

Species	Life Stage	Best Model	ΔAIC	Deviance
Walleye Pollock	Eggs	count = $s_1(y) + s_2(\text{lat}_y, \text{lon}_y) + s_3(J_{y,\text{lat},\text{lon}}) + s_4(SST_{\text{lat},\text{lon}}) + s_5(SSS_{y,\text{lat},\text{lon}}) + s_6(\text{lat}_y, \text{lon}_y, \text{by} = T) + \varepsilon_{y,\text{lat},\text{lon}}$	69.6	59.8%
	Larvae	count = $s_1(y) + s_2(\text{lat}_y, \text{lon}_y) + s_3(J_{y,\text{lat},\text{lon}}) + s_4(SST_{\text{lat},\text{lon}}) + s_5(SSS_{y,\text{lat},\text{lon}}) + s_6(\text{lat}_y, \text{lon}_y, \text{by} = T) + \varepsilon_{y,\text{lat},\text{lon}}$	96.6	60.2%
Flathead Sole	Eggs	count = $s_1(y) + s_2(\text{lat}_y, \text{lon}_y) + s_3(J_{y,\text{lat},\text{lon}}) + s_4(SST_{\text{lat},\text{lon}}) + s_5(SSS_{y,\text{lat},\text{lon}}) + s_6(\text{lat}_y, \text{lon}_y, \text{by} = T) + \varepsilon_{y,\text{lat},\text{lon}}$	43.5	68.8%
	Larvae	count = $s_1(y) + s_2(\text{lat}_y, \text{lon}_y) + s_3(J_{y,\text{lat},\text{lon}}) + s_4(SST_{\text{lat},\text{lon}}) + s_5(SSS_{y,\text{lat},\text{lon}}) + s_6(J_y, \text{by} = T) + \varepsilon_{y,\text{lat},\text{lon}}$	1001.6	68.5%
Alaska Plaice	Eggs	count = $s_1(y) + s_2(\text{lat}_y, \text{lon}_y) + s_3(J_{y,\text{lat},\text{lon}}) + s_4(SST_{\text{lat},\text{lon}}) + s_5(SSS_{y,\text{lat},\text{lon}}) + s_6(J_{y,\text{lat},\text{lon}}, \text{by} = T) + \varepsilon_{y,\text{lat},\text{lon}}$	50.4	72.8%
	Larvae	count = $s_1(y) + s_2(\text{lat}_y, \text{lon}_y) + s_3(J_{y,\text{lat},\text{lon}}) + s_4(SST_{\text{lat},\text{lon}}) + s_5(SSS_{y,\text{lat},\text{lon}}) + s_6(J_{y,\text{lat},\text{lon}}, \text{by} = T) + \varepsilon_{y,\text{lat},\text{lon}}$	115.7	76.6%
Yellowfin Sole	Eggs	count = $s_1(y) + s_2(\text{lat}_y, \text{lon}_y) + s_3(J_{y,\text{lat},\text{lon}}) + s_4(SST_{\text{lat},\text{lon}}) + s_5(SSS_{y,\text{lat},\text{lon}}) + s_6(\text{lat}_y, \text{lon}_y, \text{by} = T) + \varepsilon_{y,\text{lat},\text{lon}}$	-1.1	76.1%
	Larvae	count = $s_1(y) + s_2(\text{lat}_y, \text{lon}_y) + s_3(J_{y,\text{lat},\text{lon}}) + s_4(SST_{\text{lat},\text{lon}}) + s_5(SSS_{y,\text{lat},\text{lon}}) + s_6(\text{lat}_y, \text{lon}_y, \text{by} = T) + \varepsilon_{y,\text{lat},\text{lon}}$	115.9	66.7%



