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A Summary of Biological Data Collected During the 1995 Bristol Bay
Red King Crab Test Fishery

By

Susan Byersdorfer

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INTRODUCTION

At-sea studies of Bristol Bay red king crabs *Paralithodes camtschaticus* have been conducted annually since the inception of the Bering Sea crab test fishery program in 1990 (Watson et al. 1991). The test fishery program was initiated for the primary purpose of estimating harvest rates of legal male red king crabs in a portion of Bristol Bay using internal, Passive Integrated Transponder (PIT) tags. Annual surveys are funded under the State of Alaska Test Fishery Program, with revenues generated from the sale of crabs caught during the survey. Project goals and objectives from previous test fishery surveys are documented in Watson and Pengilly (1992, 1993, 1994a, 1994b) and Watson et al (in press) .

The primary objectives of the 1995 test fishery survey were: 1) Conduct cost recovery fishing to fund the test fishery program in FY96, 2) conduct a study of the catchability of Tanner crab pots containing 3" and 5" tunnel eye heights, and 3) characterize species, sex, and size composition of crabs caught in cost recovery pots within the survey area. The purpose of this report is to document the catch composition of crabs, their relative distribution, and related biological data from the cost recovery random pot samples. Data collected during the gear study will be reported in a separate document.

METHODS AND PROCEDURES

For the purposes of this report, terms related to the sampling of red king crabs are as follows:

Carapace Length (CL)- the straight line distance across the carapace from the posterior margin of the right eye orbit to the medial-posterior margin of the carapace.

Legal Size- male crabs ≥ 165 mm (6.5 in) in carapace width including lateral spines.

Pre-Recruit Males- male crabs between 132-164 mm (5.2-6.4 in) in carapace width.

Mature Males- male crabs ≥ 120 mm CL.

Immature Males- males < 120 mm CL.

Soft shell- crabs that have molted within the previous two months.

New-Shell- crabs that have molted between the preceding two to twelve months.

Old-Shell- crabs that have molted between the preceding twelve to twenty-four months.

Tanner crab *Chionoecetes bairdi* and snow crab *Chionoecetes opilio* were classified as follows:

Carapace Width (CW)- The greatest straight-line distance across the carapace at a right angle to a line *midway* between the eyes to the medial-posterior margin of the carapace not including the spines; the biological size measurement of *C. bairdi* and *C. opilio*.

Legal Size- male crabs ≥ 140 mm (5.5 in) in carapace width, including lateral spines.

New-Shell- crabs that have molted between the preceding two to twelve months.

Old-Shell- crabs that have molted between the preceding twelve to twenty-four months.

Very Old Shell- crabs that have not molted within the preceding twenty-four months.

Fishing Itinerary

Fishing took place during a 30 d period from August 1 to August 30, 1995 aboard the 36-m (118 ft) chartered crabber, FV *Kristen Gail*. Cost recovery fishing was conducted during the first nine days of the charter and concomitant with the Tanner crab gear study during the last week of the charter.

Fishing Area

The survey was concentrated in a 2,957 km² (864 nm²) area encompassing a portion of the harvestable red king crab population located in Bristol Bay. The study area chosen in 1995 was discerned from information on king and Tanner crab gathered during past Bristol Bay test fish surveys and the 1995 National Marine Fisheries eastern Bering Sea crab survey. The area was chosen because it contained large concentrations of legal, female, and juvenile, red king, and Tanner crabs (Byersdorfer and Watson 1992, 1993; Byersdorfer et al. 1994, 1995; (Brad Stevens, National Marine Fisheries Service, Kodiak, personal communication). The general survey area was between 56° 30' and 57° 6' N latitude and between 160° and 163° W longitude (Figure 1). Cost recovery fishing was primarily conducted from 56° 30' to 57° 6' and from 161° 30' to 163° 30' (Figure 2). A smaller area located at 57° 54' N. latitude, 162° 45' W longitude was also fished for cost recovery crabs.

Sampling Design

During cost recovery fishing 10 randomly selected pots were chosen each day for catch composition sampling. Once the number of pots to be pulled that day was known, the sample pot numbers were chosen by using a table of random digits. All pots were baited with 1.0 to 2.0

L (1.1 to 2.2 qt) of frozen herring. When available Pacific cod *Gadus macrocephalus* was used as additional hanging bait in cost recovery pots. Detailed methodology for sampling is in Watson et al. (in press).

Catch Sampling

The contents of each sampled pot were unloaded to a sorting table where all crabs were sorted by species, sex and size. The contents of each pot were fully sampled, e.g. no subsampling was done.

Each sampled crab was measured to the nearest millimeter (CL for red king crab; CW for Tanner and snow crab). Shell age of king, Tanner and snow crabs was also recorded. Additionally, a commercial measuring stick was used on carapaces of male red king and Tanner crabs to classify them as either legal or sublegal.

All sampled crabs were grossly examined for any handling-induced injury or mortality. Additionally, all sampled females were examined for the presence of eggs, empty egg cases, and clutch size for determination of maturity and mating activity. Sampling instructions are detailed in Watson et al. (in press).

Ancillary Data Collections

At the request of the Department of Environmental Conservation (DEC), 3 each of red king, snow, Tanner, and Tanner hybrid crabs were to be collected from each statistical area fished and frozen whole. These specimens were turned over to DEC upon completion of the charter for subsequent analysis to determine the baseline level of paralytic shellfish poison (PSP) and domoic acid present in the viscera of commercially-important Bering Sea shellfish.

RESULTS AND DISCUSSION

During the survey 35 strings of gear (comprised of 516 pots) were set for cost recovery fishing and of these, 56 were randomly sampled. The number of cost recovery pots pulled each day ranged from 25 to 90. The soak time on these pots averaged 46.6 h and ranged between 19.2 h and 78.4h.

Catch Composition

A total of 2,627 crabs were captured in the 56 random sample pots. Red king crabs predominated sample catches (76.7 %), followed by Tanner crabs (22.9 %), Tanner hybrids (0.3 %), Korean hair crabs *Erimacrus isenbeckii* (0.05 %), and Snow crabs (0.05%). For the remainder of this report only results related to red king crab and Tanner crab will be reported.

Red King Crab

Sex Composition and Catch Per Unit Effort

Of the 2,016 red king crabs caught in the 56 random sample pots; 96% were males and 4% were females. Approximately 50% (or 928 crabs) were legal-sized males. Length frequency and shell age data were obtained on all crabs in the 56 random sample pots. Catch per pot (C/P) of legal male red king crabs in the random sample pots ranged from 0 to 47 and averaged 16.6 crabs (Appendix A). The preponderance of legal males in cost recovery pot samples is attributed mostly to pre-survey determination of commercial concentrations of legal male red king crabs. Catch per pot data from previous years is not directly comparable to the results presented due to differences in survey dates and areas fished.

The catch per pot of female red king crabs in random sample cost recovery pots ranged from 0 to 20 (Appendix A) and averaged 1.4 crabs. Of the total females caught in random sample pots, 96% were mature (Appendix B).

Length Distribution and Shell Age

Length frequency distributions for male and female red king crabs in random sample pots are shown in Figure 3. A prominent size mode for male red king crabs was noted around 135 mm CL. The average size of legal male crabs in random sample pots was 148 mm CL.

The size modes for female red king crabs in random sample pots were noted around 100, 115, and 130 mm CL. The average size of mature female crabs was 123 mm CL, and ranged between 91 and 154 mm.

Among all males in random sample pots, 76 % were new-shell and 24 % were old-shell and of the 928 legal-sized males caught, 71% were new-shell and 29% were old-shell (Figure 4). The incidence of old-shell legal males has generally increased and is greater than last year's incidence (24%) in the test fish survey catches (Byersdorfer et al. 1995). The percentage of old-shell males has apparently doubled since the last Bristol Bay commercial red king crab fishery in 1993, where only 15% of legal males were old shells (Morrison and Gish 1994).

Incidence of Handling-Induced Injury or Mortality

The overall rate of handling-induced injury or mortality for king crabs was less than past years cost recovery pots; no injuries were observed in any crab from the random sample pots.

Cost Recovery

Approximately 14,111 male red king crabs ≥ 152 mm (6 in) CW from two deliveries were sold to offset the cost of the 1995 Bering Sea crab test fishery program. An additional 427 male red king crabs were landed as dead loss. The average weight per crab as calculated from fish ticket receipts during the first delivery was 2.4 kg (5.3 lb), somewhat less than the 1994 delivery (2.7 kg) (Byersdorfer et al. 1995) and the 1993 delivery (2.8kg) (Byersdorfer et al. 1994). The average weight per crab from the second delivery was 3 kg (6.7 lb), significantly greater than the first delivery and reflects the fact that only 7 in crabs or larger were retained for sale.

Tanner Crab

A total of 602 Tanner crabs were caught in the 56 random pot samples; all crabs were sampled (Appendix C). As with red king crabs, Tanner crab catch per pot data are not directly comparable to other surveys due to differences in time frame and area surveyed.

Sex Composition and Catch Per Unit Effort

Of the 602 Tanner crabs caught in the 56 cost recovery random pot samples, 91 % were males and 9 % were females. The catch of legal male Tanner crabs in the random pot samples ranged from 0 to 45 with an average of 9.8 crabs per pot. Male and female Tanner crab catch per pot for cost recovery random pot samples is summarized in Appendix C.

Width Distribution and Shell Age

Width frequency distributions for male and female Tanner crabs in the 56 random sample pots are shown in Figure 5. Prominent size modes for males were noted around 135 and 155 CW. Among all males 27 % were new-shell and 73 % were old-shell (Figure 6). Of the 354 legal males caught, 32% were new-shell crabs. Tanner crab sex and size composition data presented here is not representative of the Bering Sea population, as cost recovery efforts targeted legal male red king crab concentrations.

Incidence of Handling-Induced Injury or Mortality

There were no observed injuries or mortalities for Tanner crabs caught in the random sample pots.

Ancillary Data Collections

A total of 23 Tanner, 6 snow, 14 hybrid Tanner, 27 red king and 6 Korean hair crabs were collected from 5 statistical areas for analysis by DEC for the presence of PSP and domoic acid. Domoic acid was not found in any of the sampled crabs but PSP was found in large amounts from hybrid Tanner crabs in one statistical area. (Mike Ostasz, Alaska Department of Environmental Conservation, Anchorage, personal communication).

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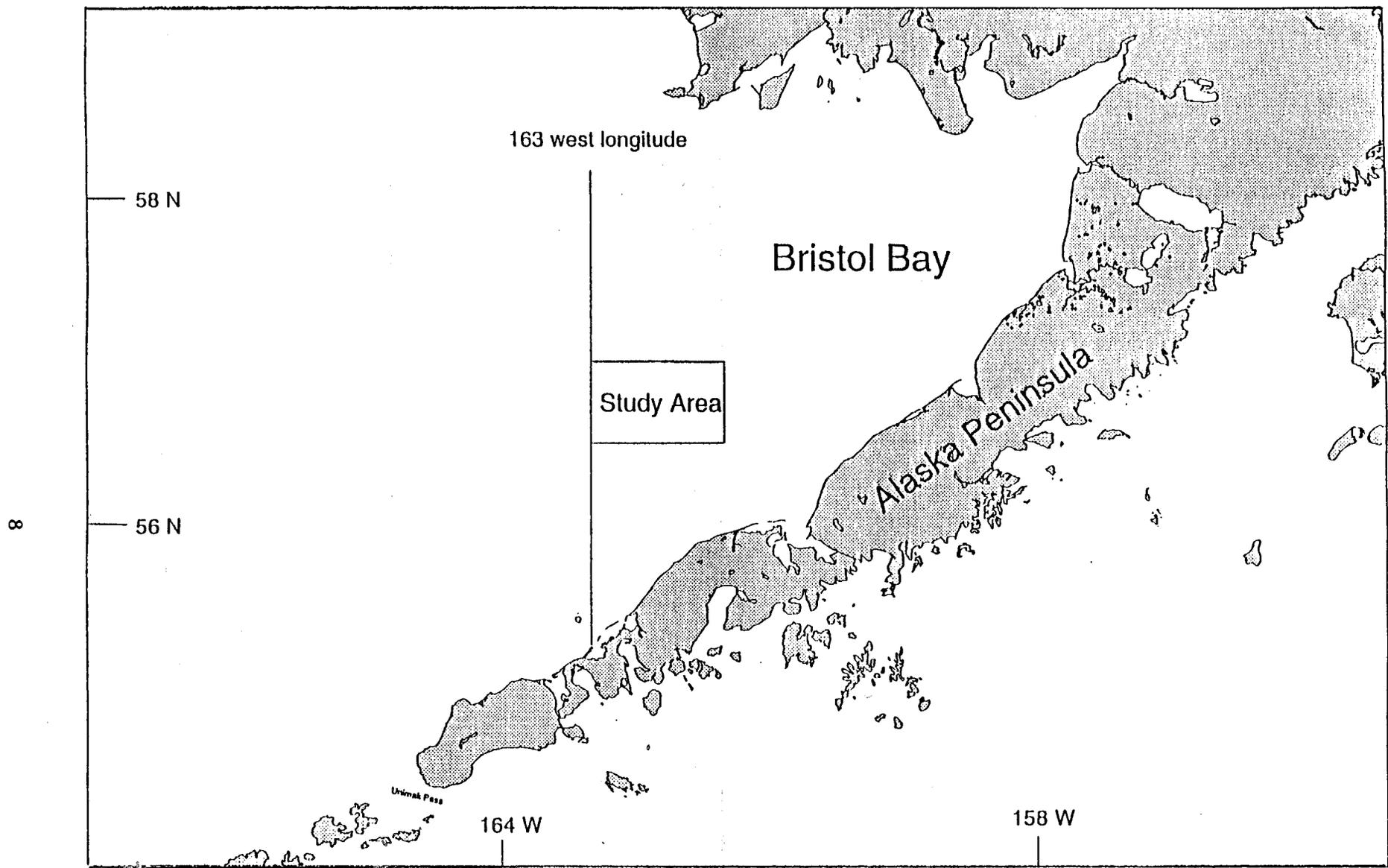


Figure 1. Location of the 1995 Bristol Bay red king crab test fishery.

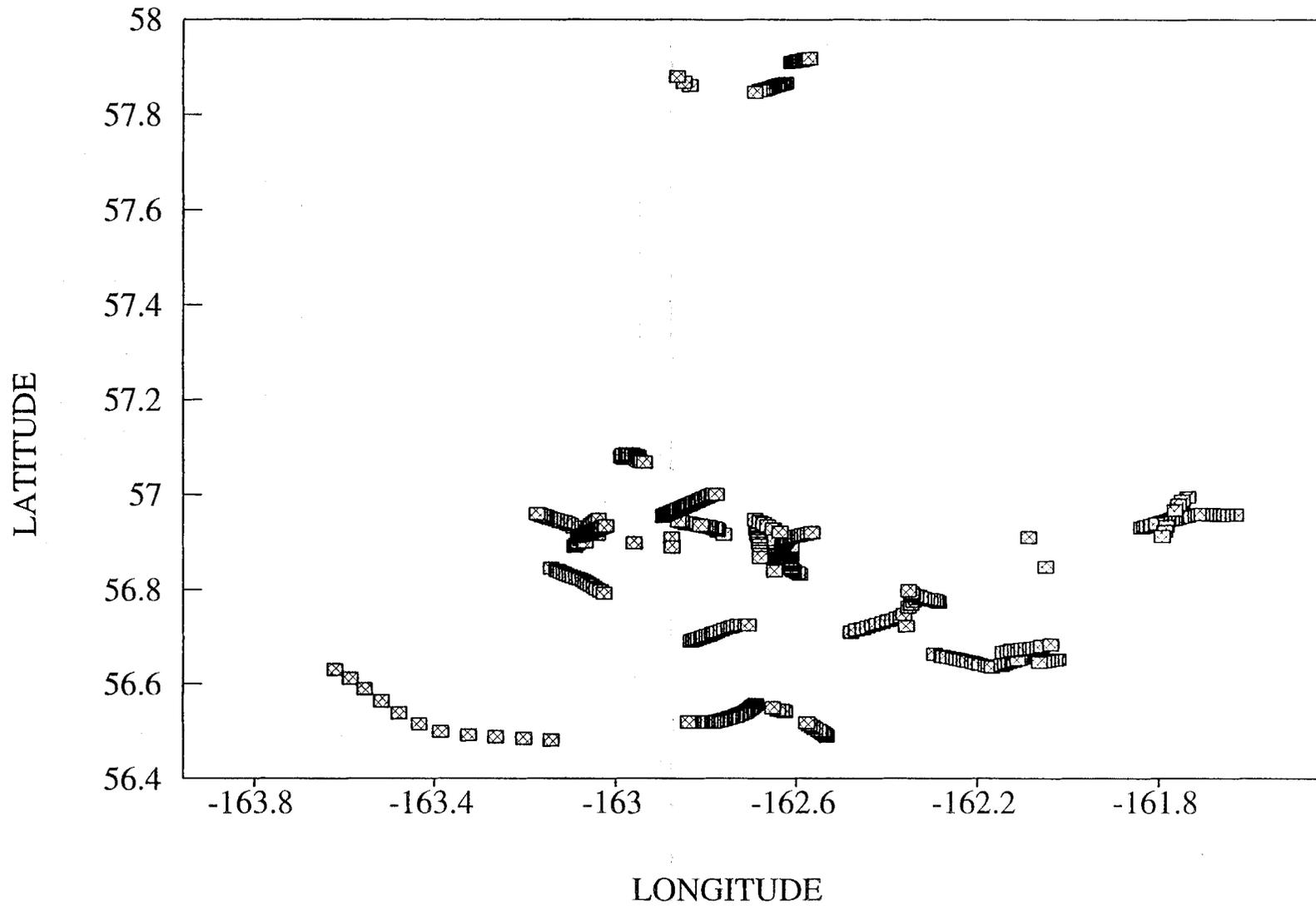


Figure 2. Location of pots pulled during cost recovery fishing in the 1995 Bristol Bay red king crab test fishery.

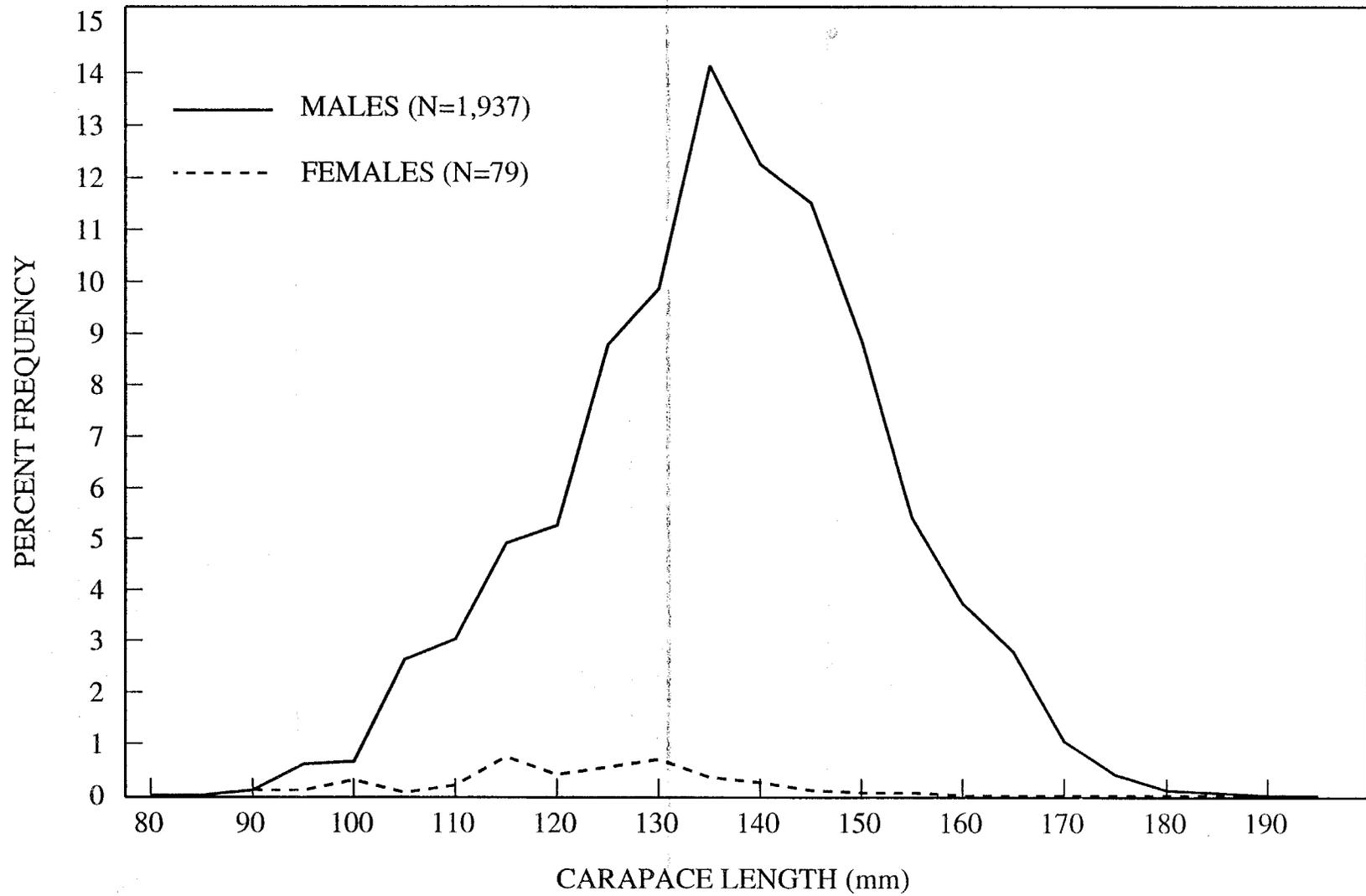


Figure 3. Length frequency of male and female red king crabs caught in random pot samples during the 1995 Bristol Bay red king crab test fishery, by 5-mm length classes.

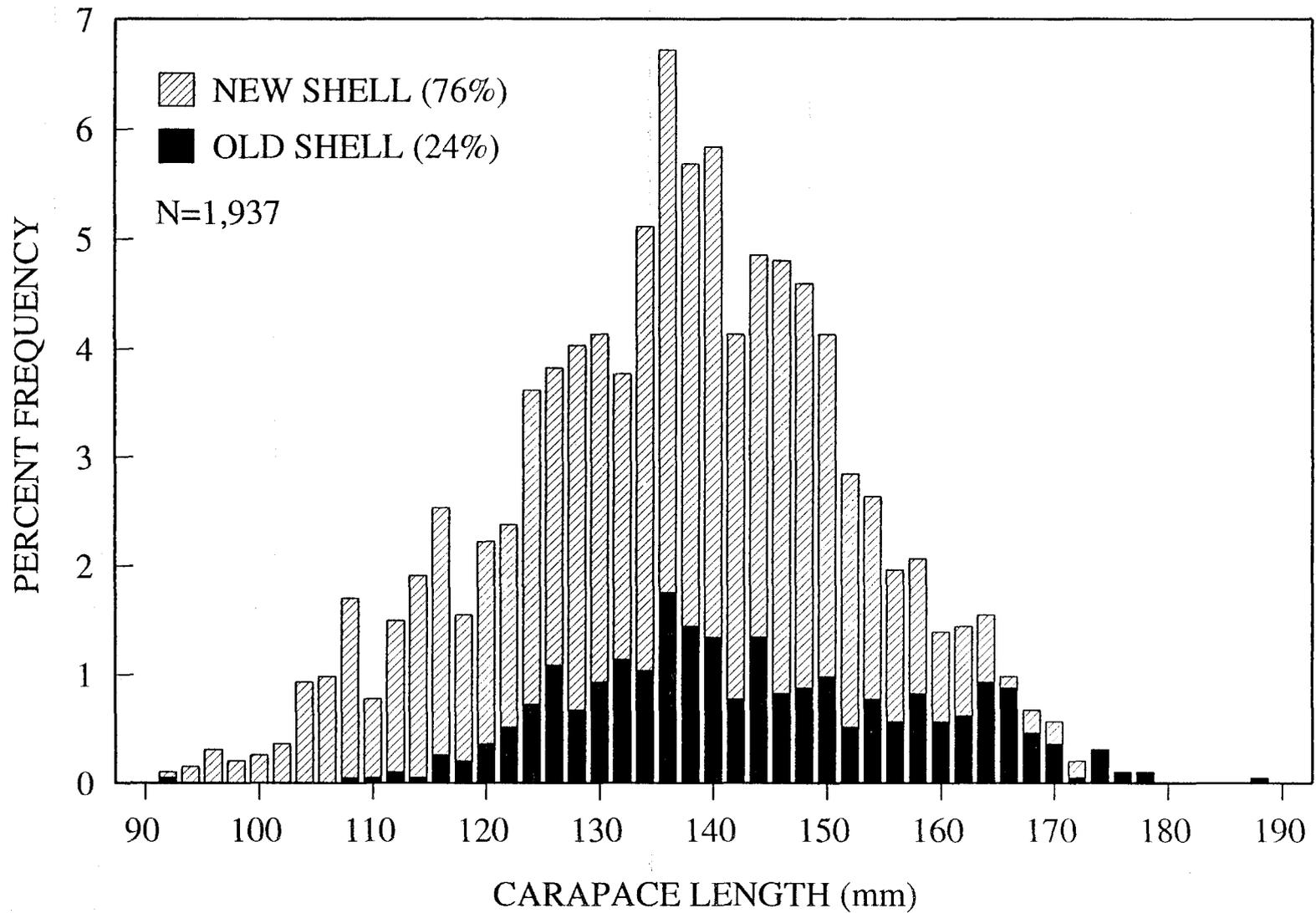


Figure 4. Shell age of male red king crabs caught in random pot samples during the 1995 Bristol Bay red king crab test fishery, by 2-mm length classes.

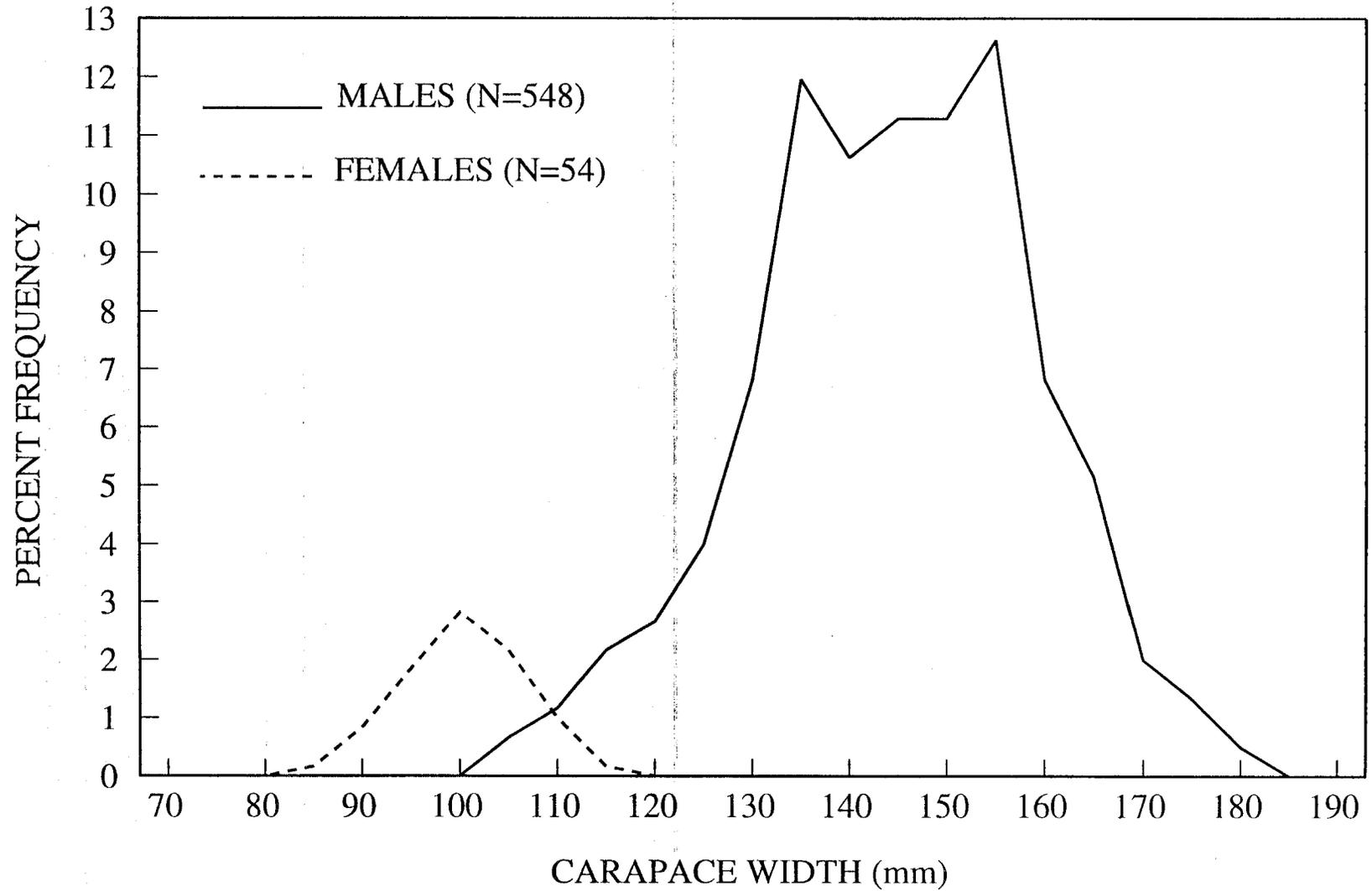


Figure 5. Width frequency of male and female Tanner crabs caught in random pot samples during the 1995 Bristol Bay red king crab test fishery, by 5-mm width classes.

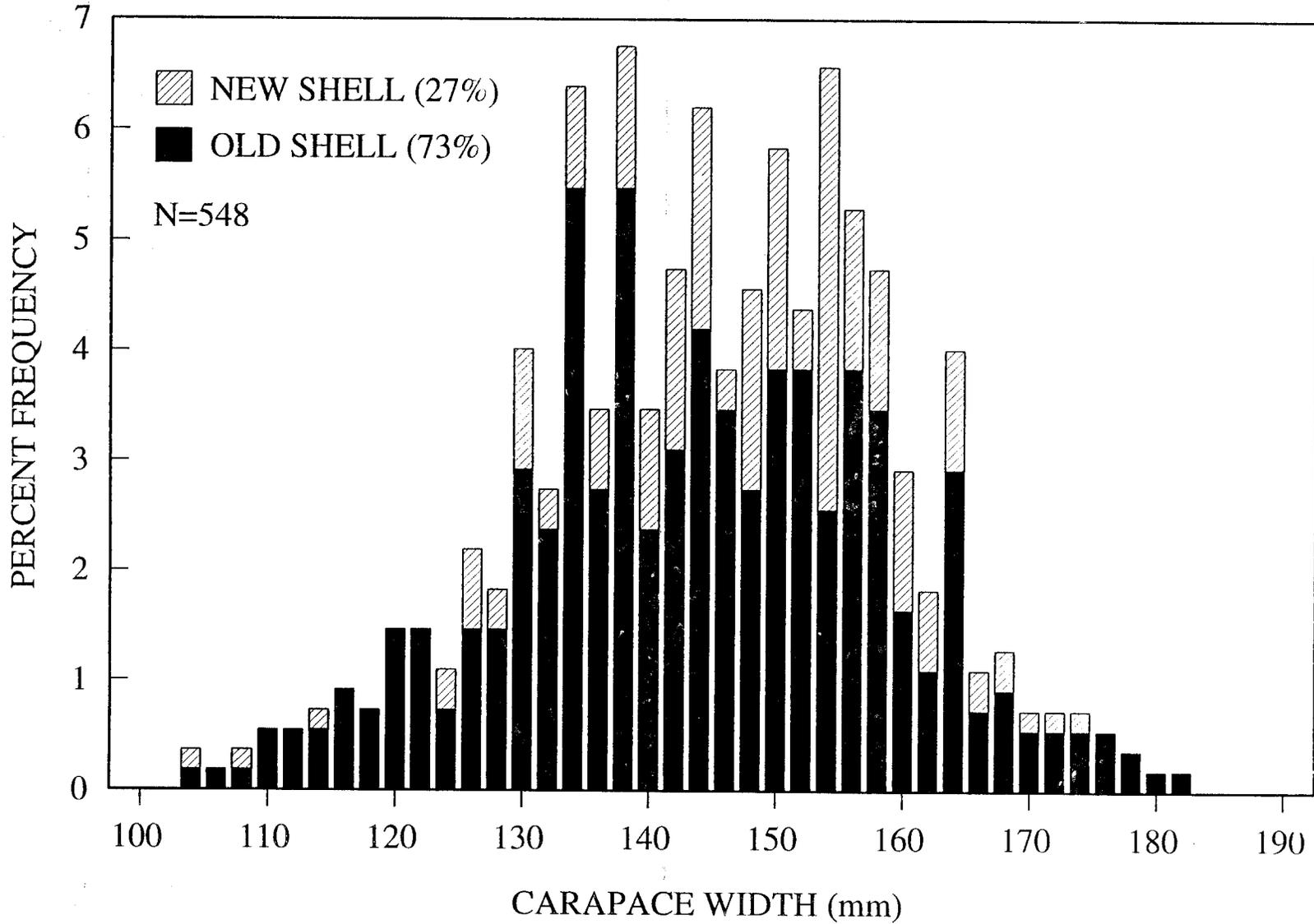


Figure 6. Shell age of male Tanner crabs caught in random pot samples during the 1995 Bristol Bay red king crab test fishery, by 2-mm width classes.

APPENDIX

Appendix A. Summary of red king crab fishing and catch data from 56 random sample pots in the 1995 Bristol Bay test fishery.

| Pot # | Date | North Latitude | | West Longitude | | Depth (m) | Catch Per Pot (CPUE) | | | |
|-------|------|----------------|-------|----------------|-------|-----------|----------------------|-----------------|-----------------|-----------|
| | | | | | | | Males | | | Legal No. |
| | | | | | | | Females | Sublegal <120mm | Sublegal ≥120mm | |
| 3 | 8/03 | 56 | 35.36 | 163 | 33.27 | 79 | 0 | 0 | 0 | 0 |
| 10 | 8/03 | 56 | 29.05 | 163 | 12.18 | 82 | 0 | 0 | 0 | 0 |
| 11 | 8/03 | 56 | 28.87 | 163 | 8.53 | 82 | 0 | 0 | 0 | 0 |
| 18 | 8/03 | 56 | 30.55 | 162 | 33.84 | 73 | 0 | 0 | 0 | 0 |
| 23 | 8/03 | 56 | 32.68 | 162 | 38.43 | 77 | 0 | 0 | 0 | 0 |
| 25 | 8/03 | 56 | 33.40 | 162 | 41.33 | 79 | 0 | 0 | 0 | 0 |
| 27 | 8/03 | 56 | 33.18 | 162 | 41.66 | 79 | 0 | 0 | 0 | 0 |
| 38 | 8/03 | 56 | 31.89 | 162 | 44.15 | 79 | 0 | 1 | 0 | 0 |
| 39 | 8/03 | 56 | 31.79 | 162 | 44.45 | 79 | 0 | 0 | 0 | 0 |
| 45 | 8/03 | 56 | 31.35 | 162 | 46.20 | 79 | 0 | 0 | 0 | 0 |
| 66 | 8/04 | 56 | 42.11 | 162 | 47.90 | 70 | 1 | 0 | 1 | 1 |
| 77 | 8/04 | 56 | 43.47 | 162 | 43.31 | 68 | 0 | 0 | 0 | 1 |
| 91 | 8/04 | 56 | 38.47 | 162 | 11.63 | 71 | 0 | 0 | 0 | 0 |
| 94 | 8/04 | 56 | 38.11 | 162 | 10.01 | 73 | 0 | 0 | 0 | 1 |
| 101 | 8/04 | 56 | 39.27 | 162 | 6.07 | 75 | 0 | 0 | 2 | 5 |
| 104 | 8/04 | 56 | 39.68 | 162 | 5.01 | 75 | 0 | 3 | 8 | 10 |
| 111 | 8/05 | 56 | 56.54 | 161 | 47.40 | 64 | 9 | 17 | 17 | 14 |
| 116 | 8/05 | 56 | 57.11 | 161 | 45.04 | 68 | 2 | 19 | 28 | 35 |
| 126 | 8/04 | 56 | 57.45 | 161 | 40.31 | 71 | 1 | 5 | 13 | 8 |
| 144 | 8/05 | 56 | 48.50 | 163 | 3.22 | 66 | 0 | 1 | 1 | 6 |
| 148 | 8/05 | 56 | 47.50 | 163 | 1.52 | 66 | 0 | 1 | 5 | 16 |
| 158 | 8/05 | 56 | 56.33 | 163 | 6.40 | 64 | 0 | 0 | 4 | 2 |
| 160 | 8/05 | 56 | 56.61 | 163 | 7.38 | 64 | 0 | 0 | 2 | 12 |
| 161 | 8/05 | 56 | 56.75 | 163 | 7.82 | 64 | 0 | 0 | 3 | 10 |
| 169 | 8/05 | 56 | 56.34 | 162 | 50.70 | 62 | 0 | 7 | 20 | 30 |
| 178 | 8/05 | 56 | 55.00 | 162 | 45.65 | 64 | 0 | 2 | 22 | 28 |
| 179 | 8/05 | 56 | 55.25 | 162 | 38.74 | 64 | 3 | 35 | 63 | 47 |
| 192 | 8/05 | 56 | 42.97 | 162 | 27.18 | 73 | 0 | 2 | 10 | 15 |
| 195 | 8/05 | 56 | 43.59 | 162 | 25.21 | 71 | 0 | 0 | 6 | 16 |
| 199 | 8/05 | 56 | 44.36 | 162 | 22.60 | 70 | 0 | 0 | 3 | 3 |
| 205 | 8/05 | 56 | 46.52 | 162 | 20.42 | 73 | 0 | 2 | 21 | 44 |
| 213 | 8/06 | 56 | 39.06 | 162 | 6.61 | 77 | 0 | 1 | 1 | 5 |
| 214 | 8/06 | 56 | 39.97 | 162 | 8.55 | 73 | 1 | 1 | 6 | 7 |
| 217 | 8/06 | 56 | 40.27 | 162 | 6.90 | 73 | 0 | 1 | 5 | 7 |
| 226 | 8/06 | 56 | 40.97 | 162 | 2.17 | 75 | 2 | 4 | 29 | 19 |
| 229 | 8/06 | 56 | 38.97 | 162 | 2.16 | 75 | 0 | 2 | 10 | 16 |
| 244 | 8/07 | 56 | 57.00 | 161 | 45.61 | 70 | 19 | 14 | 21 | 32 |
| 246 | 8/07 | 56 | 56.95 | 161 | 46.27 | 68 | 18 | 21 | 47 | 46 |
| 258 | 8/07 | 56 | 54.74 | 161 | 47.47 | 64 | 20 | 15 | 44 | 23 |
| 265 | 8/07 | 56 | 54.22 | 163 | 4.65 | 64 | 0 | 2 | 15 | 19 |
| 268 | 8/07 | 56 | 54.02 | 163 | 4.01 | 64 | 1 | 1 | 15 | 40 |
| 272 | 8/07 | 56 | 55.86 | 163 | 3.46 | 64 | 0 | 0 | 6 | 22 |
| 273 | 8/07 | 56 | 56.15 | 163 | 3.23 | 62 | 0 | 2 | 12 | 23 |
| 274 | 8/07 | 56 | 56.38 | 163 | 2.93 | 62 | 0 | 0 | 10 | 28 |
| 277 | 8/07 | 56 | 55.47 | 162 | 46.47 | 64 | 0 | 9 | 27 | 31 |
| 278 | 8/07 | 56 | 55.66 | 162 | 46.70 | 64 | 0 | 8 | 45 | 37 |
| 1120 | 8/28 | 56 | 57.56 | 162 | 52.95 | 60 | 0 | 1 | 8 | 8 |
| 1127 | 8/28 | 56 | 58.29 | 162 | 51.22 | 60 | 0 | 23 | 44 | 37 |
| 1128 | 8/28 | 56 | 58.40 | 162 | 50.97 | 59 | 0 | 18 | 30 | 33 |

-Continued-

Appendix A. (page 2 of 2)

| Pot # | Date | North Latitude | | West Longitude | | Depth (m) | Catch Per Pot (CPUE) | | | |
|--------|------|----------------|-------|----------------|-------|-----------|----------------------|--------|--------|-----------|
| | | | | | | | Females | Males | | Legal No. |
| | | | | | | | | <120mm | ≥120mm | |
| 1129 | 8/28 | 56 | 58.49 | 162 | 50.77 | 59 | 0 | 24 | 36 | 33 |
| 1136 | 8/28 | 56 | 59.16 | 162 | 49.09 | 59 | 2 | 3 | 18 | 39 |
| 1139 | 8/28 | 56 | 59.50 | 162 | 48.36 | 59 | 0 | 14 | 36 | 47 |
| 1144 | 8/28 | 57 | 0.05 | 162 | 46.97 | 59 | 0 | 2 | 13 | 15 |
| 1155 | 8/28 | 57 | 54.97 | 162 | 34.72 | 62 | 0 | 3 | 15 | 22 |
| 1183 | 8/28 | 56 | 54.75 | 163 | 4.65 | 64 | 0 | 1 | 10 | 23 |
| 1213 | 8/29 | 57 | 4.69 | 162 | 57.88 | 59 | 0 | 7 | 5 | 12 |
| TOTALS | | | | | | | 79 | 272 | 737 | 928 |

Appendix B. Percent maturity by length class of new-shell female red king crabs caught in random pot sample during the 1995 Bristol Bay test fishery.

| Carapace Length (mm) | Without Embryos | With Embryos | Total | Percent Mature |
|----------------------|-----------------|--------------|-------|----------------|
| 91 | 1 | 0 | 1 | 0 |
| 92 | 1 | 0 | 1 | 0 |
| 93 | 1 | 0 | 1 | 0 |
| 97 | 0 | 1 | 1 | 100.0 |
| 98 | 0 | 3 | 3 | 100.0 |
| 100 | 0 | 1 | 1 | 100.0 |
| 101 | 0 | 1 | 1 | 100.0 |
| 102 | 0 | 1 | 1 | 100.0 |
| 103 | 0 | 1 | 1 | 100.0 |
| 109 | 0 | 1 | 1 | 100.0 |
| 110 | 0 | 1 | 1 | 100.0 |
| 112 | 0 | 2 | 2 | 100.0 |
| 113 | 0 | 4 | 4 | 100.0 |
| 114 | 0 | 2 | 2 | 100.0 |
| 115 | 0 | 5 | 5 | 100.0 |
| 116 | 0 | 1 | 1 | 100.0 |
| 117 | 0 | 3 | 3 | 100.0 |
| 119 | 0 | 1 | 1 | 100.0 |
| 120 | 0 | 2 | 2 | 100.0 |
| 121 | 0 | 4 | 4 | 100.0 |
| 122 | 0 | 1 | 1 | 100.0 |
| 123 | 0 | 2 | 2 | 100.0 |
| 124 | 0 | 1 | 1 | 100.0 |
| 125 | 0 | 2 | 2 | 100.0 |
| 126 | 0 | 2 | 2 | 100.0 |
| 127 | 0 | 4 | 4 | 100.0 |
| 128 | 0 | 1 | 1 | 100.0 |
| 129 | 0 | 2 | 2 | 100.0 |
| 130 | 0 | 4 | 4 | 100.0 |
| 131 | 0 | 4 | 4 | 100.0 |
| 132 | 0 | 2 | 2 | 100.0 |
| 133 | 0 | 3 | 3 | 100.0 |
| 134 | 0 | 1 | 1 | 100.0 |
| 135 | 0 | 2 | 2 | 100.0 |
| 136 | 0 | 1 | 1 | 100.0 |
| 138 | 0 | 1 | 1 | 100.0 |
| 139 | 0 | 2 | 2 | 100.0 |
| 140 | 0 | 1 | 1 | 100.0 |
| 141 | 0 | 0 | 0 | 100.0 |
| 142 | 0 | 1 | 1 | 100.0 |
| 143 | 0 | 1 | 1 | 100.0 |
| 147 | 0 | 1 | 1 | 100.0 |
| 151 | 0 | 1 | 1 | 100.0 |
| 154 | 0 | 1 | 1 | 100.0 |
| TOTAL | 3 | 76 | 79 | 96.0 |

Appendix C. Summary of Tanner crab fishing and catch data in random sample pots in the 1995 Bristol Bay test fishery.

| Pot # | Date | North | | West | | Depth (m) | Females | Catch Per Pot (CPUE) Males | |
|-------|------|----------|-----------|-----------|----------|-----------|---------|----------------------------|--------------|
| | | Latitude | Longitude | Longitude | Latitude | | | Sublegal <140mm | Legal ≥140mm |
| 3 | 8/03 | 56 | 35.36 | 163 | 33.27 | 79 | 5 | 0 | 5 |
| 10 | 8/03 | 56 | 29.05 | 163 | 12.18 | 82 | 7 | 3 | 13 |
| 11 | 8/03 | 56 | 28.87 | 163 | 8.53 | 82 | 2 | 6 | 1 |
| 18 | 8/03 | 56 | 30.55 | 162 | 33.84 | 73 | 0 | 0 | 1 |
| 23 | 8/03 | 56 | 32.68 | 162 | 38.43 | 77 | 0 | 0 | 3 |
| 25 | 8/03 | 56 | 33.40 | 162 | 41.33 | 79 | 0 | 1 | 3 |
| 27 | 8/03 | 56 | 33.18 | 162 | 41.66 | 79 | 0 | 4 | 10 |
| 38 | 8/03 | 56 | 31.89 | 162 | 44.15 | 79 | 0 | 1 | 2 |
| 39 | 8/03 | 56 | 31.79 | 162 | 44.45 | 79 | 0 | 0 | 1 |
| 45 | 8/03 | 56 | 31.35 | 162 | 46.20 | 79 | 0 | 0 | 1 |
| 66 | 8/04 | 56 | 42.11 | 162 | 47.90 | 70 | 0 | 1 | 9 |
| 77 | 8/04 | 56 | 43.47 | 162 | 43.31 | 68 | 1 | 2 | 16 |
| 91 | 8/04 | 56 | 38.47 | 162 | 11.63 | 71 | 0 | 1 | 5 |
| 94 | 8/04 | 56 | 38.11 | 162 | 10.01 | 73 | 0 | 2 | 7 |
| 101 | 8/04 | 56 | 39.27 | 162 | 6.07 | 75 | 0 | 0 | 1 |
| 104 | 8/04 | 56 | 39.68 | 162 | 5.01 | 75 | 0 | 4 | 6 |
| 111 | 8/05 | 56 | 56.54 | 161 | 47.40 | 64 | 1 | 2 | 6 |
| 116 | 8/05 | 56 | 57.11 | 161 | 45.04 | 68 | 0 | 3 | 6 |
| 126 | 8/04 | 56 | 57.45 | 161 | 40.31 | 71 | 0 | 1 | 2 |
| 144 | 8/05 | 56 | 48.50 | 163 | 3.22 | 66 | 0 | 6 | 5 |
| 148 | 8/05 | 56 | 47.50 | 163 | 1.52 | 66 | 1 | 2 | 5 |
| 158 | 8/05 | 56 | 56.33 | 163 | 6.40 | 64 | 3 | 9 | 3 |
| 160 | 8/05 | 56 | 56.61 | 163 | 7.38 | 64 | 0 | 5 | 5 |
| 161 | 8/05 | 56 | 56.75 | 163 | 7.82 | 64 | 1 | 8 | 3 |
| 169 | 8/05 | 56 | 56.34 | 162 | 50.70 | 62 | 1 | 2 | 1 |
| 178 | 8/05 | 56 | 55.00 | 162 | 45.65 | 64 | 0 | 3 | 5 |
| 179 | 8/05 | 56 | 55.25 | 162 | 38.74 | 64 | 0 | 1 | 7 |
| 192 | 8/05 | 56 | 42.97 | 162 | 27.18 | 73 | 1 | 11 | 45 |
| 195 | 8/05 | 56 | 43.59 | 162 | 25.21 | 71 | 0 | 11 | 25 |
| 199 | 8/05 | 56 | 44.36 | 162 | 22.60 | 70 | 0 | 9 | 16 |
| 205 | 8/05 | 56 | 46.52 | 162 | 20.42 | 73 | 5 | 6 | 17 |
| 213 | 8/06 | 56 | 39.06 | 162 | 6.61 | 77 | 2 | 2 | 9 |
| 214 | 8/06 | 56 | 39.97 | 162 | 8.55 | 73 | 1 | 4 | 3 |
| 217 | 8/06 | 56 | 40.27 | 162 | 6.90 | 73 | 1 | 4 | 8 |
| 226 | 8/06 | 56 | 40.97 | 162 | 2.17 | 75 | 0 | 5 | 23 |
| 229 | 8/06 | 56 | 38.97 | 162 | 2.16 | 75 | 3 | 3 | 12 |
| 244 | 8/07 | 56 | 57.00 | 161 | 45.61 | 70 | 0 | 0 | 0 |
| 246 | 8/07 | 56 | 56.95 | 161 | 46.27 | 68 | 1 | 4 | 7 |
| 258 | 8/07 | 56 | 54.74 | 161 | 47.47 | 64 | 3 | 3 | 6 |
| 265 | 8/07 | 56 | 54.22 | 163 | 4.65 | 64 | 1 | 5 | 4 |
| 268 | 8/07 | 56 | 54.02 | 163 | 4.01 | 64 | 0 | 5 | 1 |
| 272 | 8/07 | 56 | 55.86 | 163 | 3.46 | 64 | 0 | 8 | 4 |
| 273 | 8/07 | 56 | 56.15 | 163 | 3.23 | 62 | 1 | 8 | 3 |
| 274 | 8/07 | 56 | 56.38 | 163 | 2.93 | 62 | 2 | 8 | 1 |

-Continued-

Appendix C. (page 2 of 2)

| Pot # | Date | North Latitude | | West Longitude | | Depth (m) | Females | Catch Per Pot (CPUE) | |
|--------|------|----------------|-------|----------------|-------|-----------|---------|----------------------|--------------|
| | | | | | | | | Males | |
| | | | | | | | | <u>Sublegal</u> | <u>Legal</u> |
| | | | | | | | | <140mm | ≥140mm |
| 277 | 8/07 | 56 | 55.47 | 162 | 46.47 | 64 | 0 | 1 | 3 |
| 278 | 8/07 | 56 | 55.66 | 162 | 46.70 | 64 | 0 | 2 | 5 |
| 1120 | 8/28 | 56 | 57.56 | 162 | 52.95 | 60 | 0 | 1 | 0 |
| 1127 | 8/28 | 56 | 58.29 | 162 | 51.22 | 60 | 3 | 3 | 1 |
| 1128 | 8/28 | 56 | 58.40 | 162 | 50.97 | 59 | 1 | 2 | 0 |
| 1129 | 8/28 | 56 | 58.49 | 162 | 50.77 | 59 | 4 | 5 | 7 |
| 1136 | 8/28 | 56 | 59.16 | 162 | 49.09 | 59 | 0 | 4 | 2 |
| 1139 | 8/28 | 56 | 59.50 | 162 | 48.36 | 59 | 1 | 4 | 5 |
| 1144 | 8/28 | 57 | 0.05 | 162 | 46.97 | 59 | 0 | 3 | 4 |
| 1155 | 8/28 | 57 | 54.97 | 162 | 34.72 | 62 | 1 | 2 | 7 |
| 1183 | 8/28 | 56 | 54.75 | 163 | 4.65 | 64 | 1 | 4 | 2 |
| 1213 | 8/29 | 57 | 4.69 | 162 | 57.88 | 59 | 0 | 0 | 2 |
| TOTALS | | | | | | | 54 | 194 | 354 |

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