189.3 | 75.8 | 471.7 |
| 1983–84 | 21.8 | 24.2 | 38.9 | 15.1 | 119.3 | 132.8 | 213.2 | 82.4 | 547.7 |
| 1984–85 | 25.6 | 25.1 | 36.7 | 12.6 | 126.2 | 123.4 | 180.5 | 61.9 | 492.0 |
| 1985–86 | 28.4 | 22.1 | 33.1 | 16.5 | 171.5 | 133.2 | 199.6 | 99.3 | 603.6 |
| 1986–87 | 29.0 | 15.6 | 37.1 | 18.3 | 168.3 | 90.3 | 215.5 | 106.2 | 580.3 |
| 1987–88 | 24.0 | 19.2 | 41.1 | 15.7 | 107.7 | 86.1 | 184.5 | 70.3 | 448.5 |
| 1988–89 | 20.4 | 13.9 | 50.0 | 15.6 | 92.0 | 62.5 | 225.3 | 70.4 | 450.2 |
| 1989–90 | 30.0 | 21.9 | 38.7 | 9.4 | 95.5 | 69.6 | 123.3 | 30.0 | 318.3 |
| 1990–91 | 23.4 | 19.2 | 50.5 | 6.9 | 86.5 | 71.1 | 186.6 | 25.5 | 369.7 |
| 1991–92 | 21.2 | 22.0 | 52.3 | 4.5 | 82.3 | 85.3 | 203.0 | 17.7 | 388.3 |
| 1992–93 | 23.1 | 21.2 | 47.5 | 8.2 | 76.1 | 69.7 | 156.6 | 27.0 | 329.4 |
| 1993–94 | 24.9 | 20.2 | 45.4 | 9.5 | 85.1 | 69.0 | 155.2 | 32.4 | 341.8 |
| 1994–95 | 22.5 | 19.5 | 49.4 | 8.7 | 70.2 | 60.8 | 154.3 | 27.1 | 312.5 |
| 1995–96 | 27.9 | 14.1 | 46.8 | 11.2 | 88.0 | 44.6 | 147.5 | 35.2 | 315.3 |
| 1996–97 | 27.0 | 18.2 | 43.0 | 11.8 | 102.2 | 68.9 | 162.6 | 44.5 | 378.3 |
| 1997–98 | 29.2 | 19.9 | 43.4 | 7.4 | 99.0 | 67.4 | 147.0 | 25.2 | 338.7 |
| 1998–99 | 29.0 | 19.4 | 43.5 | 8.2 | 96.9 | 64.8 | 145.3 | 27.3 | 334.2 |
| 1999–00 | 24.0 | 21.6 | 47.2 | 7.1 | 77.5 | 69.7 | 152.1 | 23.0 | 322.4 |
| 2000–01 | 24.1 | 17.4 | 51.8 | 6.6 | 82.8 | 59.6 | 177.7 | 22.6 | 342.7 |
| 2001–02 | 24.2 | 18.5 | 48.2 | 9.1 | 79.7 | 60.8 | 158.5 | 29.8 | 328.7 |
| 2002–03 | 19.5 | 24.2 | 43.1 | 13.2 | 65.6 | 81.4 | 145.0 | 44.2 | 336.3 |
| 2003–04 | 23.4 | 21.4 | 45.7 | 9.5 | 68.0 | 62.1 | 132.6 | 27.7 | 290.4 |
| 2004–05 | 20.3 | 23.7 | 50.5 | 5.5 | 65.5 | 76.5 | 163.2 | 17.7 | 323.0 |
| 2005–06 | 22.0 | 20.5 | 48.0 | 9.5 | 77.5 | 72.2 | 168.7 | 33.3 | 351.7 |
| 2006–07 | 28.3 | 20.9 | 39.7 | 11.2 | 99.5 | 73.6 | 139.7 | 39.3 | 352.1 |
| 2007–08 | 26.5 | 19.2 | 41.3 | 13.1 | 94.2 | 68.4 | 147.0 | 46.5 | 356.0 |
| 2008–09 | 24.2 | 18.0 | 43.9 | 13.8 | 86.1 | 64.0 | 156.0 | 49.2 | 355.3 |
| 2009–10 | 23.1 | 15.4 | 42.2 | 19.4 | 79.7 | 52.9 | 145.5 | 66.7 | 344.8 |

Table 41: Distribution and annual potlifts by statistical area from CRA 6, 1979–80 to 2009–10.

| Fishing Year | Distribution (%) | | | | Annual Potlifts (000's) | | | | |
|-----------------|------------------|------|------|------|-------------------------|-------|-------|------|-------|
| | 940 | 941 | 942 | 943 | 940 | 941 | 942 | 943 | CRA 6 |
| 1979–80 | 24.5 | 40.0 | 24.3 | 11.2 | 42.2 | 68.9 | 41.9 | 19.2 | 172.2 |
| 1980–81 | 24.0 | 33.6 | 27.8 | 14.7 | 39.2 | 54.9 | 45.4 | 24.0 | 163.5 |
| 1981–82 | 15.9 | 45.2 | 24.6 | 14.4 | 33.7 | 96.1 | 52.3 | 30.6 | 212.6 |
| 1982–83 | 20.2 | 35.3 | 32.0 | 12.6 | 53.6 | 93.6 | 84.8 | 33.3 | 265.3 |
| 1983–84 | 16.1 | 32.8 | 37.3 | 13.8 | 51.0 | 103.9 | 118.2 | 43.8 | 317.0 |
| 1984–85 | 22.5 | 31.5 | 34.8 | 11.2 | 82.0 | 115.1 | 127.3 | 41.0 | 365.4 |
| 1985–86 | 23.4 | 27.4 | 32.9 | 16.3 | 100.2 | 117.4 | 140.7 | 69.7 | 428.0 |
| 1986–87 | 31.6 | 19.5 | 30.8 | 18.1 | 110.8 | 68.5 | 108.0 | 63.4 | 350.6 |
| 1987–88 | 23.5 | 26.2 | 34.2 | 16.1 | 71.0 | 79.2 | 103.4 | 48.6 | 302.2 |
| 1988–89 | 23.4 | 17.8 | 43.3 | 15.6 | 75.2 | 57.2 | 139.2 | 50.0 | 321.7 |
| 1989–90 | 27.4 | 26.9 | 34.7 | 11.0 | 65.1 | 64.0 | 82.5 | 26.1 | 237.7 |
| 1990–91 | 23.8 | 28.8 | 37.4 | 10.1 | 63.6 | 77.0 | 100.0 | 27.1 | 267.7 |
| 1991–92 | 22.1 | 32.9 | 38.0 | 7.0 | 66.6 | 98.8 | 114.2 | 21.1 | 300.6 |
| 1992–93 | 28.0 | 30.3 | 31.5 | 10.3 | 81.1 | 87.9 | 91.2 | 29.8 | 290.0 |
| 1993–94 | 27.6 | 24.6 | 35.1 | 12.7 | 88.0 | 78.5 | 112.2 | 40.5 | 319.2 |
| 1994–95 | 22.1 | 28.4 | 36.2 | 13.3 | 64.5 | 82.7 | 105.6 | 38.9 | 291.7 |
| 1995–96 | 30.2 | 19.9 | 35.2 | 14.8 | 87.7 | 57.8 | 102.2 | 43.1 | 290.7 |
| 1996–97 | 31.3 | 22.2 | 33.9 | 12.6 | 116.3 | 82.4 | 125.8 | 46.7 | 371.2 |
| 1997–98 | 35.2 | 22.8 | 35.1 | 6.9 | 136.1 | 88.1 | 135.9 | 26.8 | 386.9 |
| 1998–99 | 37.3 | 21.7 | 33.2 | 7.7 | 106.7 | 62.1 | 94.9 | 22.0 | 285.7 |
| 1999–00 | 29.4 | 27.5 | 32.9 | 10.3 | 79.7 | 74.6 | 89.2 | 27.9 | 271.3 |
| 2000–01 | 30.1 | 21.9 | 38.8 | 9.1 | 89.6 | 65.3 | 115.7 | 27.2 | 297.8 |
| 2001–02 | 28.5 | 24.8 | 37.8 | 9.0 | 81.5 | 70.9 | 108.1 | 25.8 | 286.2 |
| 2002–03 | 20.3 | 28.4 | 38.3 | 13.0 | 58.8 | 82.1 | 110.9 | 37.5 | 289.3 |
| 2003–04 | 22.4 | 30.9 | 36.0 | 10.7 | 59.0 | 81.5 | 95.0 | 28.1 | 263.7 |
| 2004–05 | 21.6 | 32.2 | 39.8 | 6.4 | 57.6 | 85.8 | 106.3 | 17.1 | 266.8 |
| 2005–06 | 22.8 | 30.3 | 38.4 | 8.4 | 59.5 | 79.0 | 100.0 | 22.0 | 260.5 |
| 2006–07 | 32.6 | 29.2 | 29.9 | 8.2 | 79.7 | 71.3 | 73.1 | 20.1 | 244.2 |
| 2007–08 | 29.2 | 25.5 | 31.1 | 14.2 | 68.1 | 59.4 | 72.5 | 33.2 | 233.3 |
| 2008–09 | 27.0 | 20.2 | 38.9 | 13.9 | 64.0 | 48.0 | 92.4 | 32.9 | 237.4 |
| 2009–10 | 28.7 | 17.1 | 33.5 | 20.7 | 72.6 | 43.4 | 84.8 | 52.4 | 253.2 |

Table 42: Percentage of annual catch by month from CRA 6, 1979–80 to 2009–10. A ‘x’ indicates fewer than 3 vessels, and a ‘.’ indicates no fishing, in the year/month cell.

| Fishing year | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar |
|--------------|-----|-----|------|------|-----|-----|------|------|------|------|------|-----|
| 1979–80 | . | 7.2 | 8.1 | 6.1 | 3.5 | 3.5 | 12.1 | 14.5 | 15.1 | 18.5 | 11.3 | . |
| 1980–81 | . | 2.2 | 8.5 | 9.2 | 2.1 | 1.7 | 8.2 | 14.1 | 16.8 | 25.6 | 11.7 | . |
| 1981–82 | . | 4.8 | 6.6 | 4.8 | 2.9 | 3.5 | 18.4 | 14.6 | 14.2 | 15.2 | 14.8 | . |
| 1982–83 | . | 2.5 | 10.3 | 9.1 | 3.9 | 3.1 | 7.6 | 10.9 | 11.8 | 23.1 | 17.8 | . |
| 1983–84 | . | 1.4 | 7 | 7.9 | 6.5 | 2.6 | 7 | 17.6 | 15.9 | 18.7 | 15.4 | . |
| 1984–85 | . | 4.1 | 6 | 5 | 3.2 | 2 | 12.3 | 13.7 | 19.1 | 20.8 | 13.8 | x |
| 1985–86 | . | 4.1 | 5.9 | 3.4 | 1.8 | 6.3 | 12.2 | 13 | 19.1 | 14.8 | 19.2 | . |
| 1986–87 | . | 2.1 | 4 | 3.3 | 3.1 | 2.9 | 10.7 | 16.9 | 20.4 | 19.9 | 16.8 | . |
| 1987–88 | . | 1.1 | 4.6 | 4.4 | 4.8 | 1.3 | 9.7 | 15.6 | 21.3 | 18.1 | 15.7 | 3.3 |
| 1988–89 | . | 3.1 | 7.2 | 4.7 | 2.8 | 1.4 | 8.7 | 14.4 | 16.9 | 22.3 | 18.5 | . |
| 1989–90 | . | 3.6 | 5.4 | 5.7 | 3.3 | 1.6 | 9.9 | 10.4 | 19.2 | 21.4 | 19.5 | x |
| 1990–91 | . | 1.9 | 5.5 | 3.4 | 1.6 | 1.5 | 16 | 15 | 16.7 | 17 | 21.3 | x |
| 1991–92 | . | 1.4 | 5.9 | 4 | 1.8 | 2.1 | 10.7 | 9.6 | 17.4 | 30.9 | 13.5 | 2.8 |
| 1992–93 | . | 1.3 | 8.2 | 7.3 | 6 | 3.3 | 2.4 | 10.1 | 16 | 20.9 | 17.7 | 6.7 |
| 1993–94 | . | 1.6 | 8.7 | 8.2 | 4.8 | 3.2 | 8.8 | 15.7 | 13.1 | 14 | 21.9 | . |
| 1994–95 | x | 4.4 | 6.2 | 5.1 | 4.4 | 2.6 | 8.6 | 16.1 | 14.8 | 20.9 | 17 | . |
| 1995–96 | . | 4.2 | 6.8 | 3.8 | 5.9 | 6.7 | 23.7 | 11.9 | 10 | 12.2 | 14.6 | 0.3 |
| 1996–97 | . | 5.3 | 8.3 | 5.7 | 5.1 | 8.7 | 20.3 | 11.1 | 13 | 12.5 | 10.1 | x |
| 1997–98 | x | 8 | 9.4 | 8.2 | 5.4 | 6.7 | 11.3 | 12.1 | 14.8 | 11.7 | 12.4 | x |
| 1998–99 | . | 6.5 | 7.1 | 5.6 | 5.2 | 6.5 | 16.6 | 18.7 | 11.9 | 9.4 | 12.6 | . |
| 1999–00 | . | 6.6 | 7.3 | 6.2 | 5.6 | 8.3 | 17.6 | 12.9 | 11.2 | 12.1 | 12 | x |
| 2000–01 | . | 5.2 | 6.8 | 6.7 | 4.8 | 9.7 | 17.8 | 16 | 10.2 | 10.7 | 11.9 | x |
| 2001–02 | . | 2.9 | 7.9 | 6.3 | 4.1 | 4.3 | 15.1 | 14.3 | 13.2 | 17 | 14.8 | x |
| 2002–03 | . | 2.2 | 6.2 | 9.5 | 5.9 | 5.7 | 8 | 15.9 | 11.1 | 18.4 | 17 | x |
| 2003–04 | . | 1.7 | 5.3 | 6.6 | 8.6 | 6.3 | 15.9 | 12.8 | 12.4 | 19 | 11.2 | x |
| 2004–05 | . | 3.9 | 7.1 | 10.1 | 3.9 | 4.8 | 10.3 | 15.1 | 12.4 | 17 | 14.9 | 0.6 |
| 2005–06 | . | 3.8 | 6.4 | 7.2 | 5.5 | 5.5 | 10.3 | 14.1 | 18.1 | 16.8 | 12.3 | . |
| 2006–07 | . | 3.3 | 8.1 | 9.6 | 6.7 | 6.7 | 15.7 | 11.3 | 12.7 | 11.6 | 13.6 | x |
| 2007–08 | . | 1.4 | 4.9 | 9.7 | 8.7 | 6.5 | 5.7 | 17.2 | 13.5 | 20.4 | 11.8 | x |
| 2008–09 | . | 2.5 | 6.9 | 6.7 | 5.8 | 7 | 15.9 | 16.6 | 10.1 | 17.8 | 10.7 | . |
| 2009–10 | . | 1.6 | 2.5 | 6.9 | 6.9 | 5.1 | 5.2 | 12.2 | 19.6 | 19.3 | 20.7 | . |

Table 43: Percentage of catch from CRA 6 by statistical area and month for 2009–10. An ‘x’ indicates fewer than 3 vessels in the month/statistical area cell (1 instance representing 0.1% of the annual catch). A ‘.’ indicates no fishing in the month/statistical area cell.

| Month | 940 | 941 | 942 | 943 |
|-------|-----|-----|-----|-----|
| Apr | . | . | . | . |
| May | 0.7 | x | 0.5 | 0.3 |
| Jun | 0.7 | 0.3 | 0.8 | 0.7 |
| Jul | 2.5 | 0.5 | 1.7 | 2.2 |
| Aug | 2.2 | 1.1 | 2.3 | 1.4 |
| Sep | 1.4 | 0.8 | 2.2 | 0.7 |
| Oct | 1.1 | 0.9 | 2.3 | 0.9 |
| Nov | 2.8 | 1.1 | 6.2 | 2.1 |
| Dec | 4.1 | 2.7 | 9.1 | 3.7 |
| Jan | 3.3 | 3.1 | 9.4 | 3.5 |
| Feb | 4.3 | 4.6 | 7.8 | 3.9 |
| Mar | . | . | . | 1 |

Table 44: Arithmetic CPUE (kg/potlift) for CRA 6 by fishing year and statistical area, 1979–80 to 2009–10.

| Fishing year | 940 | 941 | 942 | 943 |
|--------------|------|------|------|------|
| 1979–80 | 2.04 | 1.43 | 3.67 | 3.22 |
| 1980–81 | 2.59 | 1.38 | 2.44 | 2.82 |
| 1981–82 | 2.71 | 1.40 | 3.10 | 2.52 |
| 1982–83 | 2.17 | 0.97 | 2.23 | 2.28 |
| 1983–84 | 2.34 | 1.28 | 1.80 | 1.88 |
| 1984–85 | 1.54 | 1.07 | 1.42 | 1.51 |
| 1985–86 | 1.71 | 1.14 | 1.42 | 1.42 |
| 1986–87 | 1.52 | 1.32 | 2.00 | 1.68 |
| 1987–88 | 1.52 | 1.09 | 1.78 | 1.45 |
| 1988–89 | 1.22 | 1.09 | 1.62 | 1.41 |
| 1989–90 | 1.47 | 1.09 | 1.50 | 1.15 |
| 1990–91 | 1.36 | 0.92 | 1.87 | 0.94 |
| 1991–92 | 1.24 | 0.86 | 1.78 | 0.84 |
| 1992–93 | 0.94 | 0.79 | 1.72 | 0.91 |
| 1993–94 | 0.97 | 0.88 | 1.38 | 0.80 |
| 1994–95 | 1.09 | 0.74 | 1.46 | 0.70 |
| 1995–96 | 1.00 | 0.77 | 1.44 | 0.82 |
| 1996–97 | 0.88 | 0.84 | 1.29 | 0.95 |
| 1997–98 | 0.73 | 0.77 | 1.08 | 0.94 |
| 1998–99 | 0.91 | 1.04 | 1.53 | 1.24 |
| 1999–00 | 0.97 | 0.94 | 1.71 | 0.83 |
| 2000–01 | 0.92 | 0.91 | 1.54 | 0.83 |
| 2001–02 | 0.98 | 0.86 | 1.47 | 1.15 |
| 2002–03 | 1.12 | 0.99 | 1.31 | 1.18 |
| 2003–04 | 1.15 | 0.76 | 1.40 | 0.99 |
| 2004–05 | 1.14 | 0.89 | 1.53 | 1.04 |
| 2005–06 | 1.30 | 0.91 | 1.69 | 1.51 |
| 2006–07 | 1.25 | 1.03 | 1.91 | 1.96 |
| 2007–08 | 1.38 | 1.15 | 2.03 | 1.40 |
| 2008–09 | 1.34 | 1.33 | 1.69 | 1.49 |
| 2009–10 | 1.10 | 1.22 | 1.72 | 1.27 |

Table 45: Annual arithmetic, unstandardised, and standardised (with standard error) CPUE indices for CRA 6 (kg/potlift).

| Fishing year | Arithmetic | Unstandardised | Standardised | s.e. |
|--------------|------------|----------------|--------------|-------|
| 1979–80 | 2.33 | 2.10 | 2.17 | 0.036 |
| 1980–81 | 2.18 | 2.03 | 2.00 | 0.037 |
| 1981–82 | 2.19 | 2.28 | 2.28 | 0.034 |
| 1982–83 | 1.78 | 1.62 | 1.64 | 0.031 |
| 1983–84 | 1.73 | 1.63 | 1.61 | 0.031 |
| 1984–85 | 1.35 | 1.30 | 1.29 | 0.031 |
| 1985–86 | 1.41 | 1.37 | 1.36 | 0.031 |
| 1986–87 | 1.66 | 1.51 | 1.49 | 0.033 |
| 1987–88 | 1.48 | 1.34 | 1.30 | 0.033 |
| 1988–89 | 1.40 | 1.28 | 1.26 | 0.036 |
| 1989–90 | 1.34 | 1.19 | 1.13 | 0.035 |
| 1990–91 | 1.38 | 1.19 | 1.17 | 0.036 |
| 1991–92 | 1.29 | 1.24 | 1.21 | 0.032 |
| 1992–93 | 1.14 | 1.20 | 1.17 | 0.031 |
| 1993–94 | 1.07 | 1.04 | 1.04 | 0.029 |
| 1994–95 | 1.07 | 1.04 | 1.03 | 0.029 |
| 1995–96 | 1.08 | 1.03 | 1.05 | 0.028 |
| 1996–97 | 1.02 | 1.09 | 1.11 | 0.029 |
| 1997–98 | 0.88 | 1.03 | 1.05 | 0.031 |
| 1998–99 | 1.17 | 1.25 | 1.29 | 0.035 |
| 1999–00 | 1.19 | 1.28 | 1.33 | 0.038 |
| 2000–01 | 1.15 | 1.17 | 1.19 | 0.037 |
| 2001–02 | 1.15 | 1.16 | 1.18 | 0.038 |
| 2002–03 | 1.16 | 1.26 | 1.28 | 0.038 |
| 2003–04 | 1.10 | 1.20 | 1.21 | 0.038 |
| 2004–05 | 1.21 | 1.36 | 1.34 | 0.037 |
| 2005–06 | 1.35 | 1.45 | 1.44 | 0.036 |
| 2006–07 | 1.44 | 1.60 | 1.64 | 0.037 |
| 2007–08 | 1.53 | 1.59 | 1.61 | 0.038 |
| 2008–09 | 1.50 | 1.58 | 1.59 | 0.038 |
| 2009–10 | 1.36 | 1.42 | 1.40 | 0.038 |

Table 46: Number of vessels by statistical area from CRA 7, 1979–80 to 2009–10. Vessels catching less than 1 t in a year for the entire QMA were excluded.

| Fishing year | 920 | 921 | All |
|--------------|-----|-----|-----|
| 1979–80 | 64 | 35 | 90 |
| 1980–81 | 58 | 35 | 86 |
| 1981–82 | 50 | 35 | 79 |
| 1982–83 | 24 | 22 | 42 |
| 1983–84 | 23 | 22 | 40 |
| 1984–85 | 39 | 24 | 59 |
| 1985–86 | 47 | 26 | 66 |
| 1986–87 | 40 | 25 | 58 |
| 1987–88 | 41 | 16 | 51 |
| 1988–89 | 28 | 15 | 38 |
| 1989–90 | 12 | 7 | 17 |
| 1990–91 | 28 | 12 | 37 |
| 1991–92 | 34 | 15 | 46 |
| 1992–93 | 29 | 11 | 35 |
| 1993–94 | 32 | 10 | 37 |
| 1994–95 | 26 | 8 | 32 |
| 1995–96 | 22 | 16 | 27 |
| 1996–97 | 16 | 8 | 22 |
| 1997–98 | 7 | 4 | 7 |
| 1998–99 | 13 | 9 | 18 |
| 1999–00 | 13 | 6 | 17 |
| 2000–01 | 18 | 12 | 25 |
| 2001–02 | 17 | 9 | 22 |
| 2002–03 | 18 | 6 | 20 |
| 2003–04 | 16 | 3 | 17 |
| 2004–05 | 12 | 4 | 14 |
| 2005–06 | 10 | 5 | 14 |
| 2006–07 | 9 | 7 | 14 |
| 2007–08 | 15 | 8 | 20 |
| 2008–09 | 11 | 5 | 15 |
| 2009–10 | 15 | 7 | 19 |

Table 47: Distribution and annual catch by statistical area from CRA 7, 1979–80 to 2009–10.

| Fishing Year | Distribution (%) | | Annual Catch (t) | | |
|--------------|------------------|------|------------------|-------|-------|
| | 920 | 921 | 920 | 921 | CRA 7 |
| 1979–80 | 61.3 | 38.7 | 247.3 | 156.1 | 403.4 |
| 1980–81 | 62.0 | 38.0 | 184.7 | 113.0 | 297.8 |
| 1981–82 | 60.5 | 39.5 | 161.7 | 105.4 | 267.0 |
| 1982–83 | 53.6 | 46.4 | 69.3 | 60.1 | 129.4 |
| 1983–84 | 52.3 | 47.7 | 57.1 | 52.1 | 109.1 |
| 1984–85 | 63.5 | 36.5 | 121.6 | 70.0 | 191.7 |
| 1985–86 | 74.5 | 25.5 | 238.4 | 81.5 | 319.9 |
| 1986–87 | 72.6 | 27.4 | 237.5 | 89.6 | 327.1 |
| 1987–88 | 78.5 | 21.5 | 232.1 | 63.7 | 295.8 |
| 1988–89 | 70.1 | 29.9 | 150.0 | 63.9 | 213.9 |
| 1989–90 | 63.9 | 36.1 | 64.8 | 36.6 | 101.4 |
| 1990–91 | 66.5 | 33.5 | 88.7 | 44.6 | 133.4 |
| 1991–92 | 71.9 | 28.1 | 127.8 | 49.9 | 177.7 |
| 1992–93 | 69.9 | 30.1 | 91.9 | 39.6 | 131.6 |
| 1993–94 | 67.4 | 32.6 | 93.1 | 45.0 | 138.1 |
| 1994–95 | 64.9 | 35.1 | 78.1 | 42.3 | 120.3 |
| 1995–96 | 57.2 | 42.8 | 46.5 | 34.8 | 81.3 |
| 1996–97 | 62.9 | 37.1 | 39.6 | 23.3 | 62.9 |
| 1997–98 | 51.6 | 48.4 | 18.6 | 17.4 | 36.0 |
| 1998–99 | 48.3 | 51.7 | 28.3 | 30.3 | 58.6 |
| 1999–00 | 74.0 | 26.0 | 41.8 | 14.7 | 56.5 |
| 2000–01 | 50.7 | 49.3 | 44.3 | 43.0 | 87.2 |
| 2001–02 | 72.7 | 27.3 | 55.9 | 21.0 | 76.9 |
| 2002–03 | 76.5 | 23.5 | 67.8 | 20.8 | 88.6 |
| 2003–04 | 70.5 | 29.5 | 57.4 | 24.0 | 81.4 |
| 2004–05 | 58.4 | 41.6 | 55.1 | 39.1 | 94.2 |
| 2005–06 | 52.0 | 48.0 | 49.4 | 45.6 | 95.0 |
| 2006–07 | 51.4 | 48.6 | 61.7 | 58.5 | 120.2 |
| 2007–08 | 64.5 | 35.5 | 77.5 | 42.6 | 120.1 |
| 2008–09 | 64.7 | 35.3 | 77.8 | 42.5 | 120.3 |
| 2009–10 | 56.8 | 43.2 | 77.5 | 59.0 | 136.5 |

Table 48: Distribution and annual potlifts by statistical area from CRA 7, 1979–80 to 2009–10.

| Fishing Year | Distribution (%) | | Annual Potlifts (000's) | | |
|--------------|------------------|------|-------------------------|-------|-------|
| | 920 | 921 | 920 | 921 | CRA 7 |
| 1979–80 | 70.6 | 29.4 | 271.0 | 112.7 | 383.7 |
| 1980–81 | 73.5 | 26.5 | 245.5 | 88.7 | 334.2 |
| 1981–82 | 71.9 | 28.1 | 244.2 | 95.5 | 339.7 |
| 1982–83 | 67.5 | 32.5 | 173.3 | 83.6 | 256.9 |
| 1983–84 | 63.7 | 36.3 | 172.1 | 98.2 | 270.3 |
| 1984–85 | 71.5 | 28.5 | 232.4 | 92.7 | 325.1 |
| 1985–86 | 77.5 | 22.5 | 330.0 | 95.6 | 425.5 |
| 1986–87 | 79.4 | 20.6 | 321.6 | 83.3 | 404.9 |
| 1987–88 | 81.4 | 18.6 | 332.3 | 75.7 | 408.0 |
| 1988–89 | 78.0 | 22.0 | 373.7 | 105.4 | 479.0 |
| 1989–90 | 81.0 | 19.0 | 228.0 | 53.6 | 281.6 |
| 1990–91 | 81.3 | 18.7 | 262.5 | 60.4 | 322.9 |
| 1991–92 | 77.2 | 22.8 | 166.0 | 49.0 | 215.0 |
| 1992–93 | 84.1 | 15.9 | 276.7 | 52.1 | 328.9 |
| 1993–94 | 82.5 | 17.5 | 180.9 | 38.5 | 219.4 |
| 1994–95 | 84.0 | 16.0 | 209.4 | 39.8 | 249.2 |
| 1995–96 | 73.1 | 26.9 | 191.0 | 70.5 | 261.5 |
| 1996–97 | 78.5 | 21.5 | 194.3 | 53.3 | 247.6 |
| 1997–98 | 68.6 | 31.4 | 105.0 | 48.1 | 153.1 |
| 1998–99 | 59.3 | 40.7 | 115.5 | 79.3 | 194.8 |
| 1999–00 | 81.4 | 18.6 | 205.9 | 46.9 | 252.8 |
| 2000–01 | 65.2 | 34.8 | 163.8 | 87.3 | 251.1 |
| 2001–02 | 75.1 | 24.9 | 125.7 | 41.6 | 167.3 |
| 2002–03 | 88.6 | 11.4 | 151.6 | 19.4 | 171.0 |
| 2003–04 | 90.9 | 9.1 | 128.2 | 12.8 | 141.0 |
| 2004–05 | 80.6 | 19.4 | 100.9 | 24.3 | 125.2 |
| 2005–06 | 70.3 | 29.7 | 59.8 | 25.2 | 85.0 |
| 2006–07 | 62.9 | 37.1 | 48.6 | 28.7 | 77.2 |
| 2007–08 | 74.3 | 25.7 | 67.9 | 23.5 | 91.4 |
| 2008–09 | 70.9 | 29.1 | 50.6 | 20.7 | 71.3 |
| 2009–10 | 74.0 | 26.0 | 99.4 | 35.0 | 134.3 |

Table 49: Percentage of annual catch by month from CRA 7, 1979–80 to 2009–10. A 'x' indicates fewer than 3 vessels, and a '.' indicates no fishing, in the year/month cell.

| Fishing year | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar |
|--------------|-----|-----|------|------|------|------|------|------|-----|-----|-----|-----|
| 1979–80 | 1.7 | x | 5.7 | 18.1 | 26.8 | 22.6 | 13.4 | 6.5 | 3.4 | 1.1 | 0.6 | 0.3 |
| 1980–81 | 0.0 | 0.2 | 8.6 | 19.9 | 33.4 | 15.4 | 12.3 | 5.4 | 2.1 | 1.2 | 0.9 | 0.6 |
| 1981–82 | 0.1 | 0.0 | 8.5 | 27.5 | 25.0 | 19.9 | 9.3 | 5.5 | 1.9 | 1.6 | 0.7 | 0.0 |
| 1982–83 | x | x | 5.7 | 25.8 | 24.3 | 15.3 | 11.6 | 10.0 | 5.0 | 1.8 | 0.3 | x |
| 1983–84 | . | . | 5.8 | 19.0 | 24.9 | 19.9 | 15.4 | 6.6 | 5.3 | 2.0 | 0.8 | 0.2 |
| 1984–85 | x | x | 15.8 | 30.5 | 16.6 | 12.6 | 11.7 | 7.6 | 3.1 | 1.5 | 0.5 | 0.1 |
| 1985–86 | x | x | 10.9 | 28.1 | 25.5 | 12.9 | 10.6 | 5.4 | 3.8 | 1.5 | 1.1 | 0.1 |
| 1986–87 | . | 0.0 | 5.6 | 17.5 | 19.9 | 24.9 | 14.3 | 8.9 | 5.7 | 2.2 | 0.9 | 0.1 |
| 1987–88 | 0.0 | x | 7.1 | 24.7 | 27.4 | 16.0 | 12.0 | 7.0 | 2.8 | 1.6 | 0.9 | 0.5 |
| 1988–89 | x | . | 4.3 | 18.6 | 28.1 | 14.8 | 18.3 | 11.5 | 1.8 | 1.5 | 1.0 | x |
| 1989–90 | . | x | 2.6 | 6.0 | 18.0 | 27.2 | 16.5 | 11.7 | 8.6 | 6.5 | 2.7 | 0.2 |
| 1990–91 | x | . | 7.0 | 25.0 | 20.0 | 19.6 | 9.1 | 5.9 | 6.8 | 4.2 | 1.9 | 0.2 |
| 1991–92 | x | x | 21.9 | 34.6 | 32.7 | 9.6 | 0.9 | 0.2 | 0.1 | . | 0.0 | . |
| 1992–93 | . | . | 5.9 | 18.7 | 19.9 | 24.1 | 17.9 | 7.8 | 5.0 | 0.4 | x | x |
| 1993–94 | x | . | 15.7 | 40.1 | 24.4 | 11.6 | 8.0 | 0.1 | x | x | . | . |
| 1994–95 | . | x | 9.4 | 28.7 | 33.5 | 19.6 | 7.4 | 1.2 | . | . | x | . |
| 1995–96 | . | x | 5.9 | 39.0 | 26.1 | 19.9 | 8.1 | 1.0 | . | . | . | . |
| 1996–97 | . | . | 4.8 | 19.4 | 32.1 | 19.1 | 19.2 | 5.4 | . | . | . | . |
| 1997–98 | . | . | 2.4 | 17.9 | 22.9 | 21.3 | 13.5 | 22.0 | . | . | . | . |
| 1998–99 | . | . | 6.0 | 30.1 | 21.0 | 9.1 | 12.5 | 20.2 | x | . | . | . |
| 1999–00 | . | . | 7.3 | 20.4 | 27.5 | 17.4 | 14.0 | 13.5 | . | . | . | . |
| 2000–01 | . | . | 6.6 | 22.2 | 28.6 | 15.6 | 17.7 | 9.2 | . | x | . | . |
| 2001–02 | . | . | 9.0 | 27.1 | 25.7 | 18.6 | 12.6 | 6.9 | . | . | x | . |
| 2002–03 | . | x | 10.2 | 21.2 | 30.5 | 20.6 | 15.8 | 1.8 | . | . | . | . |
| 2003–04 | . | x | 7.1 | 29.1 | 25.5 | 15.2 | 18.4 | 4.8 | . | . | . | . |
| 2004–05 | x | . | 11.5 | 36.2 | 30.8 | 12.8 | 5.9 | 2.9 | . | . | . | . |
| 2005–06 | . | . | 9.0 | 45.7 | 32.1 | 10.9 | 2.0 | x | . | . | . | . |
| 2006–07 | . | . | 11.1 | 33.3 | 33.3 | 17.6 | 4.4 | x | . | . | . | . |
| 2007–08 | . | x | 3.3 | 26.5 | 34.4 | 24.3 | 10.6 | 0.6 | . | . | . | . |
| 2008–09 | . | . | 3.7 | 9.2 | 36.2 | 32.0 | 18.9 | x | . | . | . | . |
| 2009–10 | . | . | 1.6 | 7.6 | 17.5 | 30.3 | 23.0 | 20.0 | . | . | . | . |

Table 50: Percentage of catch from CRA 7 by statistical area and month for 2009–10. A ‘.’ indicates no fishing in the month/statistical area cell.

| | | |
|-------|------|------|
| Month | 920 | 921 |
| Apr | . | . |
| May | . | . |
| Jun | 0.7 | 0.9 |
| Jul | 5.3 | 2.3 |
| Aug | 13.1 | 4.4 |
| Sep | 20.8 | 9.5 |
| Oct | 10.9 | 12.1 |
| Nov | 6.0 | 14.0 |
| Dec | . | . |
| Jan | . | . |
| Feb | . | . |
| Mar | . | . |

Table 51: Arithmetic CPUE (kg/potlift) for CRA 7 by fishing year and statistical area, 1979–80 to 2009–10.

| | | |
|--------------|------|------|
| Fishing year | 920 | 921 |
| 1979–80 | 0.91 | 1.39 |
| 1980–81 | 0.75 | 1.27 |
| 1981–82 | 0.66 | 1.10 |
| 1982–83 | 0.40 | 0.72 |
| 1983–84 | 0.33 | 0.53 |
| 1984–85 | 0.52 | 0.76 |
| 1985–86 | 0.72 | 0.85 |
| 1986–87 | 0.74 | 1.08 |
| 1987–88 | 0.70 | 0.84 |
| 1988–89 | 0.40 | 0.61 |
| 1989–90 | 0.28 | 0.68 |
| 1990–91 | 0.34 | 0.74 |
| 1991–92 | 0.77 | 1.02 |
| 1992–93 | 0.33 | 0.76 |
| 1993–94 | 0.51 | 1.17 |
| 1994–95 | 0.37 | 1.06 |
| 1995–96 | 0.24 | 0.49 |
| 1996–97 | 0.20 | 0.44 |
| 1997–98 | 0.18 | 0.36 |
| 1998–99 | 0.25 | 0.38 |
| 1999–00 | 0.20 | 0.31 |
| 2000–01 | 0.27 | 0.49 |
| 2001–02 | 0.45 | 0.50 |
| 2002–03 | 0.45 | 1.07 |
| 2003–04 | 0.45 | 1.88 |
| 2004–05 | 0.55 | 1.61 |
| 2005–06 | 0.83 | 1.81 |
| 2006–07 | 1.27 | 2.04 |
| 2007–08 | 1.14 | 1.81 |
| 2008–09 | 1.54 | 2.05 |
| 2009–10 | 0.78 | 1.69 |

Table 52: Annual arithmetic, unstandardised, and standardised (with standard error) CPUE indices for CRA 7 (kg/potlift).

| Fishing year | Arithmetic | Unstandardised | Standardised | s.e. |
|--------------|------------|----------------|--------------|-------|
| 1979–80 | 1.05 | 0.98 | 0.98 | 0.031 |
| 1980–81 | 0.89 | 0.85 | 0.86 | 0.033 |
| 1981–82 | 0.79 | 0.73 | 0.73 | 0.034 |
| 1982–83 | 0.50 | 0.48 | 0.47 | 0.037 |
| 1983–84 | 0.40 | 0.41 | 0.41 | 0.038 |
| 1984–85 | 0.59 | 0.55 | 0.55 | 0.038 |
| 1985–86 | 0.75 | 0.72 | 0.73 | 0.037 |
| 1986–87 | 0.81 | 0.82 | 0.83 | 0.039 |
| 1987–88 | 0.73 | 0.68 | 0.70 | 0.041 |
| 1988–89 | 0.45 | 0.41 | 0.41 | 0.047 |
| 1989–90 | 0.36 | 0.32 | 0.34 | 0.045 |
| 1990–91 | 0.41 | 0.41 | 0.43 | 0.042 |
| 1991–92 | 0.83 | 0.95 | 0.95 | 0.054 |
| 1992–93 | 0.40 | 0.39 | 0.41 | 0.045 |
| 1993–94 | 0.63 | 0.60 | 0.61 | 0.057 |
| 1994–95 | 0.48 | 0.45 | 0.46 | 0.053 |
| 1995–96 | 0.31 | 0.28 | 0.27 | 0.052 |
| 1996–97 | 0.25 | 0.23 | 0.23 | 0.056 |
| 1997–98 | 0.24 | 0.17 | 0.17 | 0.062 |
| 1998–99 | 0.30 | 0.27 | 0.26 | 0.061 |
| 1999–00 | 0.22 | 0.27 | 0.27 | 0.065 |
| 2000–01 | 0.35 | 0.36 | 0.35 | 0.058 |
| 2001–02 | 0.46 | 0.46 | 0.45 | 0.063 |
| 2002–03 | 0.52 | 0.61 | 0.62 | 0.068 |
| 2003–04 | 0.58 | 0.57 | 0.61 | 0.076 |
| 2004–05 | 0.75 | 0.83 | 0.84 | 0.091 |
| 2005–06 | 1.12 | 1.25 | 1.24 | 0.102 |
| 2006–07 | 1.56 | 1.87 | 1.75 | 0.096 |
| 2007–08 | 1.31 | 1.66 | 1.60 | 0.084 |
| 2008–09 | 1.69 | 2.04 | 2.01 | 0.096 |
| 2009–10 | 1.02 | 0.97 | 0.98 | 0.073 |

Table 53: Number of vessels by statistical area from CRA 8, 1979–80 to 2009–10. Vessels catching less than 1 t in a year for the entire QMA were excluded. A ‘.’ indicates no fishing in the statistical area/fishing year cell.

| Fishing year | 922 | 923 | 924 | 925 | 926 | 927 | 928 | CRA 8 |
|--------------|-----|-----|-----|-----|-----|-----|-----|-------|
| 1979–80 | 6 | 48 | 76 | 5 | 67 | 69 | 67 | 271 |
| 1980–81 | 6 | 50 | 85 | 4 | 63 | 59 | 50 | 253 |
| 1981–82 | 8 | 39 | 76 | 5 | 68 | 40 | 34 | 221 |
| 1982–83 | 6 | 32 | 67 | 6 | 71 | 46 | 33 | 214 |
| 1983–84 | 6 | 41 | 56 | 7 | 73 | 47 | 34 | 208 |
| 1984–85 | 8 | 33 | 59 | 7 | 70 | 57 | 36 | 212 |
| 1985–86 | 3 | 38 | 54 | 5 | 63 | 58 | 40 | 208 |
| 1986–87 | 3 | 28 | 51 | 5 | 56 | 42 | 36 | 187 |
| 1987–88 | 5 | 24 | 53 | 1 | 57 | 38 | 28 | 173 |
| 1988–89 | 4 | 29 | 38 | 5 | 43 | 23 | 22 | 135 |
| 1989–90 | 7 | 36 | 40 | 11 | 78 | 42 | 27 | 178 |
| 1990–91 | 3 | 15 | 35 | 14 | 65 | 38 | 25 | 134 |
| 1991–92 | 5 | 19 | 34 | 4 | 71 | 43 | 34 | 143 |
| 1992–93 | 4 | 16 | 32 | 7 | 52 | 33 | 37 | 144 |
| 1993–94 | 3 | 19 | 33 | 8 | 51 | 34 | 34 | 143 |
| 1994–95 | 2 | 10 | 32 | 16 | 42 | 29 | 34 | 122 |
| 1995–96 | 3 | 10 | 18 | 10 | 36 | 27 | 30 | 112 |
| 1996–97 | 3 | 11 | 21 | 9 | 36 | 25 | 31 | 111 |
| 1997–98 | 2 | 12 | 18 | 8 | 36 | 23 | 35 | 107 |
| 1998–99 | 1 | 11 | 17 | 9 | 34 | 20 | 37 | 104 |
| 1999–00 | 2 | 13 | 16 | 7 | 29 | 21 | 21 | 91 |
| 2000–01 | 1 | 8 | 14 | 4 | 32 | 24 | 18 | 87 |
| 2001–02 | 2 | 6 | 13 | 3 | 34 | 15 | 18 | 74 |
| 2002–03 | 1 | 2 | 12 | 2 | 33 | 12 | 15 | 69 |
| 2003–04 | 1 | 5 | 11 | 4 | 29 | 11 | 14 | 66 |
| 2004–05 | 2 | 6 | 10 | 4 | 29 | 9 | 13 | 62 |
| 2005–06 | 1 | 6 | 8 | 1 | 28 | 10 | 14 | 60 |
| 2006–07 | 2 | 4 | 7 | . | 25 | 11 | 13 | 57 |
| 2007–08 | 2 | 5 | 12 | 3 | 22 | 13 | 16 | 59 |
| 2008–09 | 2 | 4 | 14 | 2 | 21 | 13 | 17 | 64 |
| 2009–10 | 3 | 2 | 12 | 1 | 23 | 16 | 18 | 62 |

Table 54: Distribution and annual catch by statistical area from CRA 8, 1979–80 to 2009–10. An ‘x’ indicates fewer than 3 vessels, and a ‘.’ indicates no fishing, in the year/statistical area cell.

| Fishing Year | Distribution (%) | | | | | | | Annual Catch (t) | | | | | | | CRA 8 |
|-----------------|------------------|------|------|-----|------|------|------|------------------|-------|-------|------|-------|-------|-------|---------|
| | 922 | 923 | 924 | 925 | 926 | 927 | 928 | 922 | 923 | 924 | 925 | 926 | 927 | 928 | |
| 1979–80 | 1.9 | 12.7 | 25.6 | 0.4 | 22.4 | 19.5 | 17.6 | 32.5 | 218.9 | 442.0 | 7.2 | 385.7 | 335.8 | 303.5 | 1,725.6 |
| 1980–81 | 1.2 | 11.3 | 30.5 | 1.3 | 24.1 | 17.1 | 14.5 | 17.4 | 165.8 | 446.1 | 18.5 | 353.1 | 250.3 | 212.2 | 1,463.4 |
| 1981–82 | 1.5 | 11.9 | 27.5 | 1.9 | 32.4 | 13.8 | 11.0 | 20.8 | 166.1 | 383.8 | 26.2 | 452.1 | 192.7 | 153.9 | 1,395.7 |
| 1982–83 | 1.4 | 9.9 | 24.9 | 1.0 | 33.2 | 18.8 | 10.8 | 21.4 | 148.4 | 374.3 | 14.7 | 498.8 | 283.1 | 161.6 | 1,502.4 |
| 1983–84 | 1.1 | 10.2 | 22.3 | 1.5 | 35.8 | 17.2 | 11.9 | 16.1 | 154.9 | 339.8 | 22.5 | 546.6 | 263.0 | 182.0 | 1,524.9 |
| 1984–85 | 1.3 | 9.4 | 22.0 | 0.8 | 30.5 | 24.9 | 11.2 | 20.1 | 145.5 | 341.4 | 11.9 | 472.0 | 385.2 | 173.2 | 1,549.3 |
| 1985–86 | 0.7 | 10.5 | 21.3 | 1.0 | 29.5 | 24.2 | 12.9 | 12.2 | 196.2 | 397.0 | 18.7 | 549.6 | 452.1 | 239.7 | 1,865.6 |
| 1986–87 | 1.1 | 9.9 | 27.8 | 0.4 | 30.2 | 16.2 | 14.3 | 18.1 | 159.0 | 444.3 | 6.6 | 483.8 | 259.0 | 229.3 | 1,600.1 |
| 1987–88 | 1.3 | 12.5 | 27.8 | x | 32.0 | 15.5 | 10.8 | 21.5 | 207.6 | 462.5 | x | 532.9 | 258.6 | 179.6 | 1,665.3 |
| 1988–89 | 1.7 | 16.2 | 23.8 | 1.0 | 32.8 | 11.5 | 12.9 | 18.3 | 169.8 | 249.8 | 10.6 | 343.4 | 120.9 | 134.8 | 1,047.7 |
| 1989–90 | 1.1 | 8.9 | 23.0 | 0.5 | 36.5 | 19.3 | 10.7 | 14.3 | 110.9 | 287.8 | 6.0 | 456.6 | 241.3 | 133.4 | 1,250.2 |
| 1990–91 | 0.9 | 6.7 | 23.0 | 1.4 | 37.9 | 18.9 | 11.2 | 7.2 | 56.1 | 192.3 | 11.6 | 316.2 | 157.3 | 93.7 | 834.5 |
| 1991–92 | 1.0 | 6.0 | 19.6 | 1.3 | 32.3 | 23.1 | 16.6 | 9.9 | 58.0 | 189.1 | 12.6 | 310.8 | 222.4 | 159.9 | 962.7 |
| 1992–93 | 0.8 | 5.6 | 19.6 | 1.4 | 33.0 | 18.4 | 21.2 | 7.0 | 49.3 | 171.4 | 12.2 | 289.4 | 161.3 | 185.8 | 876.5 |
| 1993–94 | 1.5 | 6.4 | 22.9 | 1.7 | 30.2 | 17.4 | 19.8 | 13.8 | 57.3 | 205.3 | 15.7 | 270.2 | 156.1 | 177.6 | 896.1 |
| 1994–95 | 1.0 | 3.9 | 24.2 | 4.0 | 27.8 | 18.7 | 20.3 | 8.1 | 33.7 | 207.4 | 34.0 | 238.3 | 160.2 | 173.9 | 855.6 |
| 1995–96 | 0.8 | 5.1 | 17.0 | 3.6 | 30.4 | 21.1 | 21.9 | 6.8 | 41.7 | 140.5 | 29.9 | 251.1 | 174.5 | 181.2 | 825.6 |
| 1996–97 | 0.8 | 5.5 | 16.1 | 2.7 | 33.3 | 21.7 | 20.0 | 6.7 | 47.8 | 138.6 | 23.0 | 287.5 | 186.8 | 172.2 | 862.4 |
| 1997–98 | 0.3 | 4.4 | 16.6 | 1.2 | 32.6 | 19.2 | 25.6 | 2.7 | 34.8 | 130.7 | 9.1 | 256.1 | 151.0 | 201.3 | 785.6 |
| 1998–99 | x | 6.0 | 11.6 | 1.3 | 35.0 | 20.0 | 25.7 | x | 48.1 | 94.1 | 10.6 | 282.9 | 161.6 | 207.9 | 808.1 |
| 1999–00 | x | 6.5 | 13.7 | 3.1 | 36.4 | 22.8 | 17.1 | x | 46.4 | 96.9 | 22.0 | 258.2 | 162.0 | 121.1 | 709.8 |
| 2000–01 | x | 3.6 | 15.5 | 2.1 | 40.8 | 25.3 | 12.1 | x | 25.3 | 109.3 | 14.8 | 286.8 | 178.0 | 85.4 | 703.4 |
| 2001–02 | x | 3.3 | 14.9 | 0.3 | 42.8 | 22.9 | 15.0 | x | 19.1 | 85.0 | 1.7 | 244.9 | 131.1 | 85.8 | 572.1 |
| 2002–03 | x | x | 15.6 | x | 48.4 | 18.3 | 13.9 | x | x | 88.4 | x | 274.3 | 103.9 | 78.8 | 567.1 |
| 2003–04 | x | 3.9 | 12.8 | 0.3 | 51.5 | 16.8 | 14.2 | x | 22.2 | 72.6 | 1.5 | 292.2 | 95.3 | 80.4 | 567.6 |
| 2004–05 | x | 3.8 | 12.1 | 1.2 | 50.0 | 16.7 | 15.6 | x | 22.7 | 72.7 | 7.2 | 301.2 | 100.6 | 93.8 | 603.0 |
| 2005–06 | x | 2.9 | 12.4 | x | 45.9 | 19.8 | 18.0 | x | 17.6 | 74.7 | x | 276.8 | 119.2 | 108.3 | 603.2 |
| 2006–07 | x | 3.2 | 13.4 | . | 41.2 | 23.0 | 18.1 | x | 24.1 | 101.5 | . | 311.0 | 173.4 | 136.5 | 754.9 |
| 2007–08 | x | 2.5 | 13.3 | 0.8 | 35.6 | 21.3 | 25.6 | x | 18.8 | 100.1 | 6.1 | 267.6 | 160.3 | 192.9 | 752.4 |
| 2008–09 | x | 0.4 | 15.3 | x | 28.8 | 22.4 | 32.3 | x | 4.3 | 147.6 | x | 278.2 | 216.8 | 311.6 | 966.0 |
| 2009–10 | 0.6 | x | 14.1 | x | 27.6 | 21.3 | 35.2 | 6.6 | x | 143.5 | x | 280.9 | 216.7 | 358.8 | 1,018.3 |

Table 55: Distribution and annual potlifts by statistical area from CRA 8, 1979–80 to 2009–10. An ‘x’ indicates fewer than 3 vessels, and a ‘.’ indicates no fishing, in the year/statistical area cell.

| Fishing Year | Distribution (%) | | | | | | | Annual Potlifts (000's) | | | | | | | CRA 8 |
|-----------------|------------------|------|------|-----|------|------|------|-------------------------|-------|-------|------|-------|-------|-------|---------|
| | 922 | 923 | 924 | 925 | 926 | 927 | 928 | 922 | 923 | 924 | 925 | 926 | 927 | 928 | |
| 1979–80 | 1.7 | 10.2 | 24.2 | 0.1 | 21.7 | 22.9 | 19.2 | 16.3 | 98.2 | 233.7 | 1.4 | 209.7 | 220.9 | 185.7 | 966.0 |
| 1980–81 | 1.5 | 10.3 | 26.2 | 0.3 | 21.2 | 22.2 | 18.2 | 13.1 | 87.4 | 222.8 | 2.3 | 180.2 | 188.5 | 154.8 | 849.2 |
| 1981–82 | 1.8 | 11.8 | 25.9 | 0.3 | 27.0 | 17.1 | 16.1 | 13.7 | 92.0 | 202.3 | 2.5 | 210.9 | 133.2 | 125.9 | 780.5 |
| 1982–83 | 2.0 | 8.6 | 22.6 | 0.3 | 26.3 | 24.3 | 15.8 | 19.4 | 81.8 | 216.2 | 3.3 | 251.0 | 232.2 | 150.5 | 954.4 |
| 1983–84 | 1.6 | 10.7 | 22.5 | 0.4 | 29.3 | 21.8 | 13.7 | 19.9 | 130.9 | 275.2 | 5.1 | 357.9 | 266.4 | 167.3 | 1,222.8 |
| 1984–85 | 1.8 | 9.2 | 20.2 | 0.3 | 28.7 | 25.5 | 14.3 | 23.4 | 116.8 | 256.4 | 3.2 | 363.2 | 323.3 | 181.1 | 1,267.3 |
| 1985–86 | 0.9 | 9.6 | 17.4 | 0.1 | 26.4 | 28.8 | 16.8 | 13.0 | 131.8 | 239.7 | 1.4 | 363.0 | 396.4 | 231.5 | 1,376.8 |
| 1986–87 | 1.2 | 9.8 | 18.9 | 0.2 | 28.1 | 23.6 | 18.2 | 16.4 | 136.1 | 263.2 | 3.1 | 392.0 | 328.6 | 253.1 | 1,392.7 |
| 1987–88 | 1.6 | 10.7 | 20.0 | x | 29.4 | 23.5 | 14.8 | 21.3 | 143.1 | 268.6 | x | 393.9 | 314.2 | 198.0 | 1,339.6 |
| 1988–89 | 3.0 | 14.0 | 20.6 | 0.6 | 29.2 | 15.2 | 17.4 | 34.0 | 159.1 | 233.3 | 6.7 | 331.3 | 172.7 | 196.9 | 1,133.9 |
| 1989–90 | 1.3 | 9.0 | 16.1 | 0.7 | 35.9 | 23.7 | 13.4 | 17.8 | 126.9 | 226.4 | 9.9 | 505.2 | 334.2 | 188.2 | 1,408.5 |
| 1990–91 | 1.2 | 6.3 | 16.3 | 0.9 | 35.1 | 22.9 | 17.3 | 11.8 | 60.4 | 156.2 | 8.4 | 335.4 | 219.0 | 165.3 | 956.5 |
| 1991–92 | 2.0 | 5.7 | 14.3 | 0.5 | 31.7 | 25.6 | 20.1 | 23.5 | 67.4 | 168.5 | 6.3 | 371.6 | 300.4 | 236.3 | 1,174.1 |
| 1992–93 | 1.1 | 4.9 | 12.5 | 1.0 | 31.8 | 23.3 | 25.3 | 14.8 | 62.7 | 160.8 | 13.2 | 410.4 | 300.7 | 326.4 | 1,289.0 |
| 1993–94 | 1.2 | 4.4 | 12.9 | 0.9 | 29.6 | 22.8 | 28.1 | 11.5 | 43.0 | 124.9 | 8.8 | 286.8 | 221.4 | 272.7 | 969.1 |
| 1994–95 | 1.1 | 3.9 | 17.5 | 2.7 | 27.3 | 22.0 | 25.4 | 11.1 | 37.8 | 169.5 | 26.3 | 265.0 | 214.0 | 247.0 | 970.8 |
| 1995–96 | 0.8 | 6.0 | 14.0 | 2.6 | 25.5 | 22.4 | 28.7 | 7.3 | 54.6 | 128.5 | 24.1 | 233.3 | 204.8 | 263.1 | 915.7 |
| 1996–97 | 0.9 | 6.4 | 14.6 | 1.9 | 29.0 | 22.9 | 24.3 | 8.4 | 63.5 | 144.5 | 19.1 | 285.7 | 225.8 | 239.6 | 986.8 |
| 1997–98 | 0.4 | 4.9 | 13.4 | 0.9 | 30.3 | 20.3 | 29.8 | 4.2 | 53.1 | 145.5 | 9.7 | 329.5 | 220.7 | 323.8 | 1,086.5 |
| 1998–99 | x | 6.4 | 13.0 | 1.2 | 27.6 | 18.4 | 32.9 | x | 65.7 | 132.6 | 12.0 | 280.9 | 187.8 | 335.7 | 1,018.8 |
| 1999–00 | x | 7.3 | 13.0 | 3.2 | 26.8 | 21.6 | 27.7 | x | 61.6 | 109.9 | 26.7 | 226.7 | 182.9 | 234.4 | 845.4 |
| 2000–01 | x | 2.9 | 12.1 | 1.3 | 31.4 | 30.2 | 21.6 | x | 21.0 | 86.9 | 9.5 | 225.0 | 216.8 | 154.9 | 717.5 |
| 2001–02 | x | 2.1 | 10.3 | 0.5 | 38.2 | 26.8 | 21.5 | x | 13.3 | 64.1 | 2.8 | 236.6 | 166.3 | 133.5 | 620.0 |
| 2002–03 | x | x | 12.8 | x | 41.4 | 21.8 | 20.9 | x | x | 66.0 | x | 213.1 | 112.0 | 107.3 | 514.1 |
| 2003–04 | x | 2.4 | 9.2 | 0.3 | 44.6 | 17.9 | 25.3 | x | 8.1 | 31.2 | 1.0 | 152.1 | 61.1 | 86.0 | 340.7 |
| 2004–05 | x | 2.4 | 9.9 | 1.6 | 45.3 | 18.4 | 21.7 | x | 9.3 | 37.9 | 6.3 | 172.9 | 70.2 | 82.8 | 381.8 |
| 2005–06 | x | 1.2 | 7.0 | x | 41.7 | 28.6 | 20.9 | x | 4.1 | 24.3 | x | 144.1 | 98.8 | 72.4 | 345.5 |
| 2006–07 | x | 3.5 | 7.5 | . | 37.4 | 32.2 | 18.5 | x | 11.9 | 26.0 | . | 128.9 | 111.0 | 64.0 | 345.1 |
| 2007–08 | x | 1.6 | 11.8 | 0.7 | 44.0 | 23.9 | 15.9 | x | 4.9 | 36.0 | 2.1 | 134.2 | 72.9 | 48.6 | 305.1 |
| 2008–09 | x | 0.4 | 14.7 | x | 36.3 | 24.6 | 22.0 | x | 1.2 | 44.3 | x | 109.5 | 74.1 | 66.3 | 301.5 |
| 2009–10 | 1.8 | x | 11.0 | x | 35.0 | 20.5 | 31.1 | 5.8 | x | 36.1 | x | 114.6 | 67.2 | 101.8 | 327.3 |

Table 56: Percentage of annual catch by month from CRA 8, 1979–80 to 2009–10. An ‘x’ indicates fewer than 3 vessels, and a ‘.’ indicates no fishing, in the month/year cell.

| Fishing year | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar |
|--------------|------|------|------|------|------|------|------|------|------|------|-----|-----|
| 1979–80 | 0.2 | 0.3 | 2.2 | 4.0 | 8.4 | 16.5 | 25.0 | 18.9 | 9.3 | 8.9 | 5 | 1.2 |
| 1980–81 | 0.2 | 0.3 | 2.4 | 5.4 | 7.0 | 14.4 | 25.3 | 21.2 | 12.6 | 7.4 | 3.1 | 0.8 |
| 1981–82 | 0.1 | 0.3 | 1.9 | 2.7 | 10.7 | 22.2 | 26.0 | 18.6 | 9.1 | 5.2 | 2.1 | 1.1 |
| 1982–83 | 0.3 | 0.2 | 3.4 | 3.3 | 7.2 | 20.3 | 29.2 | 10.5 | 10.5 | 8.3 | 5.5 | 1.2 |
| 1983–84 | 0.4 | 0.2 | 2.1 | 3.3 | 5.3 | 13.2 | 18.8 | 22.4 | 15.5 | 11.7 | 5.8 | 1.4 |
| 1984–85 | 0.2 | 0.3 | 1.3 | 2.4 | 9.6 | 24.8 | 24.8 | 14.8 | 10.6 | 5.6 | 3.5 | 2 |
| 1985–86 | 0.3 | 0.7 | 3.1 | 3.6 | 18.5 | 21.2 | 21.1 | 14.3 | 8.7 | 4.2 | 2.9 | 1.5 |
| 1986–87 | 0.6 | 0.6 | 1.4 | 2.1 | 9.5 | 19.1 | 20.1 | 20.1 | 11.7 | 7.8 | 4.5 | 2.6 |
| 1987–88 | 0.4 | 0.2 | 0.7 | 2.2 | 8.9 | 19.7 | 20.2 | 19.0 | 12.7 | 8 | 6 | 1.9 |
| 1988–89 | 0.7 | 0.7 | 2.9 | 3.2 | 5.7 | 12.1 | 17.0 | 17.9 | 14 | 16 | 7.3 | 2.6 |
| 1989–90 | 0.6 | 0.3 | 0.8 | 1.6 | 11.1 | 22.9 | 13.9 | 19.2 | 12.4 | 9 | 6.2 | 2 |
| 1990–91 | 0.3 | x | 0.9 | 2.5 | 8.3 | 17.6 | 17.1 | 19.7 | 10.5 | 11.9 | 7 | 4.2 |
| 1991–92 | 0.3 | 0.4 | 2.9 | 3.5 | 7.1 | 14.7 | 18.2 | 16.0 | 14.7 | 12.9 | 7.2 | 2.1 |
| 1992–93 | 0.5 | 0.2 | 2.2 | 4.0 | 8.3 | 17.4 | 15.5 | 15.8 | 15.1 | 8.6 | 8.5 | 3.9 |
| 1993–94 | 0.1 | 0.2 | 1.0 | 4.5 | 19.2 | 27.6 | 19.7 | 11.9 | 7 | 3.4 | 2.9 | 2.4 |
| 1994–95 | 0.1 | 0.4 | 3.5 | 5.2 | 11.2 | 25.6 | 18.5 | 11.4 | 10.4 | 9 | 3.3 | 1.3 |
| 1995–96 | 0.2 | 0.2 | 2.9 | 4.2 | 11.9 | 20.4 | 19.9 | 18.9 | 8.3 | 7.1 | 4.3 | 1.9 |
| 1996–97 | 0.2 | 0.3 | 2.2 | 4.0 | 10.0 | 19.1 | 22.4 | 19.1 | 11.1 | 8.2 | 2.4 | 0.9 |
| 1997–98 | 0.2 | 0.3 | 3.0 | 4.7 | 8.1 | 21.0 | 21.6 | 15.9 | 11.1 | 9.6 | 3.6 | 0.9 |
| 1998–99 | 0.1 | 0.3 | 1.4 | 2.4 | 7.6 | 17.5 | 16.6 | 22.4 | 13.2 | 10.4 | 6.3 | 1.8 |
| 1999–00 | x | 0.1 | 0.6 | 2.1 | 16.0 | 24.9 | 22.5 | 14.0 | 8.7 | 7.9 | 2.1 | 1.1 |
| 2000–01 | 0.1 | x | 0.4 | 2.6 | 14.9 | 37.7 | 15.3 | 13.0 | 6.5 | 4.9 | 3.7 | 1 |
| 2001–02 | x | 0.6 | 1.2 | 5.8 | 14.3 | 33.2 | 21.5 | 14.5 | 3.6 | 3.8 | 1.1 | 0.2 |
| 2002–03 | 0.8 | 0.8 | 0.7 | 5.3 | 20.7 | 31.6 | 19.2 | 8.8 | 3.4 | 4.9 | 1 | 2.7 |
| 2003–04 | 0.5 | 0.8 | 1.5 | 10.5 | 29.6 | 38.8 | 10.6 | 2.1 | 0.3 | 3.6 | 1.1 | 0.7 |
| 2004–05 | 0.7 | 2.0 | 2.8 | 14.0 | 22.2 | 40.6 | 6.6 | 2.4 | 0.7 | 3.7 | 2.8 | 1.4 |
| 2005–06 | 2.6 | 3 | 7.6 | 13.5 | 23.7 | 37.1 | 5.7 | 0.7 | 0.5 | 4.2 | 0.6 | 0.9 |
| 2006–07 | 10.9 | 7.4 | 11.5 | 11 | 24.7 | 24.6 | 3.5 | 0.2 | 0.1 | 0.6 | 3.3 | 2 |
| 2007–08 | 12.7 | 8.5 | 12.5 | 11.6 | 17.1 | 20.8 | 3.6 | 1 | 0.4 | 8.2 | 3.2 | 0.3 |
| 2008–09 | 14.7 | 12.5 | 7.1 | 14.4 | 19.6 | 22.7 | 4.2 | 0.5 | x | 4.2 | . | 0.1 |
| 2009–10 | 13.5 | 9.8 | 9.5 | 6.4 | 9.4 | 23.7 | 8.9 | 2.1 | 1.6 | 7 | 7.5 | 0.6 |

Table 57: Percentage of catch from CRA 8 by statistical area and month for 2009–10. An ‘x’ indicates fewer than 3 vessels in the month/statistical area cell (17 instances representing 5.1% of the annual catch). A ‘.’ indicates no fishing in the month/statistical area cell.

| Month | 922 | 923 | 924 | 925 | 926 | 927 | 928 |
|-------|-----|-----|-----|-----|-----|-----|-----|
| Apr | . | . | x | . | 3.2 | 3.8 | 5.5 |
| May | . | . | x | . | 2.5 | 3.1 | 3.8 |
| Jun | . | . | x | . | 3.0 | 2.5 | 3.5 |
| Jul | x | . | 0.4 | . | 2.1 | 1.7 | 2.2 |
| Aug | x | x | 1.2 | . | 3.4 | 1.3 | 3.4 |
| Sep | x | x | 5.5 | . | 7.2 | 3.0 | 7.5 |
| Oct | x | x | 2.6 | . | 3.2 | 0.9 | 1.8 |
| Nov | . | . | 0.9 | . | 0.5 | x | x |
| Dec | . | x | 0.4 | . | x | . | 0.9 |
| Jan | . | x | x | x | 1.0 | 2.8 | 2.1 |
| Feb | . | . | 0.9 | . | 1.2 | 1.9 | 3.6 |
| Mar | . | . | . | . | 0.1 | . | 0.5 |

Table 58: Arithmetic CPUE (kg/potlift) for CRA 8 by fishing year and statistical area, 1979–80 to 2009–10. An ‘x’ indicates fewer than 3 vessels, and a ‘.’ indicates no fishing, in the year/statistical area cell.

| Fishing year | 922 | 923 | 924 | 925 | 926 | 927 | 928 |
|--------------|------|------|------|-------|------|------|------|
| 1979–80 | 1.99 | 2.23 | 1.89 | 5.01 | 1.84 | 1.52 | 1.63 |
| 1980–81 | 1.32 | 1.90 | 2.00 | 7.95 | 1.96 | 1.33 | 1.37 |
| 1981–82 | 1.52 | 1.81 | 1.90 | 10.43 | 2.14 | 1.45 | 1.22 |
| 1982–83 | 1.10 | 1.82 | 1.73 | 4.44 | 1.99 | 1.22 | 1.07 |
| 1983–84 | 0.81 | 1.18 | 1.23 | 4.46 | 1.53 | 0.99 | 1.09 |
| 1984–85 | 0.86 | 1.25 | 1.33 | 3.67 | 1.30 | 1.19 | 0.96 |
| 1985–86 | 0.94 | 1.49 | 1.66 | 13.46 | 1.51 | 1.14 | 1.04 |
| 1986–87 | 1.10 | 1.17 | 1.69 | 2.11 | 1.23 | 0.79 | 0.91 |
| 1987–88 | 1.01 | 1.45 | 1.72 | x | 1.35 | 0.82 | 0.91 |
| 1988–89 | 0.54 | 1.07 | 1.07 | 1.58 | 1.04 | 0.70 | 0.69 |
| 1989–90 | 0.81 | 0.87 | 1.27 | 0.60 | 0.90 | 0.72 | 0.71 |
| 1990–91 | 0.61 | 0.93 | 1.23 | 1.38 | 0.94 | 0.72 | 0.57 |
| 1991–92 | 0.42 | 0.86 | 1.12 | 2.02 | 0.84 | 0.74 | 0.68 |
| 1992–93 | 0.47 | 0.79 | 1.07 | 0.93 | 0.71 | 0.54 | 0.57 |
| 1993–94 | 1.21 | 1.33 | 1.64 | 1.78 | 0.94 | 0.71 | 0.65 |
| 1994–95 | 0.73 | 0.89 | 1.22 | 1.29 | 0.90 | 0.75 | 0.70 |
| 1995–96 | 0.92 | 0.76 | 1.09 | 1.24 | 1.08 | 0.85 | 0.69 |
| 1996–97 | 0.80 | 0.75 | 0.96 | 1.20 | 1.01 | 0.83 | 0.72 |
| 1997–98 | 0.64 | 0.66 | 0.90 | 0.94 | 0.78 | 0.68 | 0.62 |
| 1998–99 | x | 0.73 | 0.71 | 0.88 | 1.01 | 0.86 | 0.62 |
| 1999–00 | x | 0.75 | 0.88 | 0.82 | 1.14 | 0.89 | 0.52 |
| 2000–01 | x | 1.20 | 1.26 | 1.56 | 1.28 | 0.82 | 0.55 |
| 2001–02 | x | 1.44 | 1.33 | 0.61 | 1.04 | 0.79 | 0.64 |
| 2002–03 | x | x | 1.34 | x | 1.29 | 0.93 | 0.74 |
| 2003–04 | x | 2.75 | 2.32 | 1.57 | 1.92 | 1.56 | 0.94 |
| 2004–05 | x | 2.46 | 1.92 | 1.15 | 1.74 | 1.43 | 1.13 |
| 2005–06 | x | 4.27 | 3.08 | x | 1.92 | 1.21 | 1.50 |
| 2006–07 | x | 2.02 | 3.90 | . | 2.41 | 1.56 | 2.13 |
| 2007–08 | x | 3.82 | 2.78 | 2.87 | 1.99 | 2.20 | 3.97 |
| 2008–09 | x | 3.58 | 3.34 | x | 2.54 | 2.92 | 4.70 |
| 2009–10 | 1.14 | x | 3.98 | x | 2.45 | 3.23 | 3.53 |

Table 59: Annual arithmetic, unstandardised, and standardised (with standard error) CPUE indices for CRA 8 (kg/potlift).

| Fishing year | Arithmetic | Unstandardised | Standardised | s.e. |
|--------------|------------|----------------|--------------|-------|
| 1979–80 | 1.79 | 2.04 | 2.02 | 0.020 |
| 1980–81 | 1.72 | 1.81 | 1.76 | 0.022 |
| 1981–82 | 1.79 | 1.80 | 1.69 | 0.023 |
| 1982–83 | 1.57 | 1.50 | 1.45 | 0.022 |
| 1983–84 | 1.25 | 1.14 | 1.09 | 0.021 |
| 1984–85 | 1.22 | 1.10 | 1.05 | 0.022 |
| 1985–86 | 1.36 | 1.27 | 1.25 | 0.022 |
| 1986–87 | 1.15 | 1.13 | 1.10 | 0.022 |
| 1987–88 | 1.24 | 1.20 | 1.16 | 0.024 |
| 1988–89 | 0.92 | 0.92 | 0.87 | 0.028 |
| 1989–90 | 0.89 | 0.86 | 0.79 | 0.024 |
| 1990–91 | 0.87 | 0.87 | 0.81 | 0.026 |
| 1991–92 | 0.82 | 0.80 | 0.77 | 0.024 |
| 1992–93 | 0.68 | 0.70 | 0.69 | 0.024 |
| 1993–94 | 0.92 | 0.93 | 0.93 | 0.027 |
| 1994–95 | 0.88 | 0.85 | 0.84 | 0.027 |
| 1995–96 | 0.90 | 0.89 | 0.87 | 0.029 |
| 1996–97 | 0.87 | 0.83 | 0.82 | 0.029 |
| 1997–98 | 0.72 | 0.69 | 0.69 | 0.028 |
| 1998–99 | 0.79 | 0.73 | 0.72 | 0.029 |
| 1999–00 | 0.84 | 0.76 | 0.74 | 0.033 |
| 2000–01 | 0.98 | 0.90 | 0.88 | 0.036 |
| 2001–02 | 0.92 | 0.94 | 0.95 | 0.041 |
| 2002–03 | 1.10 | 1.17 | 1.18 | 0.044 |
| 2003–04 | 1.67 | 1.74 | 1.79 | 0.050 |
| 2004–05 | 1.58 | 1.68 | 1.75 | 0.049 |
| 2005–06 | 1.75 | 1.88 | 2.11 | 0.050 |
| 2006–07 | 2.19 | 2.36 | 2.72 | 0.050 |
| 2007–08 | 2.47 | 2.69 | 2.94 | 0.048 |
| 2008–09 | 3.20 | 3.40 | 3.90 | 0.047 |
| 2009–10 | 3.11 | 3.55 | 3.90 | 0.044 |

Table 60: Number of vessels by statistical area from CRA 9, 1979–80 to 2009–10. Vessels catching less than 1 t in a year for the entire QMA have been excluded. A ‘.’ indicates no fishing in the statistical area/fishing year cell. A ‘0’ indicates fishing but none of the qualified vessels fished.

| Fishing year | 929 | 930 | 931 | 935 | 936 | 937 | 938 | All |
|--------------|-----|-----|-----|-----|-----|-----|-----|-----|
| 1979–80 | 4 | 6 | 6 | 3 | 6 | 3 | . | 23 |
| 1980–81 | 2 | 4 | 5 | 4 | 8 | 5 | 1 | 23 |
| 1981–82 | 1 | 3 | 7 | 3 | 4 | 4 | . | 20 |
| 1982–83 | 2 | 3 | 7 | 2 | 4 | 4 | . | 19 |
| 1983–84 | 1 | 3 | 7 | 3 | 6 | 6 | . | 22 |
| 1984–85 | 0 | 3 | 6 | 3 | 6 | 5 | . | 21 |
| 1985–86 | 0 | 2 | 7 | 7 | 6 | 6 | . | 20 |
| 1986–87 | 0 | 2 | 6 | 5 | 6 | 6 | . | 20 |
| 1987–88 | 0 | 2 | 5 | 5 | 6 | 5 | . | 19 |
| 1988–89 | . | 1 | 1 | 4 | 5 | 2 | 0 | 10 |
| 1989–90 | 1 | 4 | 4 | 7 | 3 | 1 | . | 18 |
| 1990–91 | 0 | 1 | 5 | 5 | 2 | 1 | 1 | 12 |
| 1991–92 | . | 1 | 5 | 6 | 0 | 1 | 0 | 13 |
| 1992–93 | . | 3 | 4 | 5 | 0 | 1 | 0 | 12 |
| 1993–94 | 0 | 3 | 3 | 6 | 0 | 0 | . | 12 |
| 1994–95 | 1 | 6 | 3 | 5 | 0 | 1 | . | 16 |
| 1995–96 | 1 | 4 | 1 | 6 | 1 | 1 | . | 14 |
| 1996–97 | 1 | 6 | 5 | 6 | 1 | 2 | . | 18 |
| 1997–98 | 1 | 6 | 5 | 7 | 4 | 1 | . | 19 |
| 1998–99 | 1 | 5 | 5 | 5 | 1 | 1 | 1 | 16 |
| 1999–00 | 1 | 7 | 6 | 4 | 0 | 1 | . | 17 |
| 2000–01 | 0 | 3 | 2 | 3 | 3 | 2 | 0 | 9 |
| 2001–02 | 0 | 2 | 2 | 4 | 2 | 3 | 0 | 11 |
| 2002–03 | 0 | 1 | 2 | 4 | 2 | 2 | . | 10 |
| 2003–04 | . | 1 | 3 | 3 | 2 | 1 | . | 9 |
| 2004–05 | . | 0 | 2 | 4 | 2 | 1 | . | 8 |
| 2005–06 | 0 | 1 | 2 | 4 | 1 | 1 | . | 8 |
| 2006–07 | . | 1 | 2 | 3 | . | 1 | . | 7 |
| 2007–08 | . | 1 | 2 | 3 | 1 | 1 | . | 7 |
| 2008–09 | . | 1 | 2 | 2 | 0 | 1 | . | 6 |
| 2009–10 | . | 1 | 2 | 2 | 1 | 1 | . | 6 |

Table 61: Distribution and annual catch by statistical area from CRA 9, 1979–80 to 2009–10. An ‘x’ indicates fewer than 3 vessels, and a ‘.’ indicates no fishing, in the year/statistical area cell.

| Fishing year | Distribution (%) | | | | | | | Annual Catch (t) | | | | | | | |
|--------------|------------------|------|------|------|------|------|-----|------------------|------|------|------|------|------|-----|-------|
| | 929 | 930 | 931 | 935 | 936 | 937 | 938 | 929 | 930 | 931 | 935 | 936 | 937 | 938 | CRA 9 |
| 1979–80 | 14.7 | 14.7 | 28.8 | 13.1 | 13.4 | 15.3 | . | 13.1 | 13.1 | 25.6 | 11.7 | 11.9 | 13.7 | . | 89.0 |
| 1980–81 | 3.3 | 10.9 | 16.9 | 14.4 | 29.2 | 25.0 | x | 3.3 | 10.5 | 16.5 | 14.0 | 28.3 | 24.3 | x | 97.1 |
| 1981–82 | 4.3 | 8.9 | 32.5 | 10.2 | 20.0 | 24.1 | . | 3.1 | 6.4 | 23.4 | 7.4 | 14.4 | 17.3 | . | 72.0 |
| 1982–83 | 7.2 | 9.0 | 42.3 | 16.0 | 8.5 | 17.1 | . | 4.2 | 5.4 | 25.0 | 9.5 | 5.0 | 10.1 | . | 59.1 |
| 1983–84 | x | 6.3 | 50.1 | 8.2 | 12.6 | 20.7 | . | x | 4.4 | 35.4 | 5.8 | 8.9 | 14.6 | . | 70.6 |
| 1984–85 | x | 12.2 | 42.1 | 16.5 | 12.4 | 16.1 | . | x | 9.8 | 34.0 | 13.3 | 10.0 | 13.0 | . | 80.8 |
| 1985–86 | x | 7.0 | 38.6 | 18.8 | 16.3 | 19.2 | . | x | 5.6 | 30.6 | 14.9 | 12.9 | 15.2 | . | 79.2 |
| 1986–87 | x | 6.3 | 34.6 | 23.2 | 23.4 | 11.5 | . | x | 5.9 | 32.2 | 21.6 | 21.8 | 10.8 | . | 93.3 |
| 1987–88 | x | x | 33.5 | 36.3 | 16.1 | 11.2 | . | x | x | 31.0 | 33.7 | 15.0 | 10.4 | . | 92.7 |
| 1988–89 | . | 5.5 | x | 46.9 | 19.5 | 8.0 | x | . | 1.4 | x | 12.2 | 5.1 | 2.1 | x | 26.0 |
| 1989–90 | 2.1 | 19.5 | 24.2 | 43.4 | 6.5 | 4.4 | . | 0.5 | 5.2 | 6.5 | 11.6 | 1.7 | 1.2 | . | 26.8 |
| 1990–91 | x | x | 40.4 | 46.5 | 5.3 | x | 2.1 | x | x | 18.3 | 21.1 | 2.4 | x | 1.0 | 45.3 |
| 1991–92 | . | x | 49.8 | 40.2 | x | x | x | . | x | 23.7 | 19.1 | x | x | x | 47.5 |
| 1992–93 | . | 12.5 | 41.7 | 40.2 | x | x | x | . | 5.7 | 19.0 | 18.4 | x | x | x | 45.7 |
| 1993–94 | x | 23.0 | 26.3 | 47.5 | x | x | . | x | 10.5 | 12.0 | 21.6 | x | x | . | 45.5 |
| 1994–95 | x | 31.9 | 13.2 | 46.1 | x | x | . | x | 14.4 | 6.0 | 20.9 | x | x | . | 45.2 |
| 1995–96 | 5.7 | 27.9 | x | 43.2 | x | x | . | 2.6 | 12.7 | x | 19.6 | x | x | . | 45.4 |
| 1996–97 | x | 19.0 | 22.8 | 45.5 | x | x | . | x | 8.9 | 10.7 | 21.3 | x | x | . | 46.9 |
| 1997–98 | 5.7 | 16.5 | 19.7 | 45.4 | 9.9 | x | . | 2.7 | 7.7 | 9.2 | 21.2 | 4.6 | x | . | 46.7 |
| 1998–99 | 4.7 | 31.1 | 19.2 | 35.2 | x | x | x | 2.2 | 14.6 | 9.0 | 16.5 | x | x | x | 46.9 |
| 1999–00 | x | 34.8 | 28.4 | 28.7 | x | x | . | x | 16.3 | 13.3 | 13.5 | x | x | . | 47.0 |
| 2000–01 | 1.2 | 7.5 | x | 35.3 | 10.3 | x | x | 0.6 | 3.5 | x | 16.6 | 4.9 | x | x | 47.0 |
| 2001–02 | x | 10.0 | 24.0 | 41.6 | x | 11.5 | x | x | 4.7 | 11.2 | 19.5 | x | 5.4 | x | 46.8 |
| 2002–03 | x | x | x | 44.4 | x | x | . | x | x | x | 20.9 | x | x | . | 47.0 |
| 2003–04 | . | x | 36.5 | 30.7 | x | x | . | . | x | 16.8 | 14.1 | x | x | . | 45.9 |
| 2004–05 | . | x | x | 54.7 | x | x | . | . | x | x | 25.7 | x | x | . | 47.0 |
| 2005–06 | x | x | x | 56.2 | x | 5.1 | . | x | x | x | 26.2 | x | 2.4 | . | 46.6 |
| 2006–07 | . | x | 28.8 | 59.1 | . | x | . | . | x | 13.5 | 27.8 | . | x | . | 47.0 |
| 2007–08 | . | x | x | 63.9 | x | x | . | . | x | x | 30.1 | x | x | . | 47.0 |
| 2008–09 | . | x | x | 39.6 | x | x | . | . | x | x | 18.6 | x | x | . | 47.0 |
| 2009–10 | . | x | x | x | x | x | . | . | x | x | . | x | x | . | 46.6 |

Table 62: Distribution and annual potlifts by statistical area from CRA 9, 1979–80 to 2009–10. An ‘x’ indicates fewer than 3 vessels, and a ‘.’ indicates no fishing, in the year/statistical area cell.

| Fishing year | Distribution (%) | | | | | | | Annual Potlifts (000's) | | | | | | | CRA 9 |
|--------------|------------------|------|------|------|------|------|-----|-------------------------|------|------|------|------|------|-----|-------|
| | 929 | 930 | 931 | 935 | 936 | 937 | 938 | 929 | 930 | 931 | 935 | 936 | 937 | 938 | |
| 1979–80 | 13.5 | 15.8 | 12.8 | 23.0 | 21.8 | 13.1 | . | 10.8 | 12.7 | 10.2 | 18.5 | 17.5 | 10.5 | . | 80.2 |
| 1980–81 | 5.9 | 11.8 | 8.5 | 20.1 | 37.7 | 15.8 | . | 5.0 | 10.1 | 7.2 | 17.1 | 32.2 | 13.5 | . | 85.4 |
| 1981–82 | 5.8 | 10.5 | 13.6 | 20.3 | 31.3 | 18.4 | . | 4.3 | 7.7 | 10.0 | 14.9 | 22.9 | 13.5 | . | 73.3 |
| 1982–83 | 7.5 | 16.2 | 23.0 | 19.9 | 15.8 | 17.6 | . | 5.2 | 11.1 | 15.8 | 13.6 | 10.9 | 12.1 | . | 68.7 |
| 1983–84 | x | 8.4 | 26.2 | 12.3 | 27.4 | 22.1 | . | x | 6.3 | 19.6 | 9.2 | 20.5 | 16.5 | . | 74.7 |
| 1984–85 | x | 17.6 | 20.9 | 19.5 | 21.6 | 18.7 | . | x | 16.1 | 19.1 | 17.8 | 19.7 | 17.0 | . | 91.2 |
| 1985–86 | x | 9.9 | 26.8 | 20.8 | 22.5 | 19.8 | . | x | 10.5 | 28.6 | 22.2 | 24.0 | 21.1 | . | 106.8 |
| 1986–87 | x | 8.6 | 26.2 | 22.4 | 25.8 | 15.9 | . | x | 9.2 | 28.2 | 24.1 | 27.7 | 17.1 | . | 107.6 |
| 1987–88 | x | x | 31.8 | 25.6 | 22.4 | 15.5 | . | x | x | 34.8 | 28.1 | 24.5 | 17.0 | . | 109.6 |
| 1988–89 | . | 10.7 | x | 29.2 | 30.1 | 9.8 | x | . | 3.5 | x | 9.4 | 9.7 | 3.2 | x | 32.3 |
| 1989–90 | 3.7 | 26.6 | 14.0 | 34.9 | 12.9 | 7.8 | . | 1.2 | 8.5 | 4.5 | 11.2 | 4.1 | 2.5 | . | 32.1 |
| 1990–91 | x | x | 28.9 | 52.7 | 4.6 | x | 3.0 | x | x | 13.4 | 24.4 | 2.1 | x | 1.4 | 46.2 |
| 1991–92 | . | x | 34.3 | 46.3 | x | x | x | . | x | 17.5 | 23.6 | x | x | x | 51.0 |
| 1992–93 | . | 17.5 | 25.8 | 45.7 | x | x | x | . | 9.1 | 13.3 | 23.6 | x | x | x | 51.7 |
| 1993–94 | x | 24.9 | 23.0 | 48.5 | x | x | . | x | 8.7 | 8.1 | 16.9 | x | x | . | 34.9 |
| 1994–95 | x | 45.1 | 9.2 | 34.7 | x | x | . | x | 22.0 | 4.5 | 16.9 | x | x | . | 48.8 |
| 1995–96 | 11.2 | 39.1 | x | 33.4 | x | x | . | 5.2 | 18.1 | x | 15.5 | x | x | . | 46.3 |
| 1996–97 | x | 26.9 | 25.9 | 35.7 | x | x | . | x | 12.9 | 12.4 | 17.1 | x | x | . | 47.9 |
| 1997–98 | 5.4 | 23.6 | 25.7 | 35.1 | 7.4 | x | . | 3.2 | 14.0 | 15.2 | 20.8 | 4.4 | x | . | 59.4 |
| 1998–99 | 6.9 | 38.8 | 14.5 | 33.2 | x | x | x | 3.5 | 19.7 | 7.4 | 16.9 | x | x | x | 50.9 |
| 1999–00 | x | 41.2 | 25.0 | 24.9 | x | x | . | x | 22.2 | 13.5 | 13.4 | x | x | . | 53.8 |
| 2000–01 | 1.6 | 9.9 | x | 43.9 | 20.2 | x | x | 0.8 | 5.0 | x | 22.3 | 10.2 | x | x | 50.8 |
| 2001–02 | x | 15.1 | 10.9 | 51.9 | x | 10.3 | x | x | 8.6 | 6.2 | 29.6 | x | 5.9 | x | 57.0 |
| 2002–03 | x | x | x | 40.8 | x | x | . | x | x | x | 17.2 | x | x | . | 42.2 |
| 2003–04 | . | x | 33.2 | 22.6 | x | x | . | . | x | 9.4 | 6.4 | x | x | . | 28.2 |
| 2004–05 | . | x | x | 50.8 | x | x | . | . | x | x | 11.2 | x | x | . | 22.0 |
| 2005–06 | x | x | x | 58.1 | x | 7.1 | . | x | x | x | 12.2 | x | 1.5 | . | 21.0 |
| 2006–07 | . | x | 19.0 | 67.9 | . | x | . | . | x | 4.6 | 16.4 | . | x | . | 24.2 |
| 2007–08 | . | x | x | 67.3 | x | x | . | . | x | x | 17.1 | x | x | . | 25.4 |
| 2008–09 | . | x | x | 28.6 | x | x | . | . | x | x | 7.6 | x | x | . | 26.8 |
| 2009–10 | . | x | x | x | x | x | . | . | x | x | x | x | x | . | 28.4 |

Table 63: Percentage of annual catch by month from CRA 9, 1979–80 to 2009–10. An ‘x’ indicates fewer than 3 vessels, and a ‘.’ indicates no fishing, in the year/month cell.

| Fishing year | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar |
|--------------|------|-----|------|------|------|------|------|------|------|------|------|------|
| 1979–80 | 3.4 | x | 0.6 | 3.6 | 2.9 | 2.0 | 15.0 | 26.0 | 11.6 | 17.5 | 11.0 | 6.3 |
| 1980–81 | 0.8 | 0.1 | 0.2 | 2.7 | 2.7 | 2.4 | 13.4 | 5.7 | 21.1 | 32.0 | 15.0 | 3.8 |
| 1981–82 | 0.6 | 0.2 | 1.4 | 2.4 | 3.0 | 1.2 | 9.0 | 19.9 | 20.7 | 19.7 | 14.7 | 7.3 |
| 1982–83 | 4.0 | x | 2.4 | 4.6 | 8.1 | 3.1 | 8.2 | 8.0 | 16.0 | 14.8 | 20.8 | 9.3 |
| 1983–84 | 2.6 | x | x | 11.2 | 5.2 | 0.9 | 5.5 | 11.6 | 11.6 | 21.1 | 18.4 | 8.2 |
| 1984–85 | 0.8 | 2.3 | x | 5.1 | 5.3 | 8.3 | 7.9 | 16.4 | 13.4 | 15.6 | 14.4 | 8.2 |
| 1985–86 | 4.4 | 1.6 | 0.3 | 2.9 | 6.5 | 10.4 | 10.4 | 14.6 | 17.3 | 12.8 | 11.6 | 7.3 |
| 1986–87 | 2.0 | 0.6 | 0.6 | 4.8 | 4.3 | 5.1 | 9.5 | 16.2 | 20.8 | 15.3 | 10.6 | 10.2 |
| 1987–88 | 2.7 | x | x | 3.0 | 5.9 | 4.8 | 15.9 | 18.0 | 13.6 | 15.2 | 11.4 | 7.8 |
| 1988–89 | 4.4 | . | x | 4.9 | 3.0 | 8.3 | 3.7 | 13.6 | 18.6 | 21.3 | 12.9 | 8.8 |
| 1989–90 | 1.3 | x | x | 3.9 | 7.6 | 16.1 | 7.8 | 10.6 | 12.5 | 15.8 | 18.3 | 6.0 |
| 1990–91 | 0.4 | . | . | 2.2 | 5.1 | 11.9 | 21.4 | 12.2 | 6.4 | 13.1 | 11.1 | 16.2 |
| 1991–92 | 1.1 | x | x | 17.1 | 6.1 | 8.9 | 9.8 | 17.4 | 12.5 | 10.1 | 7.4 | 7.4 |
| 1992–93 | 0.5 | x | 11.7 | 11.9 | 3.4 | 13.6 | 11.6 | 11.1 | 10.4 | 9.1 | 11.7 | 4.3 |
| 1993–94 | 1.0 | x | 1.0 | 24.3 | 9.3 | 12.7 | 16.3 | 7.1 | 11.0 | 5.7 | 8.7 | 2.5 |
| 1994–95 | x | x | 4.4 | 12.0 | 11.6 | 13.7 | 22.4 | 8.9 | 13.8 | 9.4 | 2.0 | 1.4 |
| 1995–96 | x | x | 2.4 | 7.4 | 16.5 | 24.1 | 23.9 | 13.1 | 5.1 | 3.7 | 0.5 | x |
| 1996–97 | x | 0.5 | 4.6 | 16.2 | 17.2 | 22.3 | 17.0 | 8.1 | 7.3 | 4.6 | 0.7 | 1.1 |
| 1997–98 | x | x | 12.5 | 21.0 | 15.0 | 17.1 | 12.0 | 7.3 | 7.0 | 3.6 | 3.9 | x |
| 1998–99 | 1.1 | 1.2 | 2.6 | 8.2 | 12.7 | 17.9 | 12.6 | 18.4 | 10.8 | 8.3 | 3.7 | 2.6 |
| 1999–00 | 0.8 | 1.6 | 6.4 | 9.4 | 15.9 | 27.3 | 18.2 | 12.5 | 5.7 | 2.2 | x | x |
| 2000–01 | 3.2 | 2.3 | 6.0 | 20.4 | 19.5 | 12.6 | 13.9 | 12.5 | 6.8 | x | x | x |
| 2001–02 | 4.2 | 2.7 | 8.8 | 25.3 | 13.5 | 23.3 | 13.9 | 3.8 | 2.8 | x | x | x |
| 2002–03 | 11.3 | 5.0 | 1.9 | 18.0 | 14.1 | 14.2 | 6.3 | 8.1 | 8.1 | 3.2 | 8.2 | x |
| 2003–04 | 8.0 | 0.7 | x | 16.1 | 28.8 | 9.0 | 8.7 | 5.8 | 9.5 | 10.7 | . | x |
| 2004–05 | x | x | 3.6 | 34.6 | 27.6 | 16.3 | 13.3 | . | 1.1 | x | x | x |
| 2005–06 | x | 2.5 | 12.0 | 20.6 | 28.8 | 29.5 | 2.6 | x | 0.8 | x | x | x |
| 2006–07 | x | 7.8 | 21.4 | 30.4 | 17.5 | 16.3 | . | x | 1.8 | . | . | . |
| 2007–08 | x | x | 16.1 | 39.2 | 23.5 | 12.2 | x | x | x | x | . | x |
| 2008–09 | x | 2.9 | 7.4 | 11.4 | 22.8 | 34.4 | 12.9 | x | 1.7 | x | x | x |
| 2009–10 | 4.9 | 3.1 | 8.2 | 11.6 | 5.3 | 28.9 | 25.3 | 3.2 | 5.3 | x | x | x |

Table 64: Percentage of catch from CRA 9 by statistical area and month for 2009–10. An ‘x’ indicates fewer than 3 vessels in the month/statistical area cell (33 instances representing 100% of the annual catch). A ‘.’ indicates no fishing in the month/statistical area cell.

| Month | 929 | 930 | 931 | 935 | 936 | 937 | 938 |
|-------|-----|-----|-----|-----|-----|-----|-----|
| Apr | | x | . | x | . | . | . |
| May | | x | . | x | . | x | . |
| Jun | | x | x | x | . | . | . |
| Jul | | x | x | x | x | . | . |
| Aug | | . | x | x | x | . | . |
| Sep | | . | x | x | x | x | . |
| Oct | | . | x | x | x | x | . |
| Nov | | . | x | . | . | x | . |
| Dec | | . | x | x | x | x | . |
| Jan | | . | x | . | . | x | . |
| Feb | | . | . | . | . | x | . |
| Mar | | . | . | . | . | x | . |

Table 65: Arithmetic CPUE (kg/potlift) for CRA 9 by fishing year and statistical area, 1979–80 to 2009–10. An ‘x’ indicates fewer than 3 vessels, and a ‘.’ indicates no fishing, in the year/statistical area cell.

| Fishing year | 929 | 930 | 931 | 935 | 936 | 937 | 938 |
|--------------|------|------|------|------|------|------|------|
| 1979–80 | 1.21 | 1.03 | 2.51 | 0.63 | 0.68 | 1.30 | . |
| 1980–81 | 0.65 | 1.05 | 2.28 | 0.82 | 0.88 | 1.80 | x |
| 1981–82 | 0.73 | 0.83 | 2.35 | 0.49 | 0.63 | 1.28 | . |
| 1982–83 | 0.82 | 0.48 | 1.58 | 0.69 | 0.46 | 0.83 | . |
| 1983–84 | x | 0.70 | 1.81 | 0.63 | 0.44 | 0.89 | . |
| 1984–85 | x | 0.61 | 1.78 | 0.75 | 0.51 | 0.77 | . |
| 1985–86 | x | 0.53 | 1.07 | 0.67 | 0.54 | 0.72 | . |
| 1986–87 | x | 0.64 | 1.14 | 0.90 | 0.79 | 0.63 | . |
| 1987–88 | x | x | 0.89 | 1.20 | 0.61 | 0.61 | . |
| 1988–89 | . | 0.42 | x | 1.29 | 0.52 | 0.66 | x |
| 1989–90 | 0.46 | 0.61 | 1.44 | 1.03 | 0.42 | 0.47 | . |
| 1990–91 | x | x | 1.37 | 0.86 | 1.14 | x | 0.70 |
| 1991–92 | . | x | 1.36 | 0.81 | x | x | x |
| 1992–93 | . | 0.63 | 1.43 | 0.78 | x | x | x |
| 1993–94 | x | 1.20 | 1.49 | 1.28 | x | x | . |
| 1994–95 | x | 0.66 | 1.33 | 1.23 | x | x | . |
| 1995–96 | 0.50 | 0.70 | x | 1.27 | x | x | . |
| 1996–97 | x | 0.70 | 0.86 | 1.25 | x | x | . |
| 1997–98 | 0.83 | 0.55 | 0.61 | 1.02 | 1.06 | x | . |
| 1998–99 | 0.63 | 0.74 | 1.22 | 0.98 | x | x | x |
| 1999–00 | x | 0.74 | 0.99 | 1.01 | x | x | . |
| 2000–01 | 0.72 | 0.70 | x | 0.74 | 0.47 | x | x |
| 2001–02 | x | 0.54 | 1.81 | 0.66 | x | 0.92 | x |
| 2002–03 | x | x | x | 1.21 | x | x | . |
| 2003–04 | . | x | 1.79 | 2.21 | x | x | . |
| 2004–05 | . | x | x | 2.30 | x | x | . |
| 2005–06 | x | x | x | 2.15 | x | 1.58 | . |
| 2006–07 | . | x | 2.94 | 1.69 | . | x | . |
| 2007–08 | . | x | x | 1.76 | x | x | . |
| 2008–09 | . | x | x | 2.43 | x | x | . |
| 2009–10 | . | x | x | x | x | x | . |

Table 66: Annual arithmetic, unstandardised, and standardised (with standard error) CPUE indices for CRA 9 (kg/potlift).

| Fishing year | Arithmetic | Unstandardised | Standardised | s.e. |
|--------------|------------|----------------|--------------|-------|
| 1979–80 | 1.11 | 1.07 | 1.19 | 0.050 |
| 1980–81 | 1.14 | 1.13 | 1.28 | 0.049 |
| 1981–82 | 0.98 | 0.92 | 0.98 | 0.057 |
| 1982–83 | 0.86 | 0.80 | 0.82 | 0.057 |
| 1983–84 | 0.94 | 0.88 | 0.86 | 0.058 |
| 1984–85 | 0.89 | 0.82 | 0.81 | 0.056 |
| 1985–86 | 0.74 | 0.71 | 0.72 | 0.057 |
| 1986–87 | 0.87 | 0.84 | 0.83 | 0.058 |
| 1987–88 | 0.85 | 0.88 | 0.85 | 0.061 |
| 1988–89 | 0.81 | 0.77 | 0.83 | 0.075 |
| 1989–90 | 0.83 | 0.72 | 0.75 | 0.064 |
| 1990–91 | 0.98 | 0.91 | 0.83 | 0.081 |
| 1991–92 | 0.93 | 0.99 | 0.86 | 0.079 |
| 1992–93 | 0.88 | 1.04 | 0.95 | 0.082 |
| 1993–94 | 1.30 | 1.19 | 1.12 | 0.082 |
| 1994–95 | 0.93 | 0.84 | 0.89 | 0.072 |
| 1995–96 | 0.98 | 0.99 | 1.08 | 0.082 |
| 1996–97 | 0.98 | 0.96 | 0.97 | 0.072 |
| 1997–98 | 0.79 | 0.82 | 0.83 | 0.070 |
| 1998–99 | 0.92 | 1.04 | 1.10 | 0.072 |
| 1999–00 | 0.87 | 0.91 | 0.91 | 0.075 |
| 2000–01 | 0.93 | 1.04 | 1.07 | 0.087 |
| 2001–02 | 0.82 | 1.03 | 1.04 | 0.092 |
| 2002–03 | 1.11 | 1.23 | 1.23 | 0.091 |
| 2003–04 | 1.63 | 1.91 | 1.76 | 0.112 |
| 2004–05 | 2.14 | 2.46 | 2.29 | 0.122 |
| 2005–06 | 2.22 | 2.11 | 2.10 | 0.113 |
| 2006–07 | 1.94 | 2.19 | 2.16 | 0.137 |
| 2007–08 | 1.85 | 1.90 | 1.81 | 0.135 |
| 2008–09 | 1.75 | 1.23 | 1.23 | 0.113 |
| 2009–10 | 1.64 | 1.56 | 1.48 | 0.114 |

Table 67: Seasonal standardised indices with associated standard error and the corresponding arithmetic CPUE (kg/potlift) for CRA 3 from AW 1979–80 through AW 2010–11. (N/A: not available)

| Fishing year | AW season | | | SS season | | |
|--------------|------------|--------------|-------|------------|--------------|-------|
| | Arithmetic | Standardised | s.e. | Arithmetic | Standardised | s.e. |
| 1979–80 | 0.75 | 0.74 | 0.038 | 0.97 | 0.81 | 0.029 |
| 1980–81 | 0.85 | 0.85 | 0.035 | 0.96 | 0.87 | 0.028 |
| 1981–82 | 0.84 | 0.82 | 0.035 | 0.97 | 0.88 | 0.029 |
| 1982–83 | 0.87 | 0.93 | 0.034 | 1.00 | 0.91 | 0.028 |
| 1983–84 | 0.79 | 0.84 | 0.032 | 0.90 | 0.84 | 0.028 |
| 1984–85 | 0.65 | 0.64 | 0.032 | 0.80 | 0.71 | 0.028 |
| 1985–86 | 0.58 | 0.57 | 0.032 | 0.79 | 0.72 | 0.029 |
| 1986–87 | 0.47 | 0.49 | 0.036 | 0.75 | 0.62 | 0.029 |
| 1987–88 | 0.36 | 0.38 | 0.034 | 0.47 | 0.42 | 0.030 |
| 1988–89 | 0.34 | 0.36 | 0.041 | 0.49 | 0.45 | 0.033 |
| 1989–90 | 0.34 | 0.36 | 0.038 | 0.58 | 0.51 | 0.030 |
| 1990–91 | 0.33 | 0.38 | 0.037 | 0.51 | 0.44 | 0.032 |
| 1991–92 | 0.24 | 0.25 | 0.035 | 0.37 | 0.31 | 0.030 |
| 1992–93 | 0.18 | 0.19 | 0.035 | 0.32 | 0.29 | 0.032 |
| 1993–94 | 0.42 | 0.39 | 0.039 | 0.65 | 0.77 | 0.067 |
| 1994–95 | 0.88 | 0.83 | 0.048 | 0.86 | 0.93 | 0.112 |
| 1995–96 | 1.31 | 1.31 | 0.052 | 1.20 | 1.24 | 0.139 |
| 1996–97 | 1.76 | 1.70 | 0.052 | 1.66 | 2.16 | 0.179 |
| 1997–98 | 2.18 | 2.40 | 0.054 | 1.99 | 2.77 | 0.219 |
| 1998–99 | 1.60 | 1.75 | 0.052 | 2.02 | 2.73 | 0.127 |
| 1999–00 | 1.59 | 1.71 | 0.052 | 1.35 | 1.93 | 0.102 |
| 2000–01 | 1.17 | 1.23 | 0.047 | 1.27 | 1.57 | 0.085 |
| 2001–02 | 0.91 | 0.94 | 0.050 | 1.02 | 1.17 | 0.069 |
| 2002–03 | 0.73 | 0.68 | 0.046 | 0.72 | 0.72 | 0.048 |
| 2003–04 | 0.71 | 0.60 | 0.047 | 0.54 | 0.50 | 0.047 |
| 2004–05 | 0.56 | 0.46 | 0.049 | 0.48 | 0.48 | 0.052 |
| 2005–06 | 0.66 | 0.61 | 0.053 | 0.58 | 0.54 | 0.049 |
| 2006–07 | 0.59 | 0.56 | 0.051 | 0.56 | 0.55 | 0.048 |
| 2007–08 | 0.63 | 0.59 | 0.054 | 0.57 | 0.57 | 0.050 |
| 2008–09 | 0.75 | 0.68 | 0.060 | 0.65 | 0.66 | 0.060 |
| 2009–10 | 0.83 | 0.89 | 0.063 | 0.89 | 0.83 | 0.070 |
| 2010–11 | 1.06 | 1.08 | 0.059 | N/A | N/A | N/A |

Table 68: Proportion of the total deviance explained by each variable in the seasonal standardised CPUE model for CRA 3.

| Variable | Iteration | | |
|-------------------------------|-----------|-------|-------|
| | 1 | 2 | 3 |
| Period | 0.404 | | |
| Month | 0.073 | 0.454 | |
| Area | 0.014 | 0.422 | 0.473 |
| Additional deviance explained | 0.000 | 0.050 | 0.019 |

Table 69: Seasonal standardised indices with associated standard error and the corresponding arithmetic CPUE (kg/potlift) for CRA 4 from AW 1979–80 through AW 2010–11. (N/A: not available)

| Fishing year | AW season | | | SS season | | |
|-----------------|------------|--------------|-------|------------|--------------|-------|
| | Arithmetic | Standardised | s.e. | Arithmetic | Standardised | s.e. |
| 1979–80 | 0.79 | 0.82 | 0.034 | 0.92 | 0.86 | 0.028 |
| 1980–81 | 0.85 | 0.85 | 0.033 | 0.82 | 0.79 | 0.028 |
| 1981–82 | 0.83 | 0.87 | 0.033 | 0.83 | 0.86 | 0.029 |
| 1982–83 | 0.89 | 0.94 | 0.032 | 0.93 | 0.94 | 0.028 |
| 1983–84 | 0.92 | 0.89 | 0.031 | 0.90 | 0.82 | 0.028 |
| 1984–85 | 0.76 | 0.77 | 0.030 | 0.78 | 0.76 | 0.029 |
| 1985–86 | 0.61 | 0.64 | 0.031 | 0.80 | 0.82 | 0.028 |
| 1986–87 | 0.68 | 0.68 | 0.031 | 0.93 | 0.87 | 0.029 |
| 1987–88 | 0.60 | 0.57 | 0.032 | 0.80 | 0.78 | 0.029 |
| 1988–89 | 0.50 | 0.50 | 0.033 | 0.69 | 0.64 | 0.030 |
| 1989–90 | 0.48 | 0.45 | 0.032 | 0.66 | 0.64 | 0.028 |
| 1990–91 | 0.42 | 0.43 | 0.032 | 0.55 | 0.58 | 0.029 |
| 1991–92 | 0.40 | 0.43 | 0.030 | 0.57 | 0.58 | 0.029 |
| 1992–93 | 0.45 | 0.41 | 0.030 | 0.58 | 0.57 | 0.029 |
| 1993–94 | 0.50 | 0.45 | 0.029 | 0.67 | 0.66 | 0.033 |
| 1994–95 | 0.61 | 0.59 | 0.029 | 0.84 | 0.80 | 0.038 |
| 1995–96 | 0.79 | 0.73 | 0.031 | 1.07 | 1.09 | 0.047 |
| 1996–97 | 0.99 | 1.04 | 0.032 | 1.54 | 1.42 | 0.069 |
| 1997–98 | 1.22 | 1.23 | 0.033 | 1.67 | 1.69 | 0.083 |
| 1998–99 | 1.28 | 1.34 | 0.034 | 1.84 | 2.11 | 0.075 |
| 1999–00 | 1.24 | 1.30 | 0.033 | 1.72 | 1.68 | 0.077 |
| 2000–01 | 1.20 | 1.04 | 0.034 | 1.88 | 1.95 | 0.067 |
| 2001–02 | 1.01 | 0.93 | 0.033 | 1.38 | 1.45 | 0.059 |
| 2002–03 | 0.98 | 0.96 | 0.033 | 1.74 | 1.68 | 0.050 |
| 2003–04 | 1.01 | 1.01 | 0.035 | 1.49 | 1.60 | 0.047 |
| 2004–05 | 0.79 | 0.73 | 0.035 | 1.30 | 1.32 | 0.040 |
| 2005–06 | 0.79 | 0.73 | 0.040 | 0.94 | 0.94 | 0.038 |
| 2006–07 | 0.51 | 0.61 | 0.040 | 0.71 | 0.76 | 0.033 |
| 2007–08 | 0.48 | 0.52 | 0.046 | 0.64 | 0.67 | 0.036 |
| 2008–09 | 0.52 | 0.57 | 0.051 | 0.81 | 0.85 | 0.044 |
| 2009–10 | 0.84 | 0.89 | 0.051 | 1.25 | 1.20 | 0.050 |
| 2010–11 | 0.85 | 0.86 | 0.041 | N/A | N/A | N/A |

Table 70: Proportion of the total deviance explained by each variable in the seasonal standardised CPUE model used in the CRA 4 management decision making.

| Variable | Iteration | | |
|-------------------------------|-----------|-------|-------|
| | 1 | 2 | 3 |
| Period | 0.212 | | |
| Month | 0.045 | 0.252 | |
| Area | 0.017 | 0.233 | 0.271 |
| Additional deviance explained | 0.000 | 0.040 | 0.019 |

Table 71: Seasonal standardised indices with associated standard error and the corresponding arithmetic CPUE (kg/potlift) for CRA 5 from AW 1979–80 through AW 2010–11. (N/A: not available)

| Fishing Year | AW season | | | SS season | | |
|-----------------|------------|--------------|-------|------------|--------------|-------|
| | Arithmetic | Standardised | s.e. | Arithmetic | Standardised | s.e. |
| 1979–80 | 0.75 | 0.63 | 0.039 | 0.76 | 0.64 | 0.033 |
| 1980–81 | 0.80 | 0.72 | 0.041 | 0.95 | 0.80 | 0.037 |
| 1981–82 | 0.64 | 0.58 | 0.045 | 0.84 | 0.77 | 0.036 |
| 1982–83 | 0.66 | 0.71 | 0.040 | 0.91 | 0.79 | 0.035 |
| 1983–84 | 0.68 | 0.67 | 0.041 | 0.78 | 0.68 | 0.035 |
| 1984–85 | 0.69 | 0.70 | 0.041 | 0.79 | 0.67 | 0.036 |
| 1985–86 | 0.56 | 0.51 | 0.042 | 0.72 | 0.60 | 0.035 |
| 1986–87 | 0.52 | 0.45 | 0.042 | 0.67 | 0.52 | 0.037 |
| 1987–88 | 0.41 | 0.38 | 0.042 | 0.50 | 0.44 | 0.037 |
| 1988–89 | 0.33 | 0.34 | 0.046 | 0.42 | 0.38 | 0.039 |
| 1989–90 | 0.35 | 0.35 | 0.054 | 0.44 | 0.42 | 0.039 |
| 1990–91 | 0.34 | 0.35 | 0.051 | 0.45 | 0.39 | 0.038 |
| 1991–92 | 0.25 | 0.26 | 0.044 | 0.41 | 0.34 | 0.036 |
| 1992–93 | 0.25 | 0.26 | 0.046 | 0.39 | 0.34 | 0.038 |
| 1993–94 | 0.32 | 0.34 | 0.045 | 0.43 | 0.39 | 0.043 |
| 1994–95 | 0.35 | 0.33 | 0.047 | 0.46 | 0.43 | 0.046 |
| 1995–96 | 0.40 | 0.38 | 0.049 | 0.56 | 0.52 | 0.047 |
| 1996–97 | 0.50 | 0.52 | 0.047 | 0.67 | 0.72 | 0.056 |
| 1997–98 | 0.74 | 0.74 | 0.051 | 0.95 | 1.00 | 0.062 |
| 1998–99 | 0.84 | 0.99 | 0.053 | 1.10 | 1.21 | 0.069 |
| 1999–00 | 0.96 | 1.00 | 0.052 | 1.19 | 1.26 | 0.069 |
| 2000–01 | 1.13 | 1.12 | 0.057 | 1.35 | 1.66 | 0.083 |
| 2001–02 | 1.27 | 1.30 | 0.059 | 1.22 | 1.71 | 0.112 |
| 2002–03 | 1.24 | 1.31 | 0.061 | 1.39 | 1.91 | 0.088 |
| 2003–04 | 1.30 | 1.32 | 0.060 | 1.95 | 2.42 | 0.086 |
| 2004–05 | 1.17 | 1.19 | 0.063 | 1.51 | 1.98 | 0.074 |
| 2005–06 | 1.05 | 1.07 | 0.062 | 1.58 | 1.86 | 0.076 |
| 2006–07 | 0.97 | 1.02 | 0.063 | 1.77 | 1.88 | 0.079 |
| 2007–08 | 0.98 | 1.05 | 0.067 | 1.79 | 1.70 | 0.074 |
| 2008–09 | 1.15 | 1.17 | 0.065 | 1.68 | 1.92 | 0.087 |
| 2009–10 | 1.38 | 1.46 | 0.071 | 1.62 | 2.33 | 0.086 |

Table 72: Proportion of the total deviance explained by each variable in the seasonal standardised CPUE model for CRA 5.

| Variable | Iteration | | |
|-------------------------------|-----------|-------|-------|
| | 1 | 2 | 3 |
| Period | 0.300 | | |
| Area | 0.028 | 0.325 | |
| Month | 0.026 | 0.321 | 0.346 |
| Additional deviance explained | 0.000 | 0.026 | 0.021 |

Table 73: Annual standardised offset year CPUE analysis, with standard errors, used to operate the 2009–10 CRA 3 decision rule.

| Offset year | Arithmetic | Unstandardised | Standardised | s.e. |
|-------------|------------|----------------|--------------|-------|
| 1979–80 | 0.93 | 0.89 | 0.85 | 0.022 |
| 1980–81 | 0.92 | 0.92 | 0.88 | 0.021 |
| 1981–82 | 0.94 | 0.95 | 0.93 | 0.021 |
| 1982–83 | 0.92 | 0.93 | 0.92 | 0.021 |
| 1983–84 | 0.81 | 0.79 | 0.77 | 0.020 |
| 1984–85 | 0.74 | 0.70 | 0.67 | 0.020 |
| 1985–86 | 0.71 | 0.67 | 0.64 | 0.022 |
| 1986–87 | 0.64 | 0.54 | 0.52 | 0.021 |
| 1987–88 | 0.44 | 0.44 | 0.41 | 0.024 |
| 1988–89 | 0.44 | 0.43 | 0.42 | 0.024 |
| 1989–90 | 0.49 | 0.48 | 0.47 | 0.023 |
| 1990–91 | 0.41 | 0.36 | 0.36 | 0.023 |
| 1991–92 | 0.31 | 0.27 | 0.26 | 0.022 |
| 1992–93 | 0.36 | 0.35 | 0.34 | 0.024 |
| 1993–94 | 0.79 | 0.83 | 0.87 | 0.039 |
| 1994–95 | 1.24 | 1.29 | 1.35 | 0.047 |
| 1995–96 | 1.73 | 1.70 | 1.81 | 0.048 |
| 1996–97 | 2.17 | 2.48 | 2.66 | 0.051 |
| 1997–98 | 1.60 | 1.80 | 2.01 | 0.050 |
| 1998–99 | 1.63 | 1.87 | 2.02 | 0.047 |
| 1999–00 | 1.19 | 1.30 | 1.47 | 0.042 |
| 2000–01 | 0.99 | 1.06 | 1.16 | 0.043 |
| 2001–02 | 0.82 | 0.78 | 0.87 | 0.037 |
| 2002–03 | 0.72 | 0.70 | 0.69 | 0.033 |
| 2003–04 | 0.55 | 0.53 | 0.50 | 0.033 |
| 2004–05 | 0.57 | 0.59 | 0.56 | 0.037 |
| 2005–06 | 0.59 | 0.60 | 0.57 | 0.035 |
| 2006–07 | 0.60 | 0.61 | 0.59 | 0.035 |
| 2007–08 | 0.66 | 0.67 | 0.63 | 0.038 |
| 2008–09 | 0.74 | 0.82 | 0.79 | 0.043 |
| 2009–10 | 1.00 | 1.04 | 1.03 | 0.045 |

Table 74: Proportion of the total deviance explained by each variable in the standardised CPUE model used to operate the 2009–10 CRA 3 decision rule.

| Variable | Iteration | | |
|-------------------------------|-----------|-------|-------|
| | 1 | 2 | 3 |
| Offset year | 0.346 | | |
| Area | 0.077 | 0.436 | |
| Month | 0.014 | 0.364 | 0.453 |
| Additional deviance explained | 0.000 | 0.090 | 0.018 |

Table 75: Annual standardised offset year CPUE analysis, with standard errors, used to operate the CRA 5 decision rule.

| Offset year | Arithmetic | Unstandardised | Standardised | s.e. |
|-------------|------------|----------------|--------------|-------|
| 1979–80 | 0.77 | 0.70 | 0.67 | 0.024 |
| 1980–81 | 0.86 | 0.74 | 0.71 | 0.027 |
| 1981–82 | 0.78 | 0.76 | 0.75 | 0.026 |
| 1982–83 | 0.84 | 0.75 | 0.74 | 0.025 |
| 1983–84 | 0.75 | 0.70 | 0.69 | 0.025 |
| 1984–85 | 0.73 | 0.61 | 0.60 | 0.026 |
| 1985–86 | 0.67 | 0.55 | 0.54 | 0.026 |
| 1986–87 | 0.60 | 0.47 | 0.46 | 0.027 |
| 1987–88 | 0.45 | 0.41 | 0.40 | 0.028 |
| 1988–89 | 0.41 | 0.38 | 0.37 | 0.031 |
| 1989–90 | 0.42 | 0.41 | 0.39 | 0.030 |
| 1990–91 | 0.40 | 0.35 | 0.33 | 0.028 |
| 1991–92 | 0.37 | 0.33 | 0.31 | 0.027 |
| 1992–93 | 0.36 | 0.35 | 0.34 | 0.028 |
| 1993–94 | 0.40 | 0.38 | 0.37 | 0.031 |
| 1994–95 | 0.44 | 0.42 | 0.41 | 0.032 |
| 1995–96 | 0.53 | 0.54 | 0.53 | 0.032 |
| 1996–97 | 0.71 | 0.74 | 0.76 | 0.037 |
| 1997–98 | 0.87 | 1.00 | 1.04 | 0.039 |
| 1998–99 | 0.98 | 1.06 | 1.13 | 0.040 |
| 1999–00 | 1.14 | 1.19 | 1.23 | 0.043 |
| 2000–01 | 1.29 | 1.40 | 1.49 | 0.047 |
| 2001–02 | 1.24 | 1.37 | 1.51 | 0.053 |
| 2002–03 | 1.31 | 1.48 | 1.58 | 0.049 |
| 2003–04 | 1.28 | 1.54 | 1.61 | 0.050 |
| 2004–05 | 1.17 | 1.41 | 1.44 | 0.046 |
| 2005–06 | 1.12 | 1.33 | 1.35 | 0.047 |
| 2006–07 | 1.20 | 1.36 | 1.39 | 0.050 |
| 2007–08 | 1.33 | 1.41 | 1.42 | 0.048 |
| 2008–09 | 1.46 | 1.65 | 1.70 | 0.054 |
| 2009–10 | 1.55 | 1.75 | 1.79 | 0.053 |

Table 76: Proportion of the total deviance explained by each variable in the standardised CPUE model used to operate the 2009–10 CRA 5 decision rule.

| Variable | Iteration | | |
|-------------------------------|-----------|-------|-------|
| | 1 | 2 | 3 |
| Offset year | 0.270 | | |
| Area | 0.026 | 0.319 | |
| Month | 0.028 | 0.295 | 0.344 |
| Additional deviance explained | 0.000 | 0.049 | 0.025 |

Table 77: Annual standardised offset year CPUE analysis, with standard errors, used to operate the 2009–10 CRA 7 decision rule.

| Offset year | Arithmetic | Unstandardised | Standardised | s.e. |
|-------------|------------|----------------|--------------|-------|
| 1979–80 | 0.94 | 0.97 | 0.97 | 0.033 |
| 1980–81 | 0.80 | 0.77 | 0.77 | 0.033 |
| 1981–82 | 0.50 | 0.49 | 0.49 | 0.036 |
| 1982–83 | 0.44 | 0.45 | 0.44 | 0.039 |
| 1983–84 | 0.58 | 0.54 | 0.54 | 0.038 |
| 1984–85 | 0.76 | 0.71 | 0.71 | 0.038 |
| 1985–86 | 0.75 | 0.72 | 0.73 | 0.038 |
| 1986–87 | 0.78 | 0.81 | 0.83 | 0.041 |
| 1987–88 | 0.47 | 0.47 | 0.47 | 0.043 |
| 1988–89 | 0.37 | 0.31 | 0.32 | 0.048 |
| 1989–90 | 0.45 | 0.45 | 0.47 | 0.042 |
| 1990–91 | 0.70 | 0.63 | 0.65 | 0.042 |
| 1991–92 | 0.42 | 0.44 | 0.43 | 0.055 |
| 1992–93 | 0.52 | 0.56 | 0.58 | 0.047 |
| 1993–94 | 0.54 | 0.49 | 0.50 | 0.057 |
| 1994–95 | 0.32 | 0.30 | 0.30 | 0.052 |
| 1995–96 | 0.24 | 0.22 | 0.22 | 0.056 |
| 1996–97 | 0.22 | 0.18 | 0.18 | 0.060 |
| 1997–98 | 0.29 | 0.25 | 0.24 | 0.062 |
| 1998–99 | 0.26 | 0.29 | 0.29 | 0.065 |
| 1999–00 | 0.32 | 0.34 | 0.33 | 0.060 |
| 2000–01 | 0.45 | 0.47 | 0.45 | 0.061 |
| 2001–02 | 0.48 | 0.52 | 0.53 | 0.065 |
| 2002–03 | 0.57 | 0.62 | 0.65 | 0.077 |
| 2003–04 | 0.79 | 0.74 | 0.77 | 0.082 |
| 2004–05 | 1.02 | 1.16 | 1.12 | 0.098 |
| 2005–06 | 1.54 | 1.84 | 1.73 | 0.098 |
| 2006–07 | 1.32 | 1.67 | 1.62 | 0.088 |
| 2007–08 | 1.60 | 2.03 | 1.99 | 0.092 |
| 2008–09 | 0.96 | 0.88 | 0.88 | 0.087 |
| 2009–10 | 1.00 | 0.96 | 0.96 | 0.078 |

Table 78: Proportion of the total deviance explained by each variable in the standardised CPUE model used to operate the 2009–10 CRA 7 decision rule.

| Variable | Iteration | | |
|-------------------------------|-----------|-------|-------|
| | 1 | 2 | 3 |
| Offset year | 0.237 | | |
| Area | 0.052 | 0.284 | |
| Month | 0.005 | 0.245 | 0.292 |
| Additional deviance explained | 0.000 | 0.048 | 0.007 |

Table 79: Annual standardised offset year CPUE analysis, with standard errors, used to operate the 2009–10 CRA 8 decision rule.

| Offset year | Arithmetic | Unstandardised | Standardised | s.e. |
|-------------|------------|----------------|--------------|-------|
| 1979–80 | 1.84 | 2.02 | 1.97 | 0.021 |
| 1980–81 | 1.78 | 1.84 | 1.73 | 0.022 |
| 1981–82 | 1.60 | 1.61 | 1.53 | 0.023 |
| 1982–83 | 1.41 | 1.28 | 1.23 | 0.022 |
| 1983–84 | 1.32 | 1.24 | 1.16 | 0.021 |
| 1984–85 | 1.35 | 1.21 | 1.17 | 0.021 |
| 1985–86 | 1.17 | 1.09 | 1.06 | 0.023 |
| 1986–87 | 1.20 | 1.19 | 1.14 | 0.023 |
| 1987–88 | 1.14 | 1.12 | 1.05 | 0.025 |
| 1988–89 | 0.92 | 0.90 | 0.85 | 0.027 |
| 1989–90 | 0.87 | 0.86 | 0.78 | 0.025 |
| 1990–91 | 0.81 | 0.82 | 0.79 | 0.025 |
| 1991–92 | 0.80 | 0.77 | 0.75 | 0.024 |
| 1992–93 | 0.79 | 0.79 | 0.78 | 0.024 |
| 1993–94 | 0.90 | 0.89 | 0.90 | 0.027 |
| 1994–95 | 0.88 | 0.88 | 0.85 | 0.028 |
| 1995–96 | 0.85 | 0.82 | 0.80 | 0.029 |
| 1996–97 | 0.80 | 0.76 | 0.76 | 0.028 |
| 1997–98 | 0.76 | 0.71 | 0.70 | 0.029 |
| 1998–99 | 0.84 | 0.80 | 0.77 | 0.029 |
| 1999–00 | 0.96 | 0.84 | 0.81 | 0.034 |
| 2000–01 | 0.86 | 0.87 | 0.86 | 0.036 |
| 2001–02 | 1.05 | 1.06 | 1.05 | 0.041 |
| 2002–03 | 1.53 | 1.67 | 1.66 | 0.045 |
| 2003–04 | 1.55 | 1.61 | 1.71 | 0.048 |
| 2004–05 | 1.73 | 1.85 | 2.02 | 0.047 |
| 2005–06 | 2.19 | 2.39 | 2.78 | 0.050 |
| 2006–07 | 2.35 | 2.54 | 2.91 | 0.050 |
| 2007–08 | 3.19 | 3.23 | 3.64 | 0.045 |
| 2008–09 | 2.85 | 3.21 | 3.70 | 0.048 |
| 2009–10 | 2.40 | 2.72 | 3.11 | 0.041 |

Table 80: Proportion of the total deviance explained by each variable in the standardised CPUE model used to operate the 2009–10 CRA 8 decision rule.

| Variable | Iteration | | |
|-------------------------------|-----------|-------|-------|
| | 1 | 2 | 3 |
| Offset year | 0.156 | | |
| Month | 0.036 | 0.207 | |
| Area | 0.030 | 0.186 | 0.234 |
| Additional deviance explained | 0.000 | 0.051 | 0.027 |

New Zealand CRA Quota Management and Statistical Areas

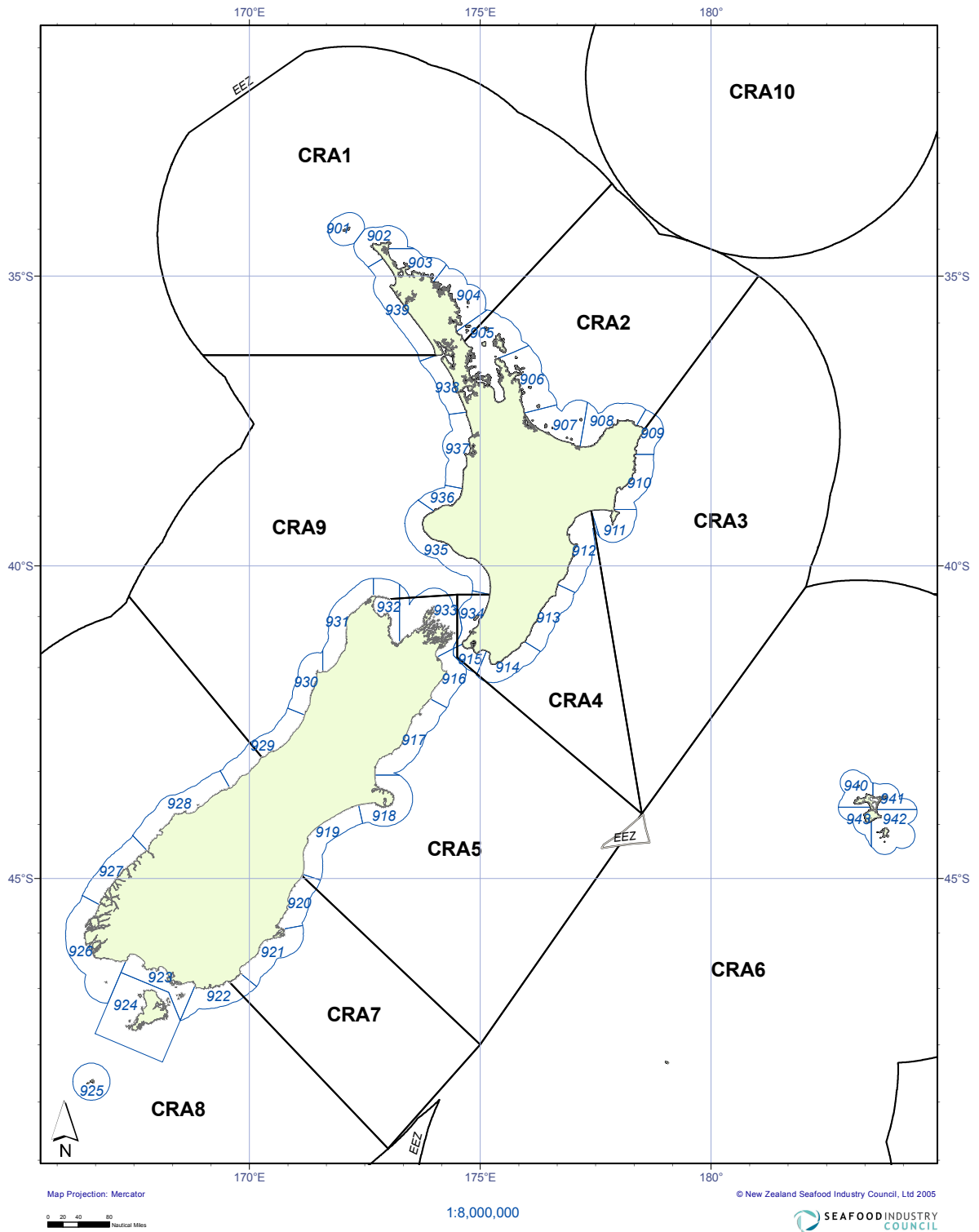


Figure 1: Map of rock lobster statistical areas and Quota Management Areas.

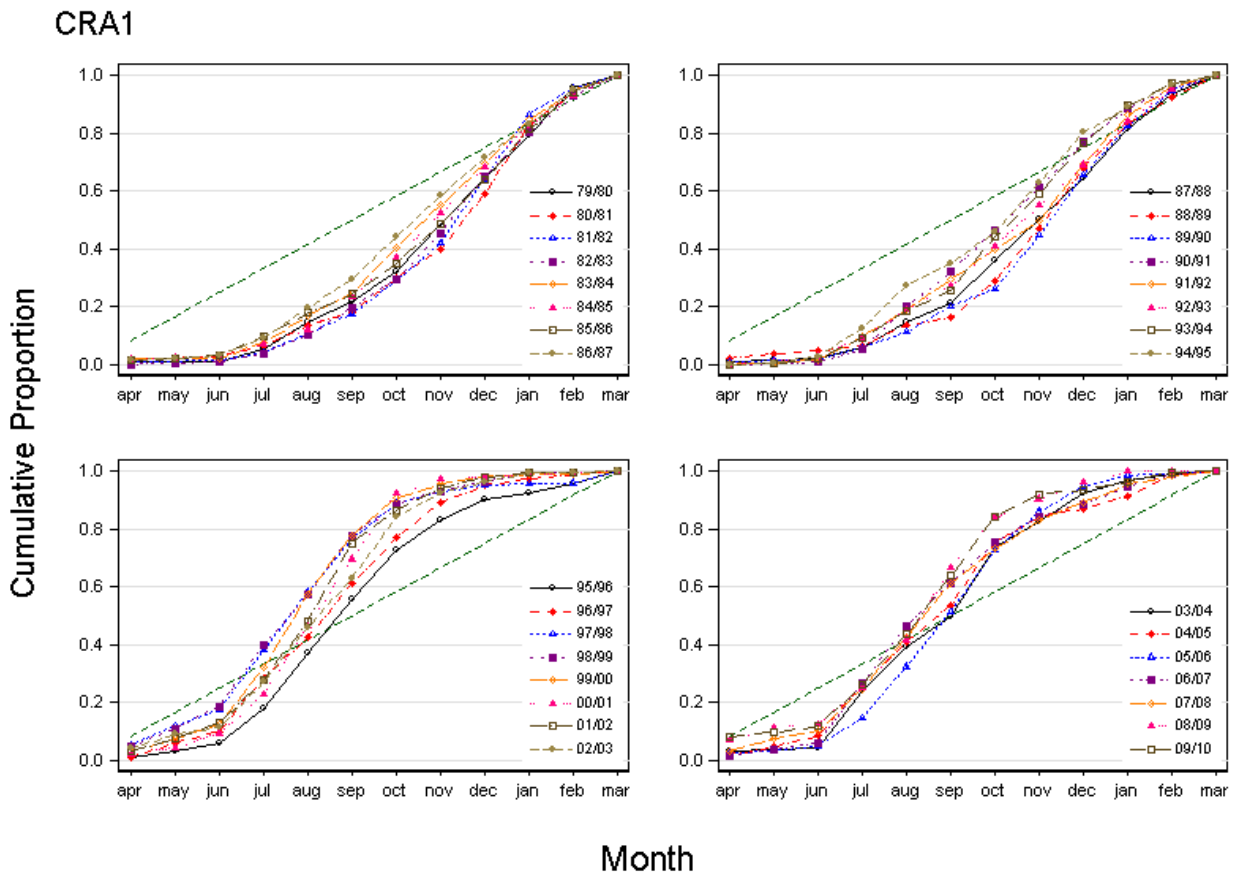


Figure 2: Cumulative catch percentages by fishing month for CRA 1, 1979–80 to 2009–10. Dotted line provides a reference equivalent to a uniform distribution of catch across all months.

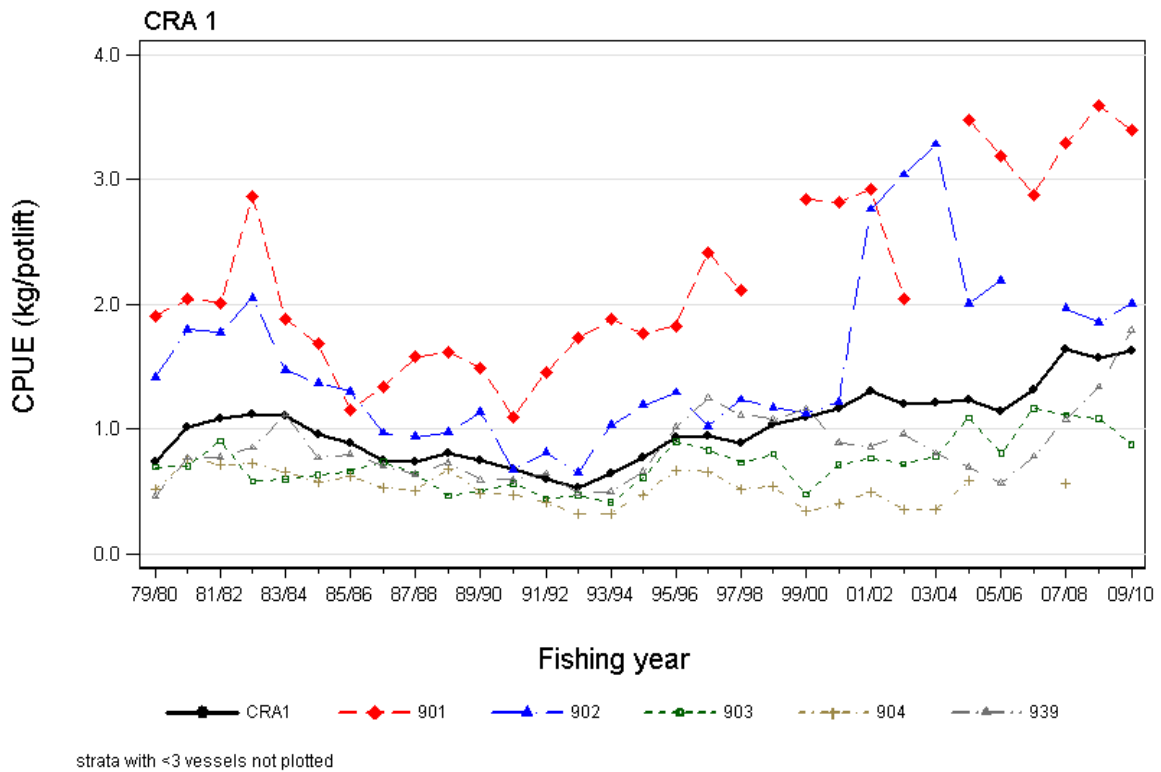


Figure 3: Arithmetic CPUE for CRA 1 by fishing year and statistical area from 1979–80 to 2009–10.

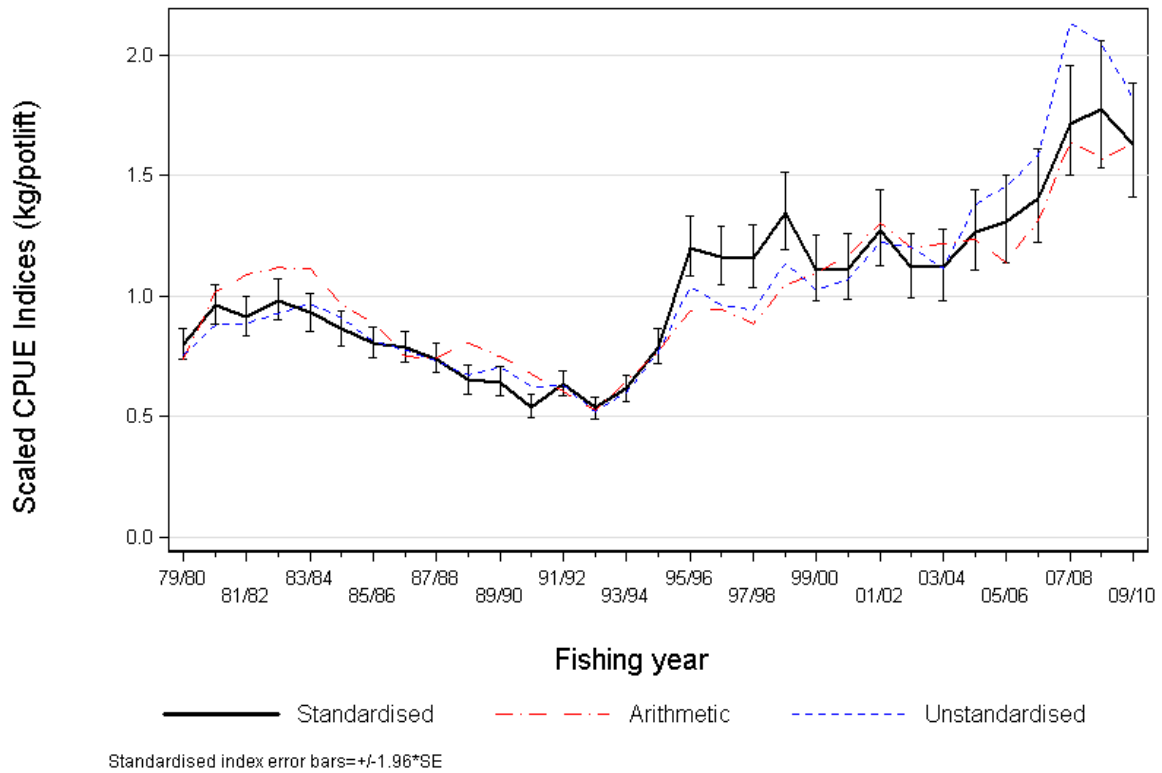


Figure 4: Annual CPUE indices for CRA 1: arithmetic (dashed line), unstandardised (dotted line), and standardised (bold line) \pm 2 s.e. from 1979–80 to 2009–10. The geometric mean for each series = 0.98 kg/potlift.

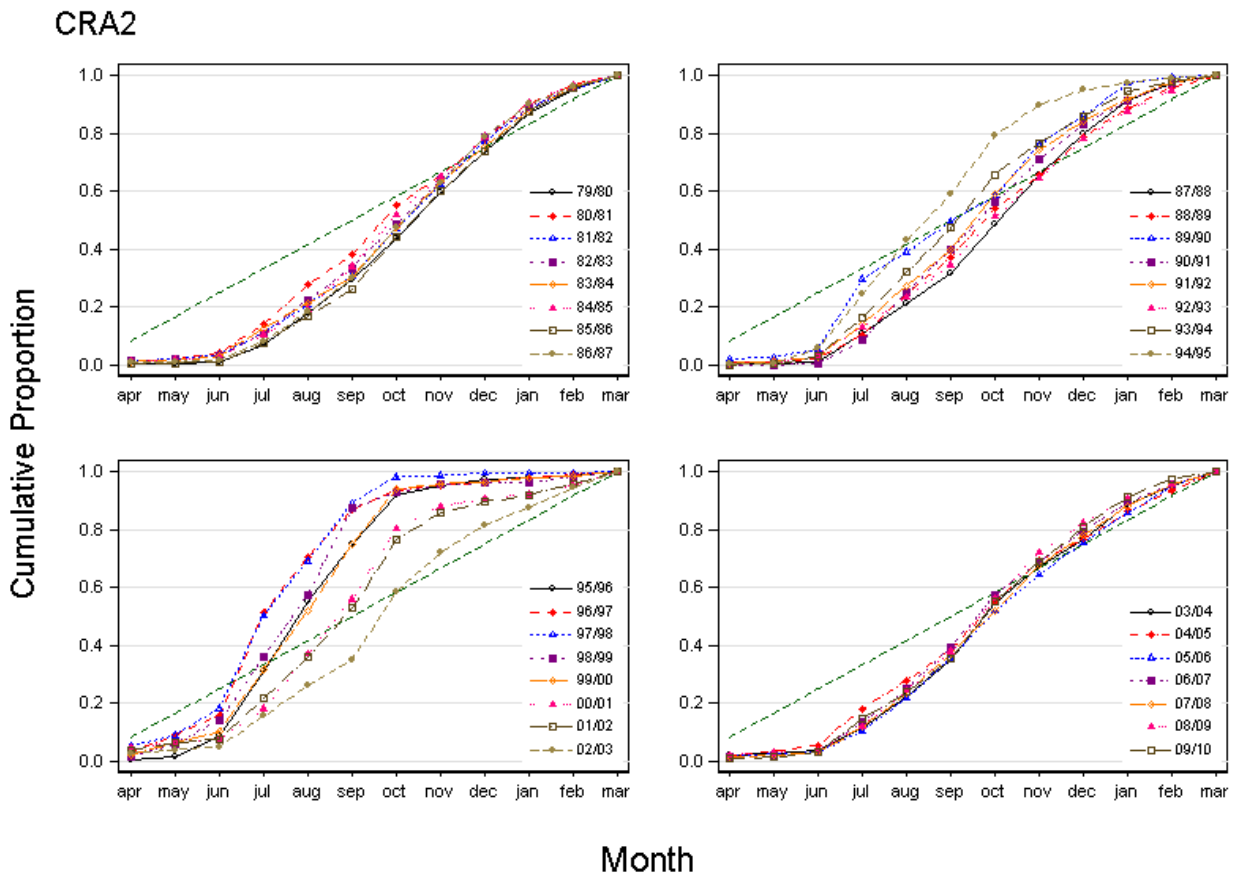


Figure 5: Cumulative catch percentages by fishing month for CRA 2, 1979–80 to 2009–10. Dotted line provides a reference equivalent to a uniform distribution of catch across all months.

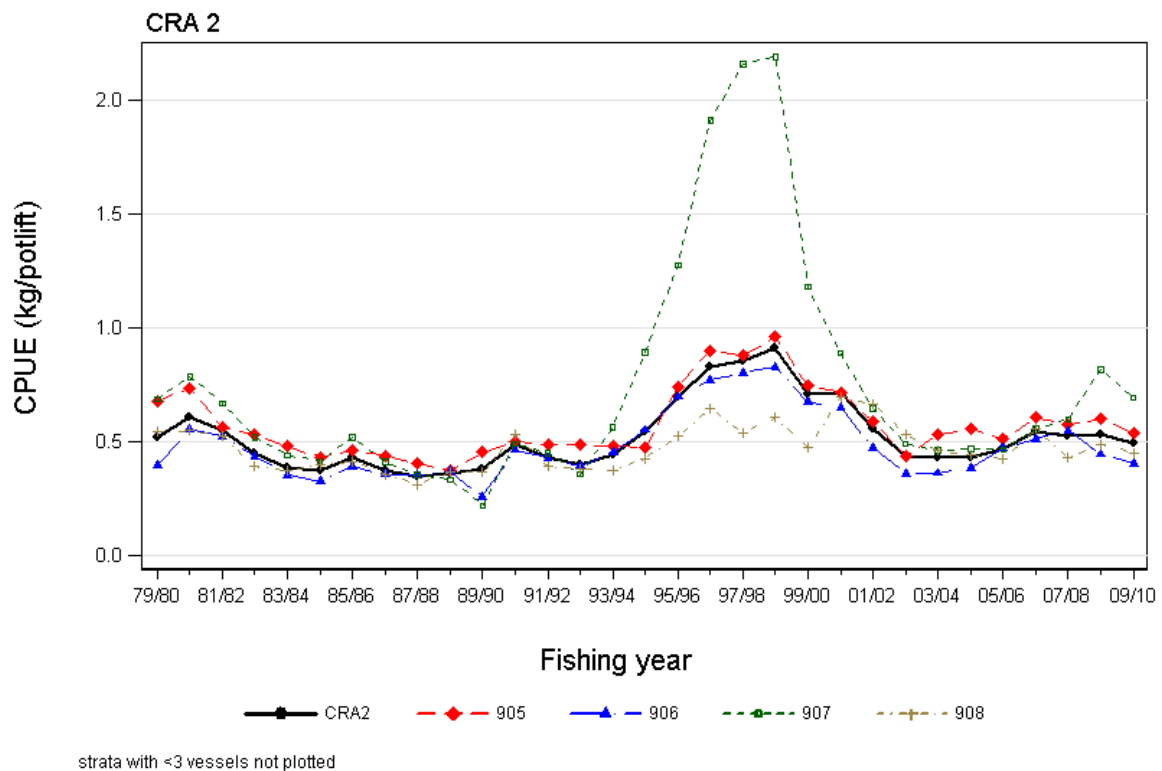


Figure 6: Arithmetic CPUE for CRA 2 by fishing year and statistical area from 1979–80 to 2009–10.

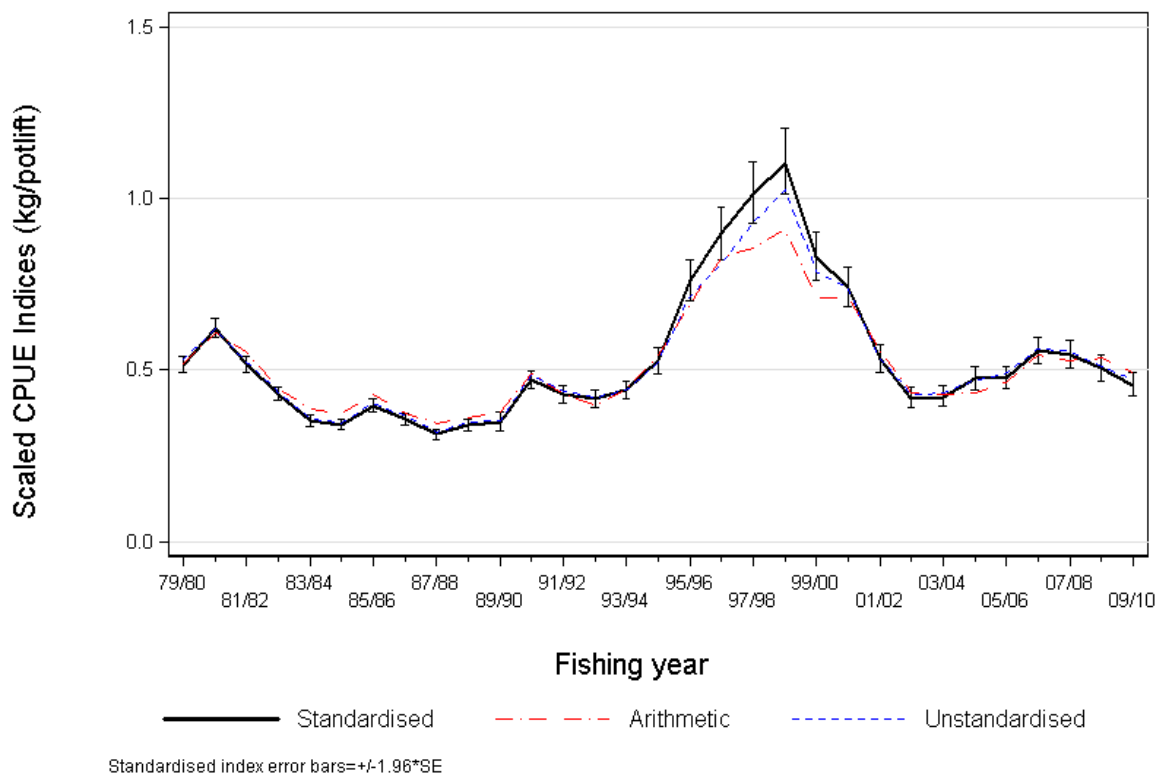


Figure 7: Annual CPUE indices for CRA 2: arithmetic (dashed line), unstandardised (dotted line), and standardised (bold line) \pm 2 s.e. from 1979–80 to 2009–10. The geometric mean for each series = 0.50 kg/potlift.

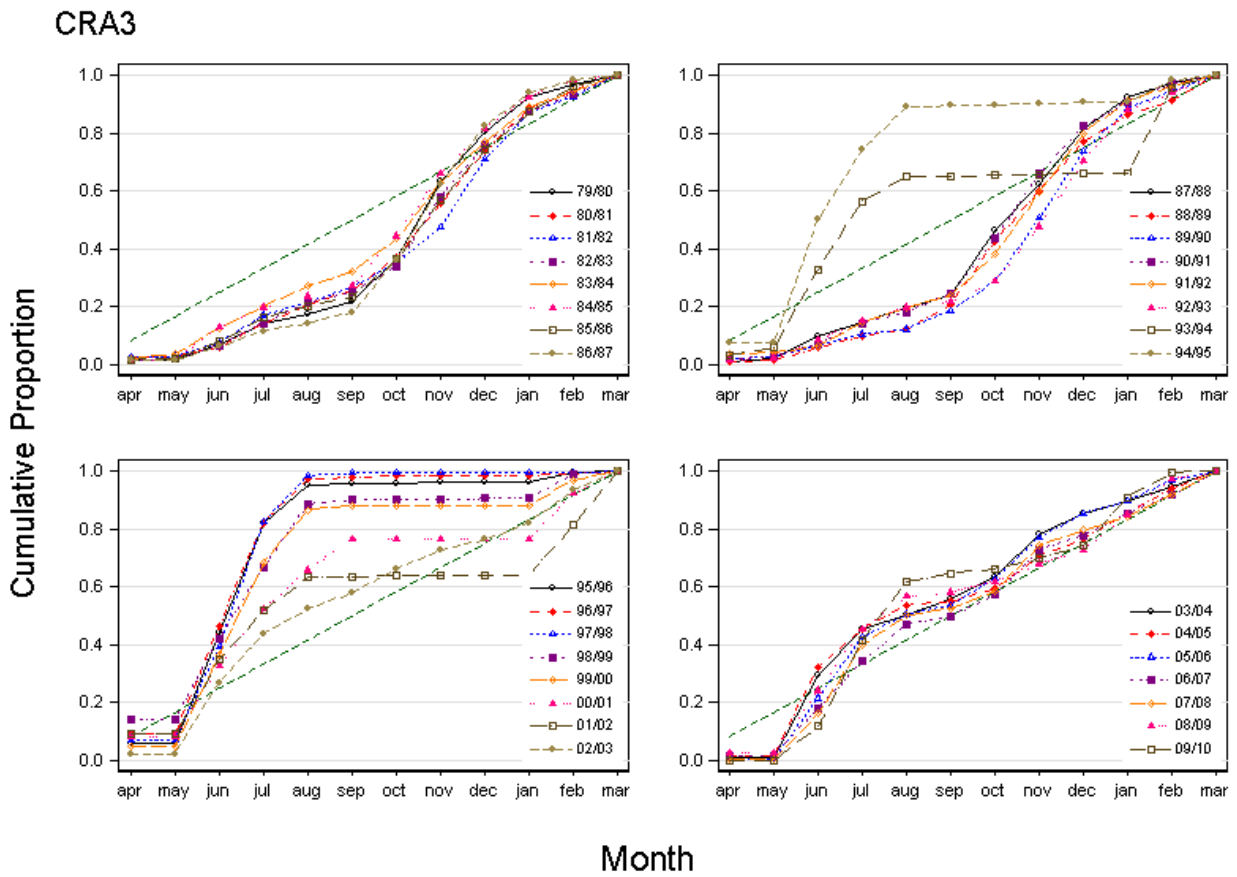


Figure 8: Cumulative catch percentages by fishing month for CRA 3, 1979–80 to 2009–10. Dotted line provides a reference equivalent to a uniform distribution of catch across all months.

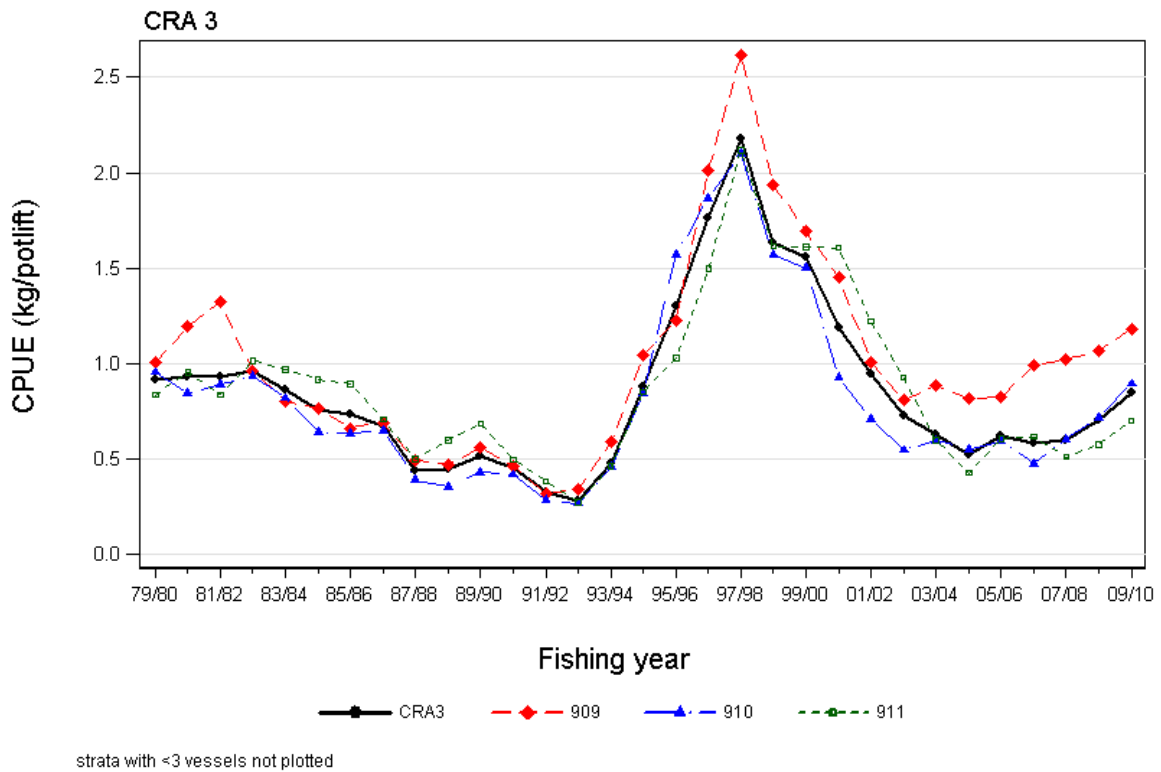


Figure 9: Arithmetic CPUE for CRA 3 by fishing year and statistical area from 1979–80 to 2009–10.

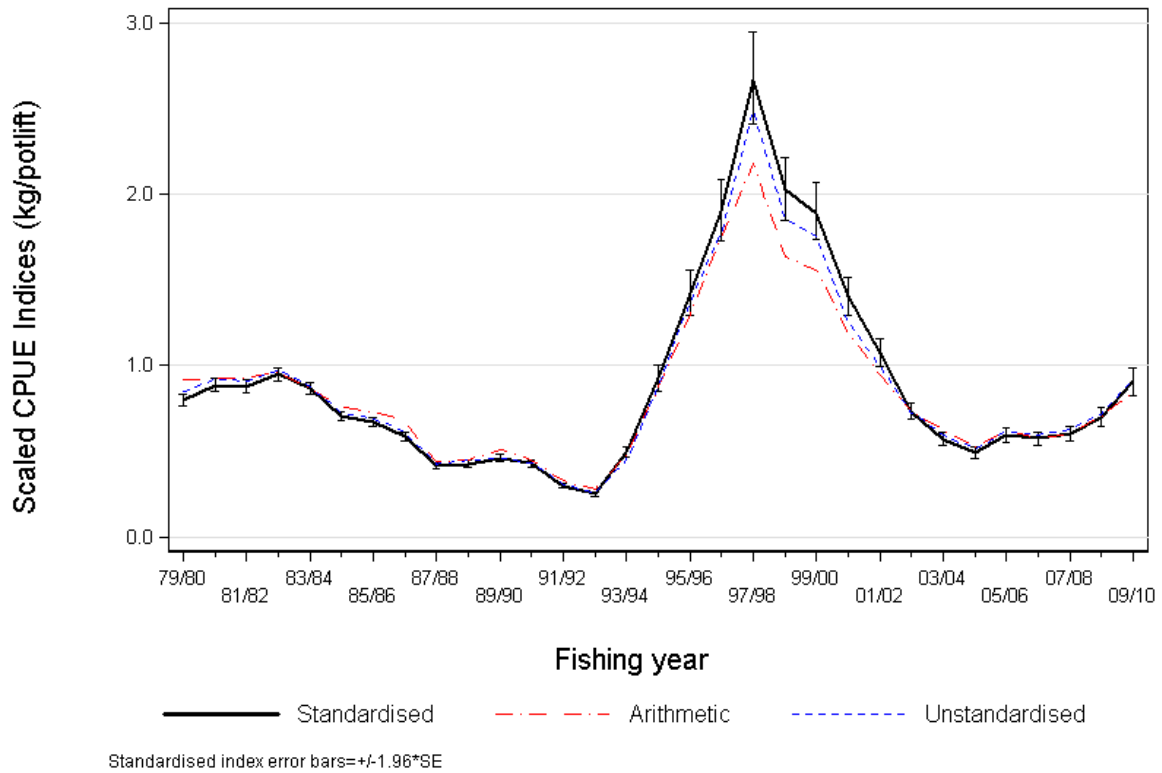


Figure 10: Annual CPUE indices for CRA 3: arithmetic (dashed line), unstandardised (dotted line), and standardised (bold line) ± 2 s.e. from 1979–80 to 2009–10. The geometric mean for each series = 0.76 kg/potlift.

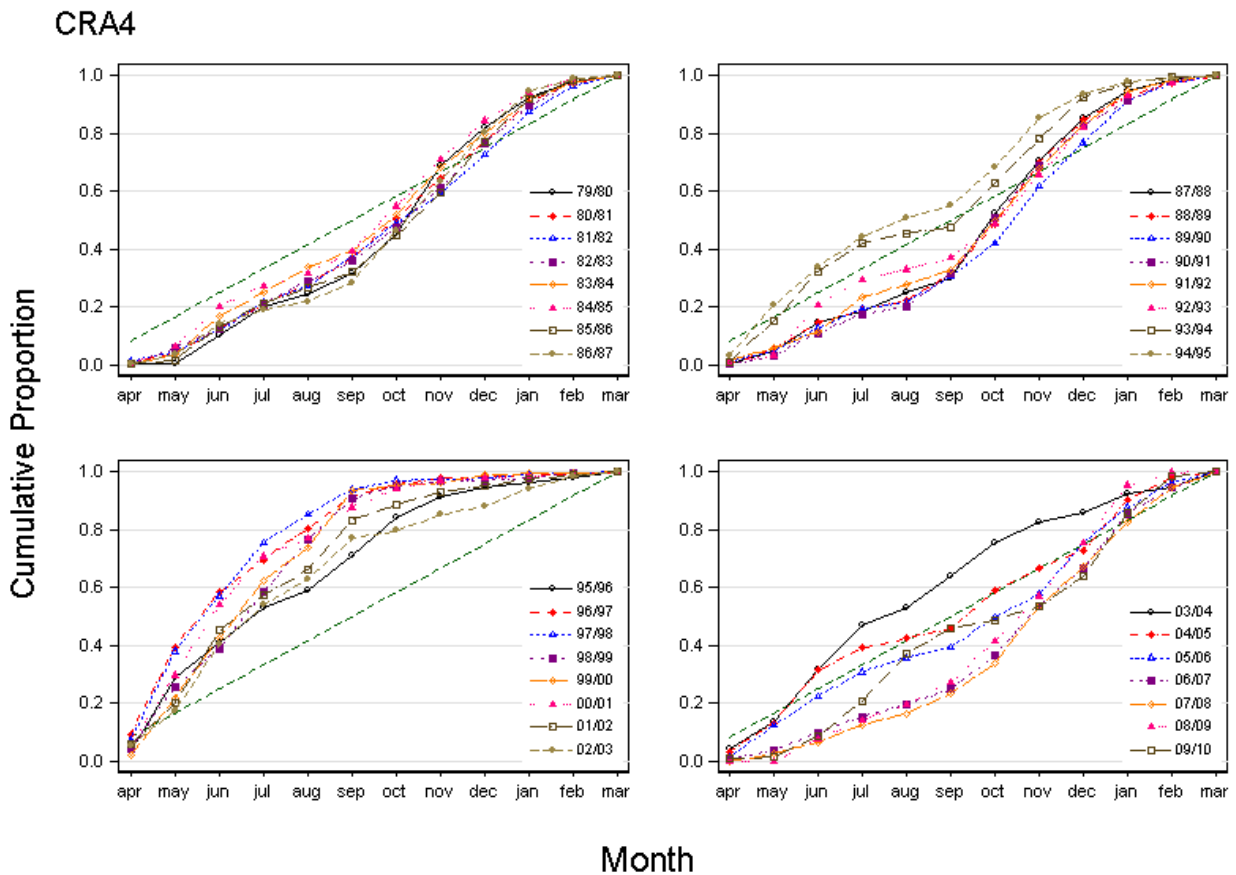


Figure 11: Cumulative catch percentages by fishing month for CRA 4, 1979–80 to 2009–10. Dotted line provides a reference equivalent to a uniform distribution of catch across all months.

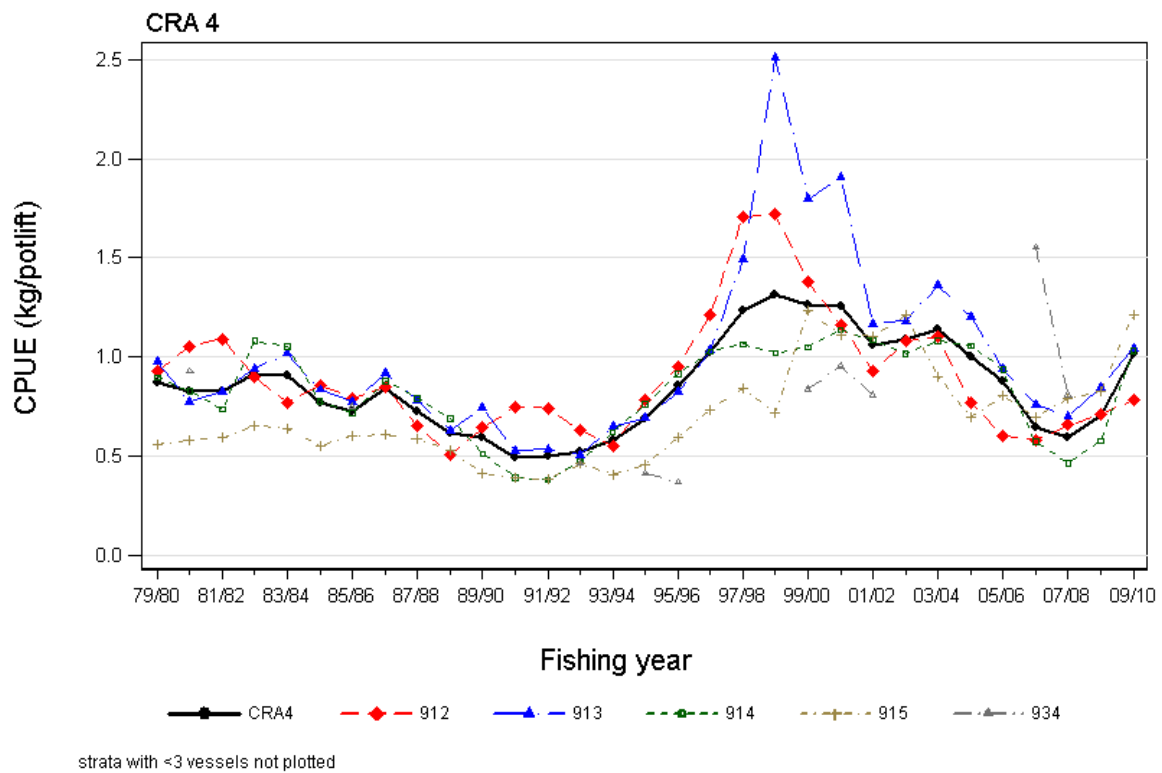


Figure 12: Arithmetic CPUE for CRA 4 by fishing year and statistical area from 1979–80 to 2009–10.

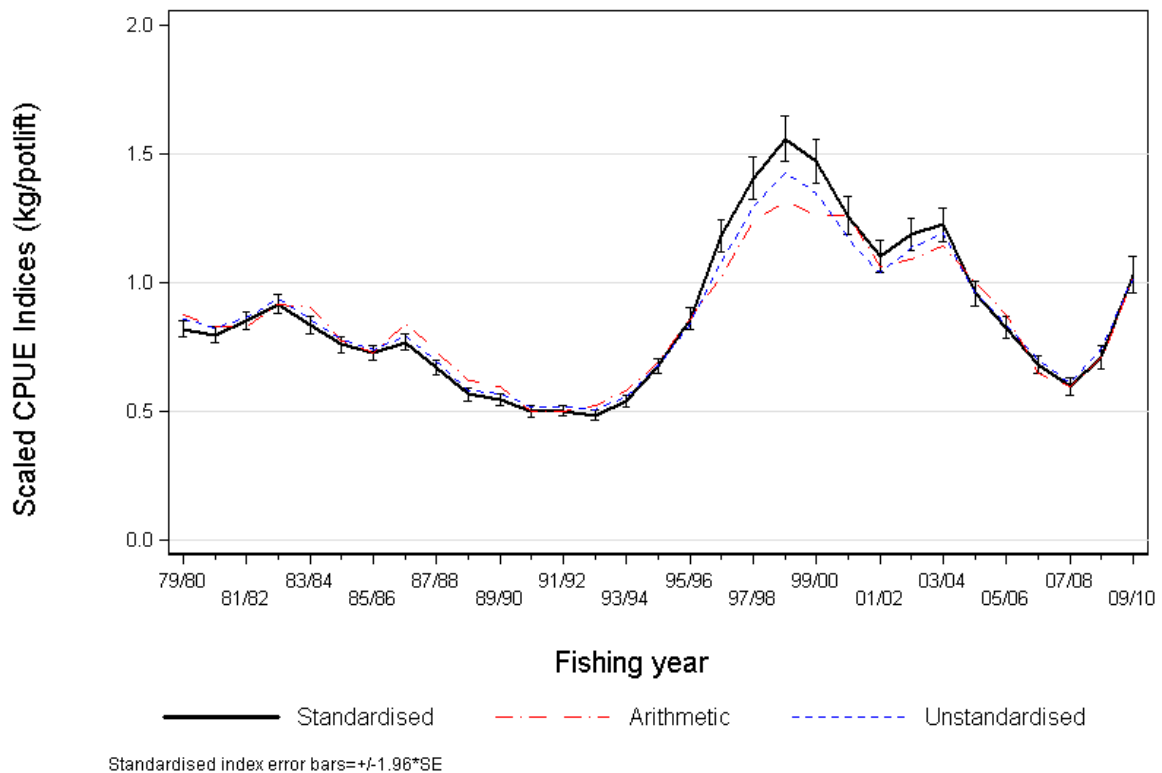


Figure 13: Annual CPUE indices for CRA 4: arithmetic (dashed line), unstandardised (dotted line), and standardised (bold line) \pm 2 s.e. from 1979–80 to 2009–10. The geometric mean for each series = 0.82 kg/potlift.

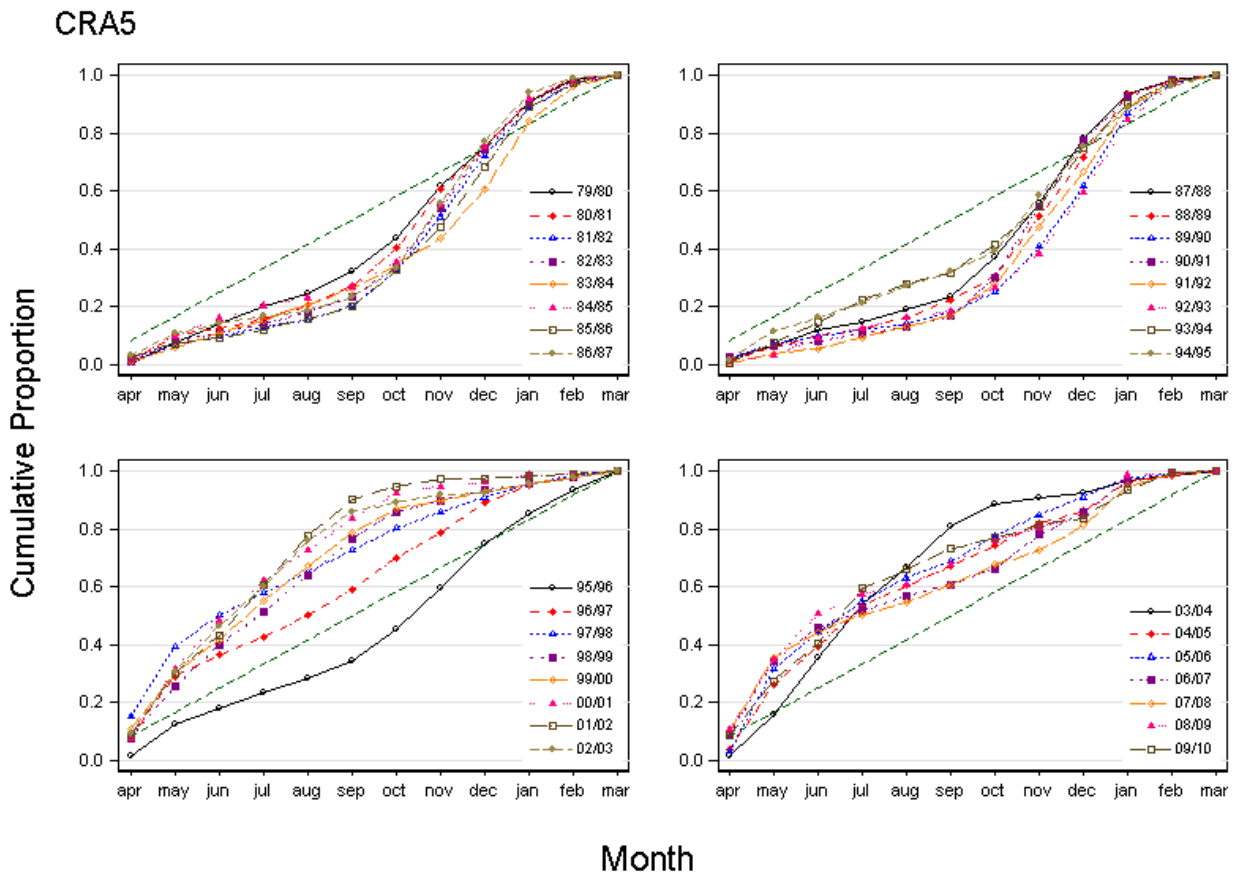


Figure 14: Cumulative catch percentages by fishing month for CRA 5, 1979–80 to 2009–10. Dotted line provides a reference equivalent to a uniform distribution of catch across all months.

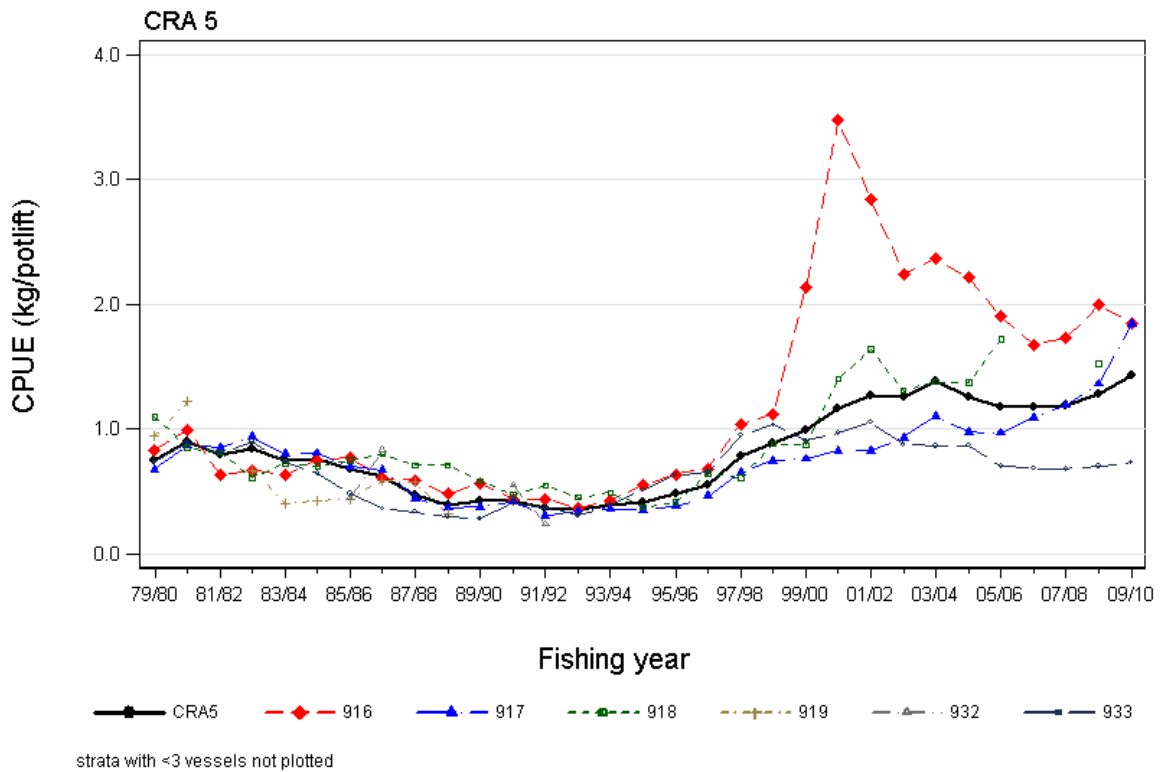


Figure 15: Arithmetic CPUE for CRA 5 by fishing year and statistical area from 1979–80 to 2009–10.

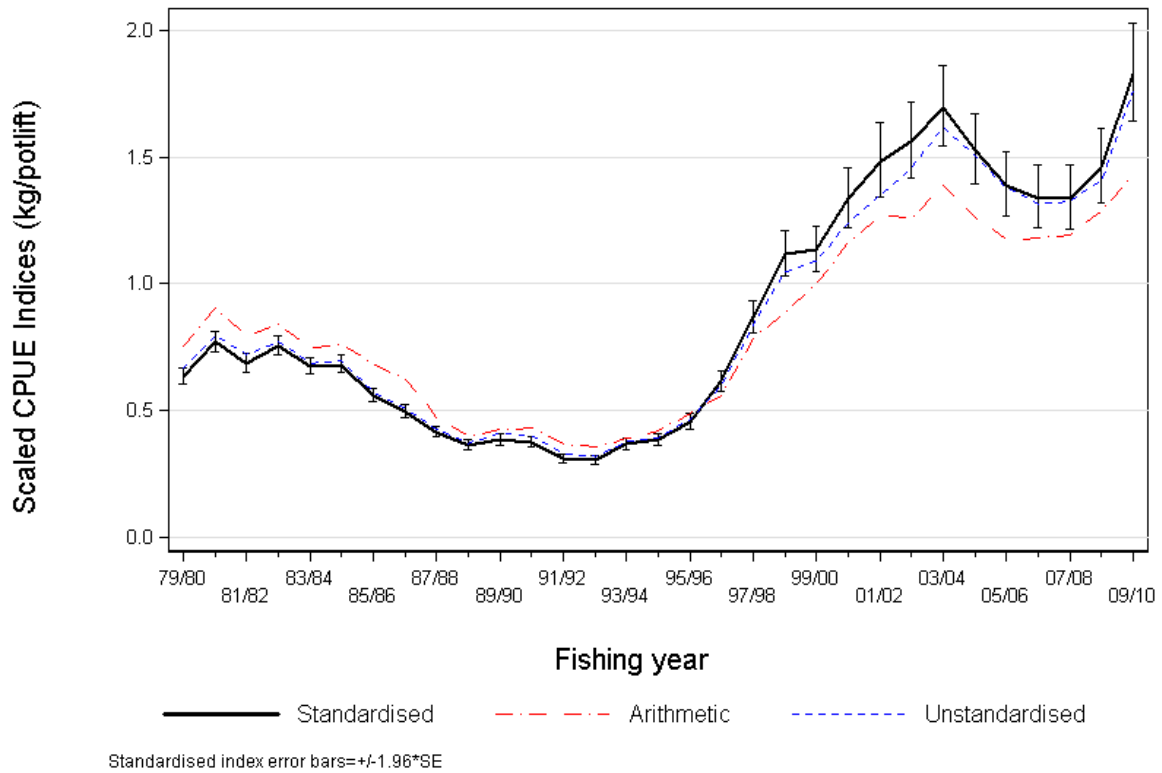


Figure 16: Annual CPUE indices for CRA 5: arithmetic (dashed line), unstandardised (dotted line), and standardised (bold line) ± 2 s.e. from 1979–80 to 2009–10. The geometric mean for each series = 0.75 kg/potlift.

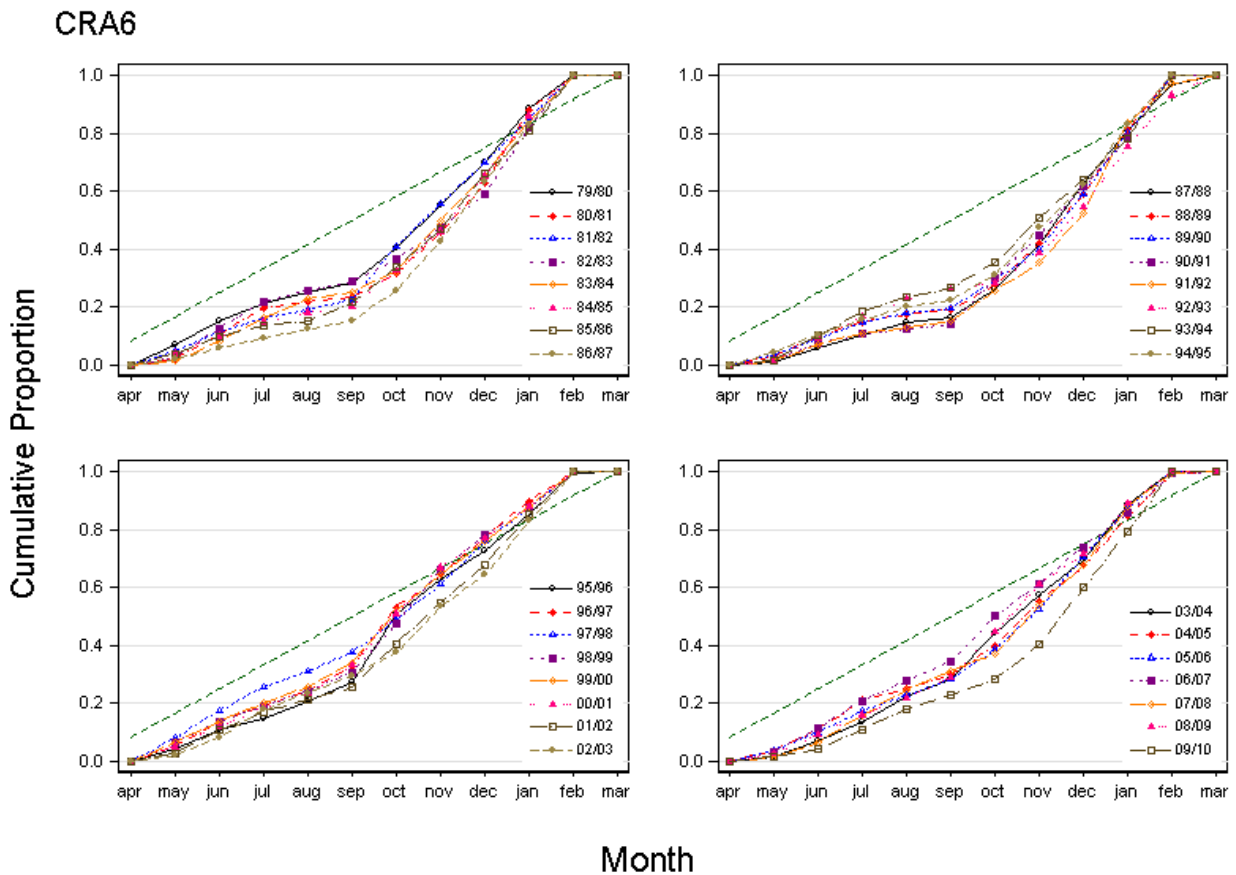


Figure 17: Cumulative catch percentages by fishing month for CRA 6, 1979–80 to 2009–10. Dotted line provides a reference equivalent to a uniform distribution of catch across all months.

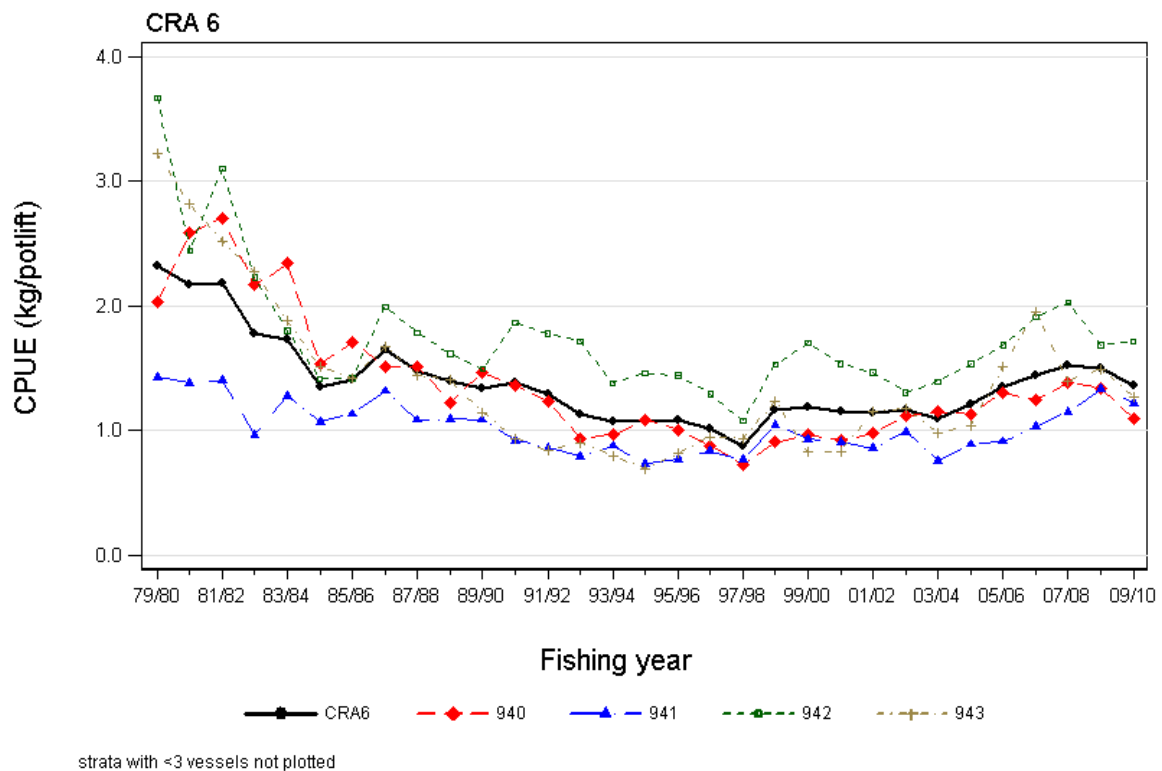


Figure 18: Arithmetic CPUE for CRA 6 by fishing year and statistical area from 1979–80 to 2009–10.

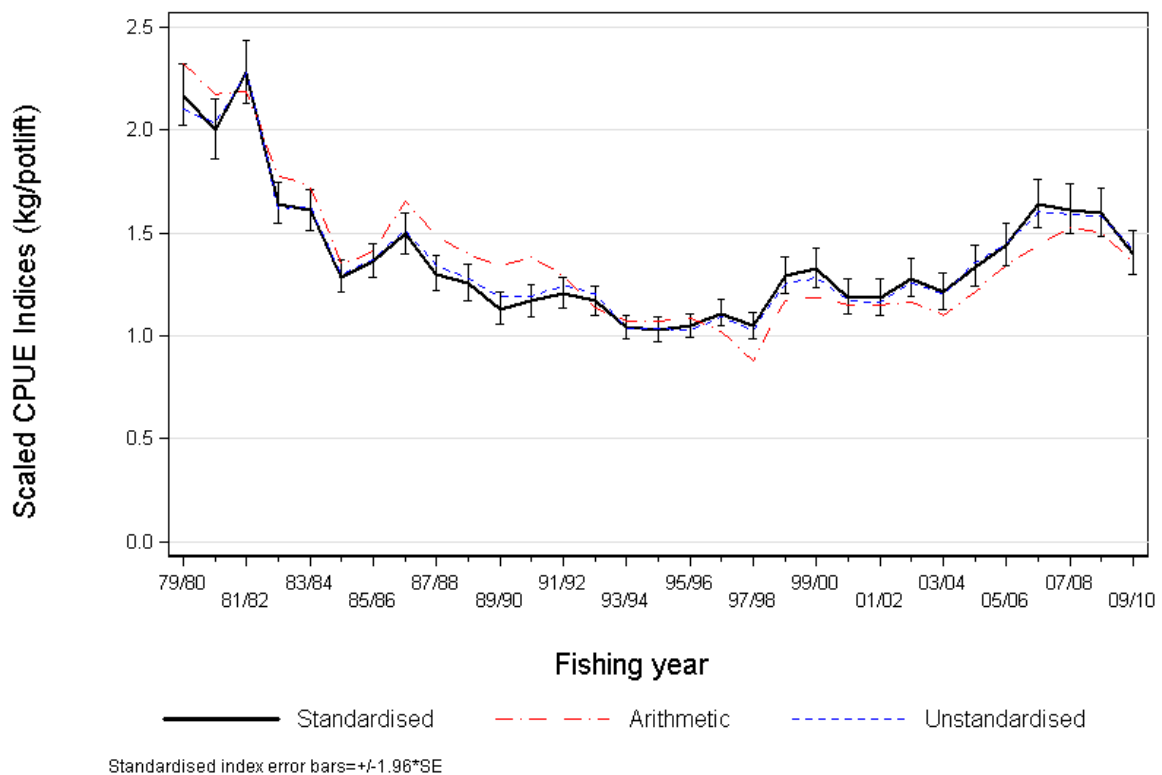


Figure 19: Annual CPUE indices for CRA 6: arithmetic (dashed line), unstandardised (dotted line), and standardised (bold line) ± 2 s.e. from 1979–80 to 2009–10. The geometric mean for each series = 1.35 kg/potlift.

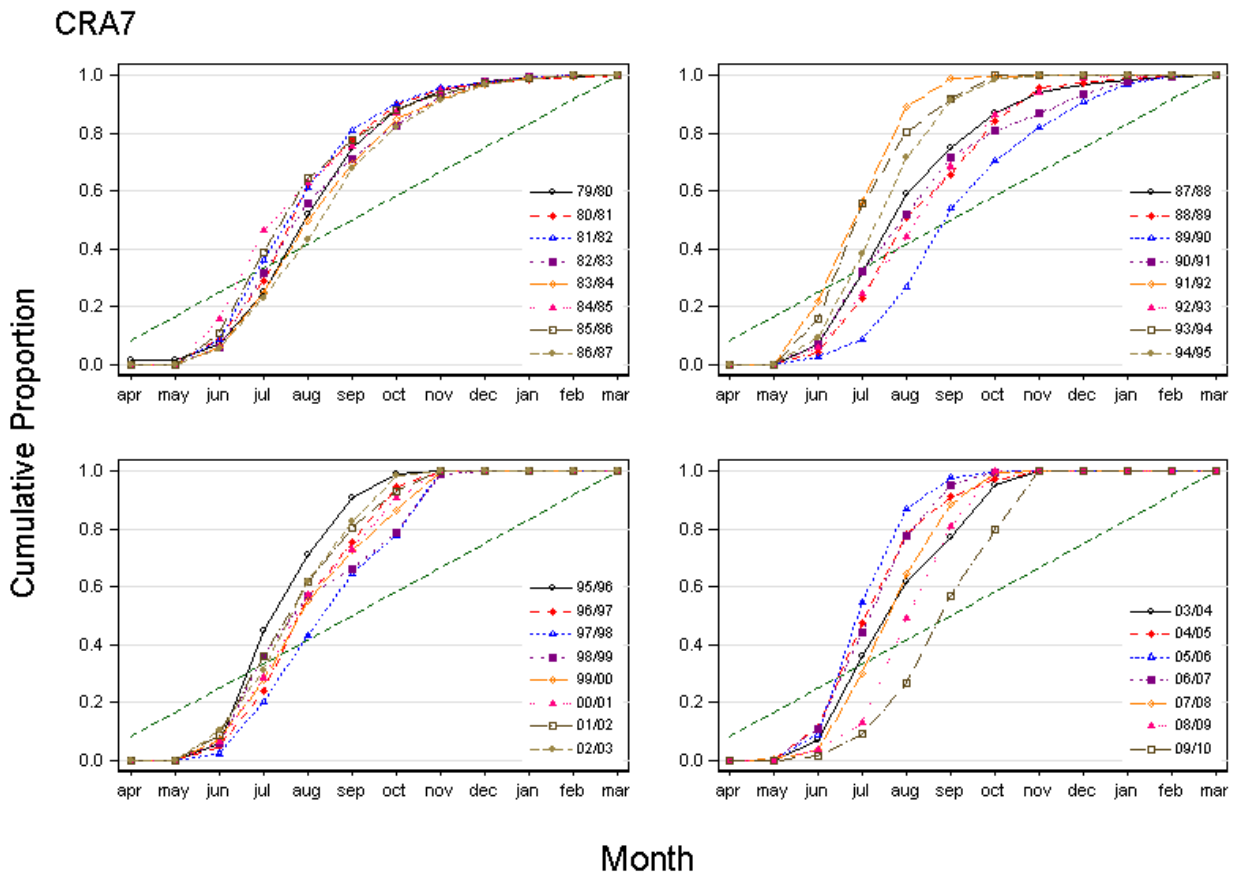


Figure 20: Cumulative catch percentages by fishing month for CRA 7, 1979–80 to 2009–10. Dotted line provides a reference equivalent to a uniform distribution of catch across all months.

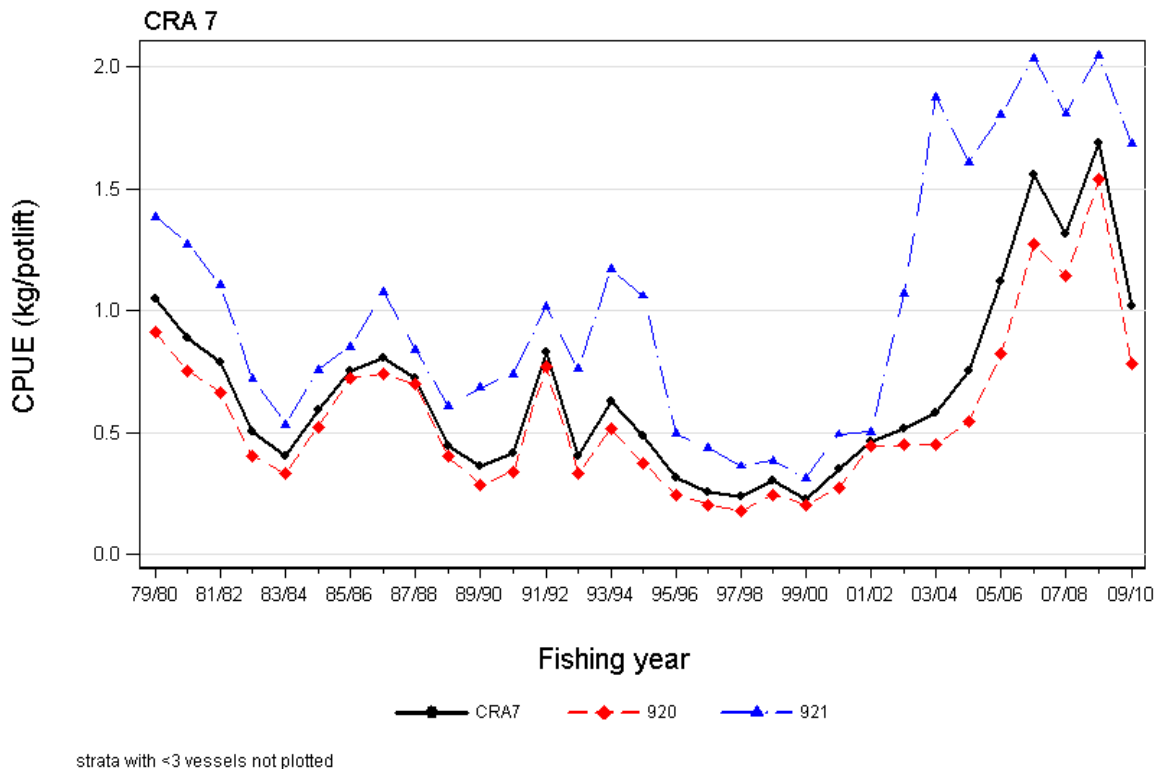


Figure 21: Arithmetic CPUE for CRA 7 by fishing year and statistical area from 1979–80 to 2009–10.

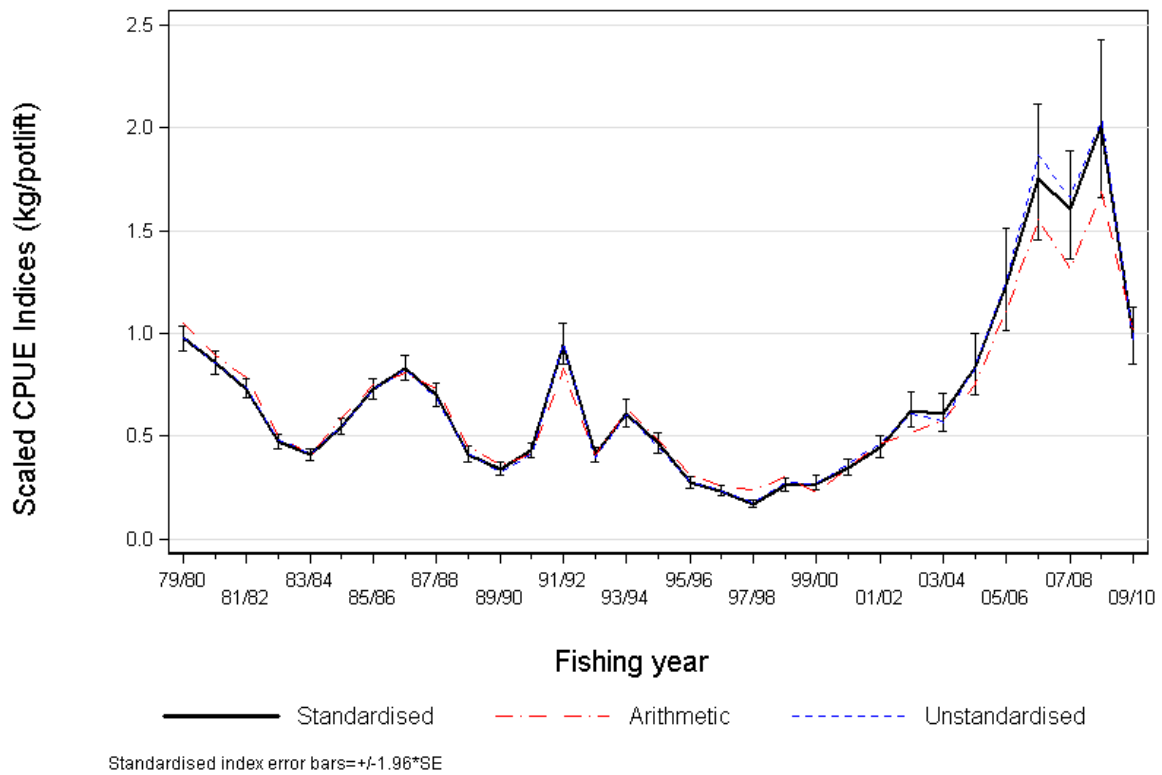


Figure 22: Annual CPUE indices for CRA 7: arithmetic (dashed line), unstandardised (dotted line), and standardised (bold line) ± 2 s.e. from 1979–80 to 2009–10. The geometric mean for each series = 0.58 kg/potlift.

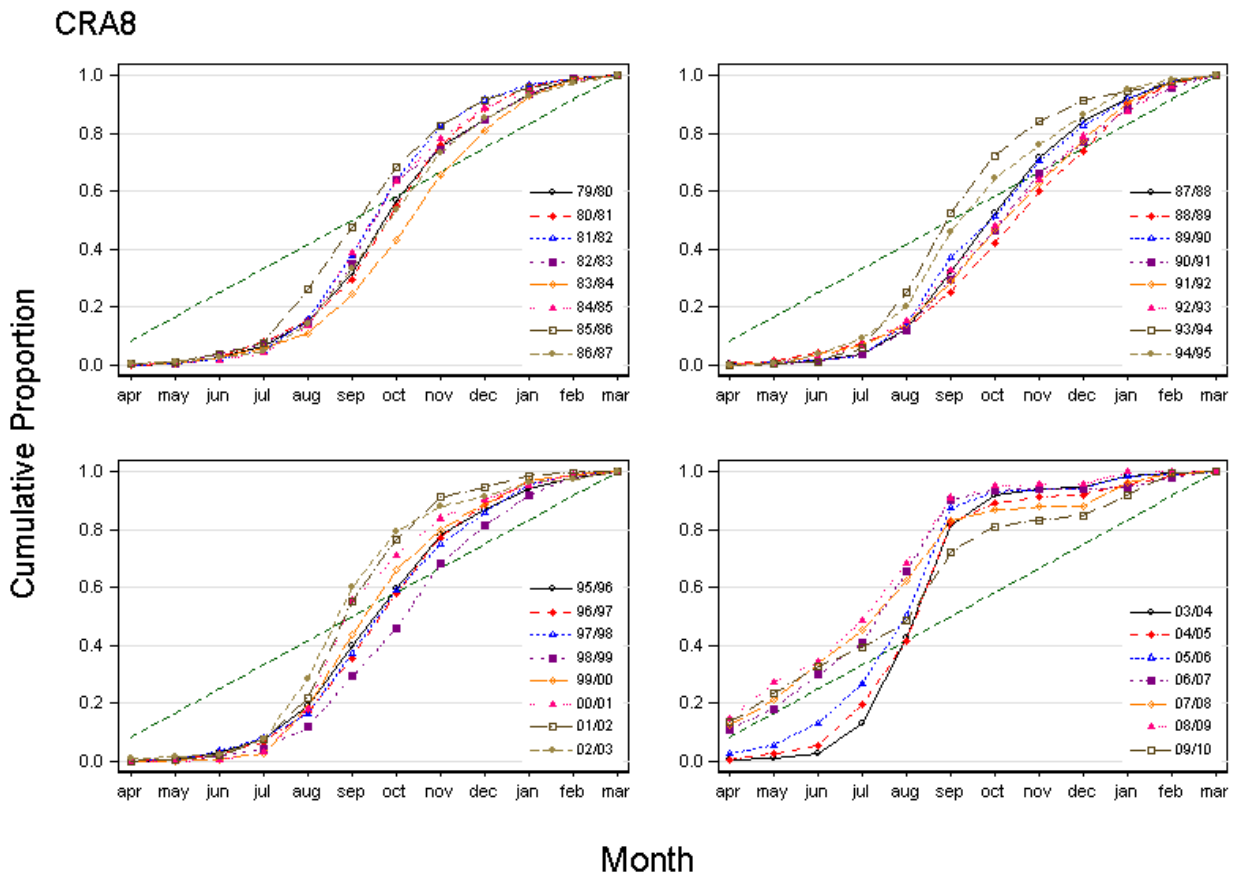


Figure 23: Cumulative catch percentages by fishing month for CRA 8, 1979–80 to 2009–10. Dotted line provides a reference equivalent to a uniform distribution of catch across all months.

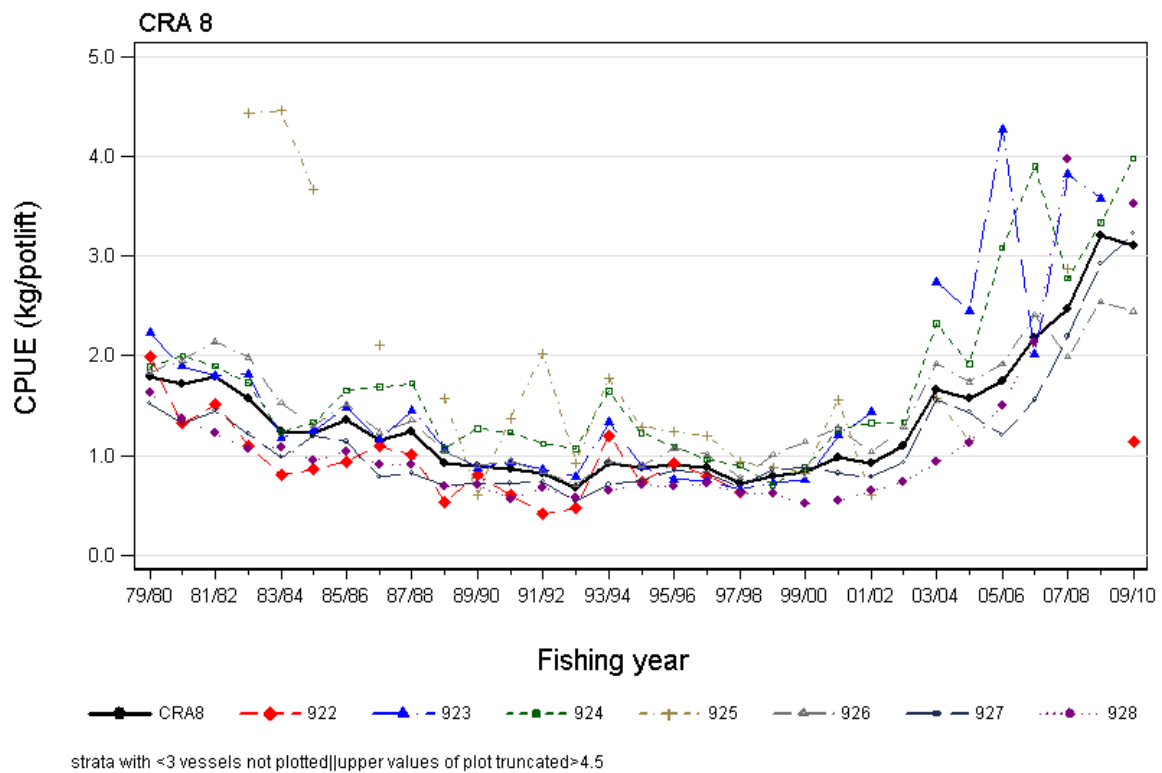


Figure 24: Arithmetic CPUE for CRA 8 by fishing year and statistical area from 1979–80 to 2009–10.

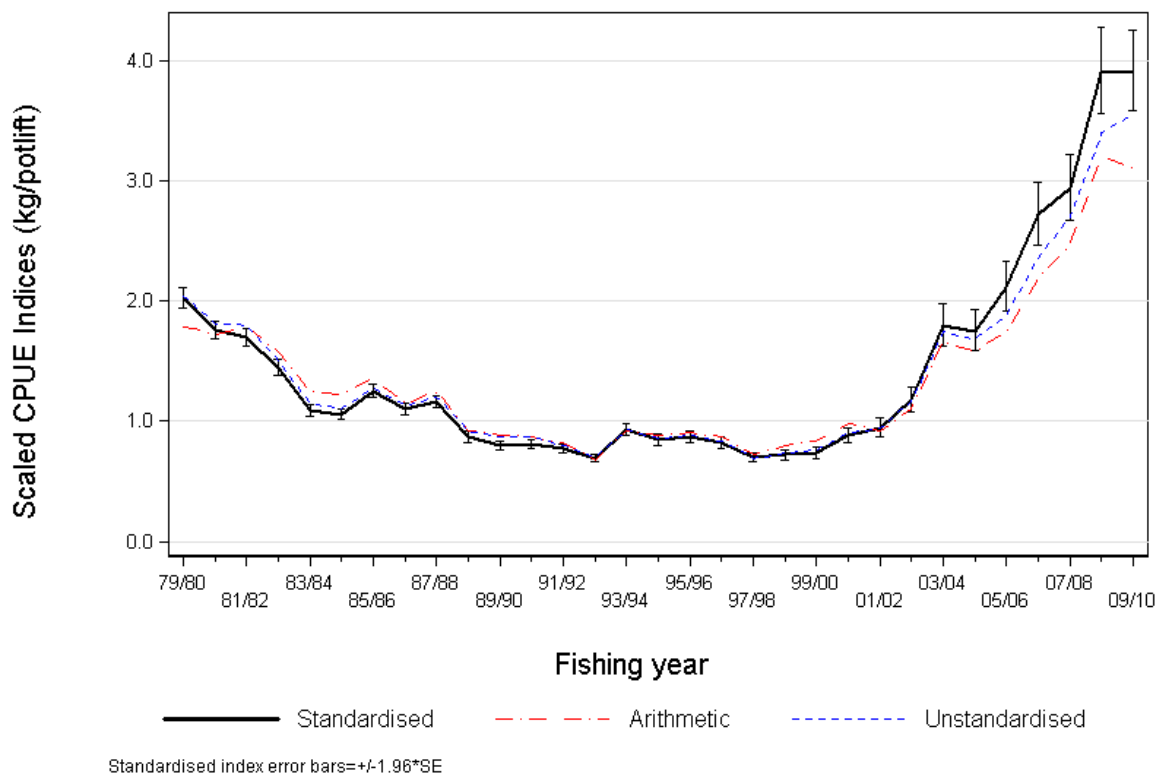


Figure 25: Annual CPUE indices for CRA 8: arithmetic (dashed line), unstandardised (dotted line), and standardised (bold line) ± 2 s.e. 1979–80 to 2009–10. The geometric mean for each series = 1.24 kg/potlift.

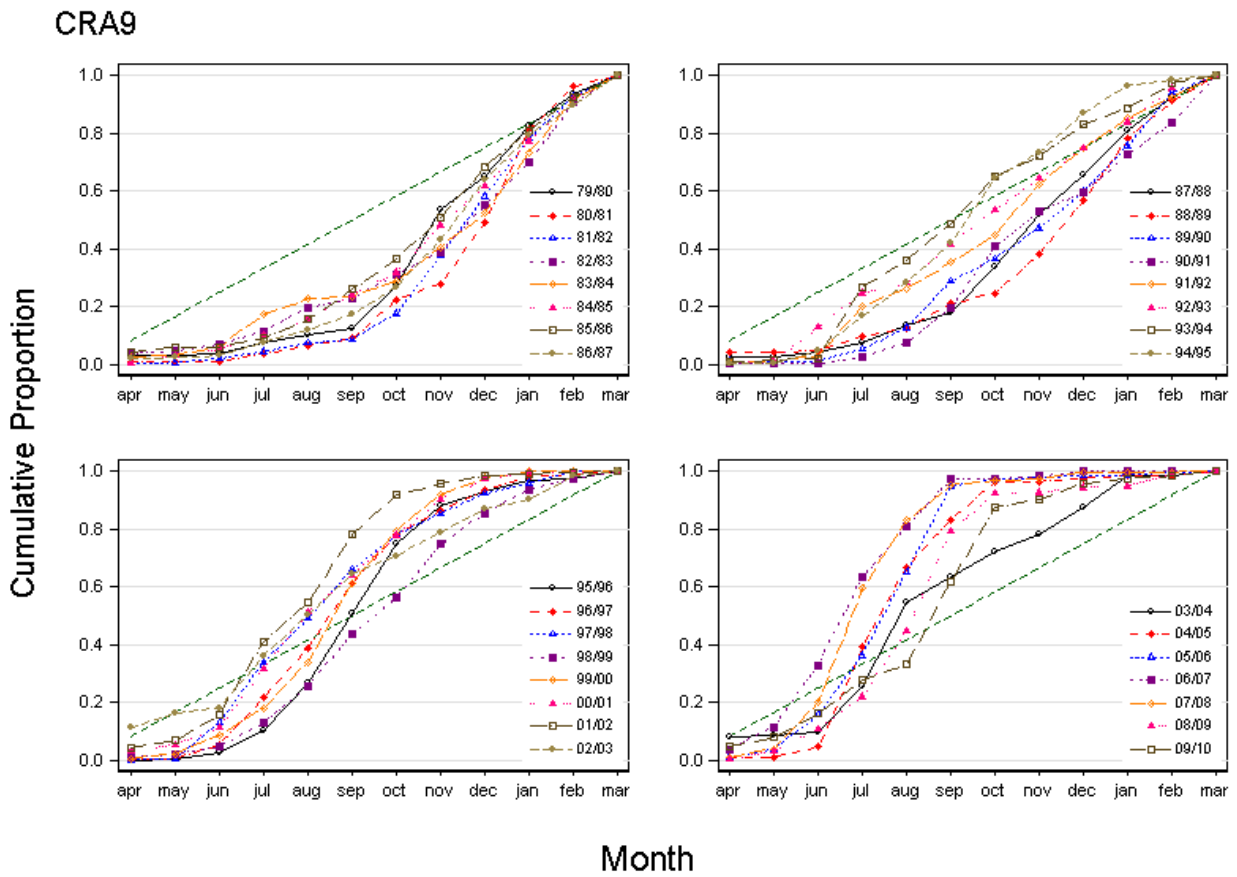


Figure 26: Cumulative catch percentages by fishing month for CRA 9, 1979–80 to 2009–10. Dotted line provides a reference equivalent to a uniform distribution of catch across all months.

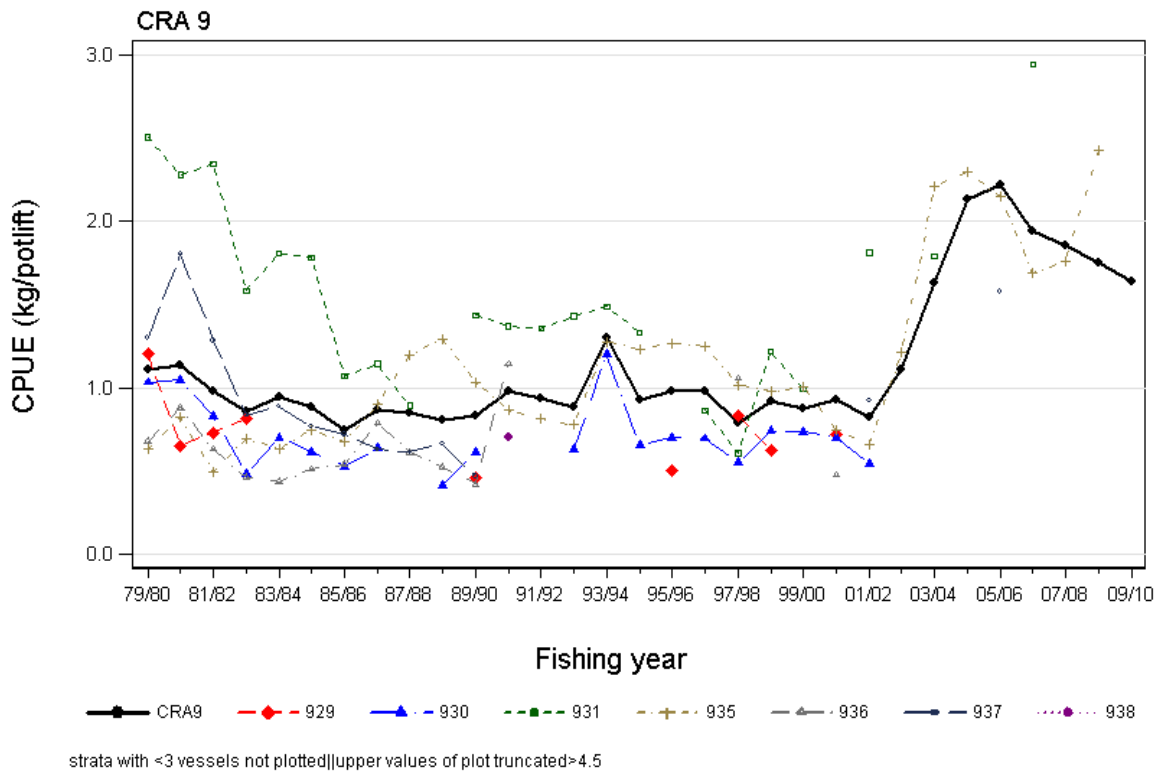


Figure 27: Arithmetic CPUE for CRA 9 by fishing year and statistical area from 1979–80 to 2009–10.

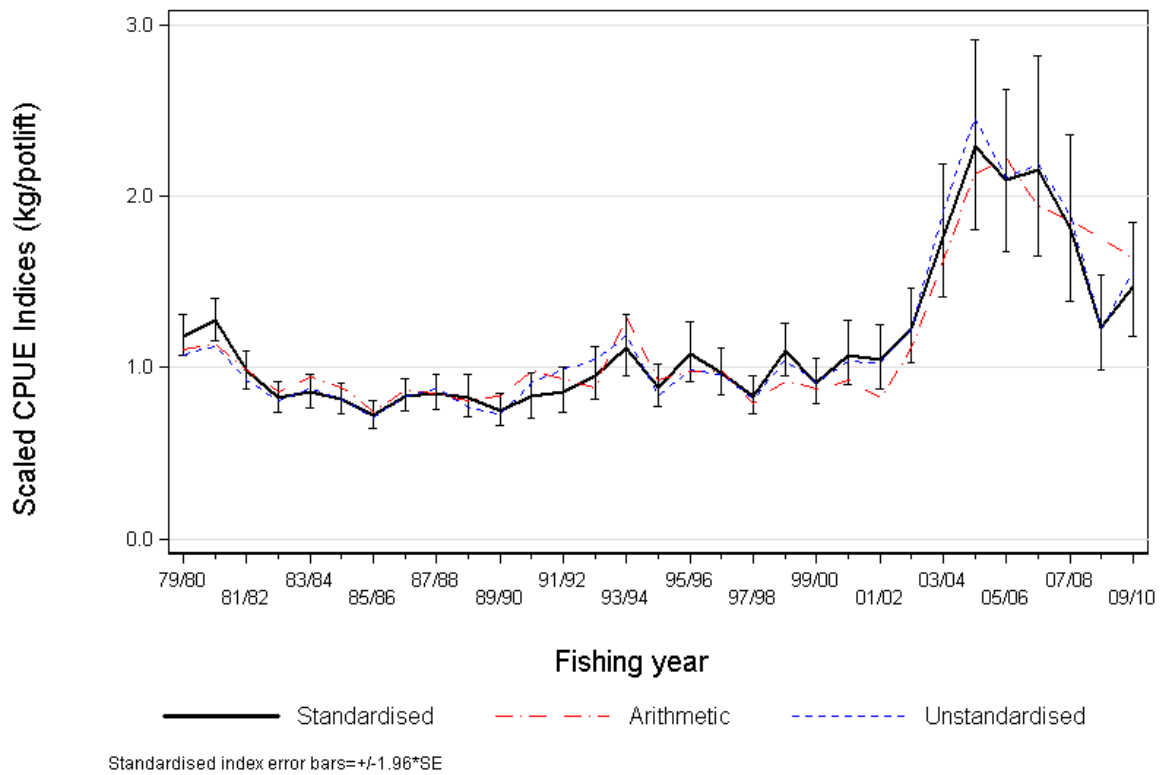


Figure 28: Annual CPUE indices for CRA 9: arithmetic (dashed line), unstandardised (dotted line), and standardised (bold line) ± 2 s.e. from 1979–80 to 2009–10. The geometric mean for each series = 1.09 kg/potlift.

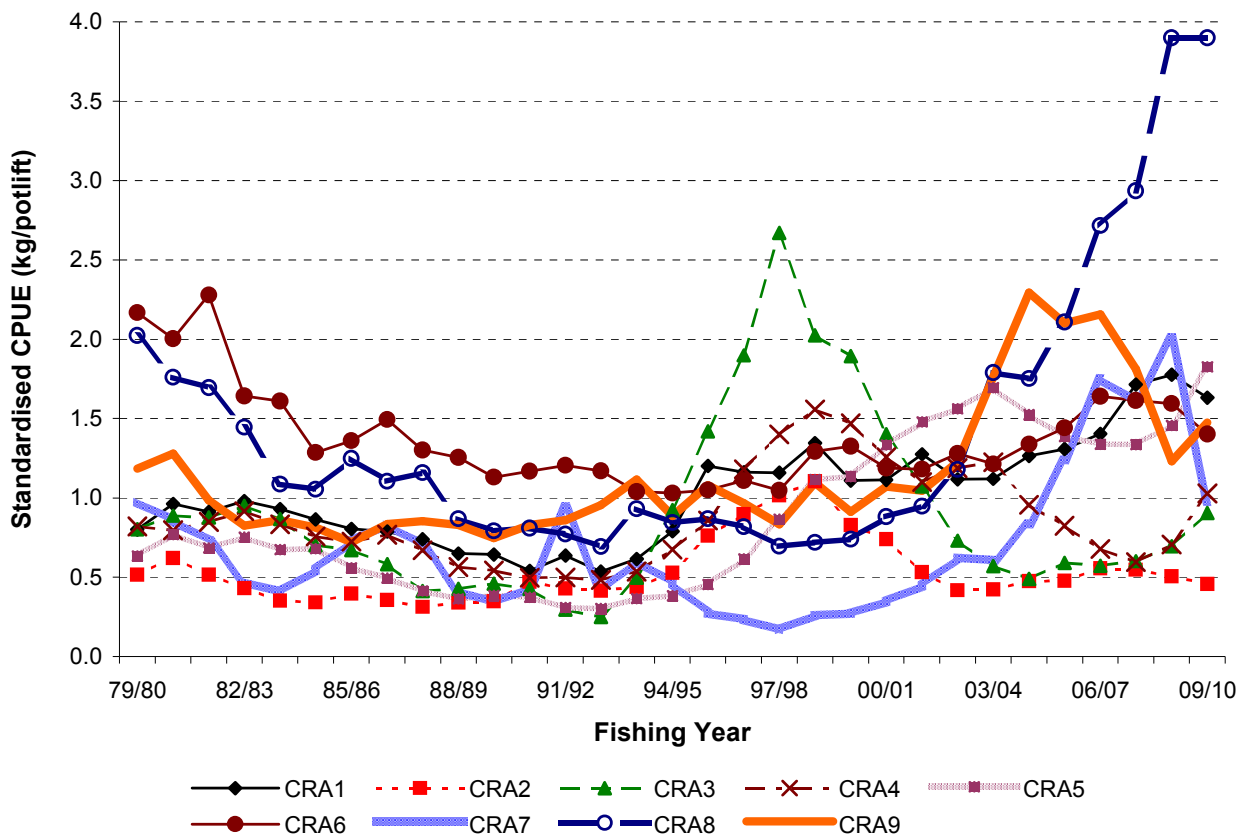


Figure 29: Standardised CPUE from all 9 QMAs (see Figure 1) from 1979–80 to 2009–10.

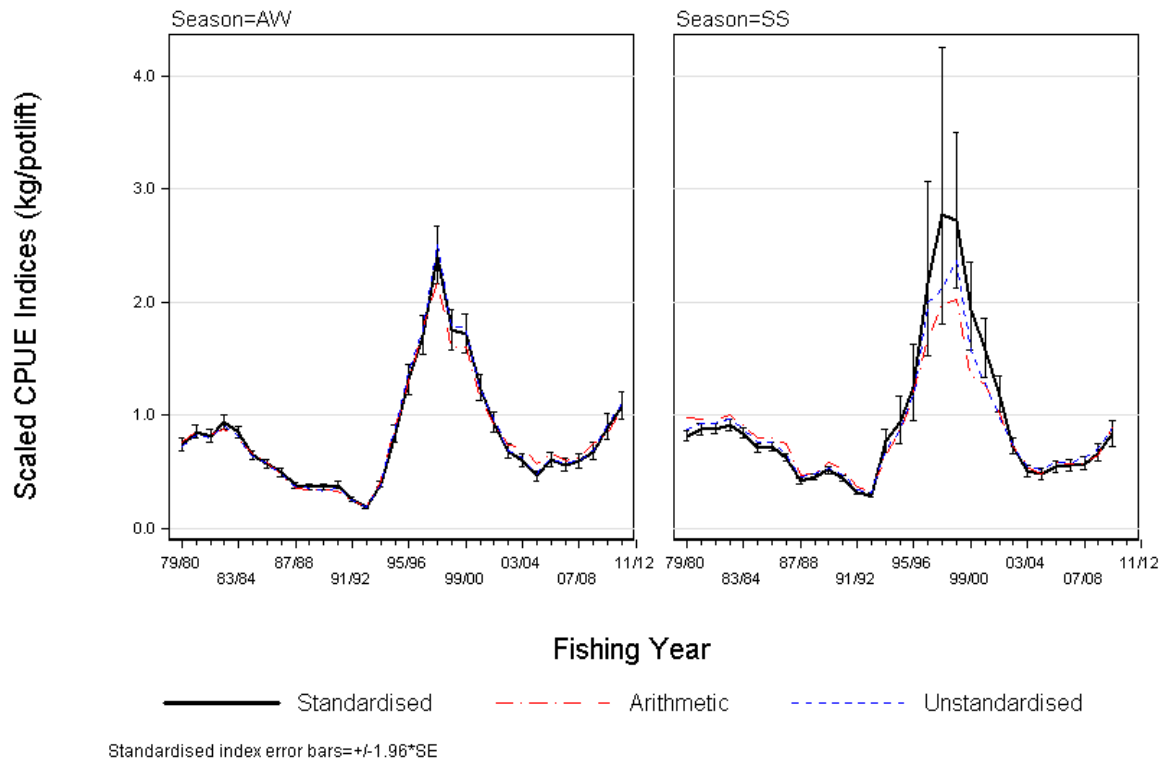


Figure 30: Standardised, unstandardised, and arithmetic CPUE indices (kg/potlift) by season and fishing year for CRA 3: 1979–80 to 2010–11 (final year for AW only). Vertical bars are 95% confidence intervals. The geometric mean for the AW series (left panel) = 0.70 kg/potlift and for the SS series (right panel) = 0.78 kg/potlift.

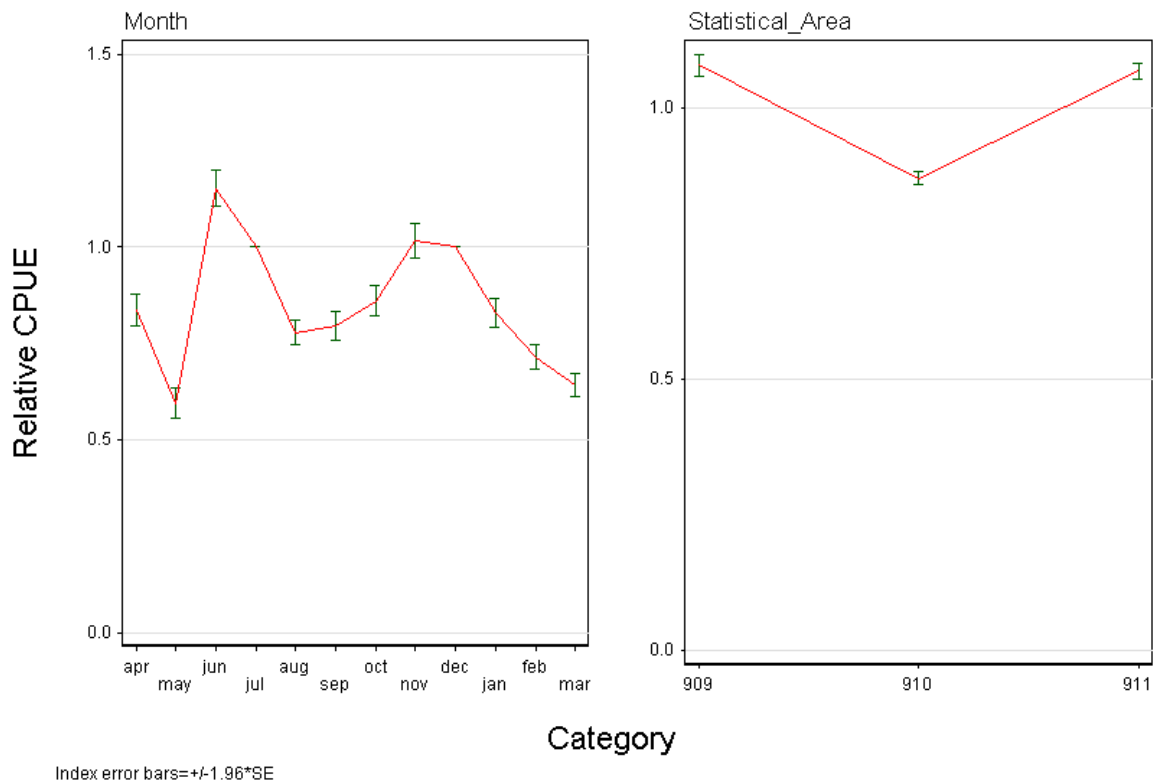


Figure 31: Coefficients for month and statistical area from the CRA 3 seasonal CPUE standardisation. The statistical area coefficients are in canonical form (Francis 1999). The coefficients for the reference months (July and December) equal 1.0 with standard error of zero.

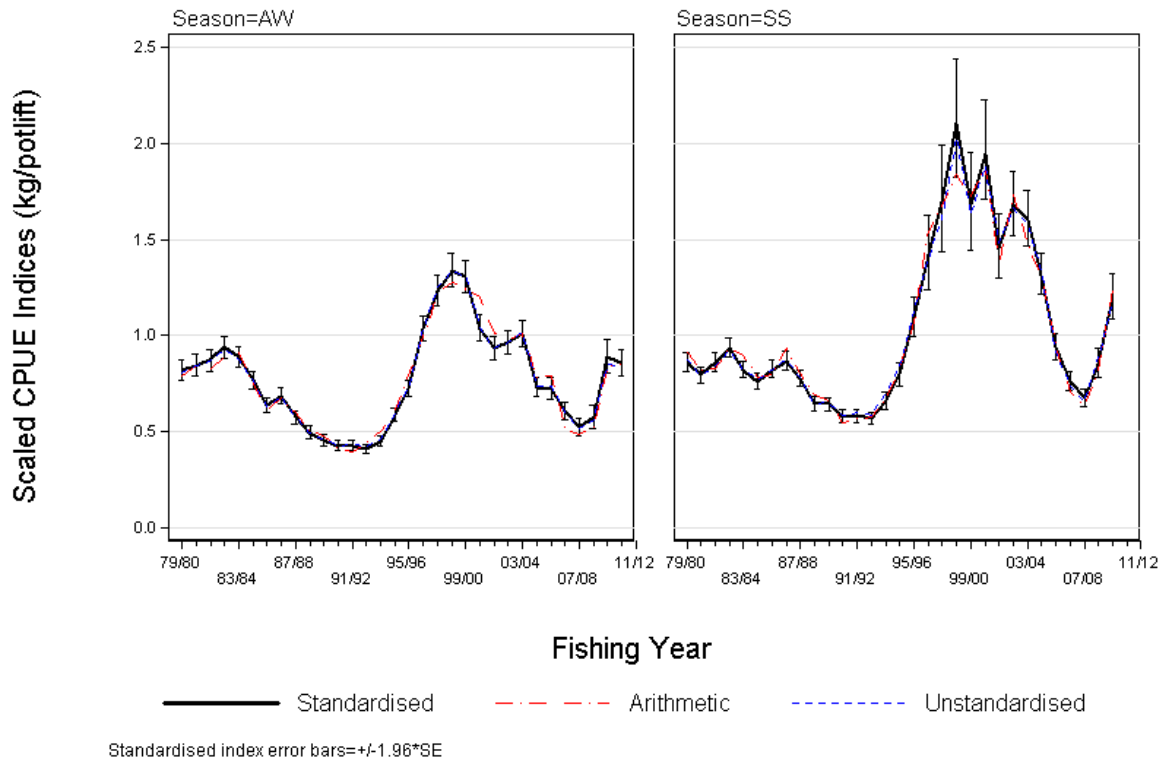


Figure 32: Standardised, unstandardised, and arithmetic CPUE indices (kg/potlift) by season and fishing year for CRA 4: 1979–80 to 2010–11 (final year for AW only). Vertical bars are 95% confidence intervals. The geometric mean for the AW series (left panel) = 0.73 kg/potlift and for the SS series (right panel) = 0.97 kg/potlift.

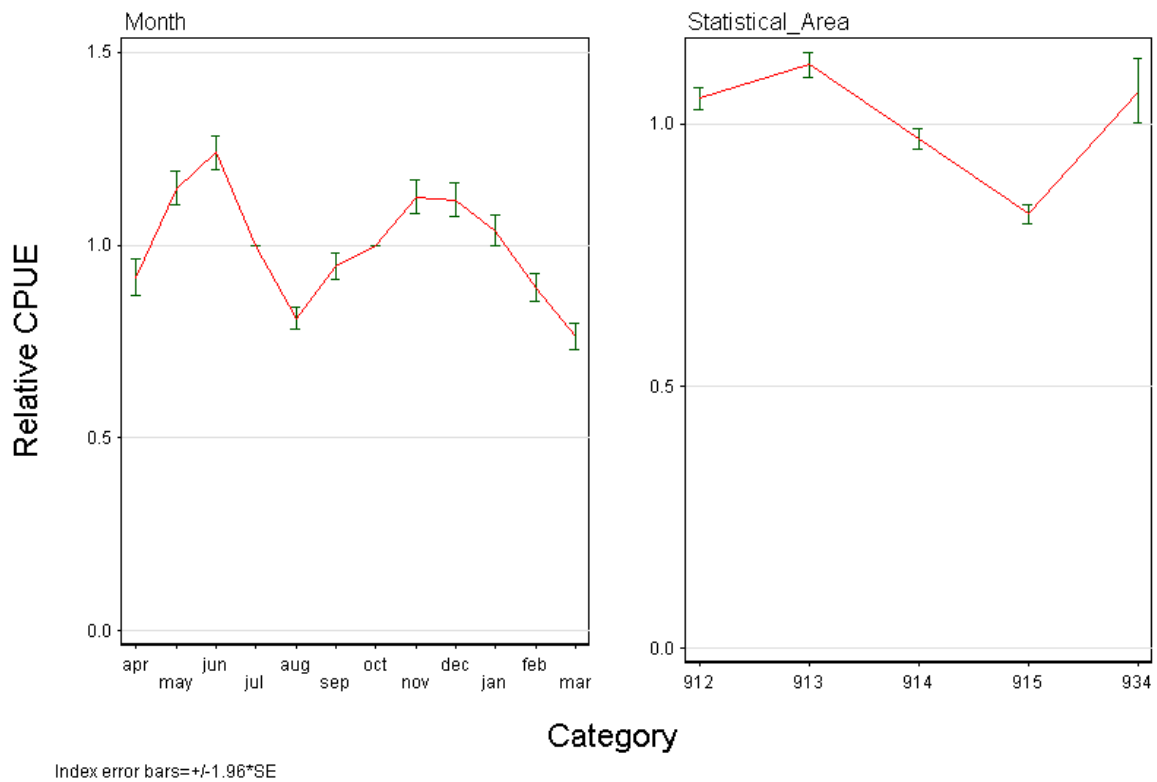


Figure 33: Coefficients for month and statistical area from the CRA 4 seasonal CPUE standardisation. The statistical area coefficients are in canonical form (Francis 1999). The coefficients for the reference months (July and October) equal 1.0 with standard error of zero.

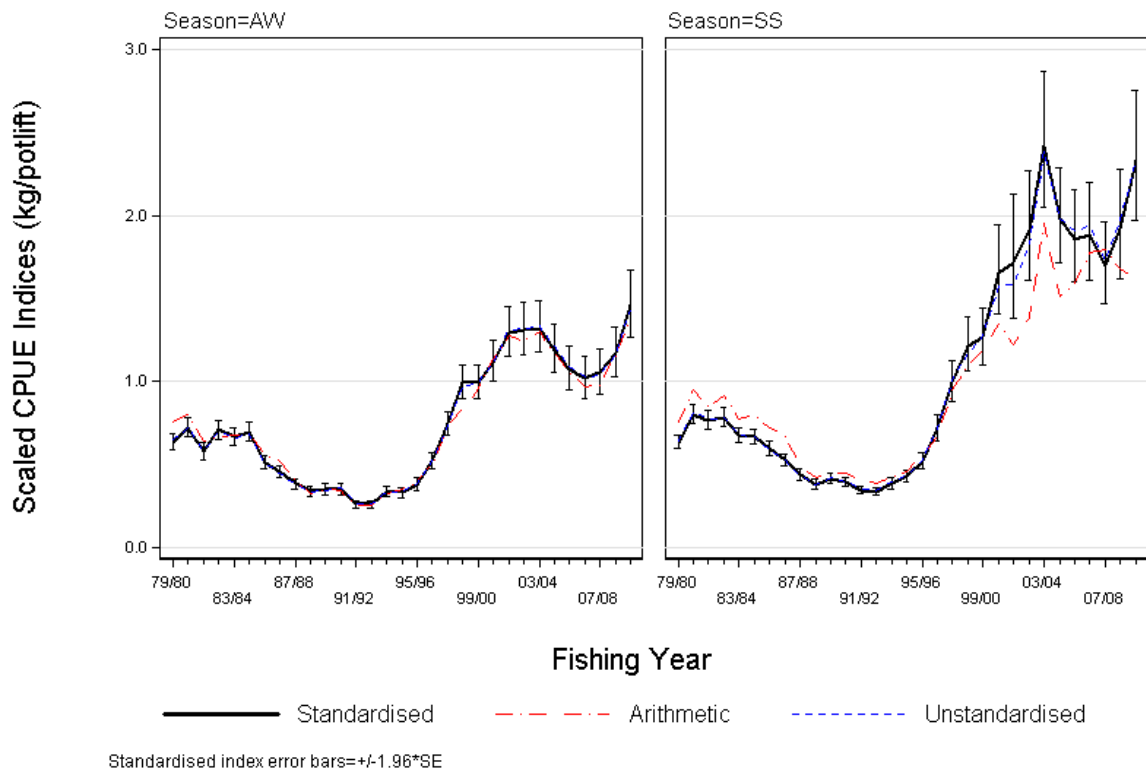


Figure 34: Standardised, unstandardised, and arithmetic CPUE indices (kg/potlift) by season and fishing year for CRA 5: 1979–80 to 2010–11 (final year for AW only). Vertical bars are 95% confidence intervals. The geometric mean for the AW series (left panel) = 0.66 kg/potlift and for the SS series (right panel) = 0.86 kg/potlift.

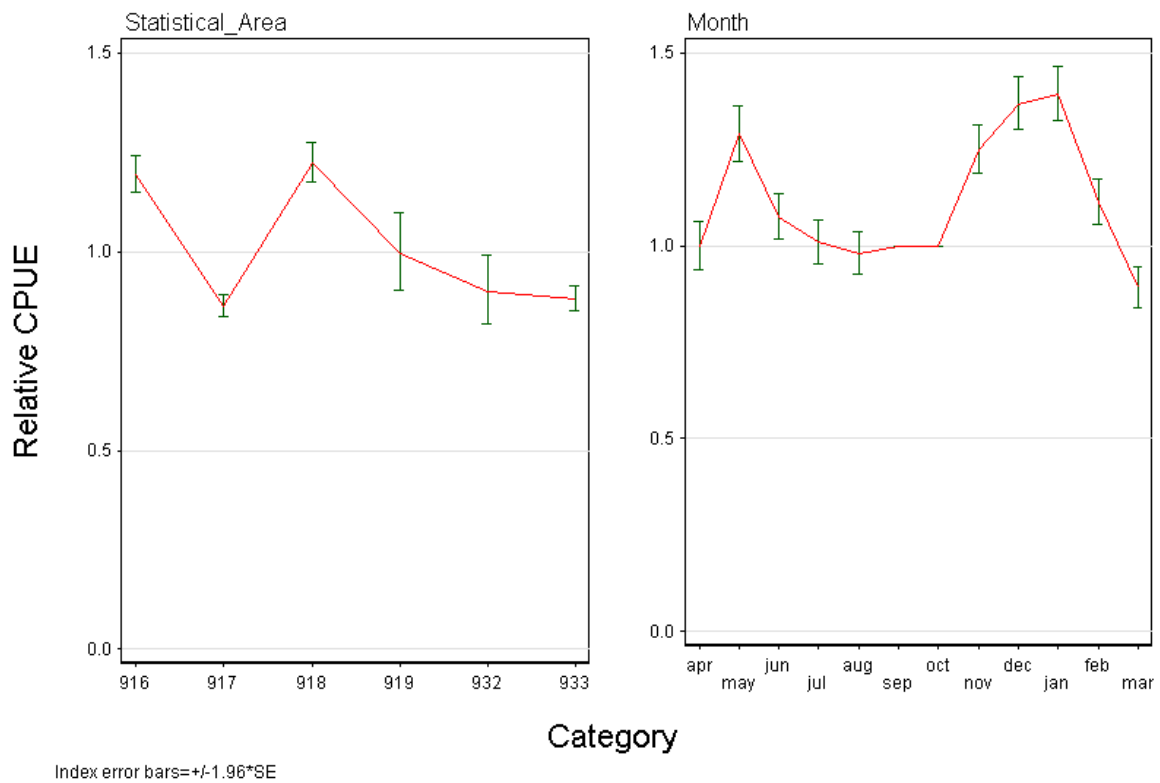


Figure 35: Coefficients for statistical area and month from the CRA 5 seasonal CPUE standardisation. The statistical area coefficients are in canonical form (Francis 1999). The coefficients for the reference months (September and October) equal 1.0 with standard error of zero.

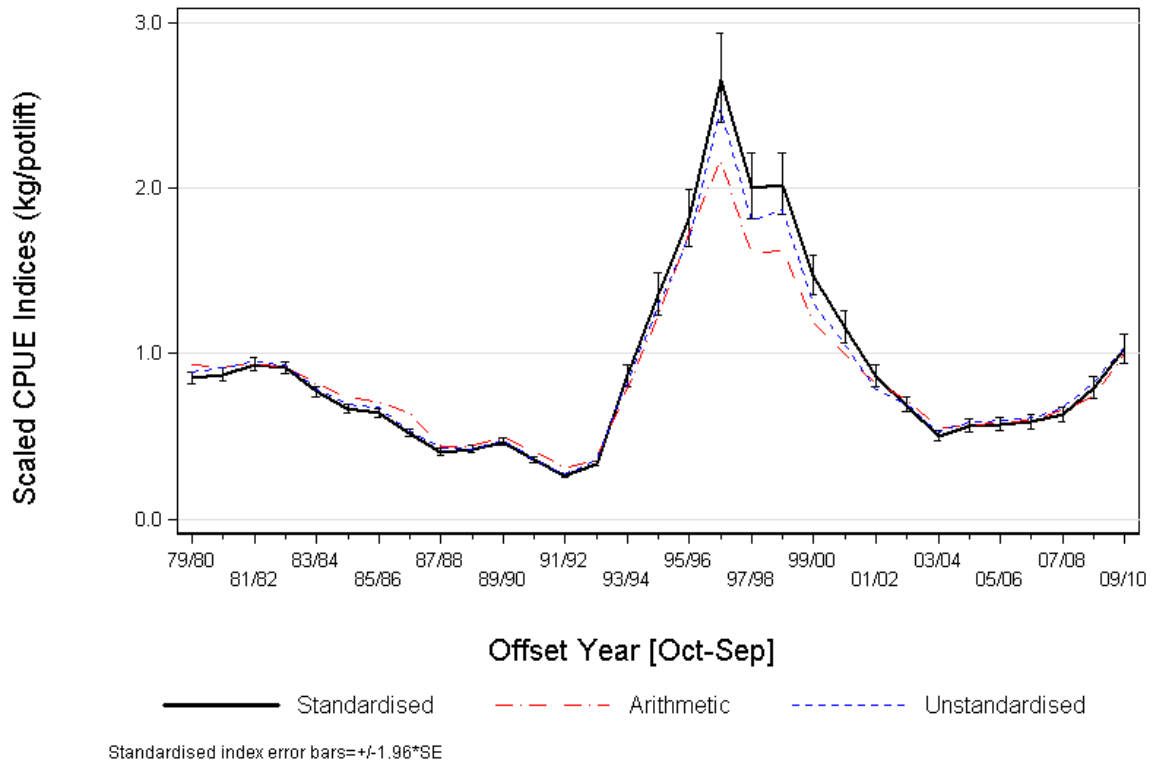


Figure 36: Standardised, unstandardised, and arithmetic offset year CPUE indices for CRA 3 from 1979–80 to 2009–10. Vertical bars are 95% confidence intervals. The geometric mean for all three series = 0.77 kg/potlift.

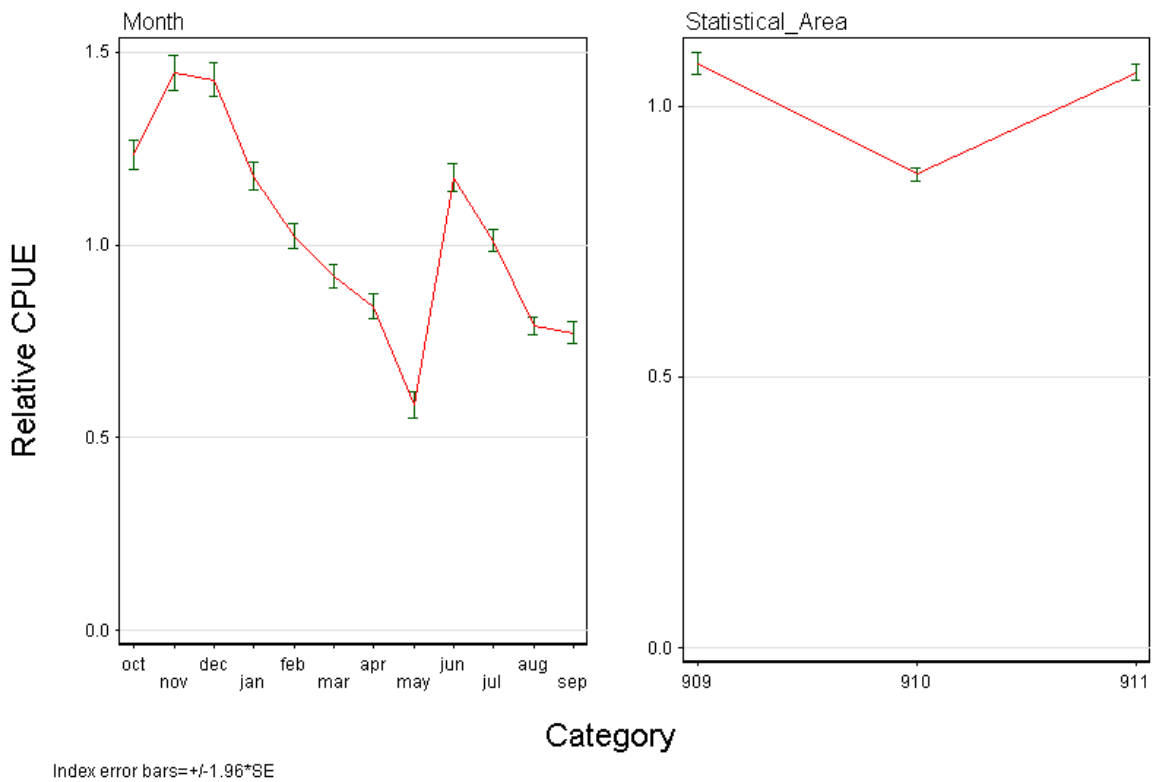


Figure 37: Coefficients for month and statistical area from the CRA 3 offset year CPUE standardisation . Both sets of coefficients are in canonical form (Francis 1999).

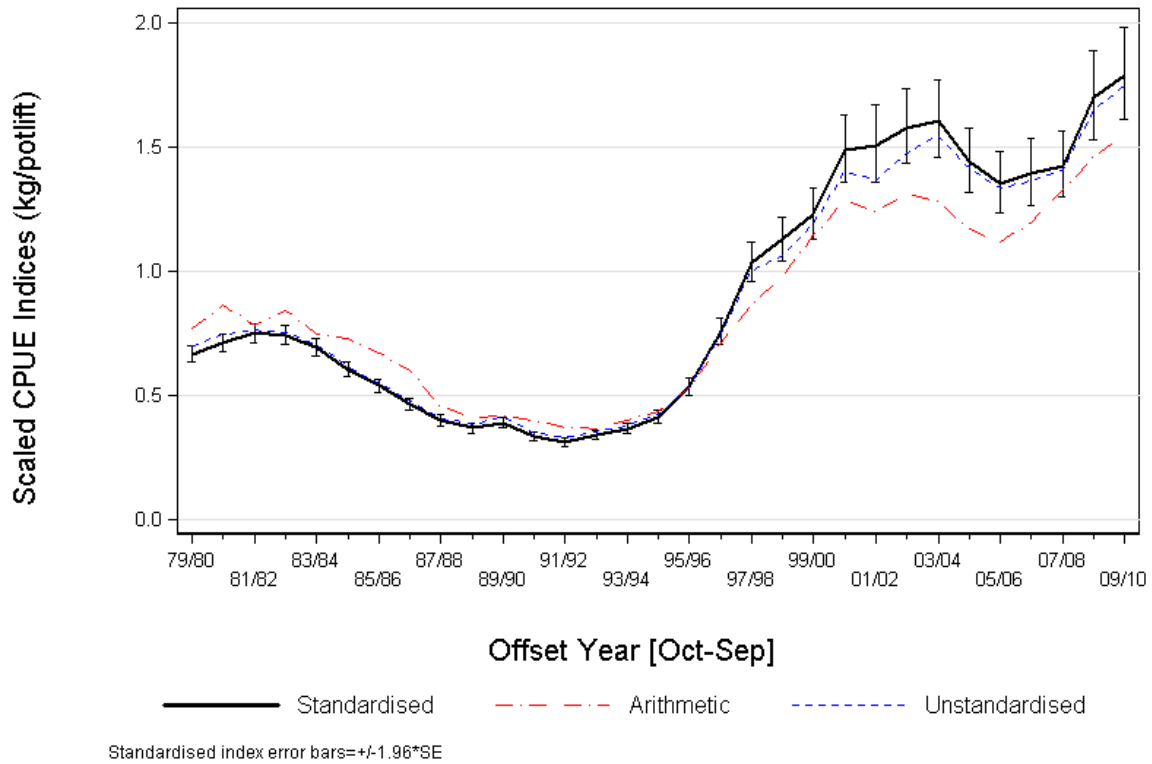


Figure 38: Standardised, unstandardised, and arithmetic offset year CPUE indices (kg/potlift) for CRA 5 from 1979–80 to 2009–10. Vertical bars are 95% confidence intervals. The geometric mean for all three series = 0.77 kg/potlift.

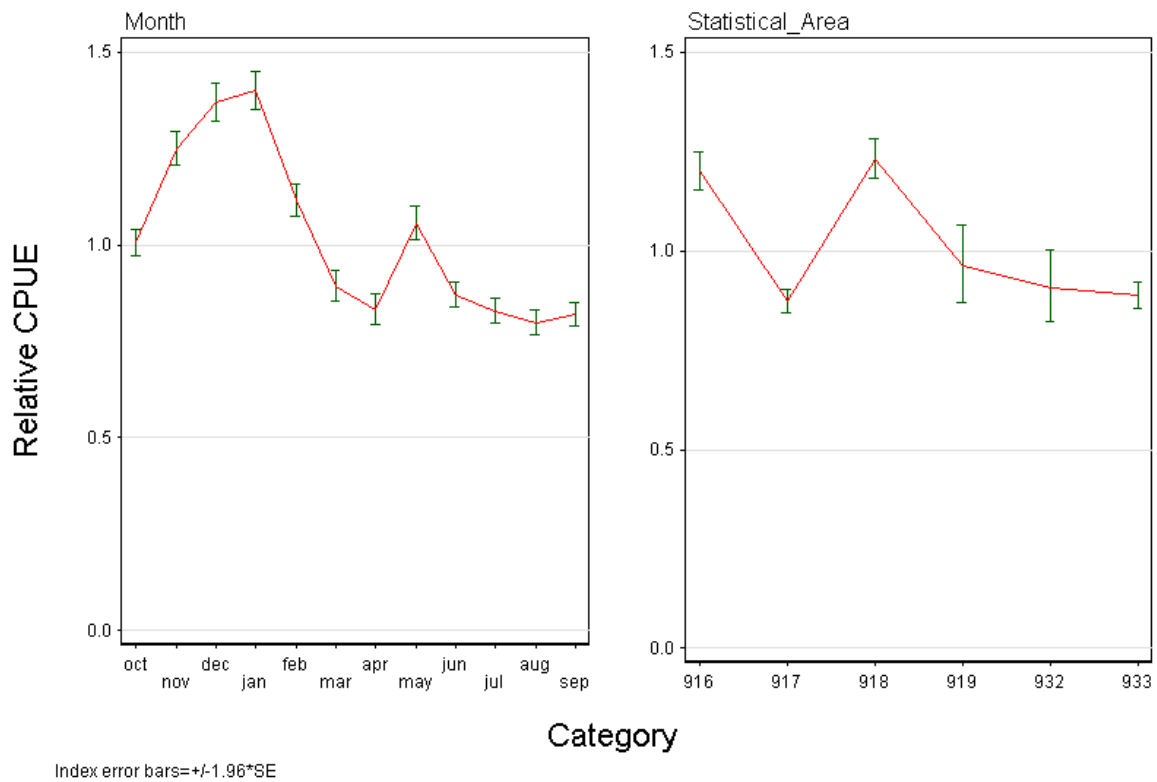


Figure 39: Coefficients for month and statistical area from the CRA 5 offset year CPUE standardisation . Both sets of coefficients are in canonical form (Francis 1999).

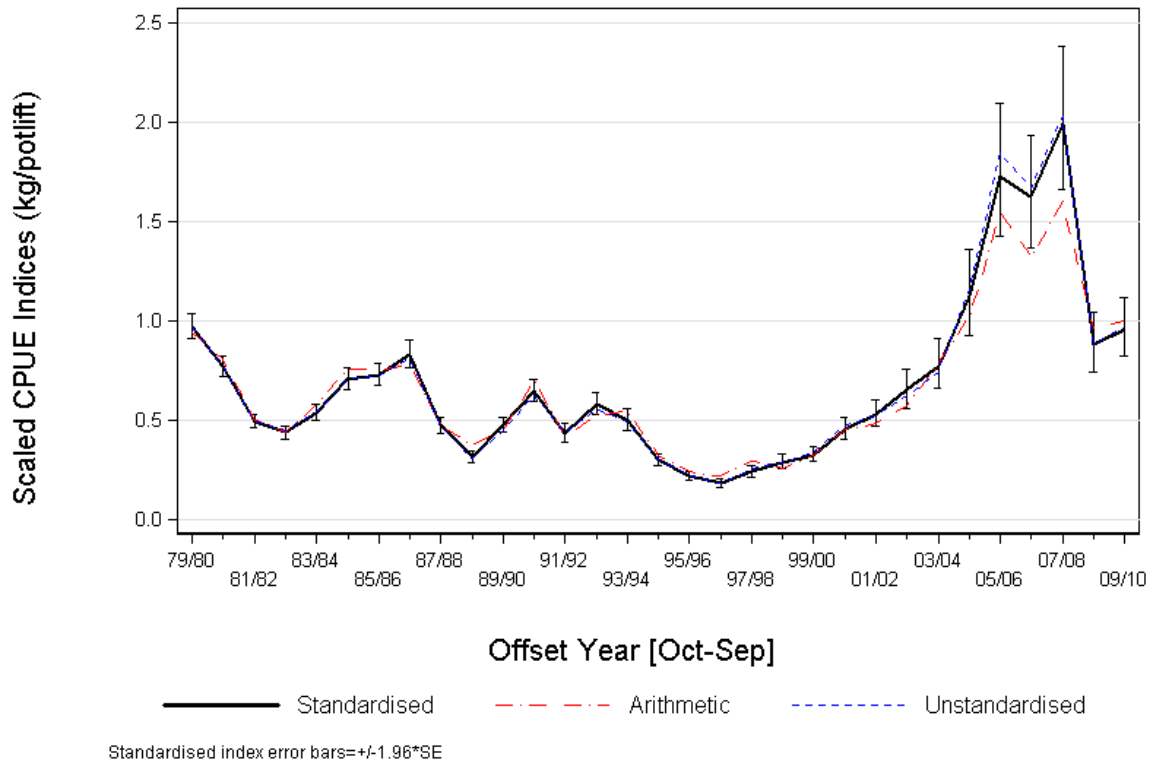


Figure 40: Standardised, unstandardised, and arithmetic offset year CPUE indices (kg/potlift) for CRA 7 from 1979–80 to 2009–10. Vertical bars are 95% confidence intervals. The geometric mean for all series = 0.58 kg/potlift.

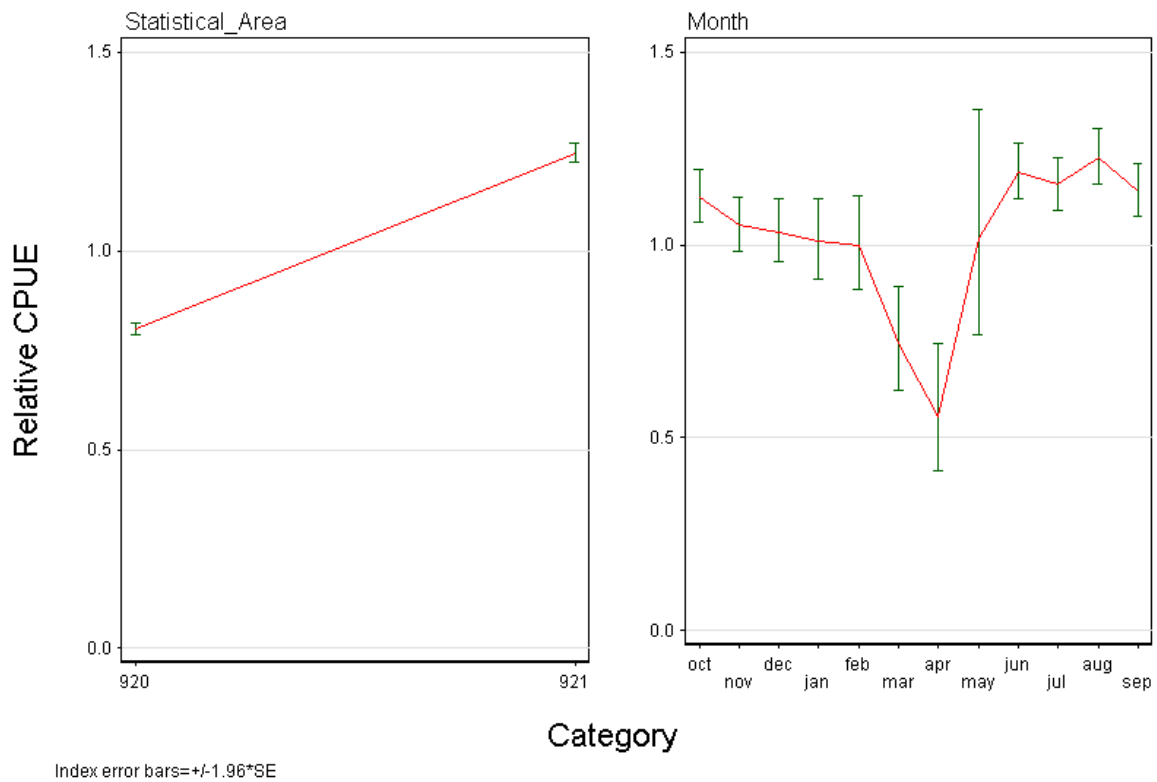


Figure 41: Coefficients for statistical area and month from the offset year CRA 7 CPUE standardisation. Both sets of coefficients are in canonical form (Francis 1999).

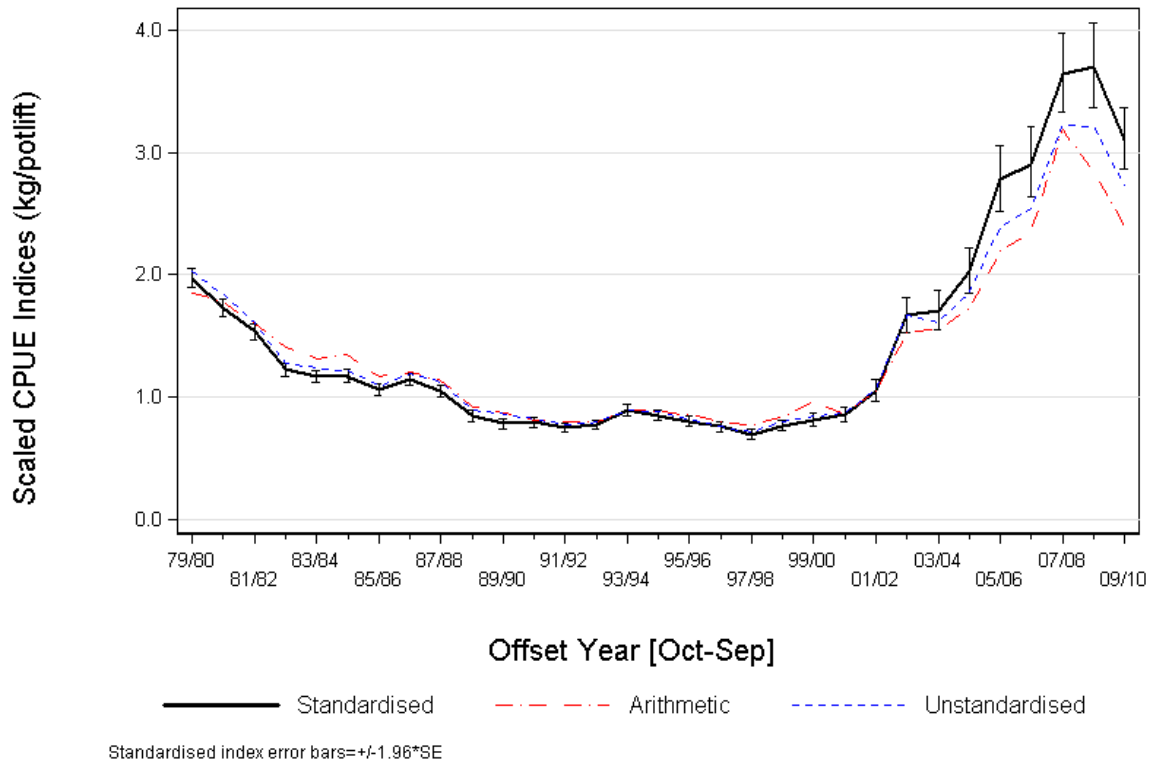


Figure 42: Standardised, unstandardised, and arithmetic offset year CPUE indices (kg/potlift) for CRA 8 from 1979–80 to 2009–10. Vertical bars are 95% confidence intervals. The geometric mean for all three series = 1.26 kg/potlift.

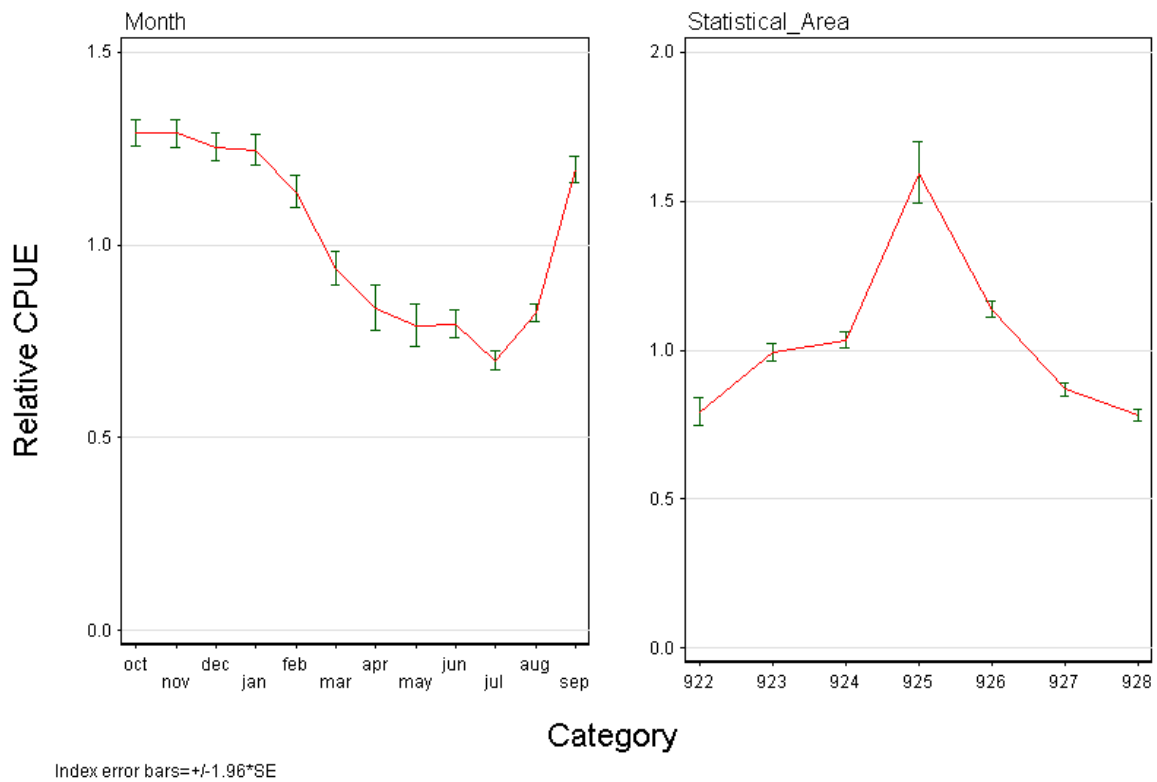


Figure 43: Coefficients for month and statistical area from the CRA 8 offset year CPUE standardisation . Both sets of coefficients are in canonical form (Francis 1999).