

Genetic diversity of Dolly Varden populations in the Kobuk River



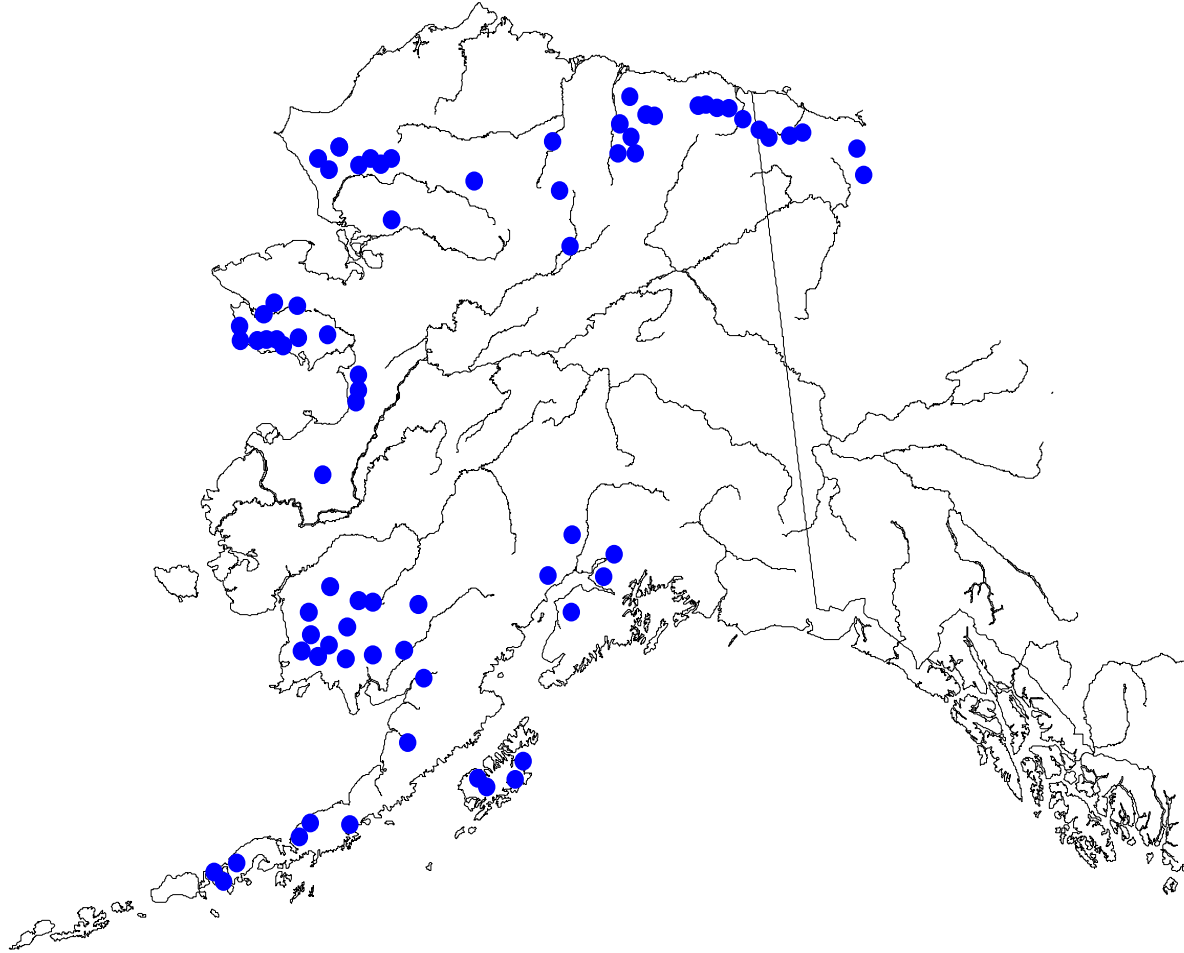
Important subsistence fish



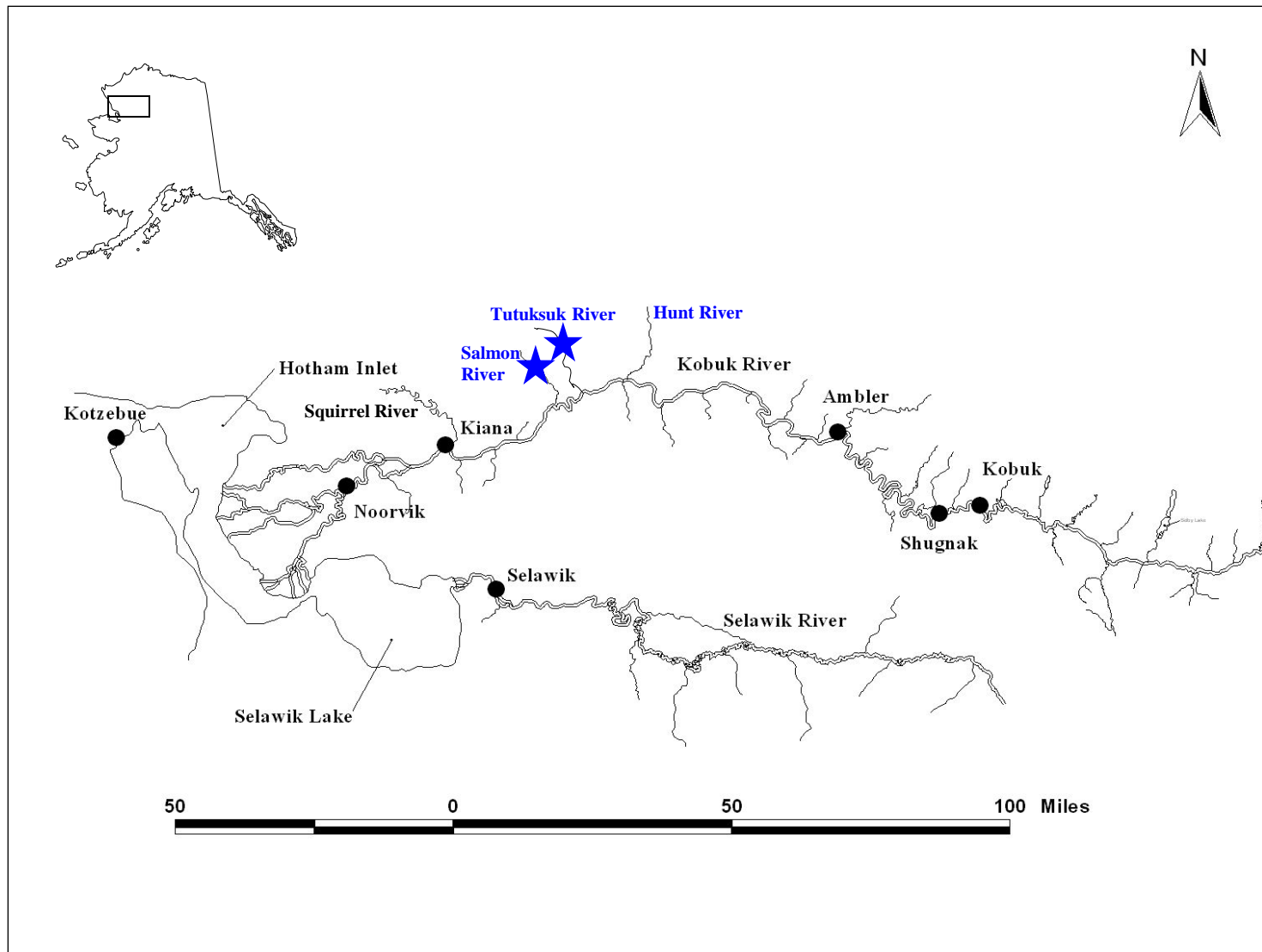
- Objectives: collect and genetically analyze Dolly Varden from three spawning areas in the Kobuk River



Locations where Dolly Varden have been sampled

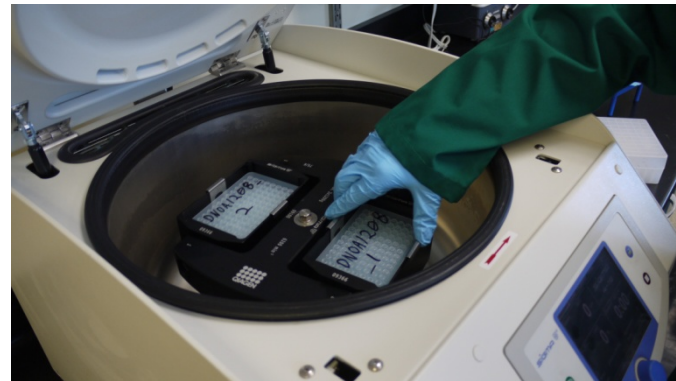
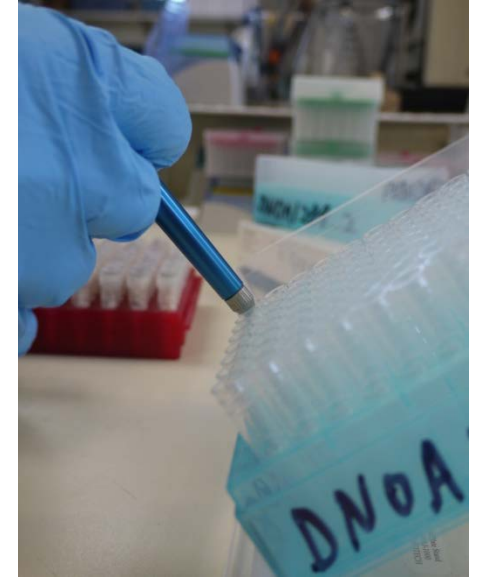
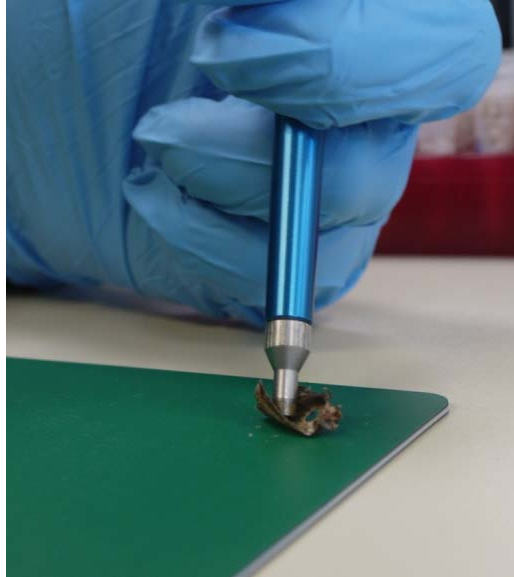
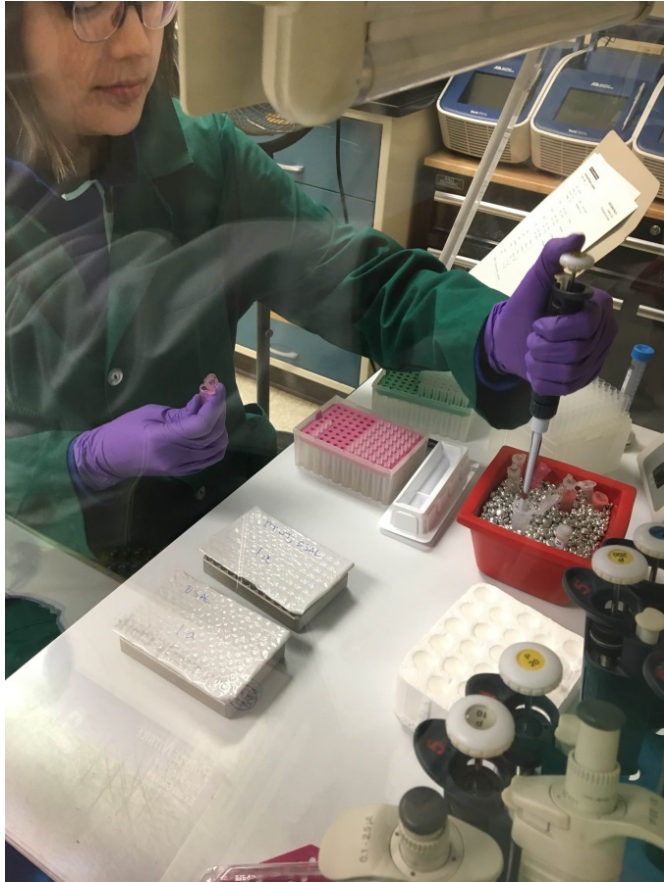


Kobuk River sample sites



Laboratory Analysis

- Isolating DNA



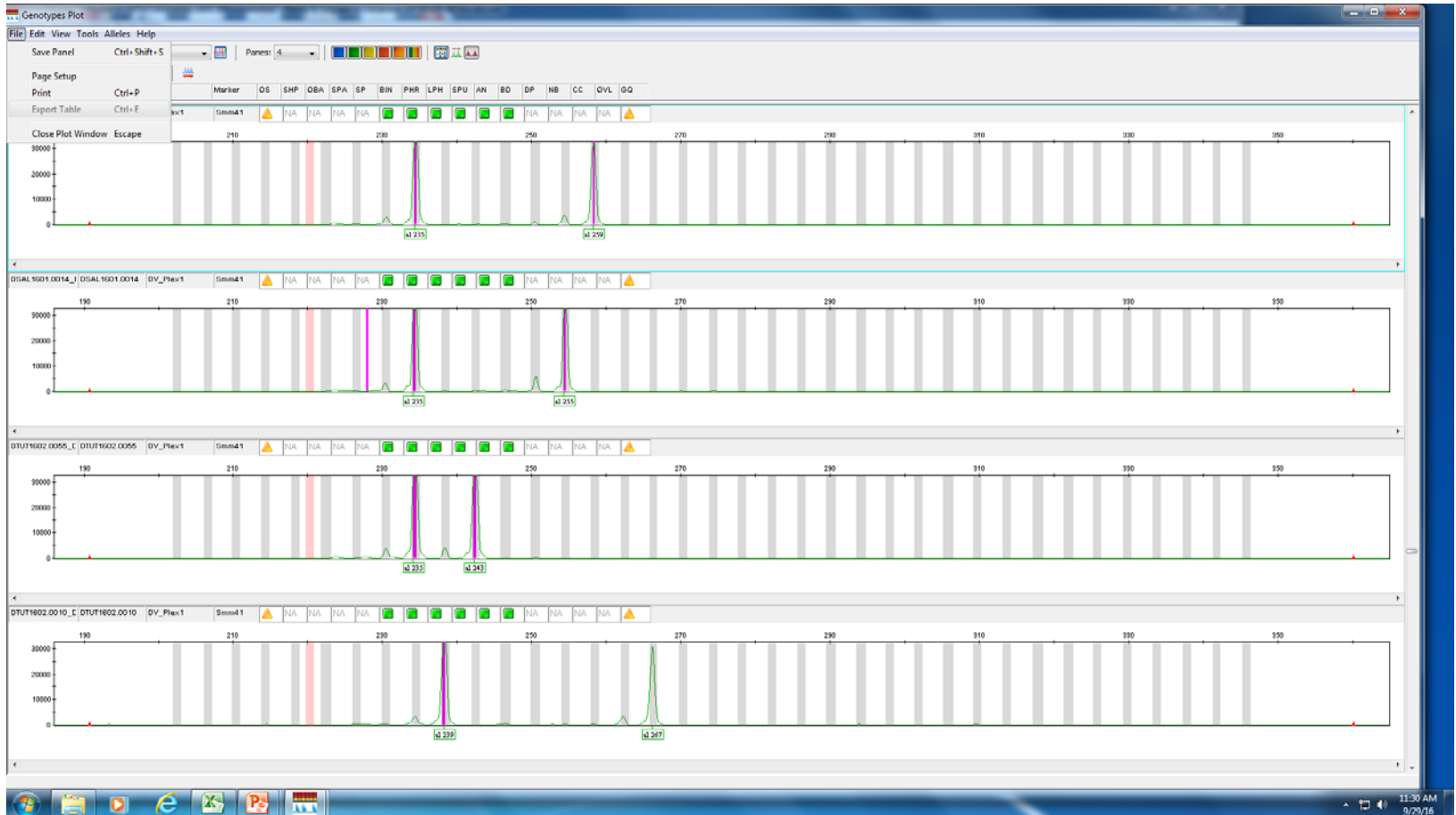
Laboratory Analysis

Making it so we can “see” specific genes

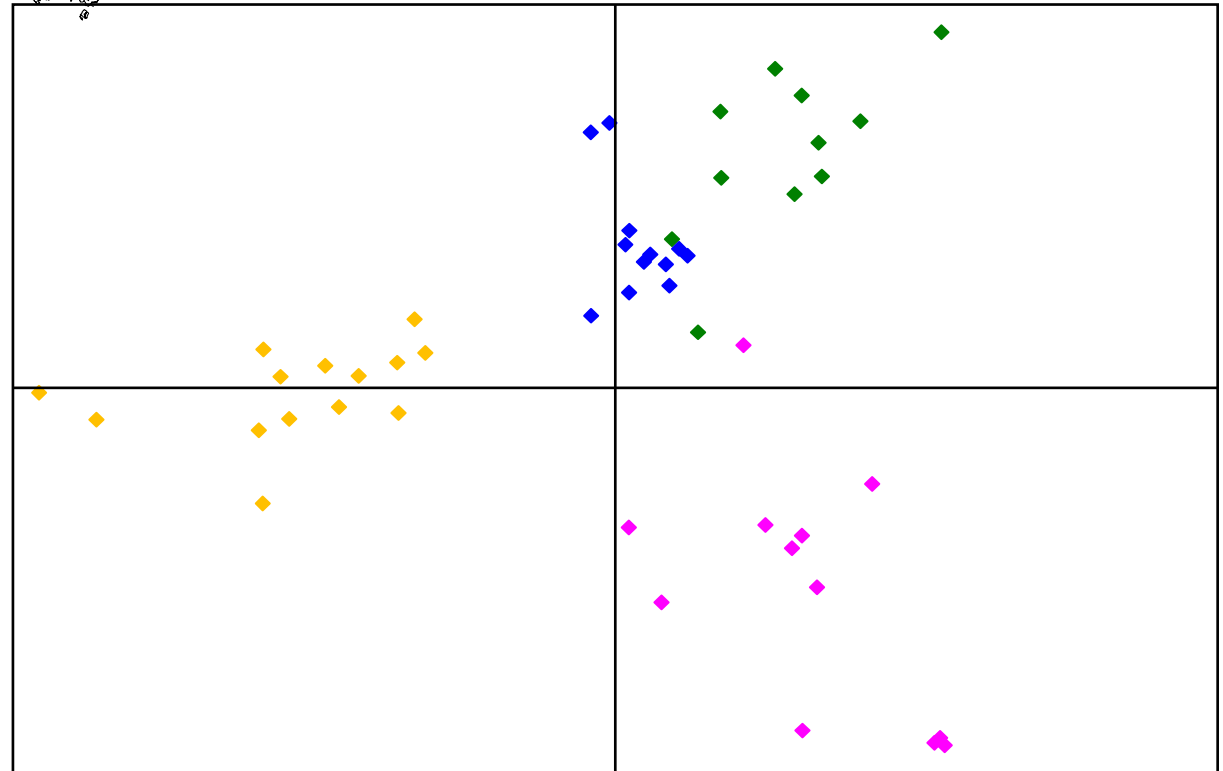
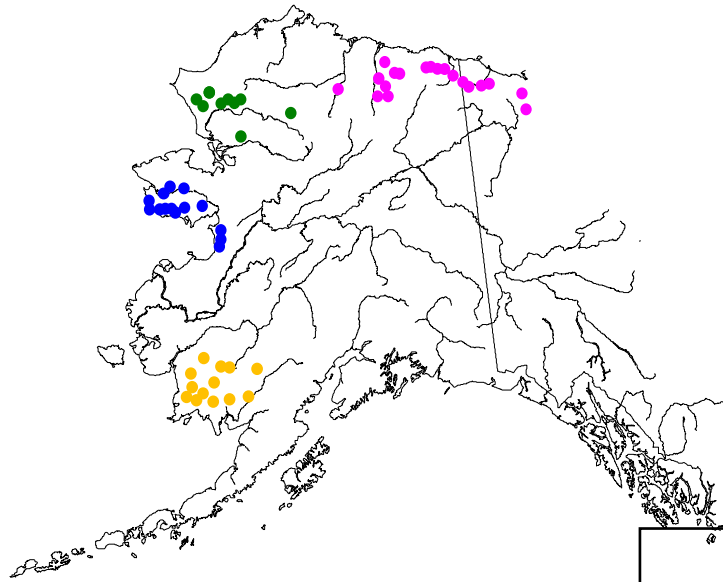
Genes are separated by size on a DNA analyzer



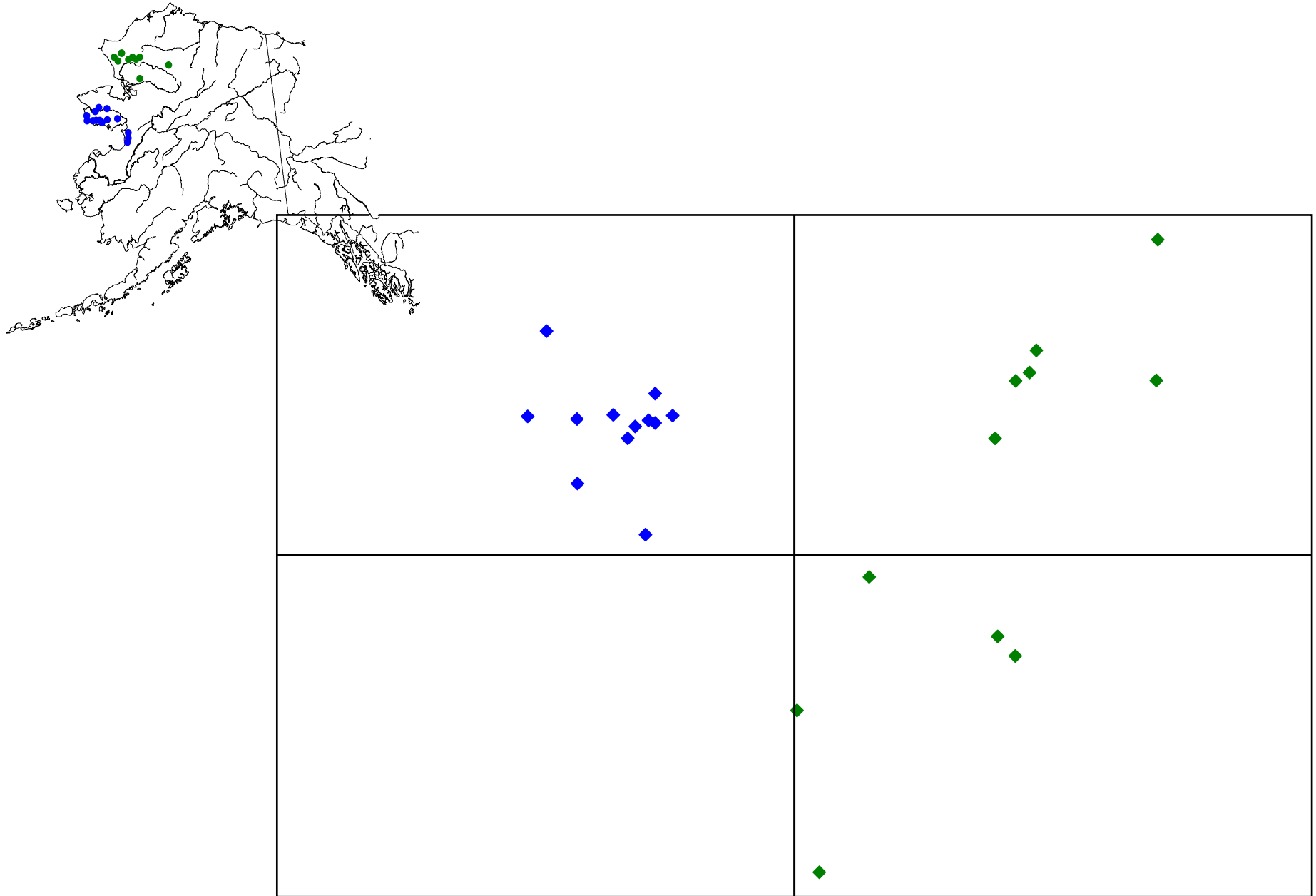
Results from DNA Analyzer



Preliminary results: all Dolly Varden samples



Preliminary results: Northwest Alaska only



Conclusions

- Spawning populations of Dolly Varden in the Kobuk River are genetically different
- Not enough samples to know if we can tell Kobuk River Dolly Varden from Noatak River Dolly Varden in mixtures
 - Continue project next summer to increase sample size and get samples from the Hunt River

