Data summary for EBS crab species size weight and chela height collections:

Years collected: 2000, 2001, 2006, 2007, 2008, 2009, 2010, and 2011.

Individual crab were weighed to the nearest gram and carapace length or width measurements were collected from male and female red king crab, blue king crab, tanner crab and snow crab caught on eastern Bering Sea standard bottom trawl survey. Shell condition was determined for all individual crab as well as clutch size, egg condition and egg color for ovigerous females. Carapace length measurements were collected from red and blue king crab and carapace width measurements from tanner and snow crab and recoded to the nearest 0.1 mm in 2006-2011. Chela height measurements were also collected from Chionoecetes species and recoded to the nearest 0.1 mm in 2006-2011. Measurements were only collected from live, whole crab with all legs intact, individuals with missing or regenerated legs were not selected. The 2006-2009 data table has just one column for carapace measurement (mm) while the other 3 tables have a separate length (mm) and width (mm) column for the carapace measurement data.

Size-weight data chela height measurements were recorded on 2000 and 2001 EBS bottom surveys using the same methodology although the carapace size and chela height measurement was only recoded to the nearest whole 1 mm unit. In 2000, 124 measurements were collected on the F/V Morningstar (vessel code 57) during the EBS slope cruise. There are extra date columns in the 2000 and 2001 data table that are not included in the 2006-2009, 2010, and 2011. These columns are redundant when using the vessel-cruise-haul combination to connect this biological data with the appropriate haul data.

Publications with results from this data set:

Chela Height measurements in reported in the 2008, 2009, 2010 & 2011 AFSC Tech Memo for the eastern Bering Sea (EBS) standard trawl survey results (Chilton et al. 2008, 2009, 2010, and 2011).

The size-weight relationship has been used in the 2010 & 2011 AFSC Tech Memo for the eastern Bering Sea (EBS) standard trawl survey results to calculate the biomass of the different stocks of the crab species (Chilton et al. 2010 and 2011).

The talk ‘Updates to size-weight relationships of eastern Bering Sea commercial crab species’ was presented at the 2009 Interagency crab meeting in Anchorage, Alaska (Webb and Woodby 2010).

2009, 2010 and 2011 Crab SAFE documents have included the size-weight relationship at the discretion of the different authors.

Chilton, E. A., C. E. Armistead, and R. J. Foy. 2011. The 2011 eastern Bering Sea continental shelf bottom trawl survey: results for the commercial crab species. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-AFSC-2XX, 118 p.

Chilton, E. A., C. E. Armistead, and R. J. Foy. 2011. The 2010 eastern Bering Sea continental shelf bottom trawl survey: results for the commercial crab species. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-AFSC-216, 140 p.

Chilton, E. A., C. E. Armistead, and R. J. Foy. 2009. The 2009 eastern Bering Sea continental shelf bottom trawl survey: results for the commercial crab species. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-AFSC-201, 102 p.

Chilton, E. A., C. E. Armistead, and R. J. Foy. 2008. The 2008 eastern Bering Sea continental shelf bottom trawl survey: results for the commercial crab species. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-AFSC-187, 88 p.

Webb, J., and D. Woodby. 2010. Summary of the interagency crab research meeting held December 16-18, 2009. Alaska Department of Fish and Game Special Publication No. 10-15, Anchorage, AK.