2017 Kachemak Trawl Survey Summary

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Text TEXT

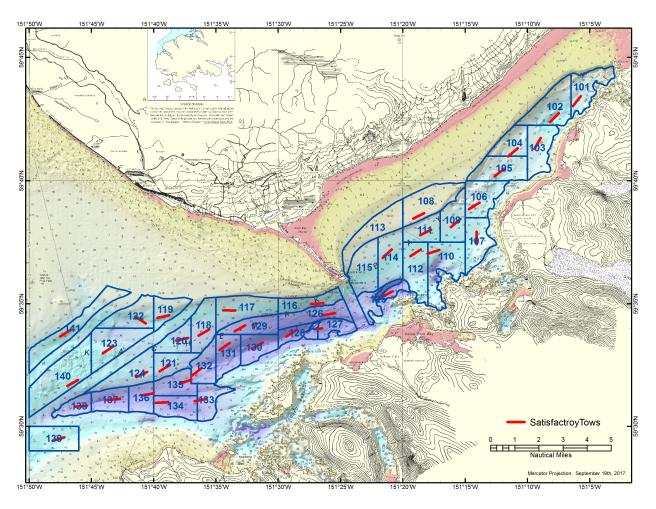


Figure 1: 2017 Kachemak Bay large-mesh trawl survey grid and tow paths.

Table 1: Male Tanner crab abundance estimates using the 2017 size class revisions from trawl surveys in the Southern District, 1990-2017. No survey

| | 2 3 2 | Fre-4 (<00IIIII) | Fre-3 (66-79mm) | Pre-2 (80-95mm) | Pre-1 (96-113mm) | Legal $(>114$ mm) | Legal CI | Total | Total CI |
|------|-------|------------------|-----------------|-----------------|------------------|-------------------|-----------|-----------|-----------|
| 1990 | 14 | 434,468 | 336,711 | 556,501 | 493,498 | 893,456 | 674,240 | 2,714,634 | 1,145,882 |
| 1991 | 15 | 252,510 | 131,374 | 273,576 | 685,422 | 1,379,426 | 453,670 | 2,722,308 | 879,693 |
| 1992 | 15 | 209,831 | 71,948 | 134,688 | 381,086 | 1,978,010 | 1,054,687 | 2,775,565 | 1,097,301 |
| 1993 | 16 | 558,464 | 59,025 | 73,378 | 107,855 | 848,810 | 363,005 | 1,647,532 | 430,628 |
| 1994 | 16 | 260,137 | 127,473 | 161,944 | 101,303 | 356,246 | 156,693 | 1,007,104 | 451,486 |
| 1995 | 16 | 300,509 | 198,207 | 301,598 | 484,296 | 811,734 | 807,143 | 2,096,344 | 1,299,465 |
| 1996 | 16 | 176,841 | 32,054 | 49,592 | 454,902 | 742,974 | 595,718 | 1,456,364 | 1,174,485 |
| 1997 | 16 | 134,484 | 87,749 | 107,042 | 244,548 | 478,055 | 211,981 | 1,051,879 | 323,965 |
| 1998 | 16 | 320,868 | 16,134 | 9,216 | 20,131 | 403,196 | 347,716 | 771,087 | 373,615 |
| 1999 | 16 | 713,951 | 699,162 | 830,294 | 518,904 | 312,049 | 239,298 | 3,074,360 | 2,743,906 |
| 2000 | 16 | 446,734 | 231,376 | 345,433 | 316,831 | 480,494 | 261,368 | 1,820,868 | 754,144 |
| 2001 | 16 | 1,508,596 | 470,833 | 344,754 | 255,343 | 504,698 | 318,804 | 3,084,224 | 1,995,590 |
| 2002 | 14 | 1,673,386 | 908,731 | 838,260 | 369,526 | 311,822 | 244,971 | 4,101,726 | 2,098,934 |
| 2003 | 16 | 884,933 | 861,700 | 806,086 | 553,965 | 358,230 | 201,368 | 3,464,914 | 1,726,501 |
| 2004 | 16 | 635,416 | 355,266 | 1,041,375 | 723,209 | 868,018 | 460,041 | 3,623,284 | 1,875,763 |
| 2005 | 15 | 986,832 | 174,394 | 87,049 | 155,515 | 405,890 | 452,079 | 1,809,679 | 1,083,062 |
| 2006 | 17 | $970,\!276$ | 133,238 | 113,845 | 191,802 | 456,127 | 583,967 | 1,865,289 | 1,828,893 |
| 2002 | 16 | 326,276 | 38,953 | 100,798 | 116,841 | 561,046 | 909,757 | 1,143,914 | 1,252,423 |
| 2008 | 16 | 528,442 | 87,852 | 187,970 | 125,792 | 351,461 | 425,347 | 1,281,516 | 787,437 |
| 2009 | 15 | 818,177 | 439,944 | 547,114 | 636,899 | 752,945 | 548,314 | 3,195,079 | 2,338,396 |
| 2011 | 37 | 4,005,798 | 190,619 | 78,819 | 32,032 | 139,263 | 121,689 | 4,447,159 | 1,983,355 |
| 2012 | 37 | 1,527,582 | 2,375,372 | 721,862 | 123,414 | 80,920 | 55,218 | 4,829,149 | 1,796,356 |
| 2013 | 37 | 778,423 | 390,244 | 716,835 | 1,098,146 | 192,637 | 105,523 | 3,179,046 | 975,058 |
| 2017 | 38 | 180,159 | 369,070 | 274,479 | 187,270 | 124,965 | 132,255 | 1,135,943 | 806,870 |

Table 2: Male Tanner crab abundance estimates using the pre-2017 size class definitions from trawl surveys in the Southern District, 1990-2017. No survey was conducted in 2010 and 2014-2016

| survey | was con | survey was conducted in 2010 and 2014-2016 | 1 2014-2016 | | | | | | |
|-------------------------|---------|--|-----------------|------------------|-------------------|--------------------------|----------|-----------|-----------|
| Year | Tows | Pre-4 (<70mm) | Pre-3 (70-91mm) | Pre-2 (92-114mm) | Pre-1 (115-139mm) | Legal $(>140 \text{mm})$ | Legal CI | Total | Total CI |
| 1990 | 14 | 496,674 | 722,894 | 613,950 | 492,692 | 388,422 | 403,617 | 2,714,634 | 1,145,882 |
| 1991 | 15 | 293,894 | 277,640 | 802,800 | 848,159 | 499,815 | 226,608 | 2,722,308 | 879,693 |
| 1992 | 15 | 237,159 | 125,034 | 455,057 | 902,459 | 1,055,855 | 734,287 | 2,775,565 | 1,097,301 |
| 1993 | 16 | 578,321 | 89,958 | 135,248 | 325,507 | 518,498 | 254,074 | 1,647,532 | 430,628 |
| 1994 | 16 | 312,332 | 210,142 | 132,840 | 158,590 | 193,199 | 106,304 | 1,007,104 | 451,486 |
| 1995 | 16 | 356,090 | 389,839 | 565,725 | 506,325 | 278,365 | 296,245 | 2,096,344 | 1,299,465 |
| 1996 | 16 | 186,397 | 44,644 | 522,916 | 601,084 | 101,322 | 69,836 | 1,456,364 | 1,174,485 |
| 1997 | 16 | 171,929 | 123,219 | 287,722 | 325,897 | 143,111 | 80,729 | 1,051,879 | 323,965 |
| 1998 | 16 | 325,474 | 19,208 | 24,005 | 195,049 | 205,808 | 190,004 | 771,087 | 373,615 |
| 1999 | 16 | 911,483 | 1,160,291 | 697,642 | 200,663 | 104,282 | 91,894 | 3,074,360 | 2,743,906 |
| 2000 | 16 | 513,366 | 453,588 | 390,984 | 380,557 | 82,374 | 72,974 | 1,820,868 | 754,144 |
| 2001 | 16 | 1,619,958 | 655,741 | 319,106 | 392,469 | 96,951 | 61,266 | 3,084,224 | 1,995,590 |
| 2002 | 14 | 2,027,607 | 1,275,475 | 499,598 | 211,036 | 88,010 | 69,895 | 4,101,726 | 2,098,934 |
| 2003 | 16 | 1,228,442 | 1,188,614 | 710,246 | 288,894 | 48,717 | 52,980 | 3,464,914 | 1,726,501 |
| 2004 | 16 | 671,544 | 1,119,199 | 1,037,689 | 683,921 | 110,930 | 75,834 | 3,623,284 | 1,875,763 |
| 2005 | 15 | 1,043,700 | 185,975 | 186,987 | 347,339 | 45,676 | 41,786 | 1,809,679 | 1,083,062 |
| 2006 | 17 | 1,029,633 | 154,678 | 230,111 | 226,338 | 224,530 | 286,932 | 1,865,289 | 1,828,893 |
| 2007 | 16 | 339,466 | 92,716 | 176,167 | 373,061 | 162,504 | 238,989 | 1,143,914 | 1,252,423 |
| 2008 | 16 | 552,269 | 224,880 | 159,200 | 239,726 | 105,440 | 130,955 | 1,281,516 | 787,437 |
| 2009 | 15 | 1,000,556 | 643,343 | 852,512 | 554,785 | 143,882 | 141,993 | 3,195,079 | 2,338,396 |
| 2011 | 37 | 4,109,517 | 159,347 | 40,208 | 94,797 | 42,660 | 40,810 | 4,447,159 | 1,983,355 |
| 2012 | 37 | 2,031,199 | 2,532,088 | 188,265 | 57,085 | 20,512 | 20,105 | 4,829,149 | 1,796,356 |
| 2013 | 37 | 925,729 | 820,089 | 1,390,554 | 141,245 | 38,077 | 34,026 | 3,179,046 | 975,058 |
| 2017 | 38 | 234,313 | 553,408 | 230,471 | 110,673 | 7,078 | 8,329 | 1,135,943 | 806,870 |
| | | | | | | | | | |

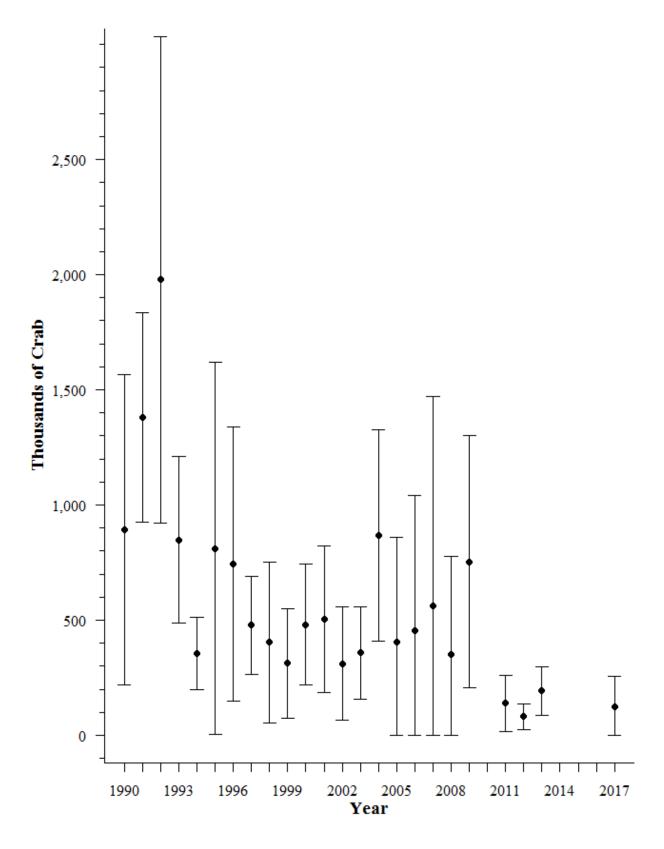


Figure 2: Legal male Tanner crab abundance estimates and 95% confidence intervals using the 2017 legal size (114 mm or 4.5 in) from trawl surveys in the Southern District, 1990-2017.

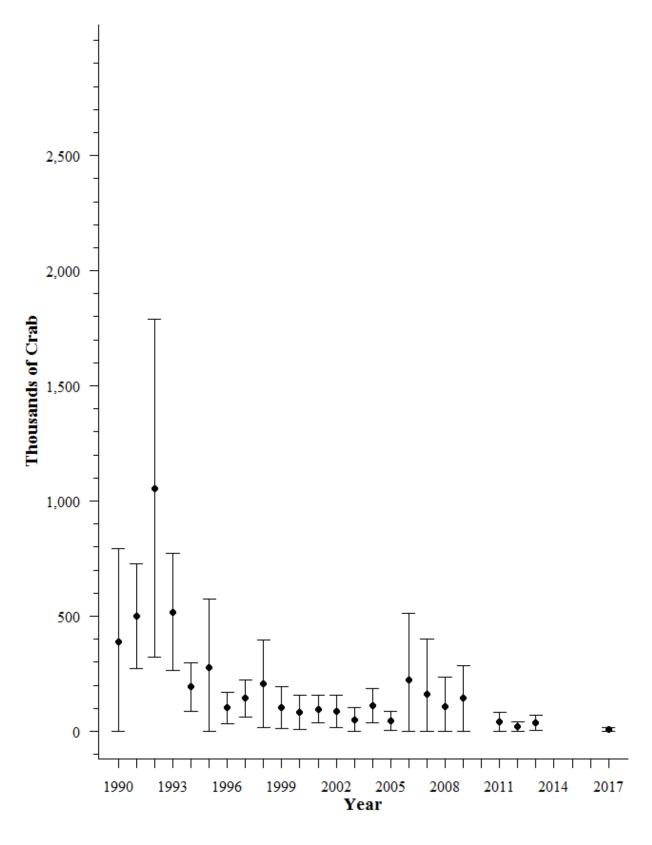


Figure 3: Legal male Tanner crab abundance estimates and 95% confidence intervals using the pre-2017 legal size (140 mm or 5.5 in) from trawl surveys in the Southern District, 1990-2017.