The Genomic Variation Lab: Genetic Tools to Improve Aquatic Species Conservation

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- Marker development
- Conservation genetics
- Spontaneous autopolyploidy

Schreier et al., in prep
Genetic Diet Analysis of Bay Delta Piscivores

• What’s eating delta smelt and juv. salmon?

![Graph showing frequency of detection vs time](image)

Hours post ingestion

Brandl et al, unpubl data
New Chinook Salmon SNP panel improves run assignment

USR	Mill	Deer	Butte	FRH	COL	NIM	MKH	STN	TOU	MER

Fall

Late-fall

Spring

Winter

Meek et al, in prep
Delta Smelt Conservation Genetics

• Marker development
• Genetic monitoring of refugial population
• Population monitoring

Fisch et al. 2012 J. Hered
Future Directions

- Sturgeon genomics
- Sex marker development
- eDNA/metabarcoding
- Epigenetics