

- 1) Please introduce yourself and your company.

Jim Parsons, Aquaculture Operations Manager, Jamestown S'Klallam Tribe, Sequim, WA. Producer of Pacific oysters, Kumamoto oysters, geoduck clams, and sablefish.

Formerly partner/owner in Troutlodge, Inc.

- 2) What it is that you wish you could do, but just cannot do today due to cost or lack of technology?

Assign parentage in oysters as we were able to in rainbow trout (thanks to ARS NCCCWA!!). Genomic analysis of oyster and clam brood stocks for traits of interest (again, as in rainbow trout).

- 3) What is/are the biggest current and 10-year challenge(s) to your industry that changing traits in your animals might be able to address?

- a. Adaptation of juvenile oyster and clam larvae to ocean acidification.
- b. Resistance to highly pathogenic herpes virus strains
- c. Shell color and shape
- d. Meat yield and growth rate (particularly in geoduck clams; currently a 5 year crop)

- 4) Are there opportunities between different segments of the industry? For example, something that does not fall within the wheelhouse of the breed association/company or the meat industry (expand to any topic one can think of), but would be very beneficial for both industries?

Early survival characteristics and “setting” performance would be highly beneficial for both harvesters and seed producers.

Mortality from highly pathogenic herpes virus has caused devastating losses in segments of the worldwide oyster industry, both in seed producers and grow out/harvesters.

- 5) Other insights?

I honestly have been extremely impressed with the gains made through genomics in rainbow trout over the last decade, and I'm hoping that this can be expanded to Pacific oysters and geoduck clams over the next 10 years!