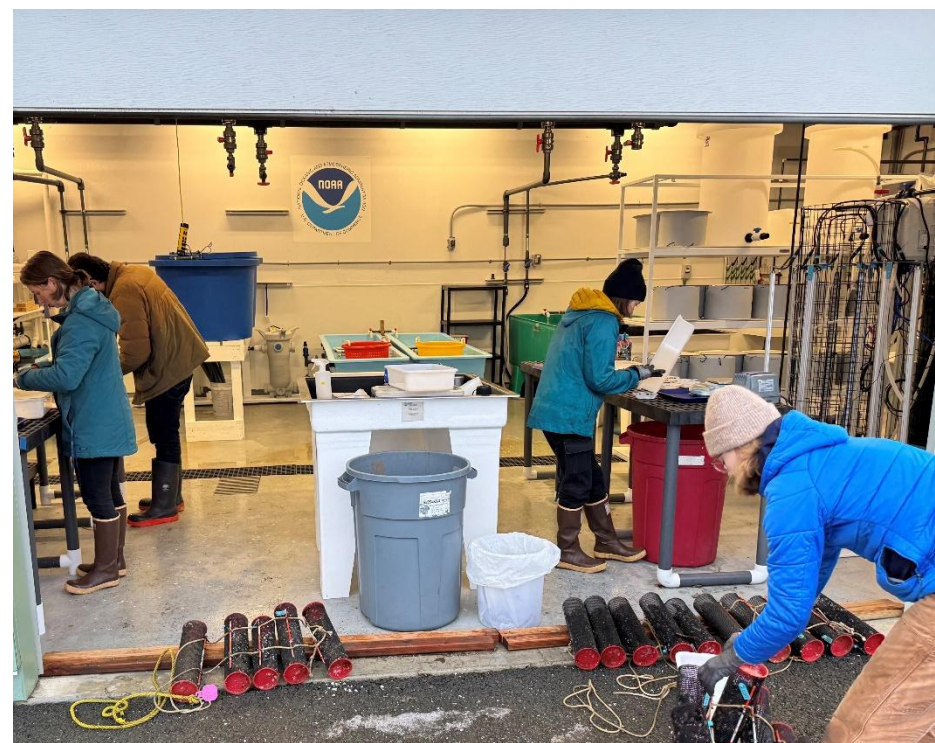


Optimizing hybrid Pacific oysters for improved yields in cold-water environments

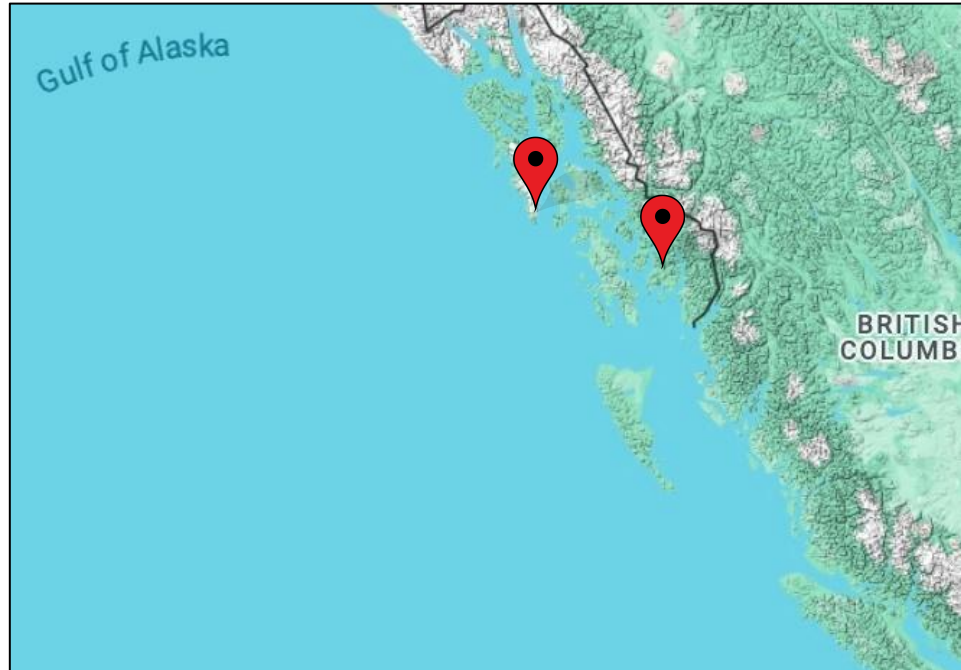
Francis  PACIFIC HYBREED t





Cohort 1	<ul style="list-style-type: none"> • Hybrid crosses produced • Fieldwork at Little Port Walter • Data collection, three timepoints 	<ul style="list-style-type: none"> • Fieldwork at Little Port Walter • Data collection, three timepoints
Cohort 2		<ul style="list-style-type: none"> • Hybrid crosses produced • Fieldwork at Little Port Walter and Ketchikan • Data collection, two timepoints

- ✓ 6,619 oysters outplanted in 188 cages
- ✓ 31 hybrid crosses hybrid crosses evaluated





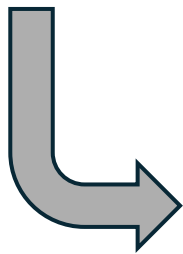
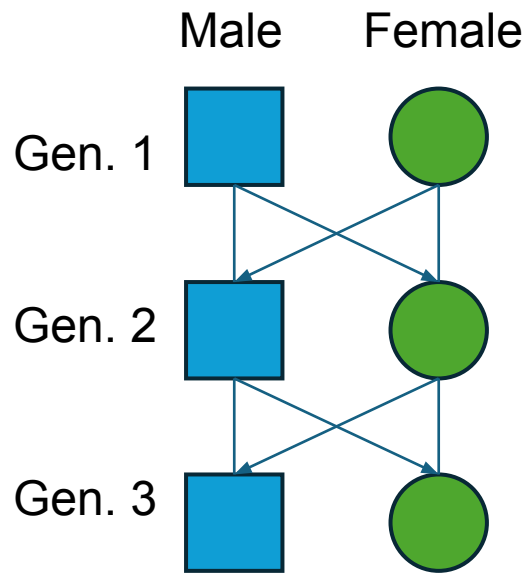
Cohort 1	<ul style="list-style-type: none"> Hybrid crosses produced Fieldwork at Little Port Walter Data collection, three timepoints 	<ul style="list-style-type: none"> Fieldwork at Little Port Walter Data collection, three timepoints
Cohort 2		<ul style="list-style-type: none"> Hybrid crosses produced Fieldwork at Little Port Walter and Ketchikan Data collection, two timepoints

Cohort 1
Survivorship

Spring-Summer Winter Spring-Summer
 94% ± 7% 98% ± 2% 95% ± 6%

Cohort 2
Survivorship

Spring-Summer
 94% ± 5%



Specific effect of a *Hybrid Cross*

General effect of a *Genetic Line*

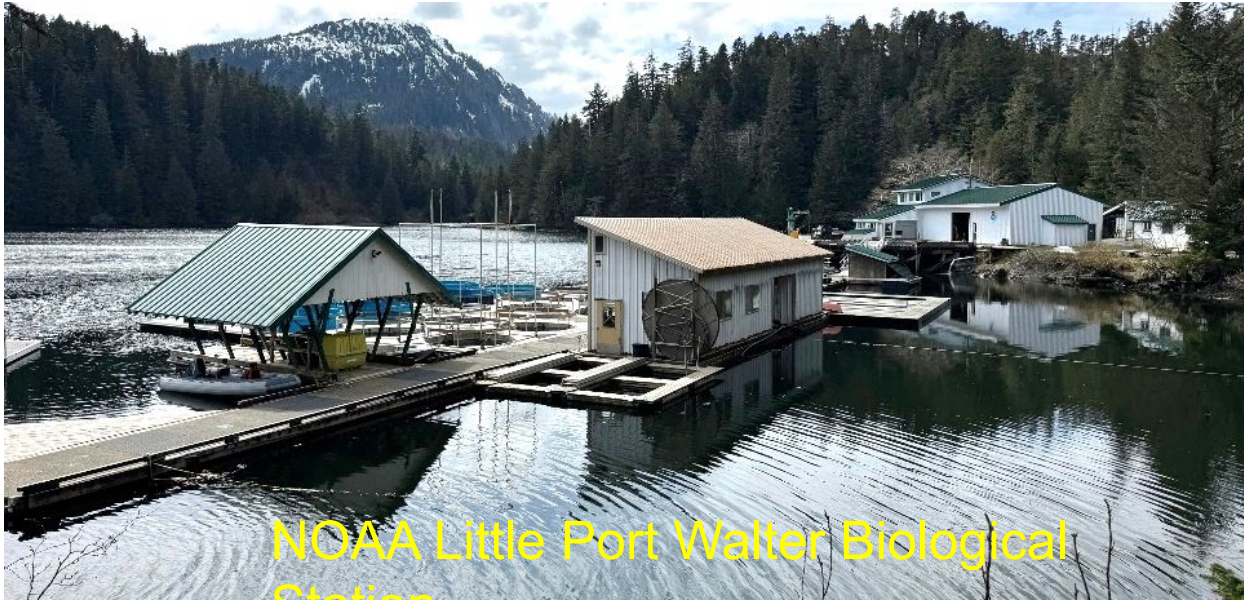
		Genetic lines (male)			
		A	B	C	D
Genetic lines (female)	A	A x A	B x A	C x A	D x A
	B	A x B	B x B	C x B	D x B
	C	A x C	B x C	C x C	D x C
	D	A x D	B x D	C x D	D x D

Specific effect of two Reciprocal Crosses

✓ Site and Cross effects; No site-by-cross interaction



Hump Island Oyster

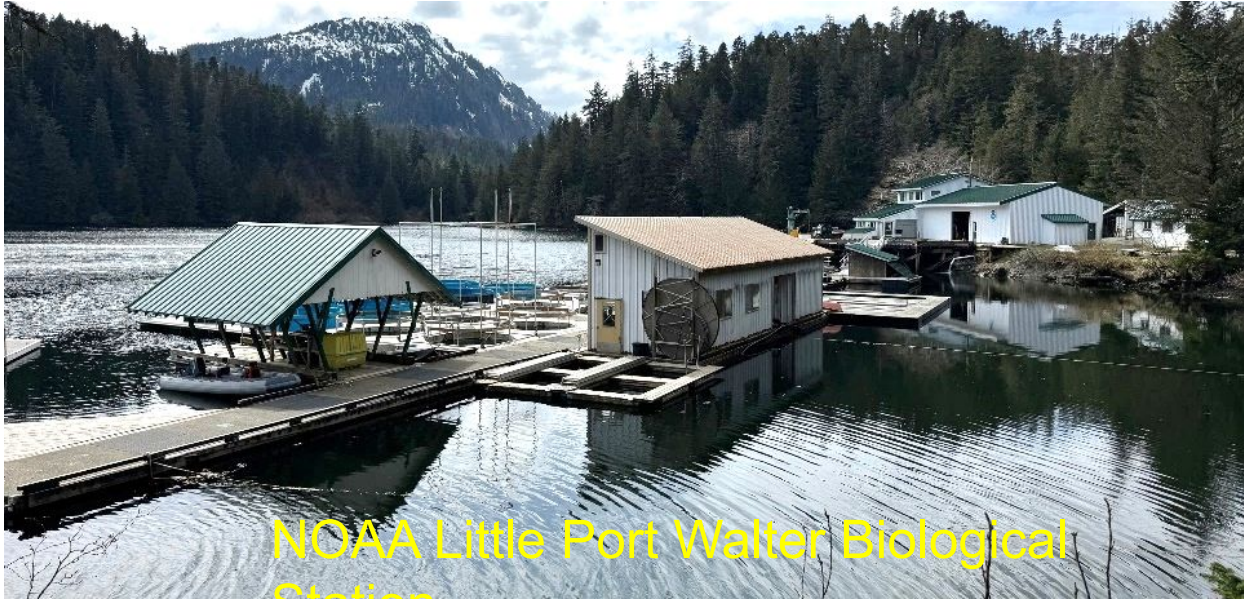


NOAA Little Port Walter Biological Station

- ✓ Site and Cross effects; No site-by-cross interaction
- ✓ General effect: Genetic line #37 yielded 27% increase
- ✓ Specific effect: Cross 26×36 yielded 43% increase



Hump Island
Oyster



NOAA Little Port Walter Biological
Station