**Bering Sea BCS Sampling Summary**

Special project sampling protocols exist for the EBS bottom trawl survey (2007-2012, 2014-2019, 2022) Bering Sea slope survey (2014) and Beaufort Arctic survey (2008).

1978-1987 only histology samples (Primarily BS, GOA and AI, king/tanner/snow crab)

**GOA/SEAK:**

1990/92-94, 2003-2004 bairdi, smears then 2005-2012 PCR/some smears

**Bering:**

1988- 2013, smears then start of PCR in 2003, switch to PCR in 2005, bairdi/opilio/rkc, some years very sparse

Index site sampling 2014-2019, 2022 (snow and tanner only, PCR only)

**NBS/Chukchi:**

1988-1992, 1994-2013 smear (rkc/primarily snow), pcr in 2005, very small sample sizes in most yrs

**Beaufort:**

2008, PCR, snow and hyas

**Aleautian Islands**

1994, 2000, 2004, bairdi/GKC, smears, very small sample size

**Atlantic Coast/newfoundland**

2004, 2006 (smear), 2008-2010 (pcr), opilio only

**Questions**

Are these all surveys???

Were BS samples taken at same stations from 1988-2006 than in later protocols?

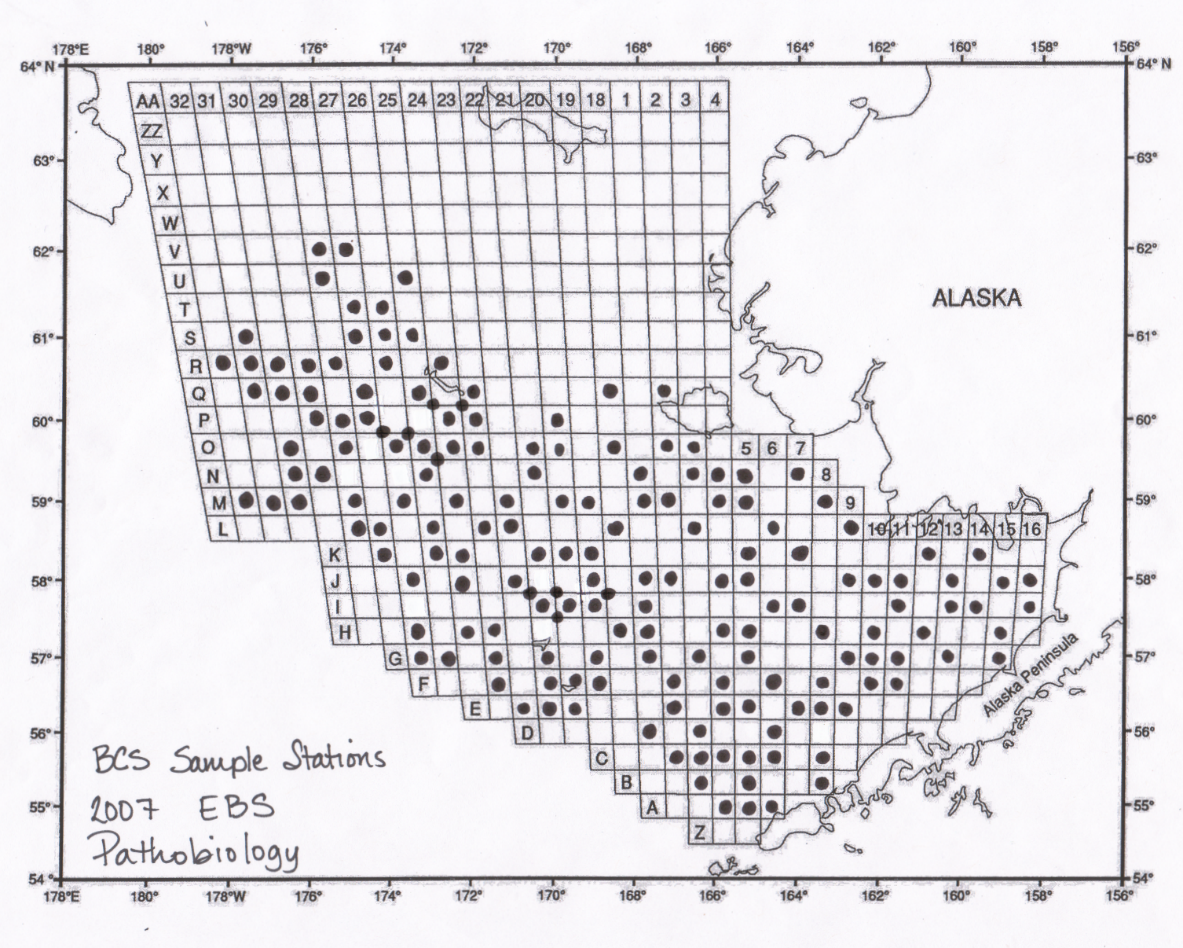
Switch of methodologies? Ie smear to PCR, but also PCR methods (muscle vrs blood)

just calculate as pop prev? b/c very misleading if survey isn’t always exactly sampling size/mat the same….no but this would make pop prev misleading! (i.e. if sample only small crab and prev is expected to be higher)

How to these rates compare with visual prev? because this PCR sampling doesn’t take into pop size, only calculating prev of portion sampled.

Bering Sea:

2007-2008: Approximately 175 stations will be pre-selected for sampling as part of an ongoing study on this disease. The sampler will collect hemolymph by syringe from 10-20 crabs of the dominant *Chionoecetes* species at each designated station completed by the vessel with Pathobiology staff (approximately half of the designated stations). Hemolymph will be preserved in 100% ethanol. Collection methodology: Randomly select at least ten but up to twenty specimens of the dominant *Chionoecetes* species. ONE boat only



2009: What: Hemolymph from the following species when available: *Paralithodes spp., Hyas spp., Pagurus spp., E. isenbeckii, Elassochirus spp., shrimp*

When: After routine haul duties, all three legs of EBS survey, one boat only

Collection methodology: Record species, sex, shell condition, morphometry, visual BCS status, plate #, vessel, cruise and haul. Using a syringe draw 0.2mL hemolymph from the arthrodial membrane. Preserve hemolymph sample in 100% ethanol stored in pre-filled 96-well plates. APPEARS TO BE HAPHAZARDOUS, NO SAMPLE PLAN

2010: Approximately 250 stations will be pre-selected for sampling as part of an ongoing study on this disease. The sampler will collect hemolymph by syringe from 10-20 crabs of the dominant *Chionoecetes* species at each designated station completed by the vessel with Pathobiology staff (approximately half of the designated stations). One boat only. Totally different stations or just expanded?

2011: What: Hemolymph from the following species when available:

*Paralithodes spp., Hyas spp., Pagurus spp., E. isenbeckii, Elassochirus spp., shrimp*

When: After routine haul duties, all three legs of EBS survey, Aldebaran only

Who: Pathobiology staff will take collections.

Collection methodology: Record species, sex, shell condition, morphometry, visual BCS status, plate #, vessel, cruise and haul. Using a syringe draw 0.2mL hemolymph from the arthrodial membrane. Preserve hemolymph sample in 100% ethanol stored in pre-filled 96-well plates.

2012: dominant species randomly selected at pre-assigned stations (when available). Aprox 125 stations, dominant chion. Species

2013???

2014: switch to index sites!!!!!!!!!!!!!!!!!