**Colorimeter Protocol for crab the 2017 Snow Crab Survey:**

**SAMPLING PROTOCOL:**

* Legal-sized mature males would be measured. Only a subsample of mature males is required. This includes **skip-moulters** 90mm and larger.
* The proposed sampling intensity is 2 colorimeter crab measurements per shell condition (consider SC3 and SC3M as being lumped together) per tow. Where not all shell conditions are present, the focus should be on the SC2 vs SC3 category boundaries. **It is not critical that all shell condition categories be sampled equally.**
* On the colorimeter paper output, the following should be noted:
  + Date and tow number (or tow ID) at the beginning of each tow.
  + Crab numbers for each subsequent crab measurement.
  + Shell condition.
* Note that a colorimeter reading was taken in the comments section of the data entry program.

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| **Figure 1:** Colorimeter measurements were taken on the lower ventral side of the cheliped for male snow crab larger than 90mm. |

**STUDY GOALS**

* Calibration of colorimeter to observed shell conditions by an experienced sampling biologist.
* Check spatial and seasonal variability of chela colour, which will enable us to confirm that shell conditions 2 and 3 are distinguishable over the whole sGSL as well as over the entire season.
* Spatial variation in colorimeter data for the 2017 survey might aid in interpreting spatial variations in shell conditions over the span of priors surveys.