

Comments on fishery genetic studies Kodiak Salmon Work Group

What is the question?

- Mixed stock fishery genetic studies are a powerful tool, but like any scientific study, should only be used to address questions for which they were designed to answer.
- Shedd et al. 2016 and 2017 was designed to improve brood tables and run reconstructions for local Kodiak stocks, **NOT** to comprehensively estimate harvests of non-local stocks in KMA.
- Sampling was limited to major producers on the West side KMA for that purpose.
- Monthly estimates do **NOT** describe non-local stock harvests, which may vary by more than 8 fold in weekly WASSIP estimates from South Peninsula.

Are there non-local stock harvest patterns in the study?

- Harvests of Cook Inlet bound sockeye in KMA fisheries varied by an order of magnitude between study years and between monthly samples within a year.
- In SW Kodiak (Ayakulik/Halibut Bay), Harvests of Cook Inlet bound fish were more than four times greater in 2015 than 2014 or 2016 due to a large pink salmon run.
- Sampling at Igvak was limited to three monthly strata in two of three years. Regardless of numbers, this is **NOT** sufficient to infer any non-local stock harvest patterns.
- The widely divergent harvest proportions of non-local stocks in this three year study show **NO** reliable patterns upon which to base specific management actions.

Cautions with fishery genetic studies

- Stock specific harvest estimates represent environmental conditions and fishery management at the time.
- Oceanographic conditions in the Gulf of Alaska during 2014-2016 were highly unusual.
- Does a narrowly focused study, with no reliable patterns of non-local stock harvest, conducted at a time of dramatic environmental change, represent “best available science” for advancing major change to fishery management plans?

Emphatically **NO!**