

# GAM Models

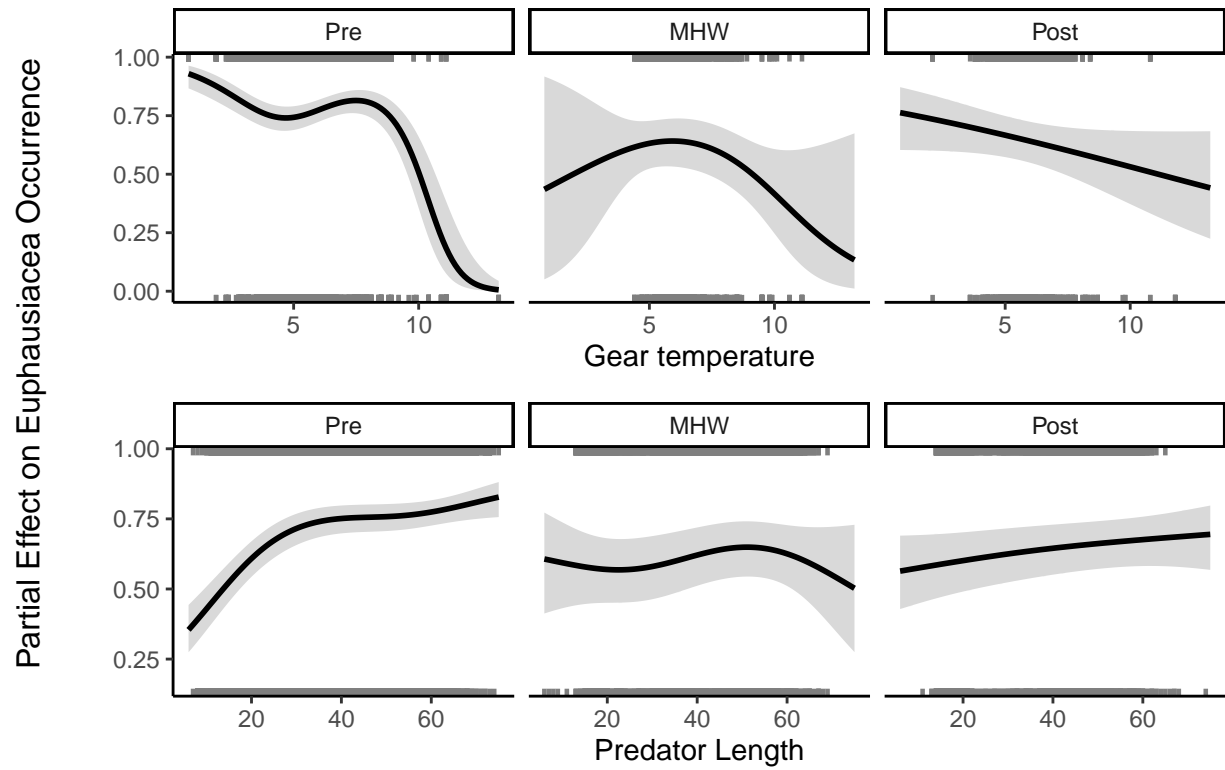
Catalina Burch

2023-05-24

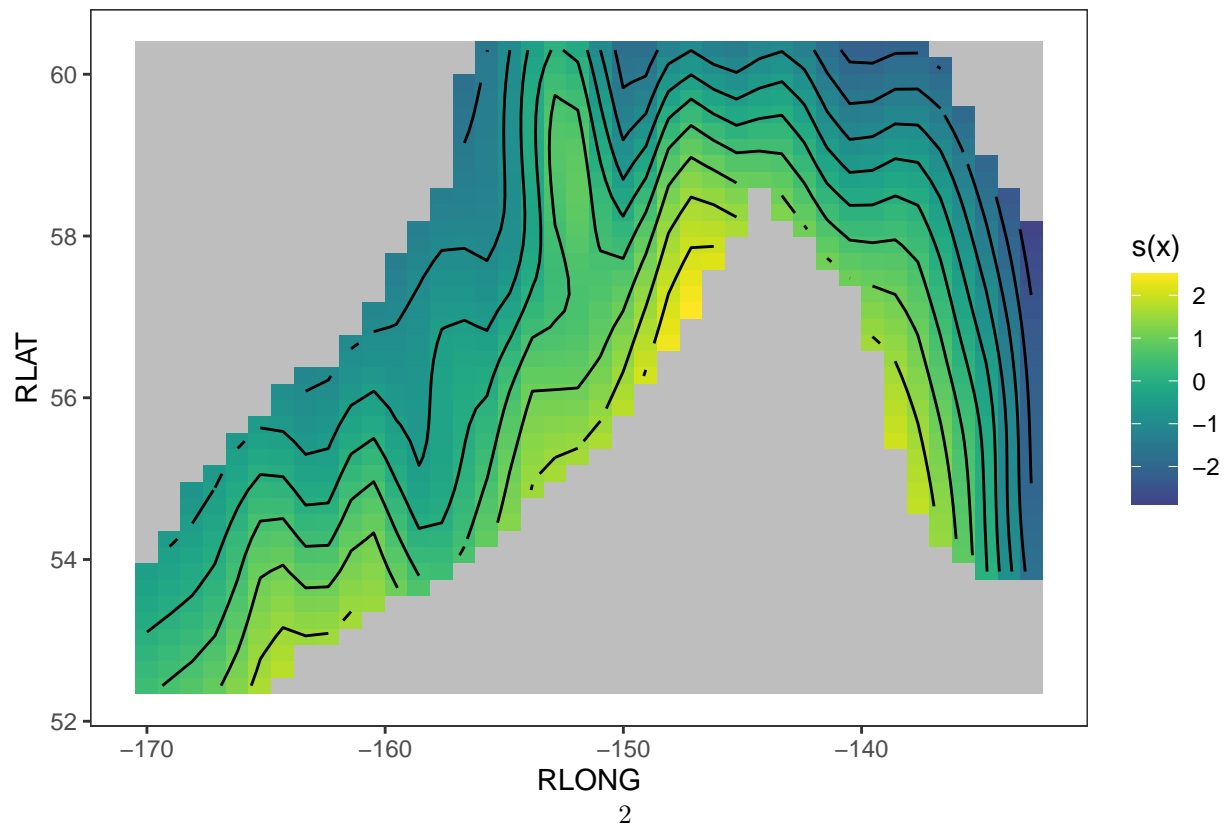
This document runs all of the GAMs included in my thesis.

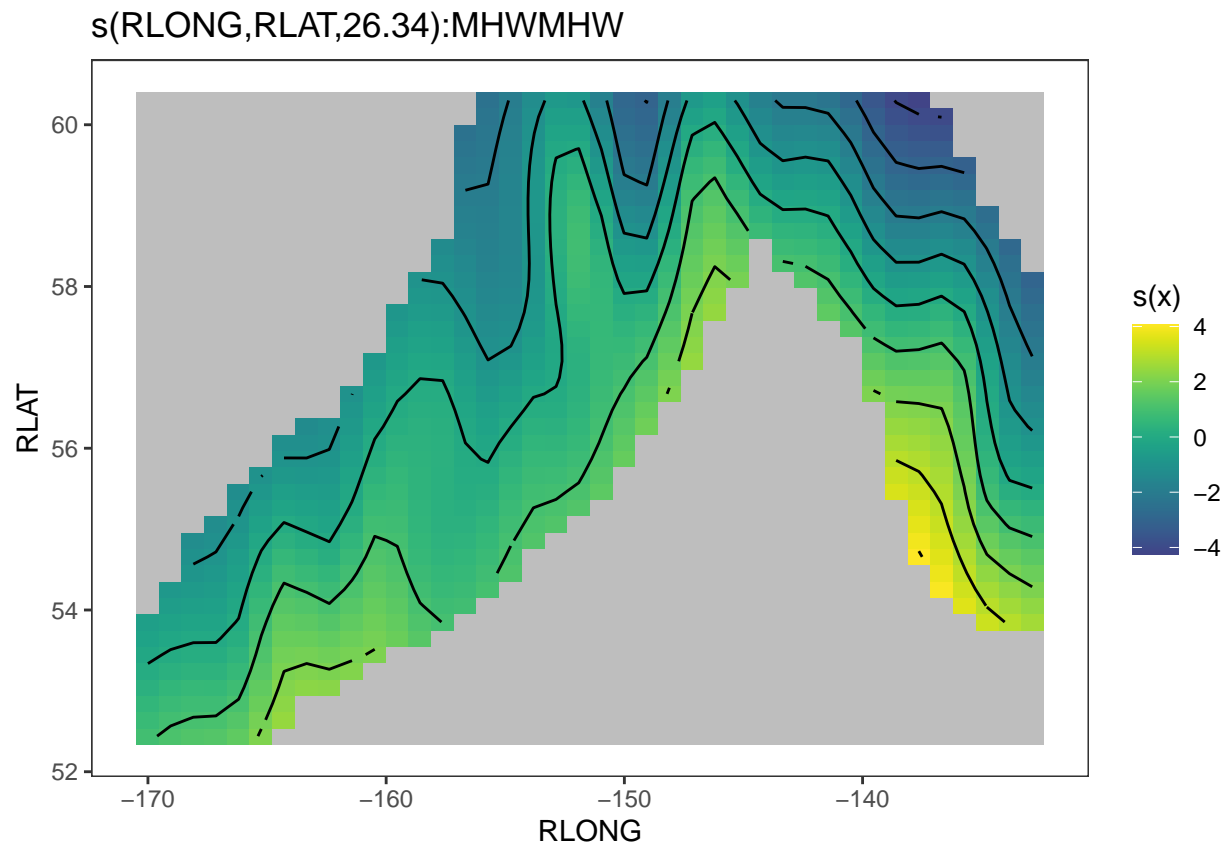
## Model 1: Euphausiacea Prey

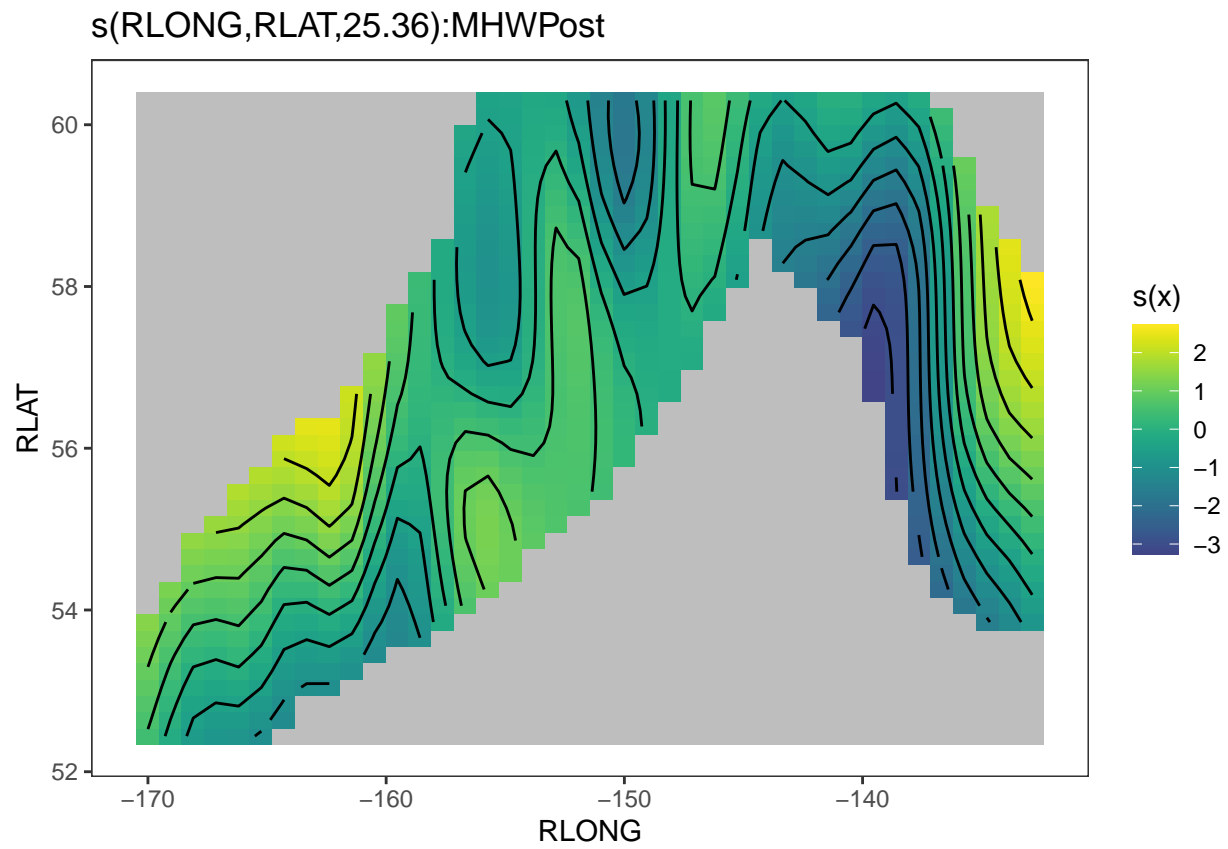
Predator: Walleye Pollock



s(RLONG,RLAT,27.68):MHWPre



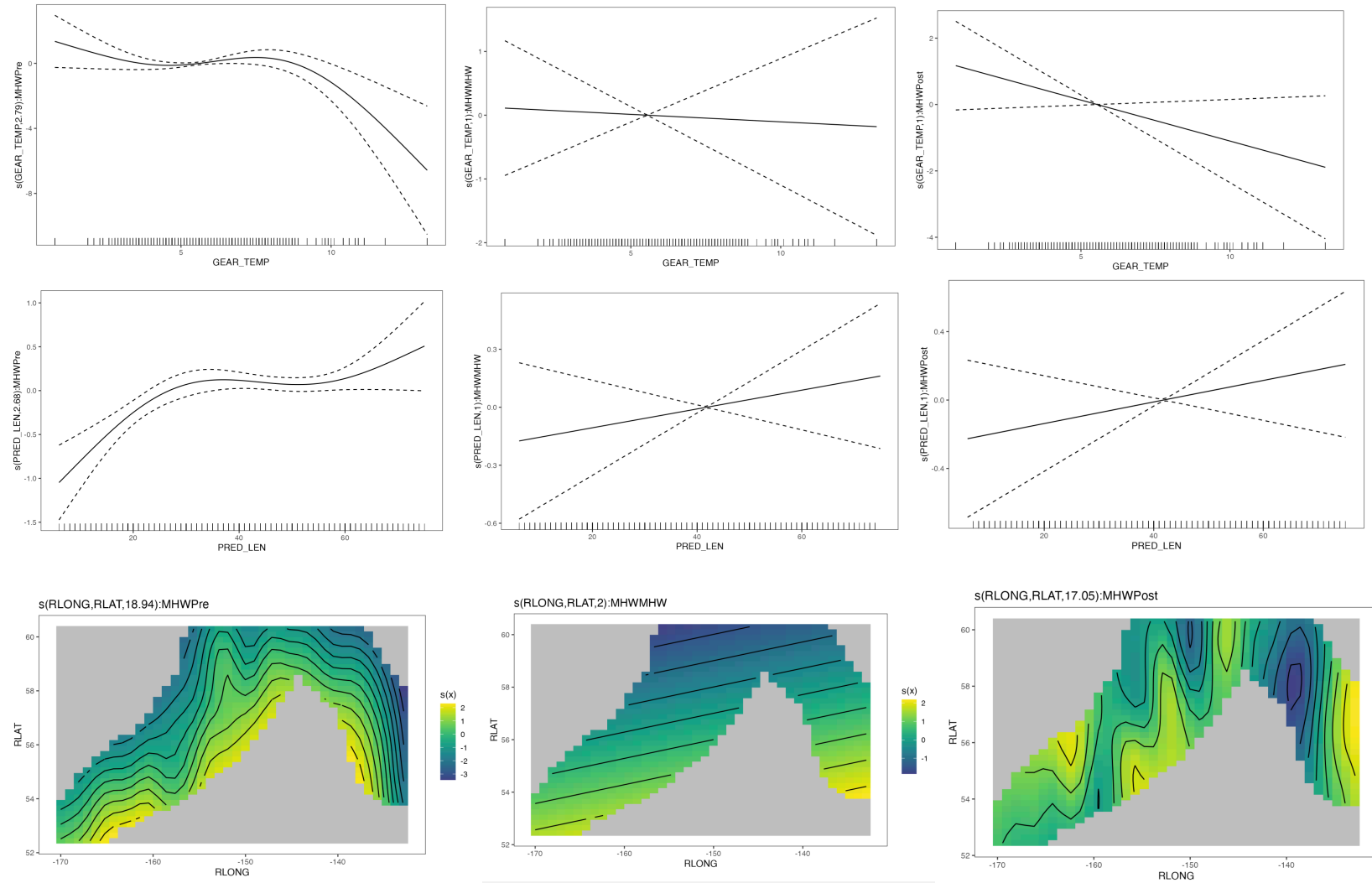




This page shows the results of a gamm4 model with a nested random effect of (1|YEAR/STATIONID).

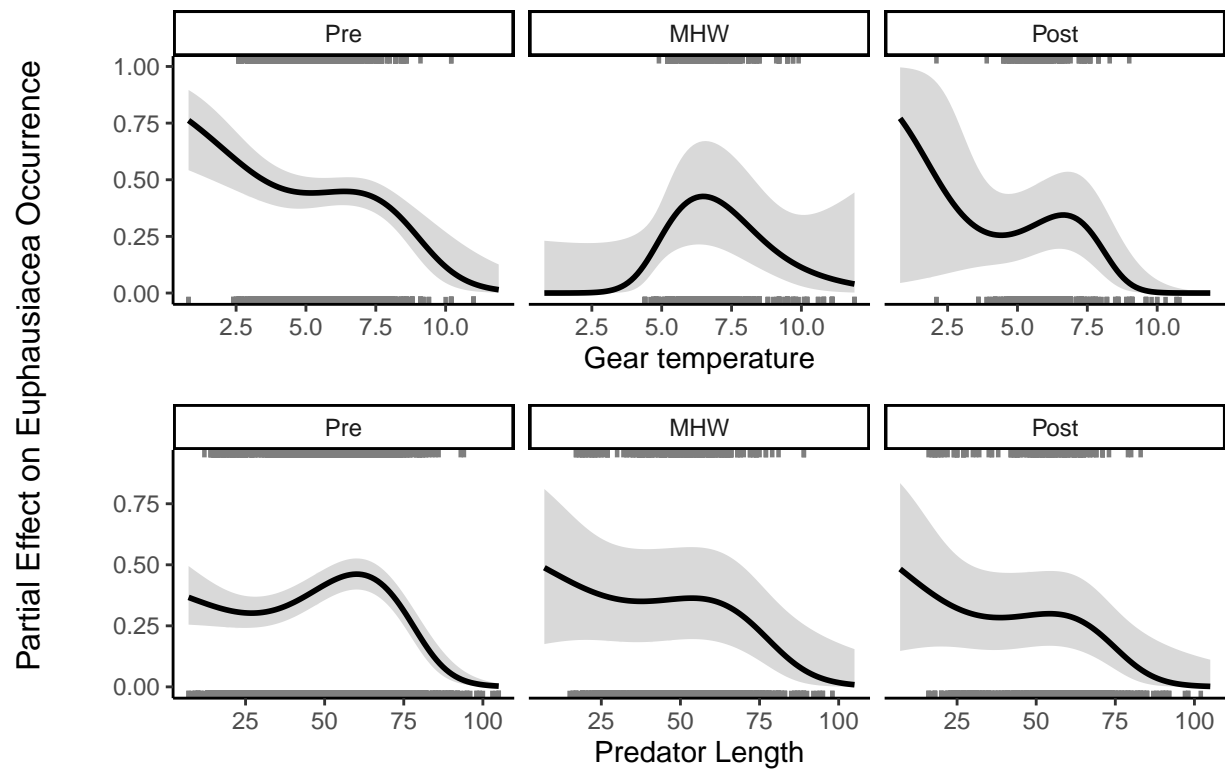
Predator: Walleye Pollock

Prey: Euphausiacea

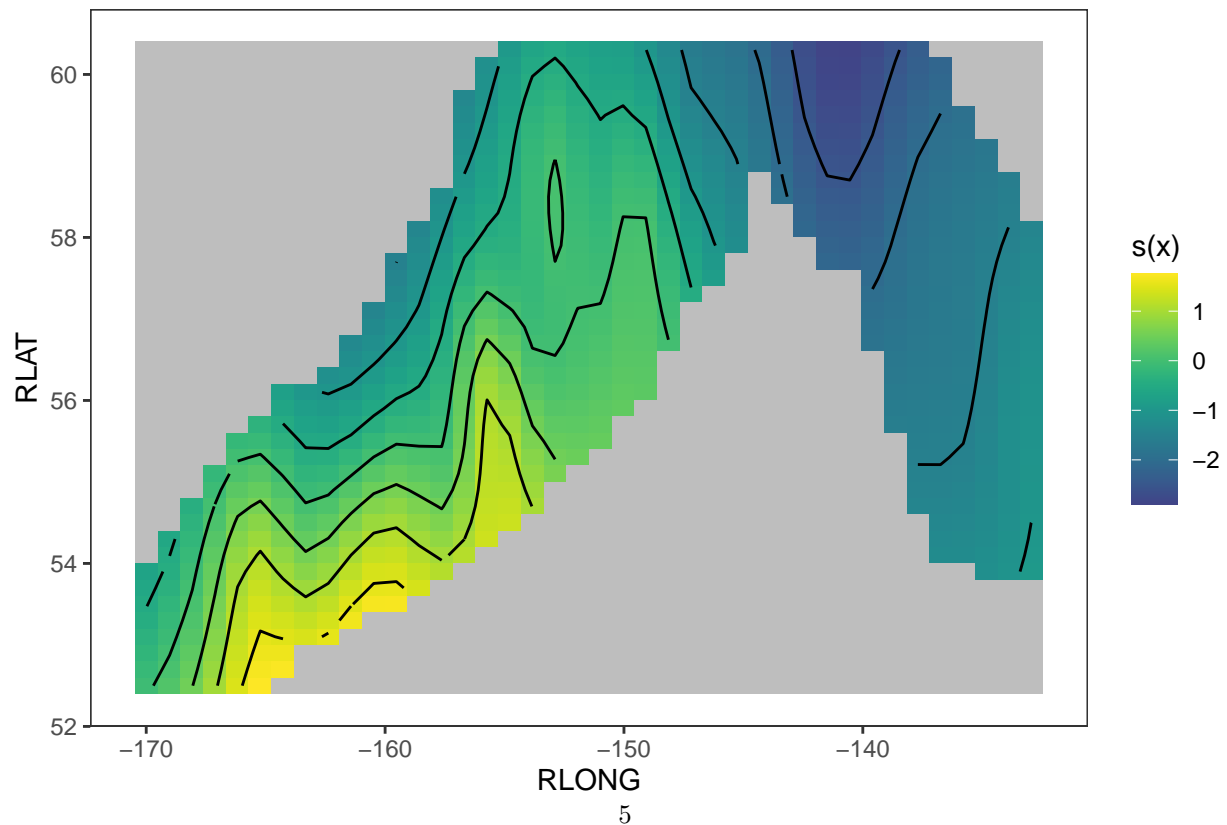


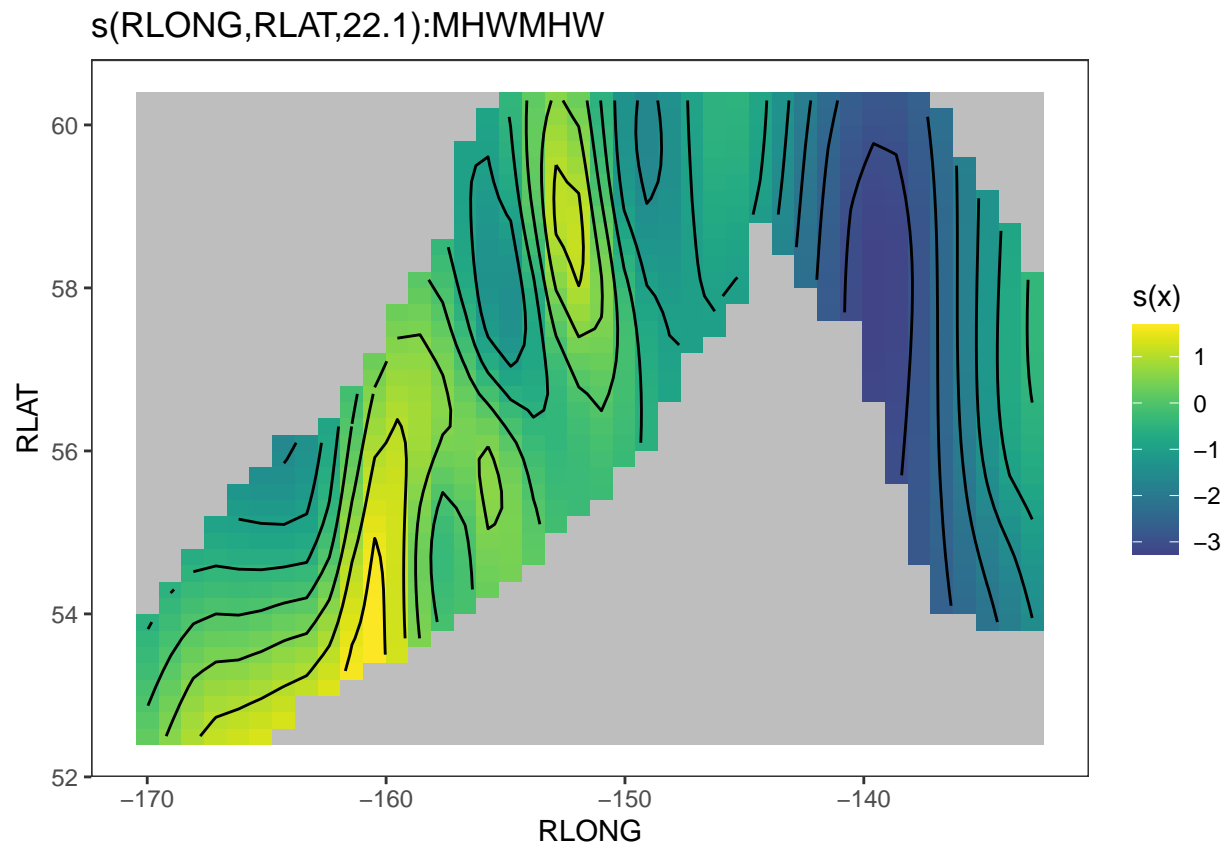
## Model 1: Euphausiacea Prey

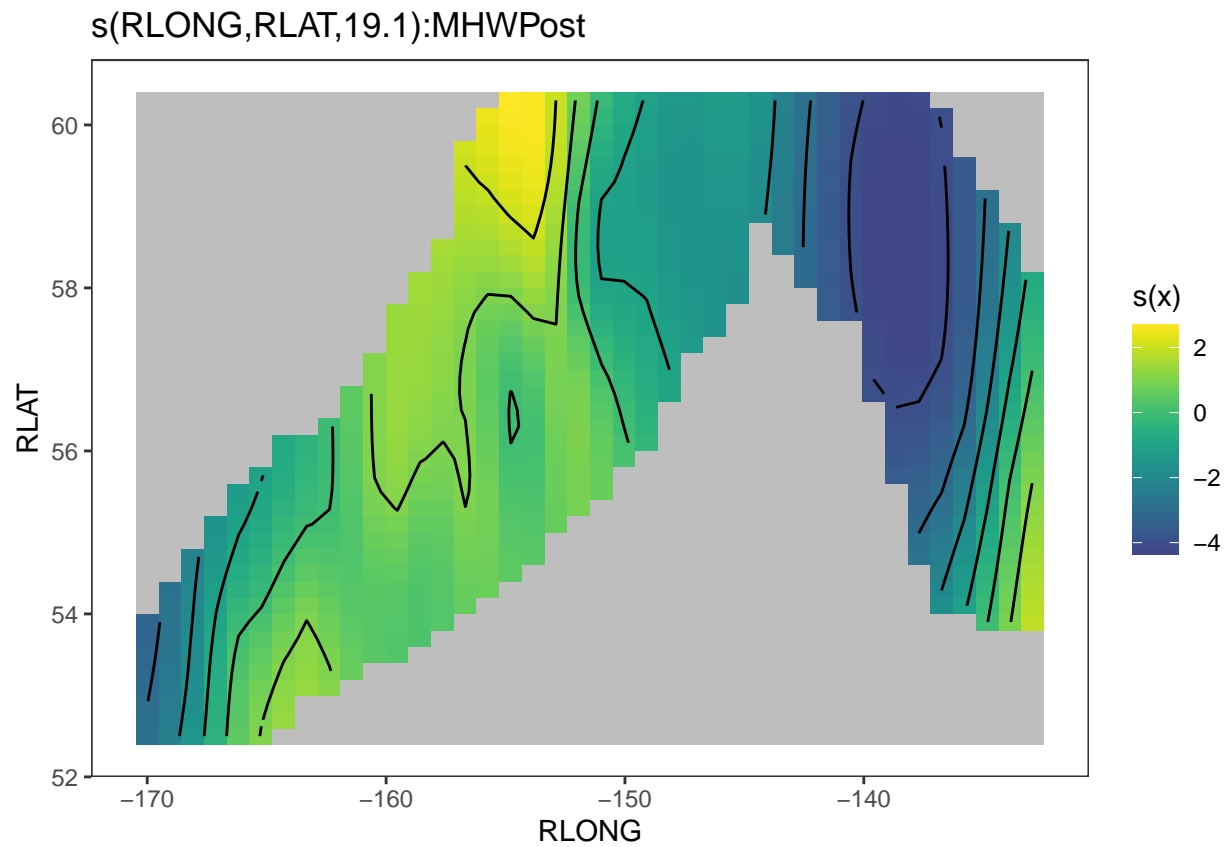
Predator: Pacific Cod



s(RLONG,RLAT,22.74):MHWPre



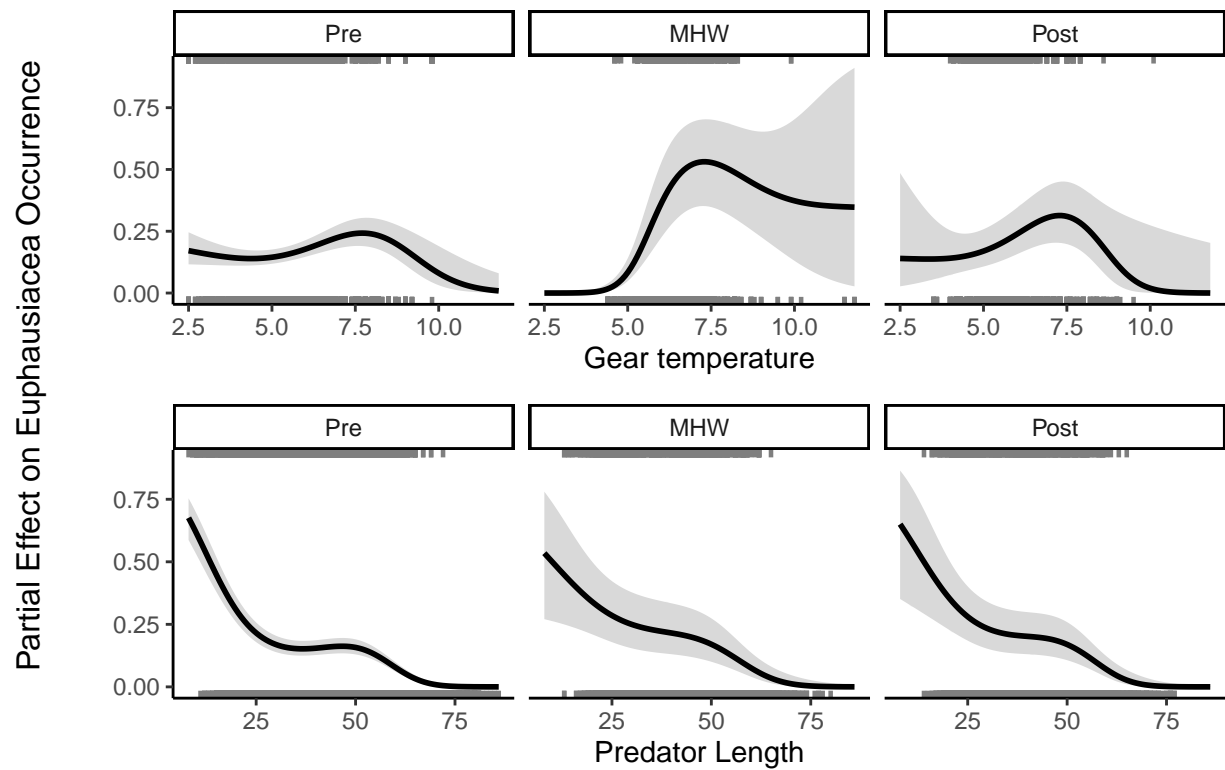




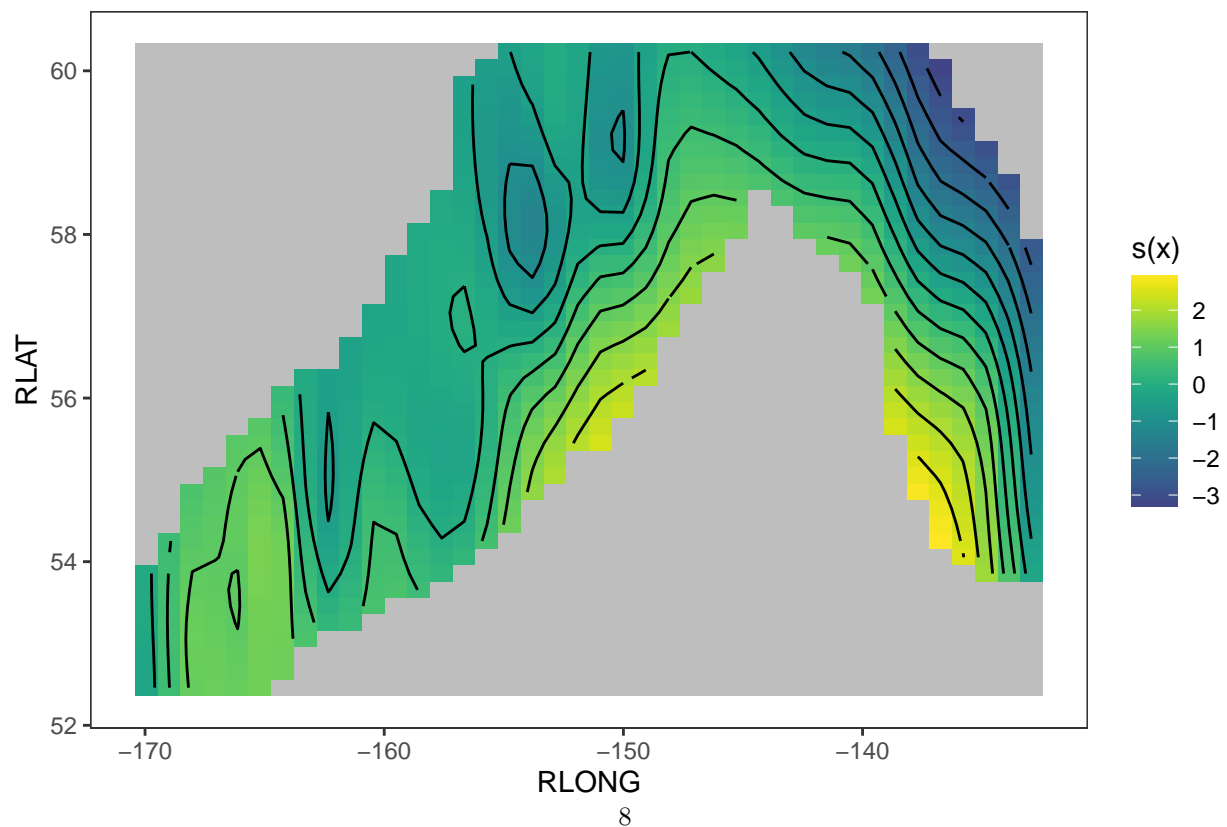


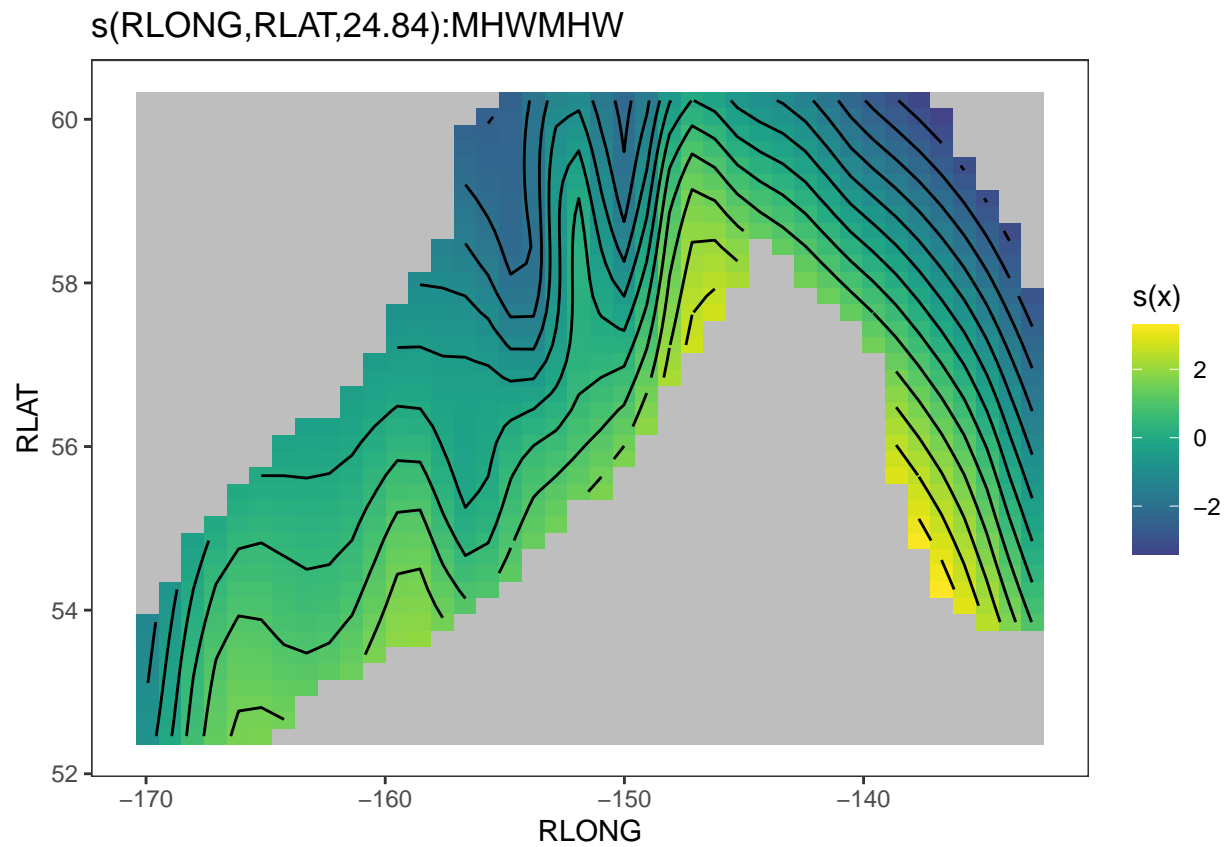
## Model 1: Euphausiacea Prey

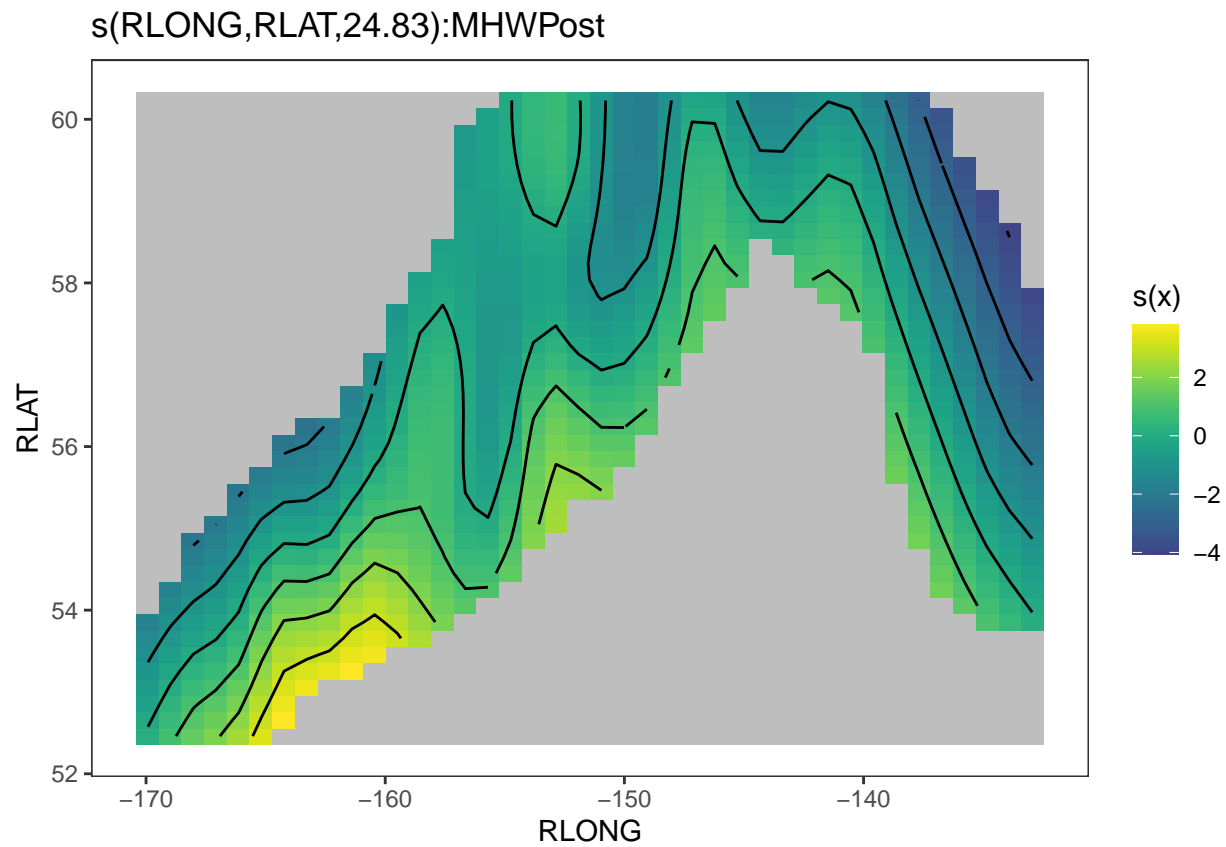
Predator: Arrowtooth Flounder



s(RLONG,RLAT,27.97):MHWPre

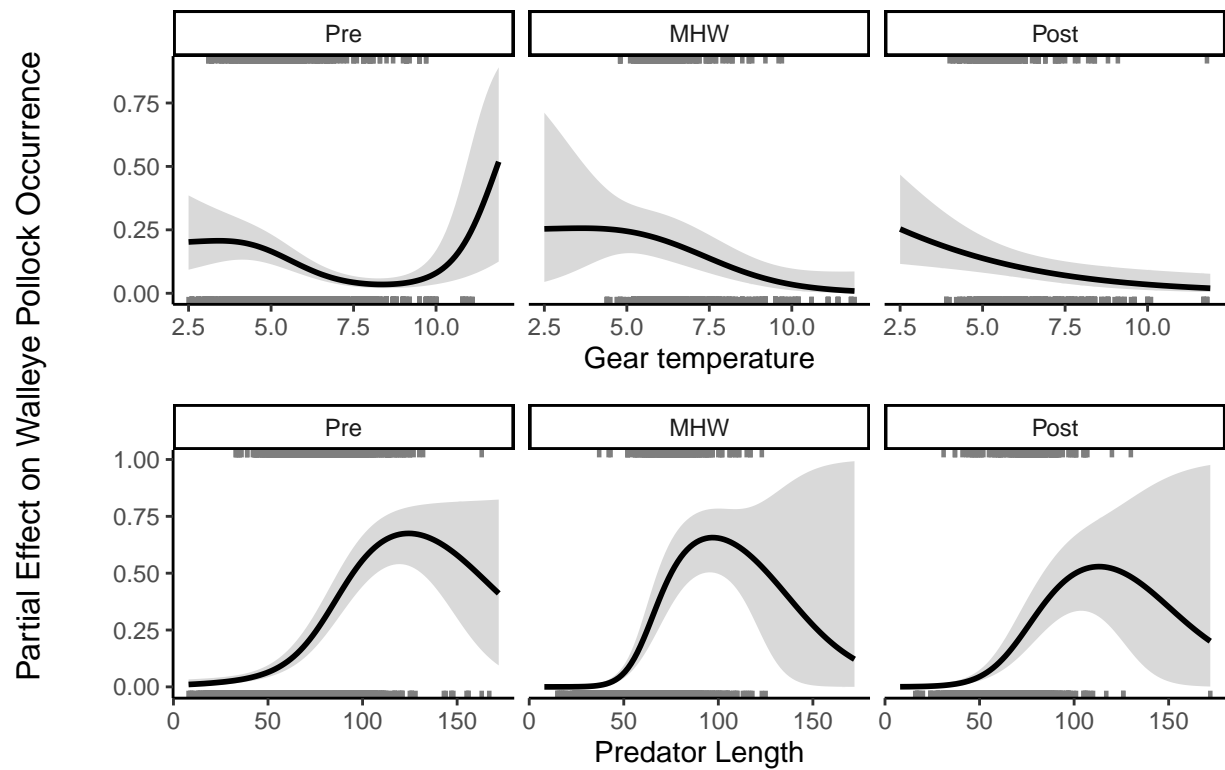




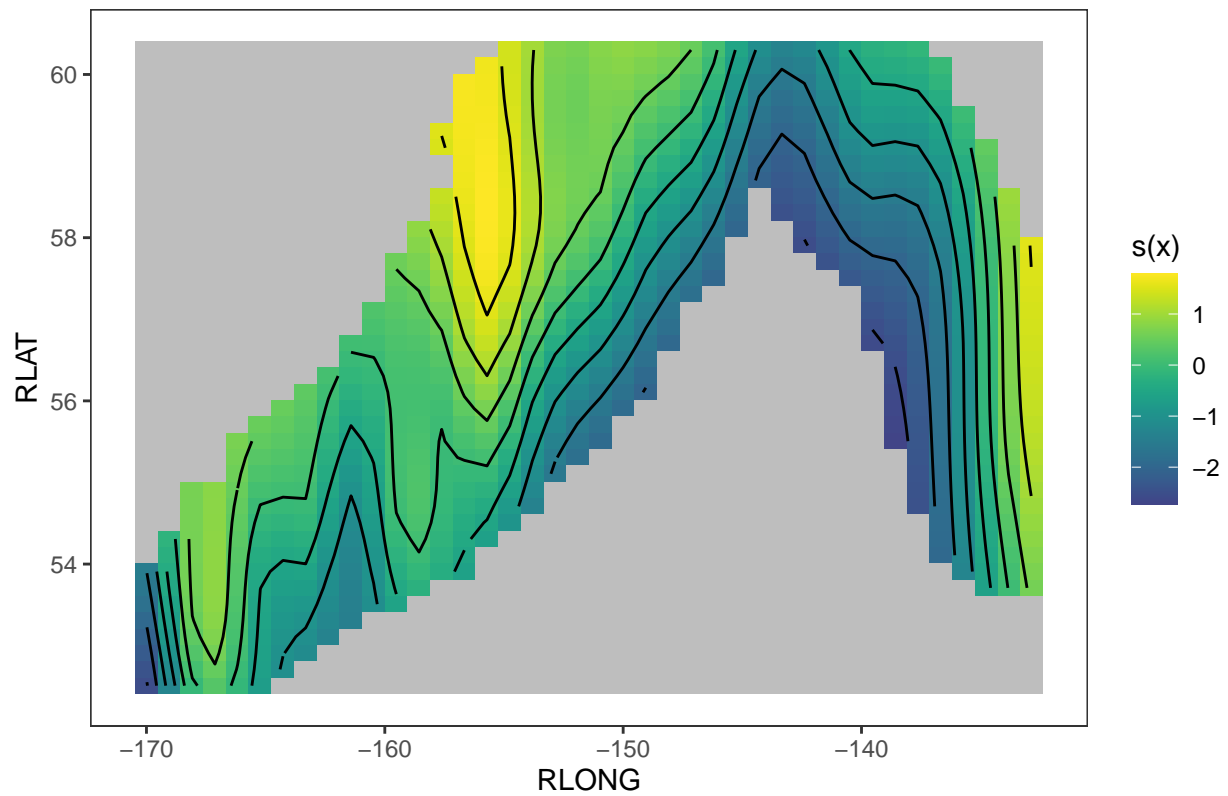


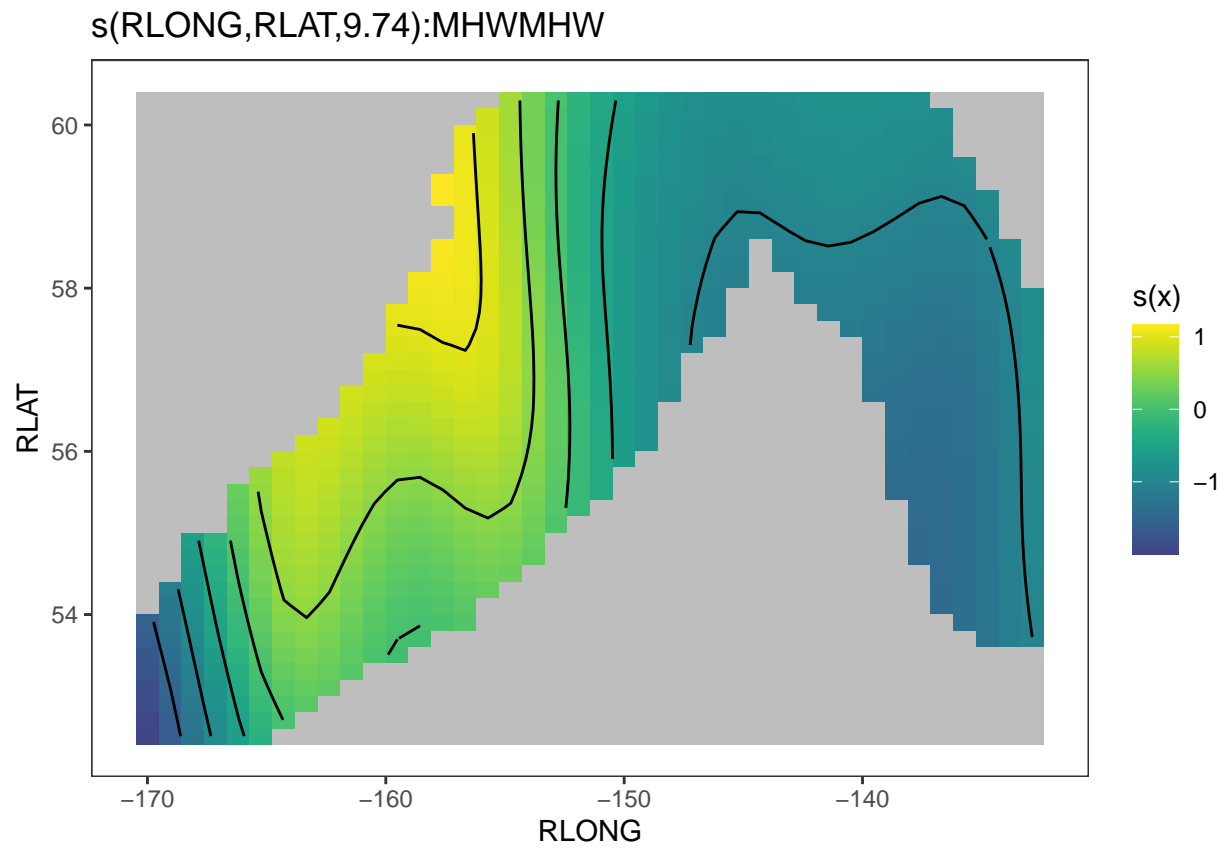
## Model 2: Walleye Pollock Prey

Predator: Pacific Halibut

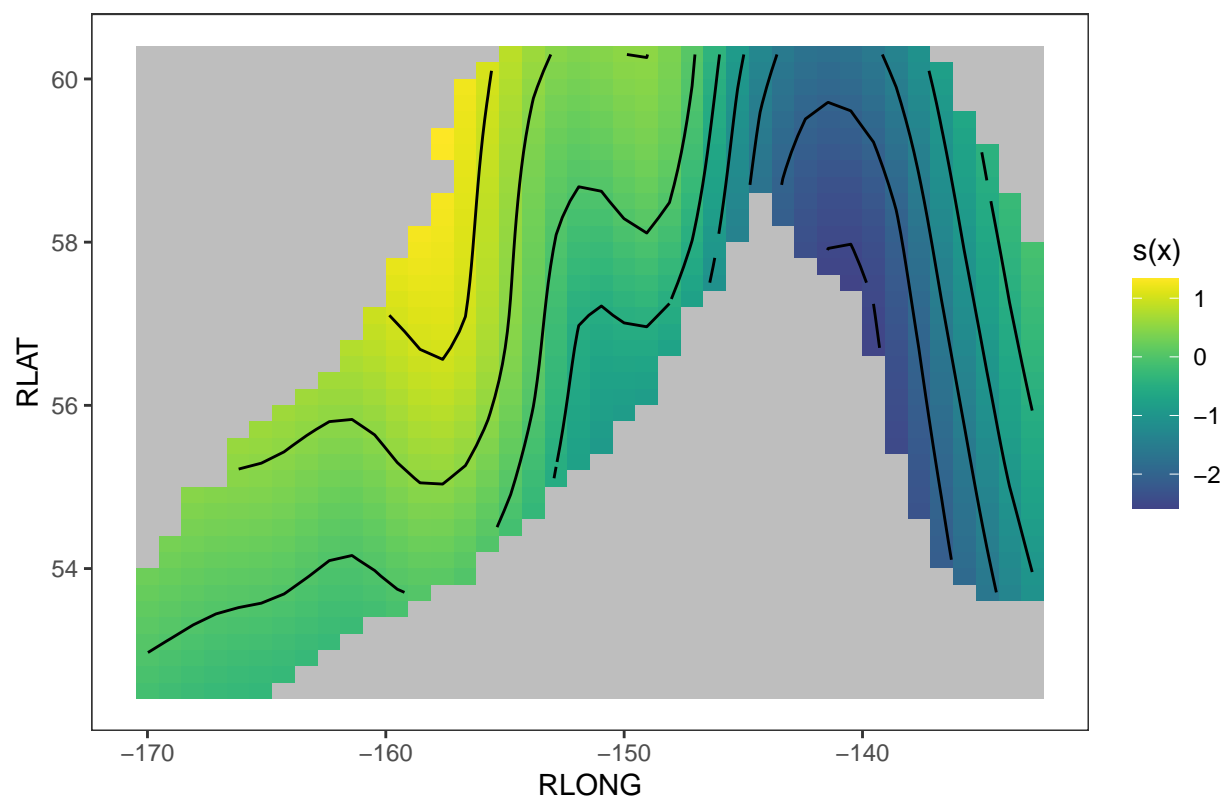


s(RLONG,RLAT,23.3):MHWPre



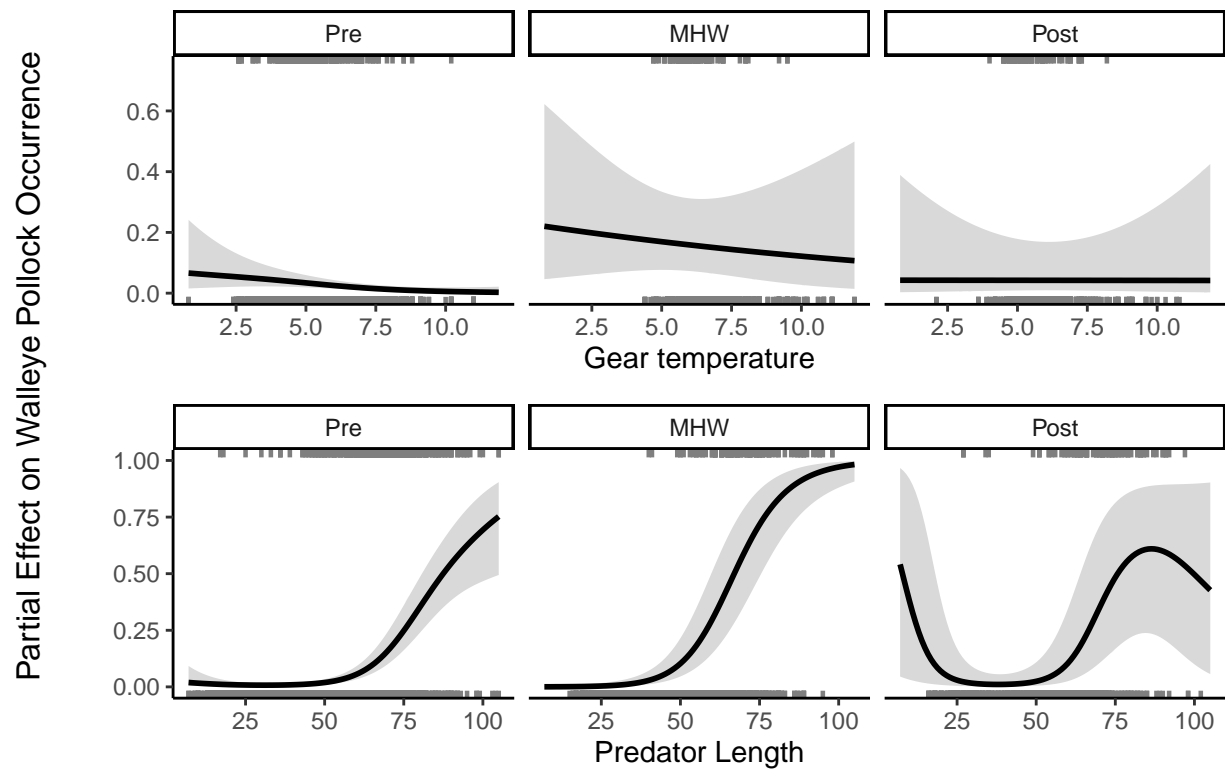


s(RLONG,RLAT,11.03):MHWPost

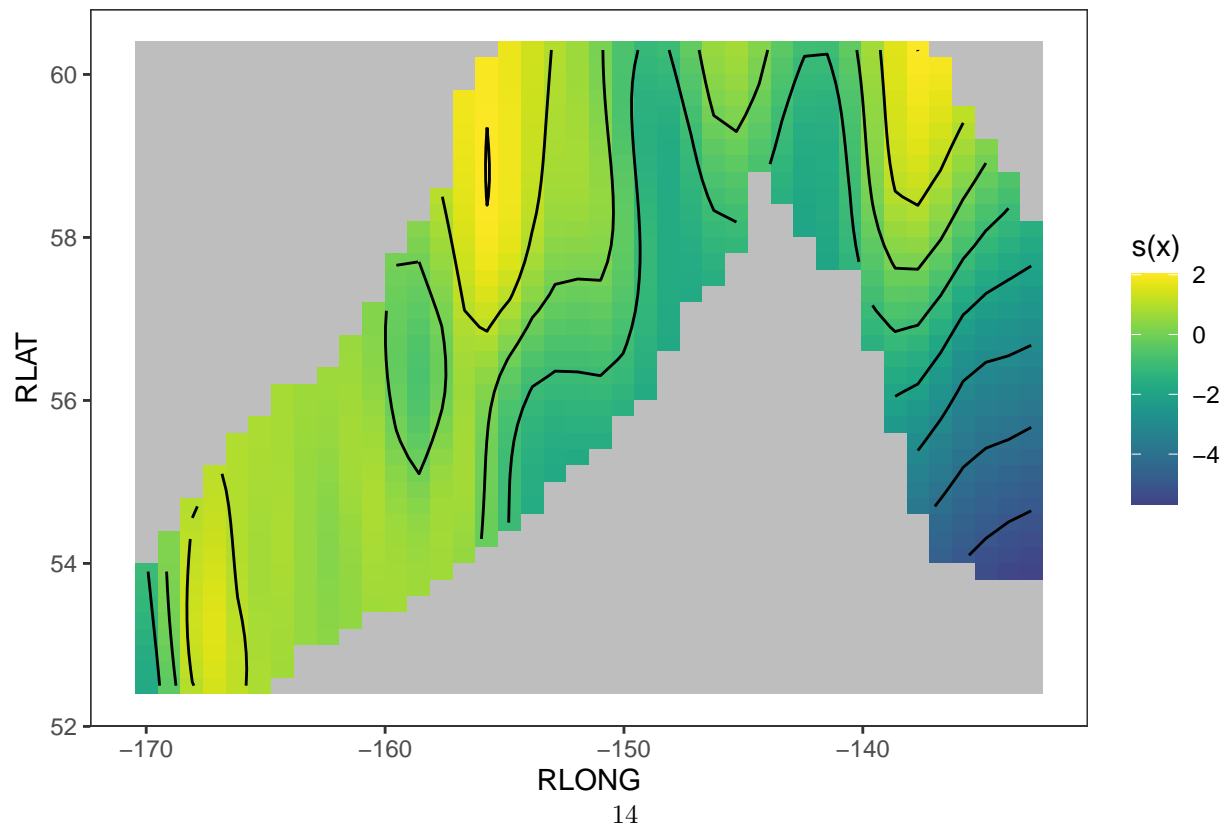


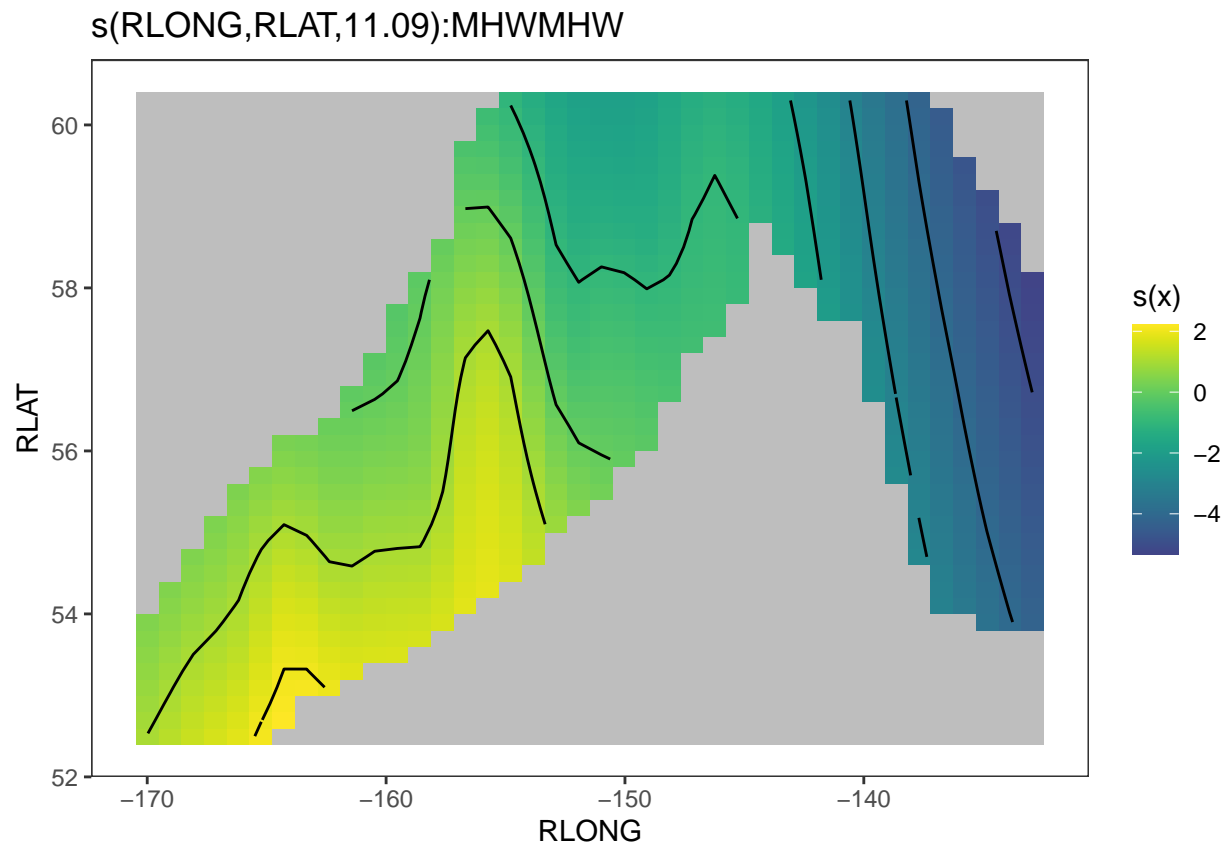
## Model 2: Walleye Pollock Prey

Predator: Pacific Cod

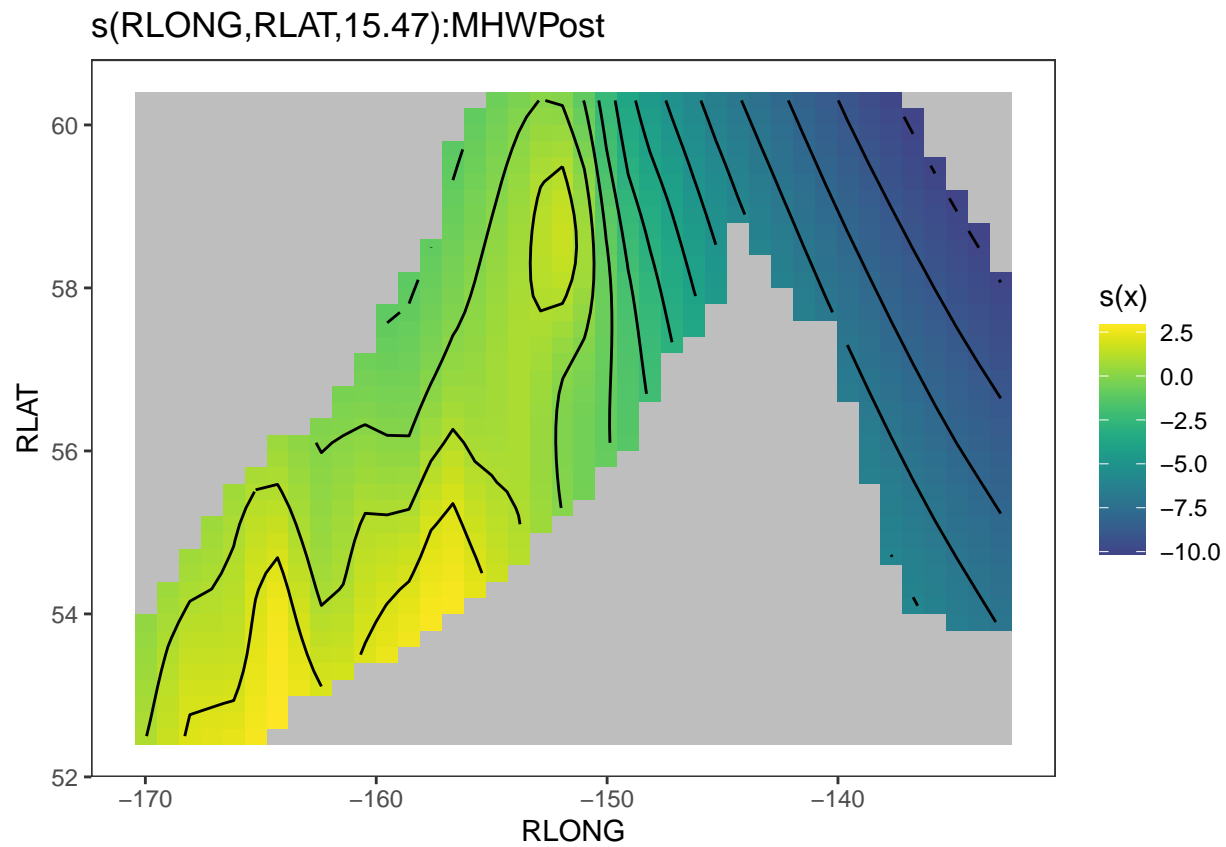


s(RLONG,RLAT,23.7):MHWPre



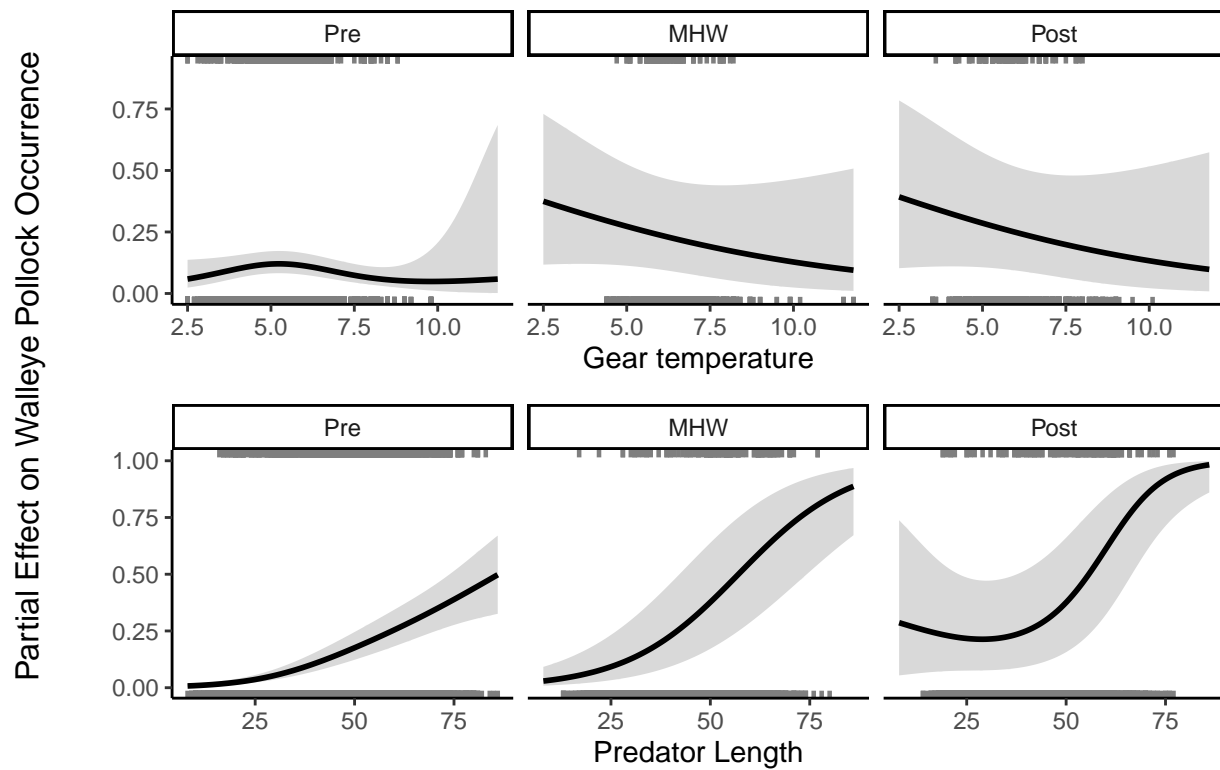




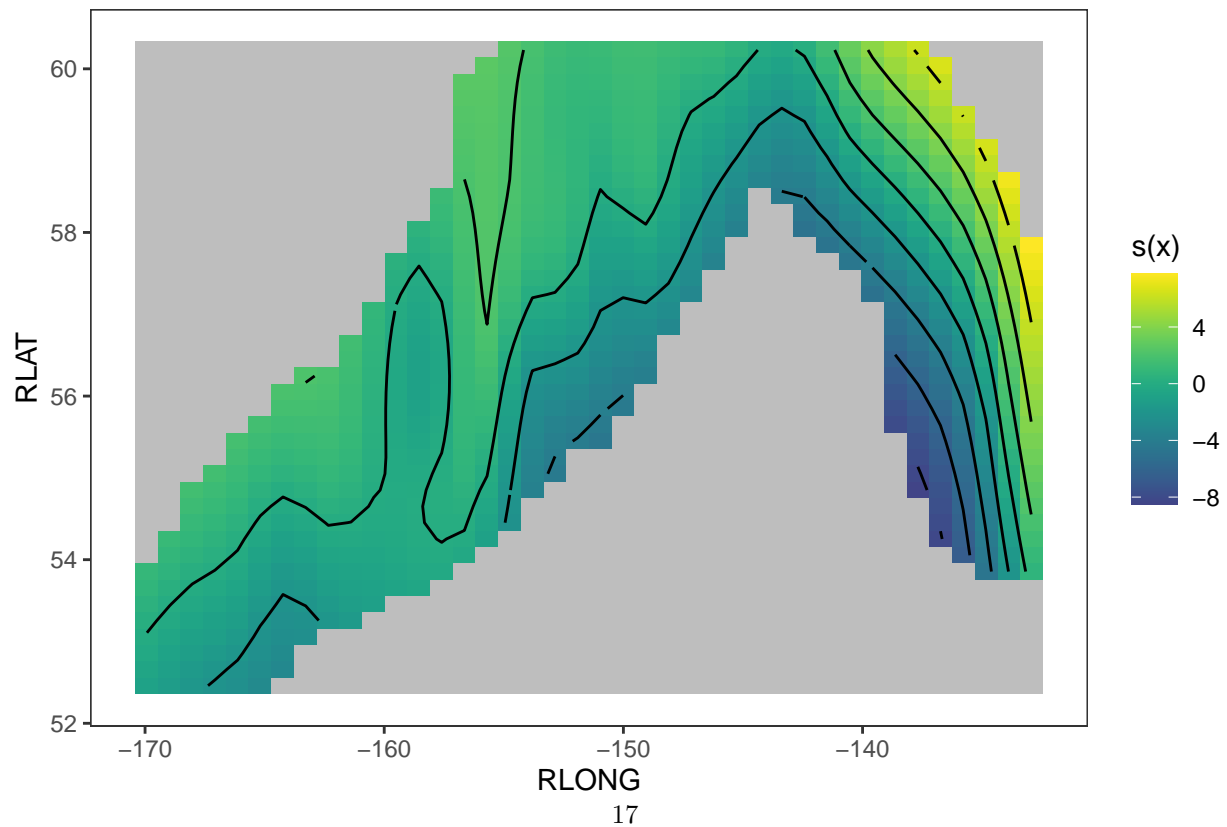


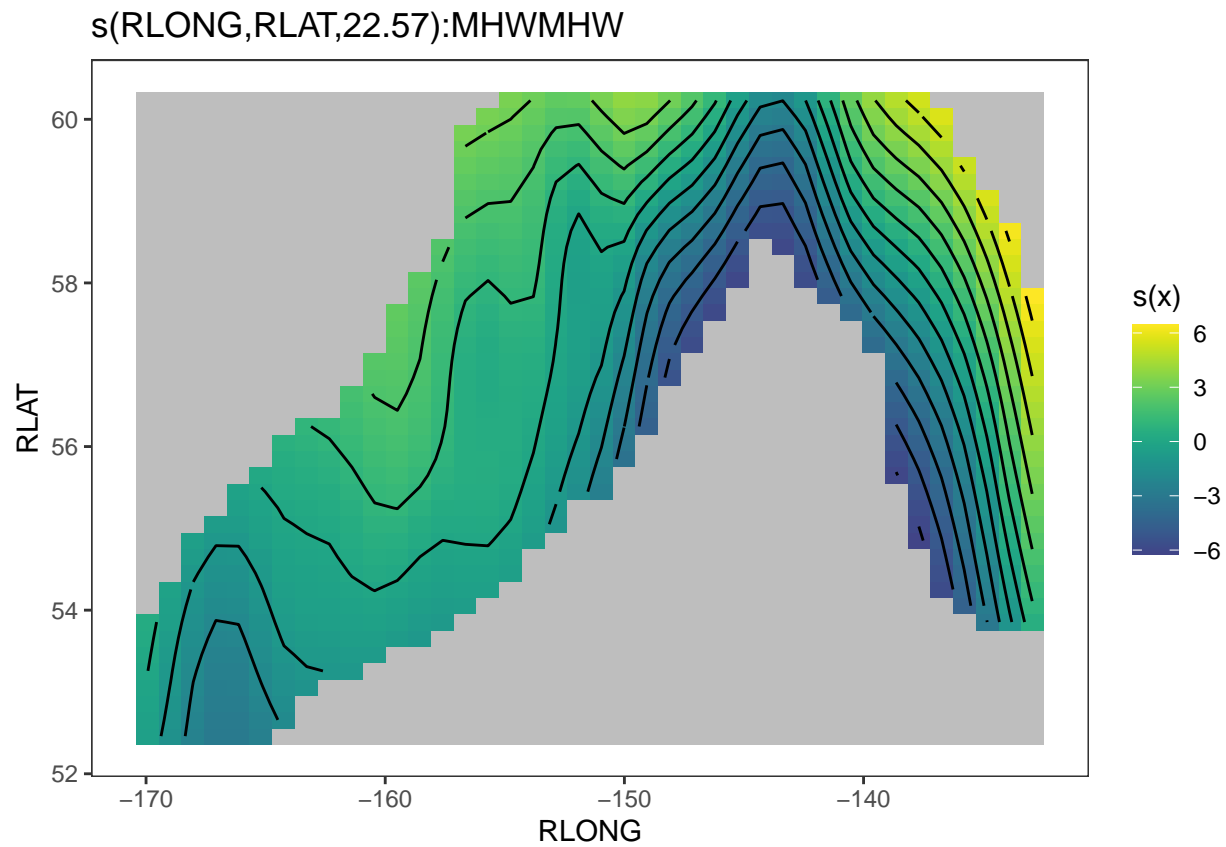
## Model 2: Walleye Pollock Prey

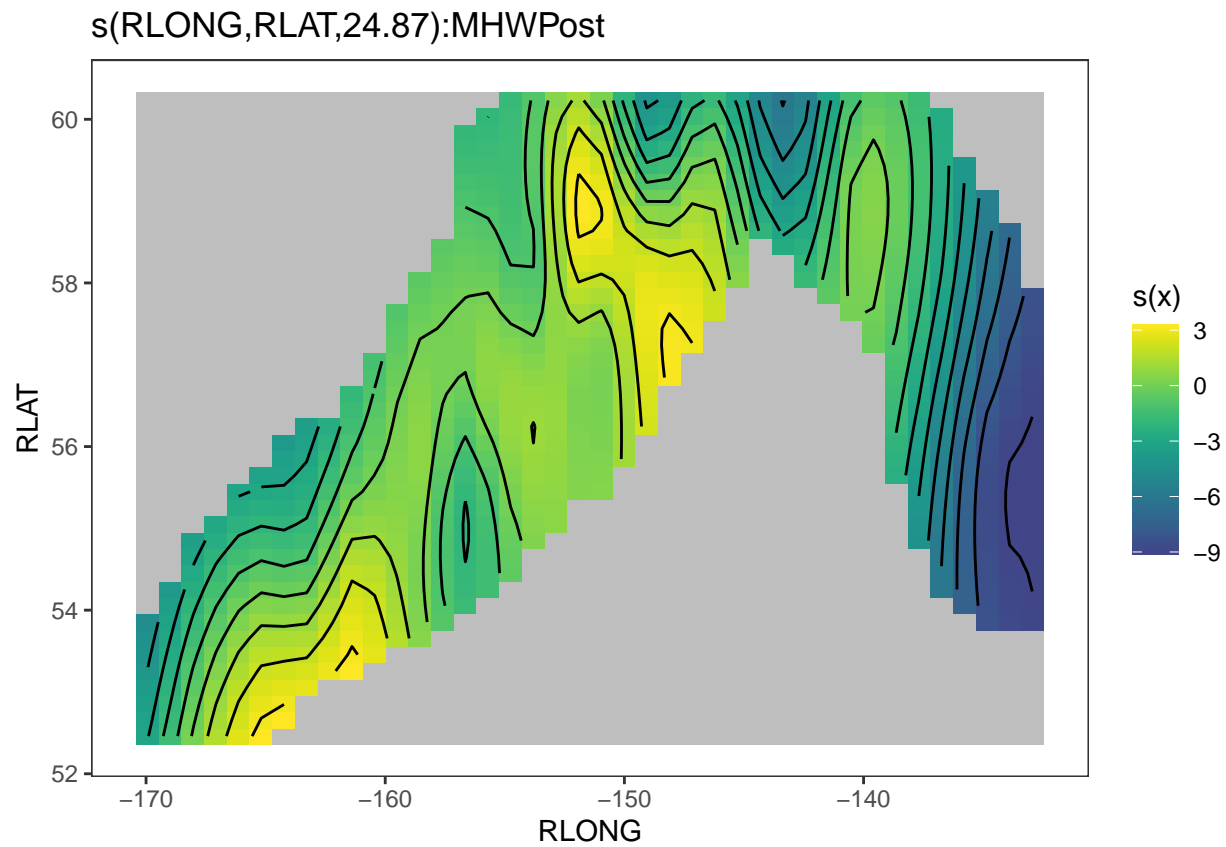
Predator: Arrowtooth Flounder



$s(\text{RLONG}, \text{RLAT}, 27.77): \text{MHWPre}$

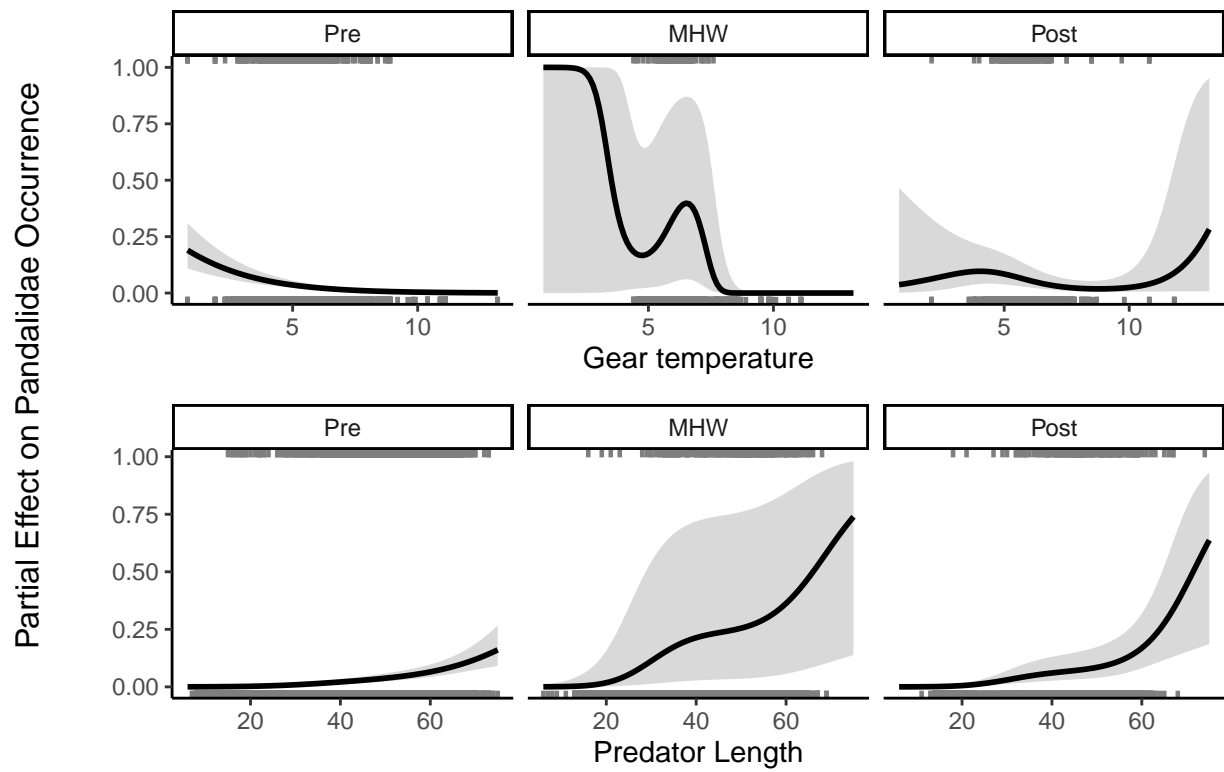




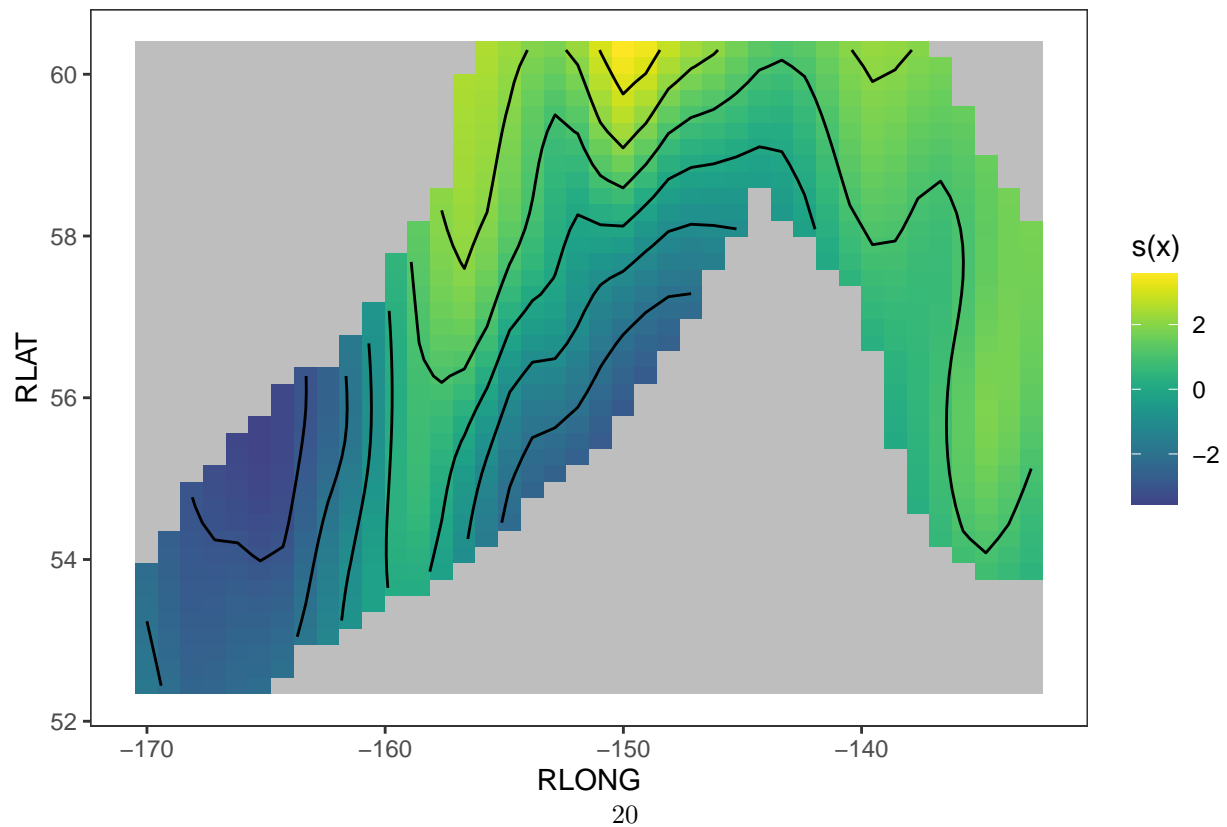


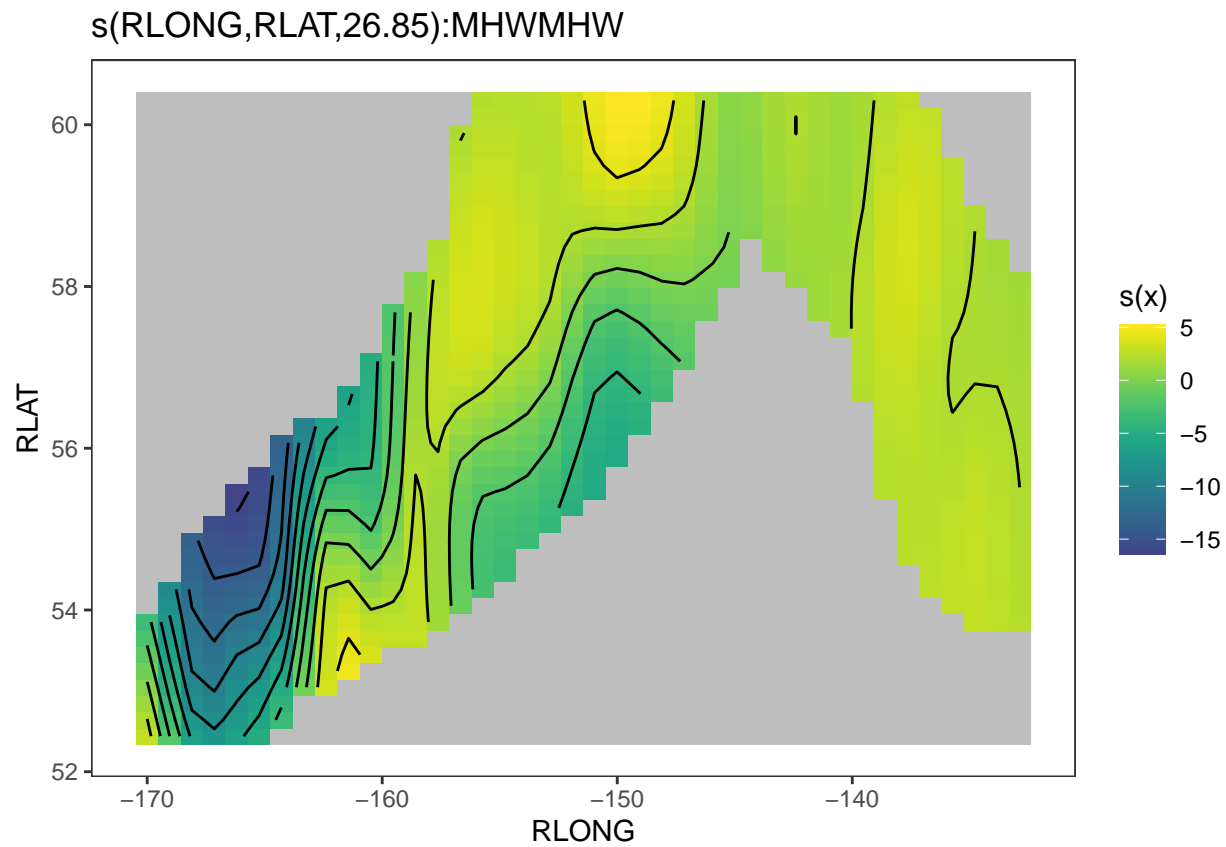
### Model 3: Pandalidae Prey

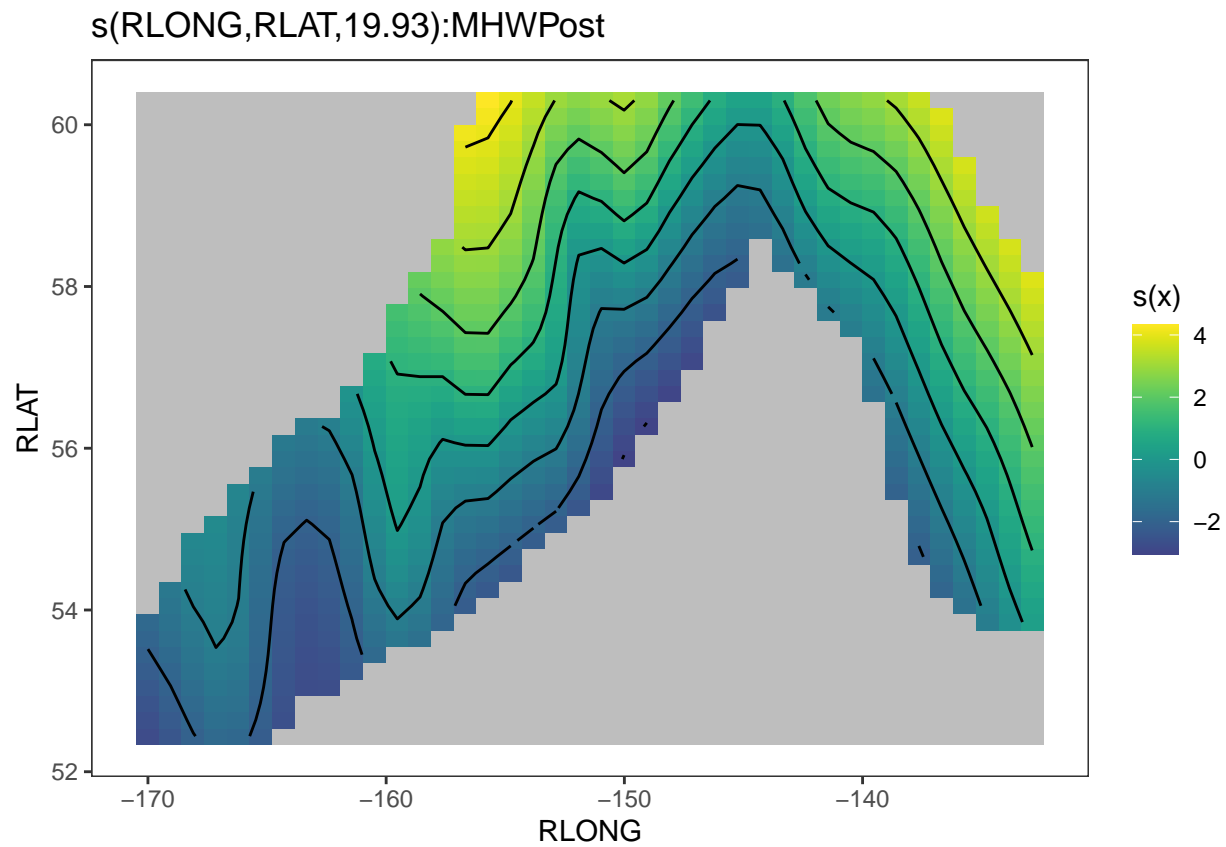
Predator: Walleye Pollock



$s(\text{RLONG}, \text{RLAT}, 25.08): \text{MHWPre}$

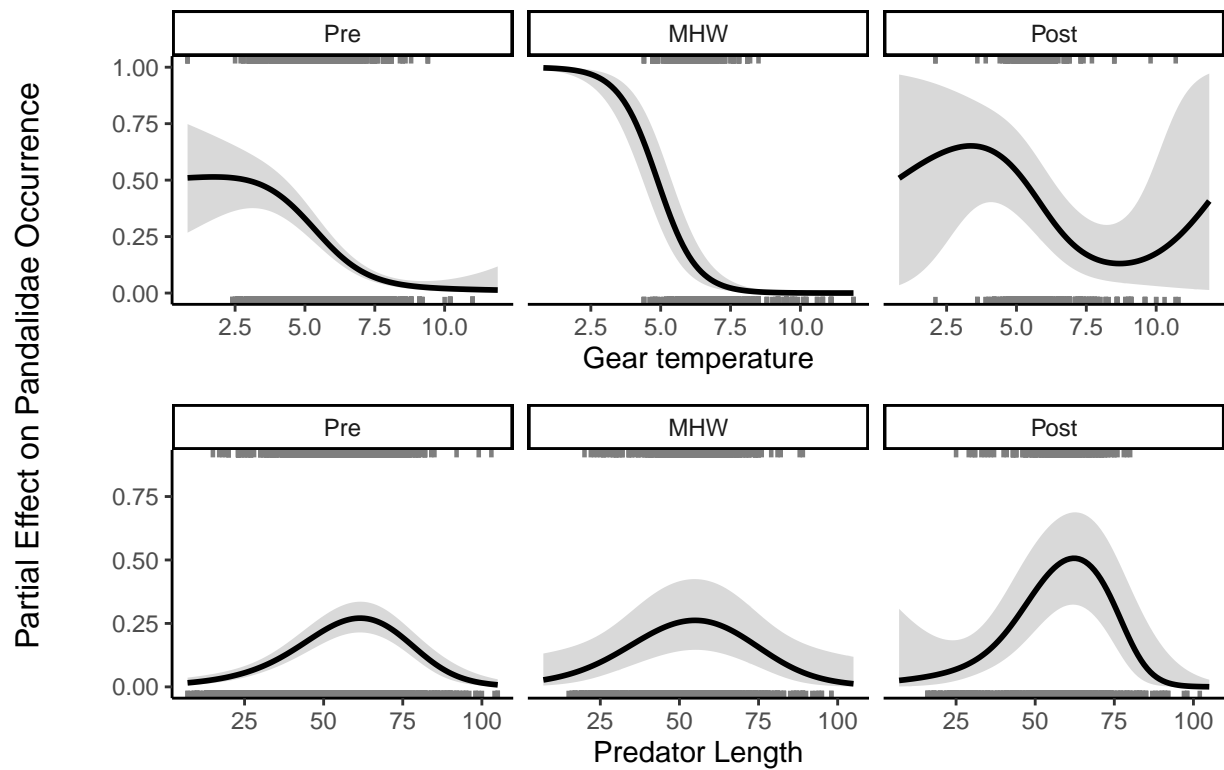




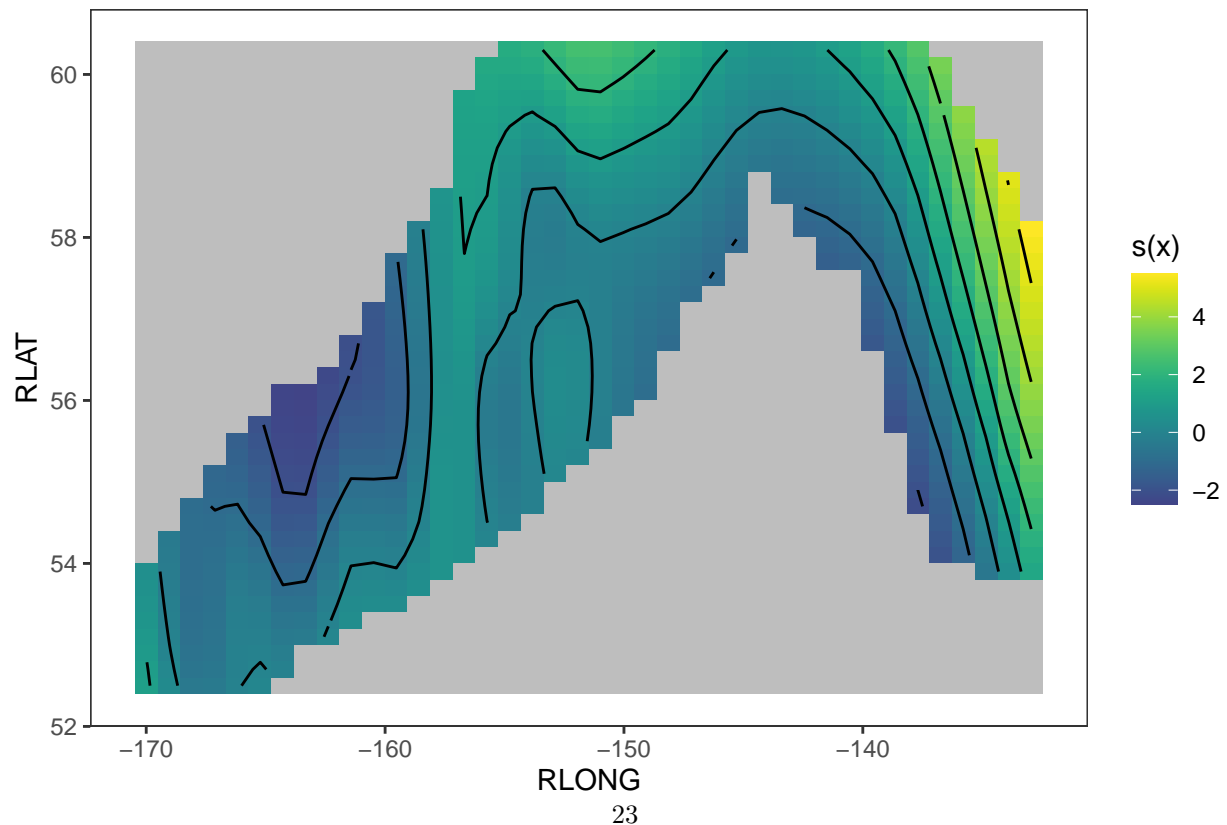


### Model 3: Pandalidae Prey

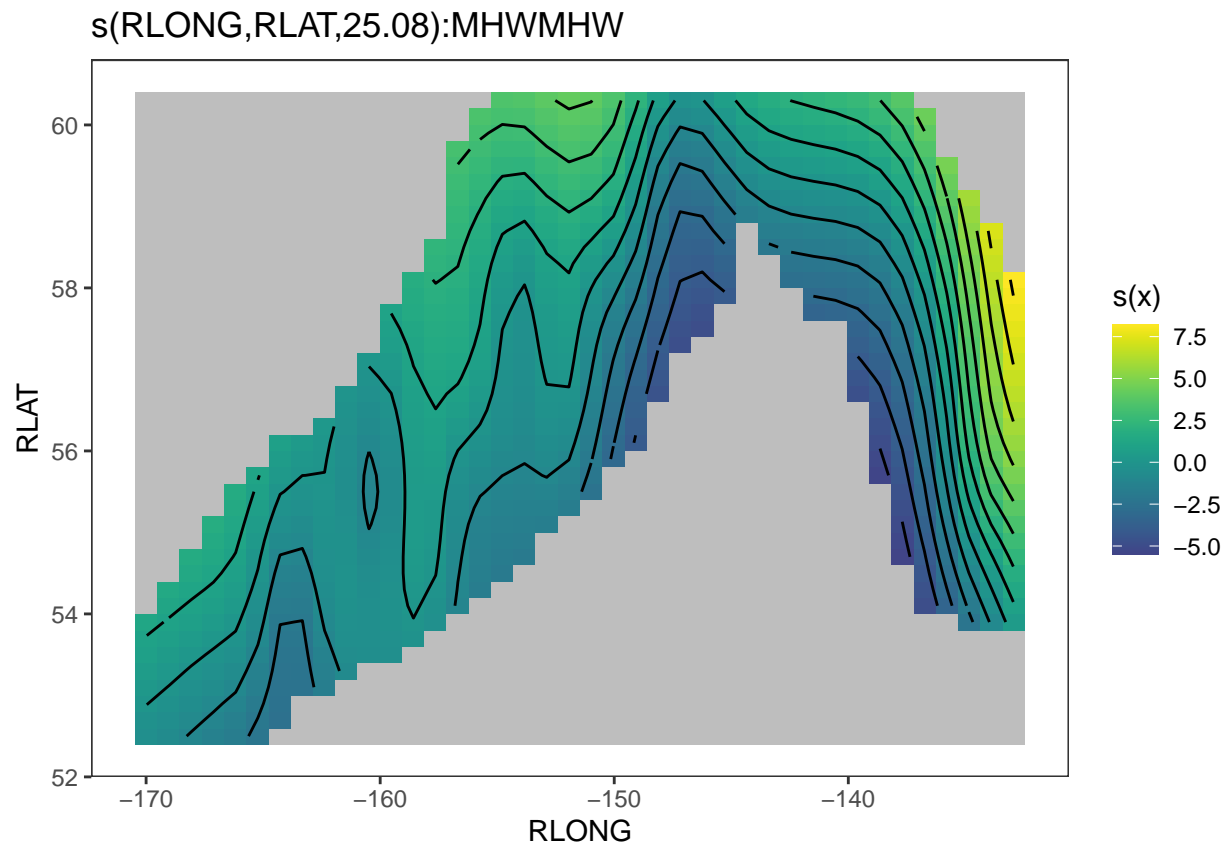
Predator: Walleye Pollock

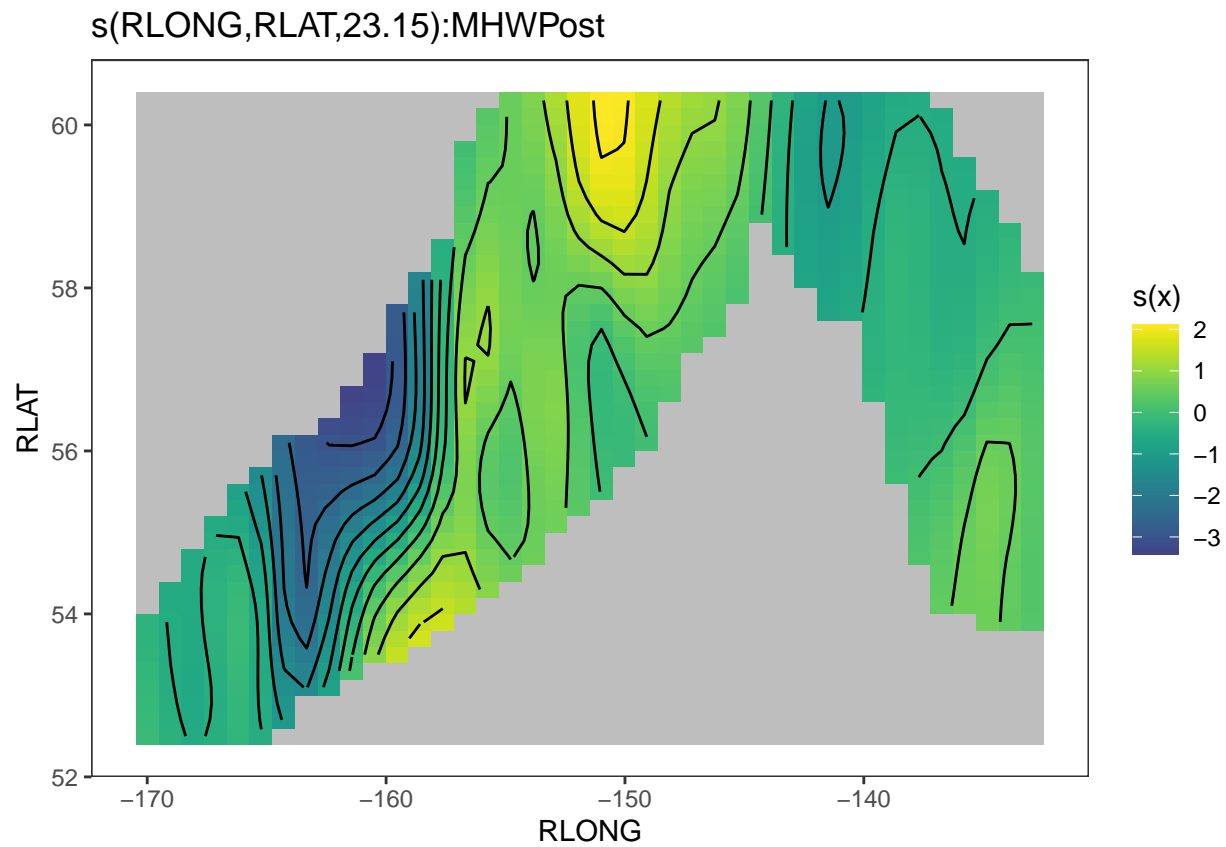


$s(\text{RLONG}, \text{RLAT}, 27.23): \text{MHWPre}$



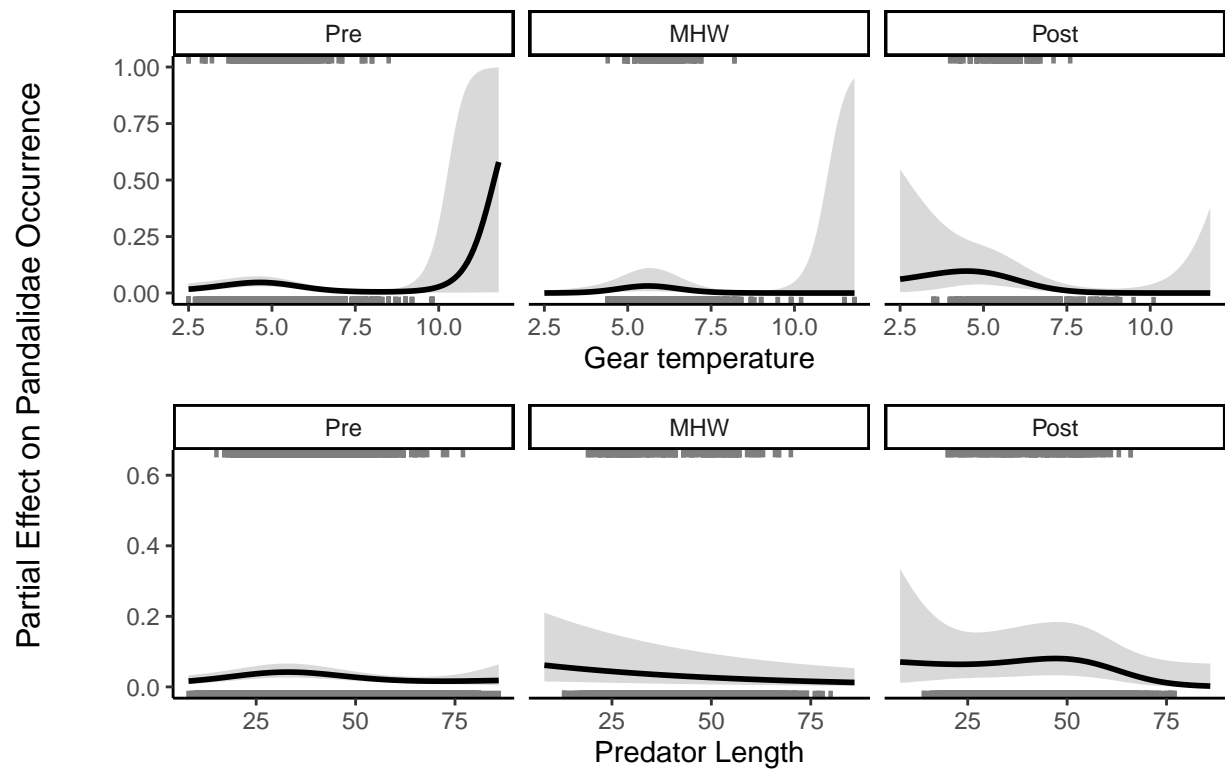




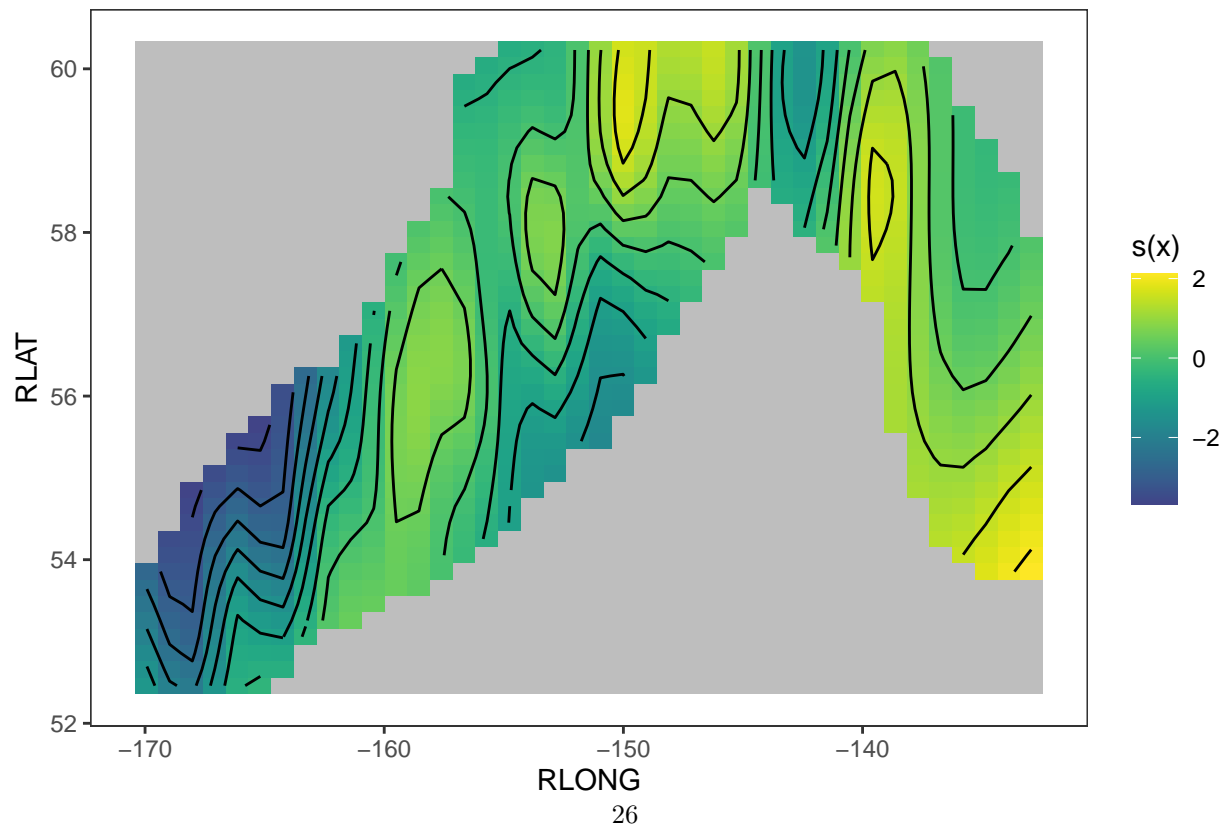


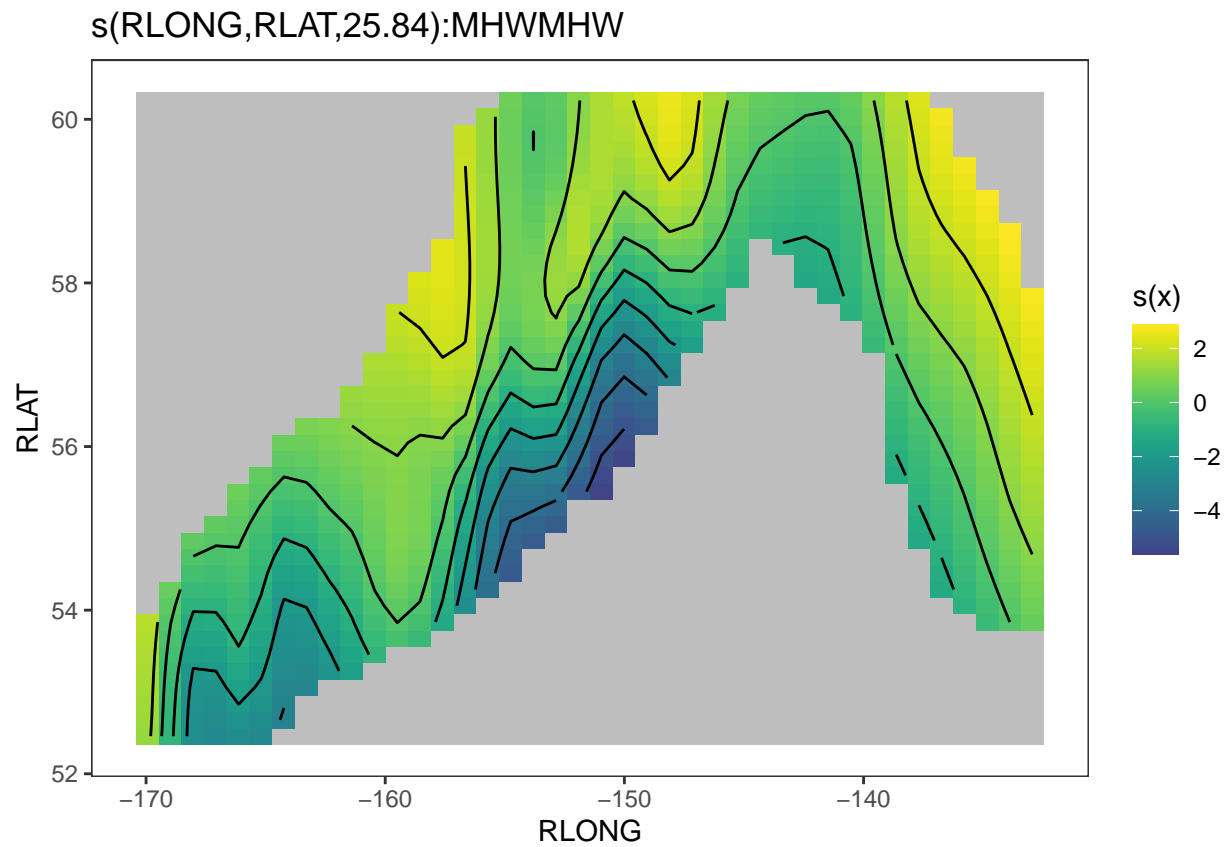
### Model 3: Pandalidae Prey

Predator: Arrowtooth Flounder

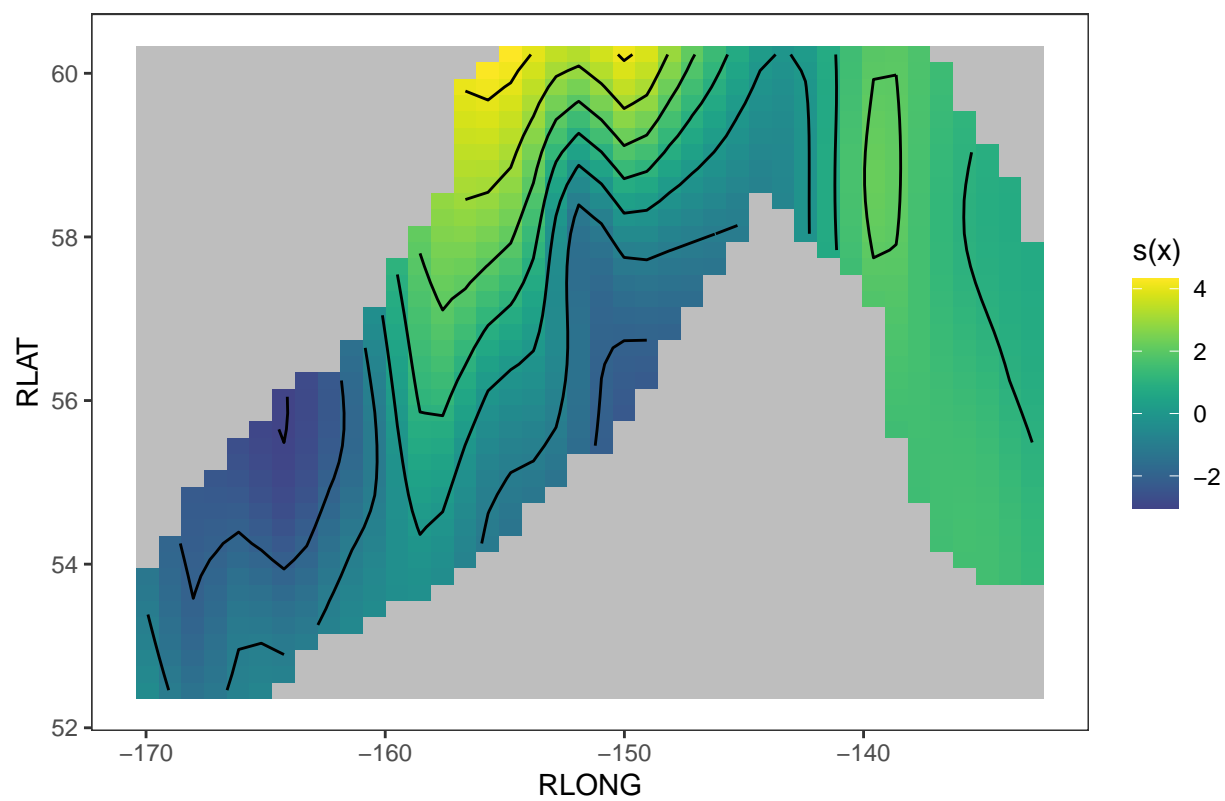


s(RLONG,RLAT,27.38):MHWPre



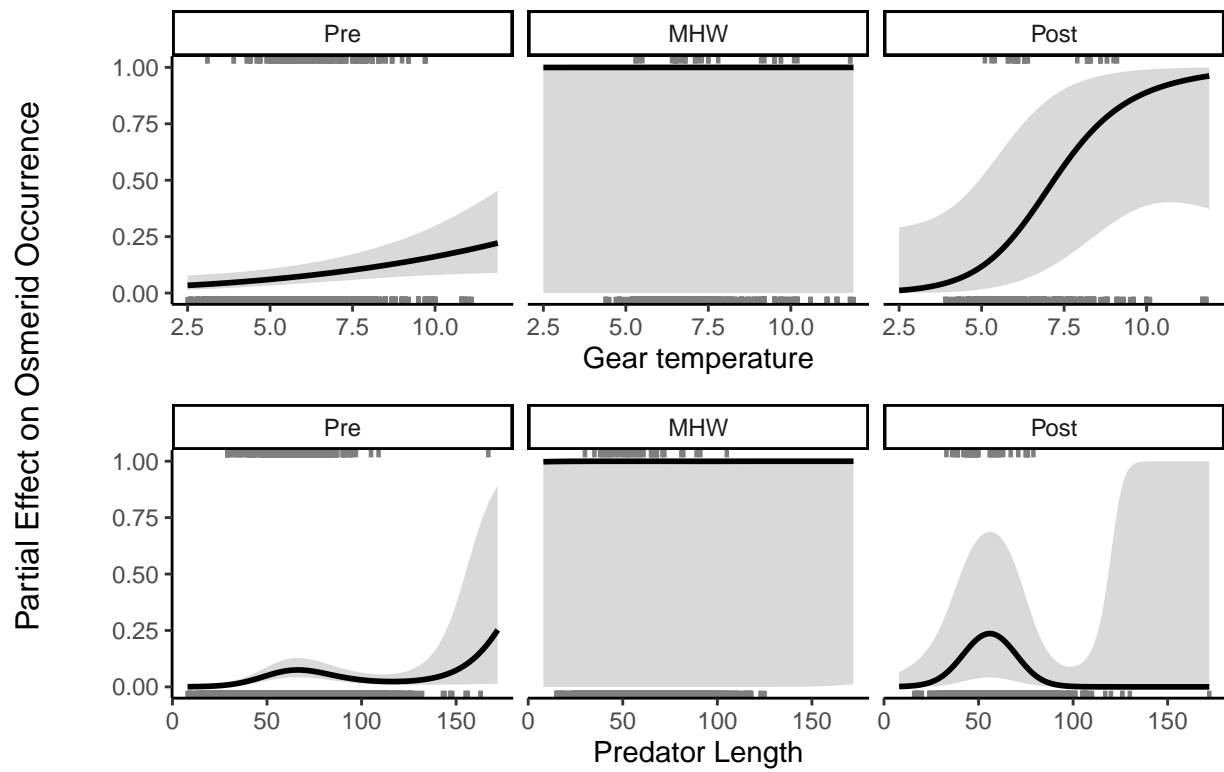


s(RLONG,RLAT,21.85):MHWPost

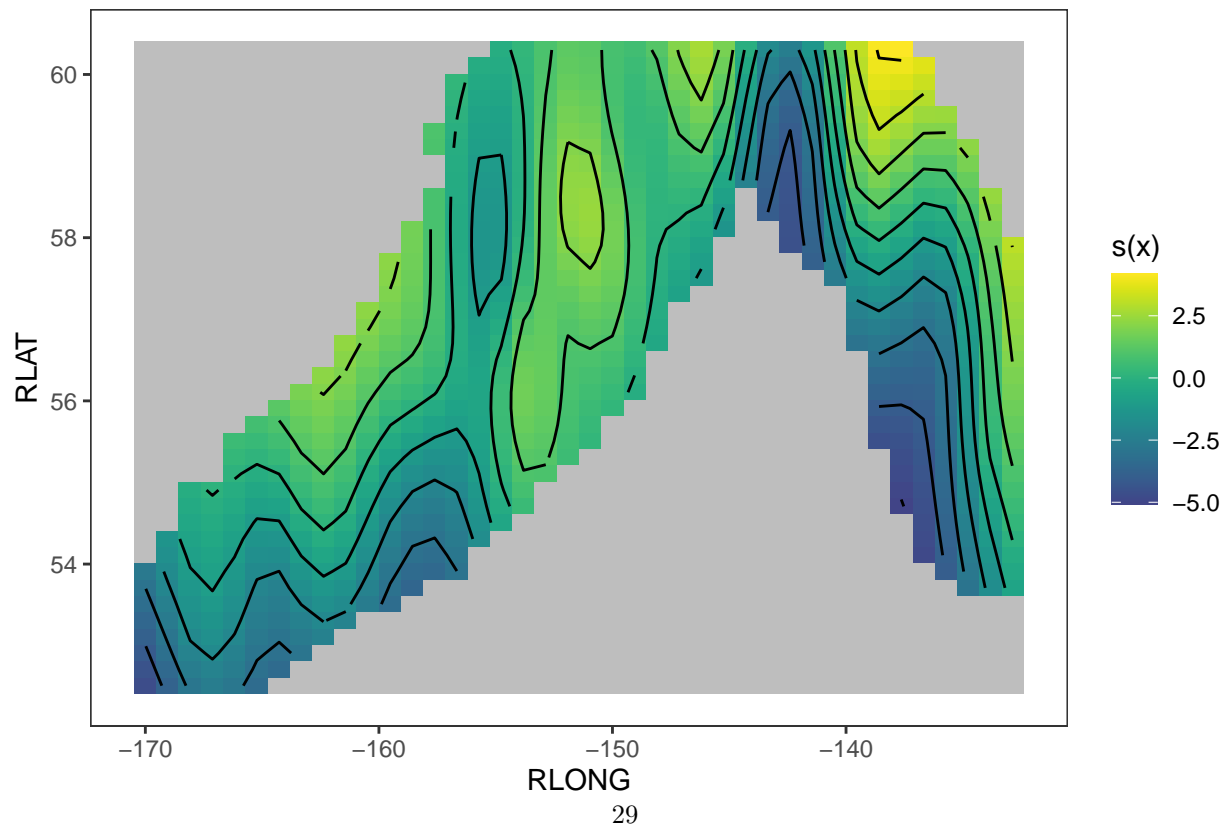


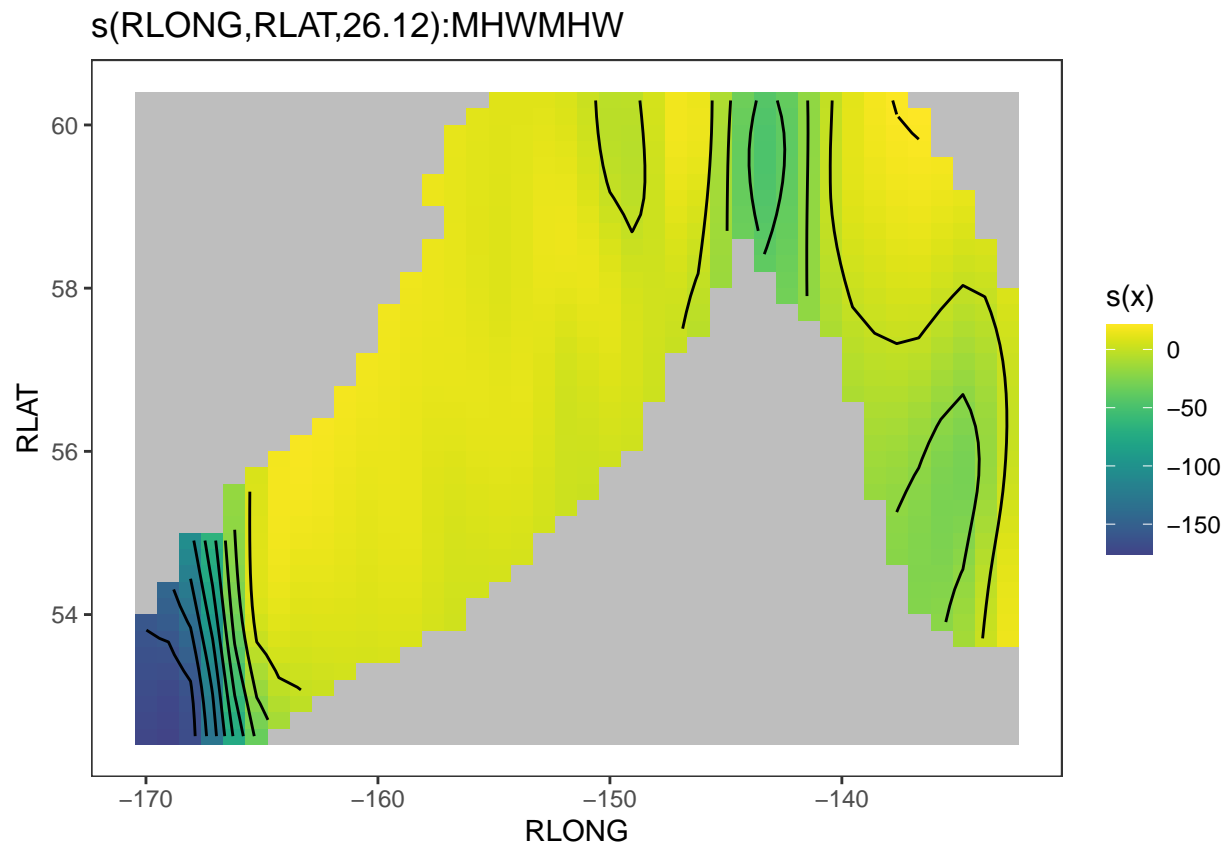
## Model 5: Osmerid Prey

Predator: Pacific Halibut

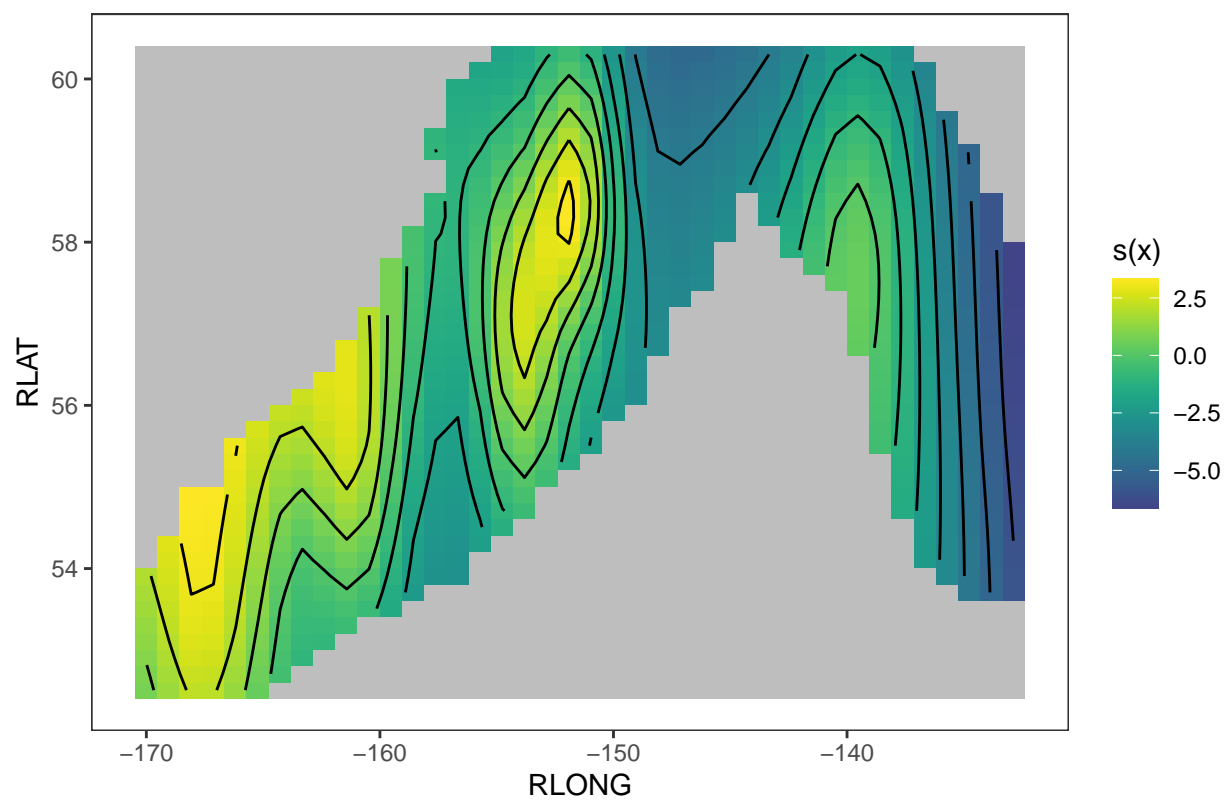


s(RLONG,RLAT,25.54):MHWPre





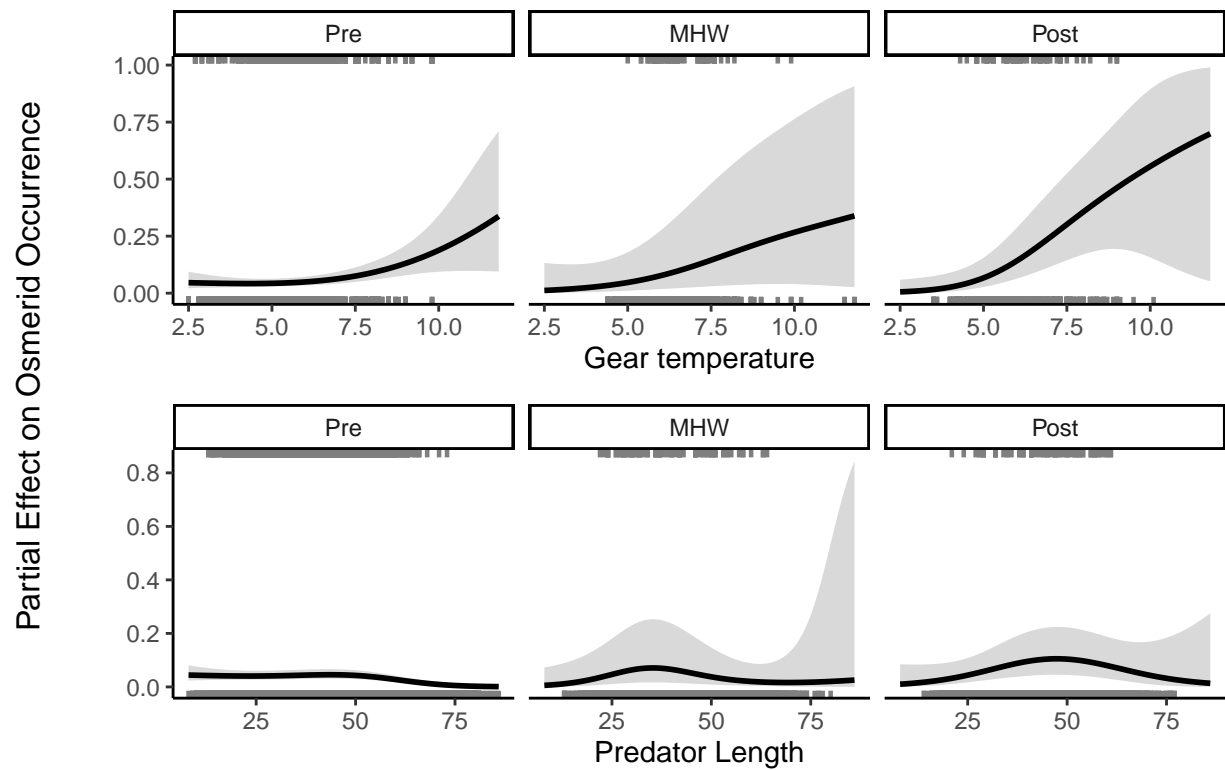
s(RLONG,RLAT,15.77):MHWPost



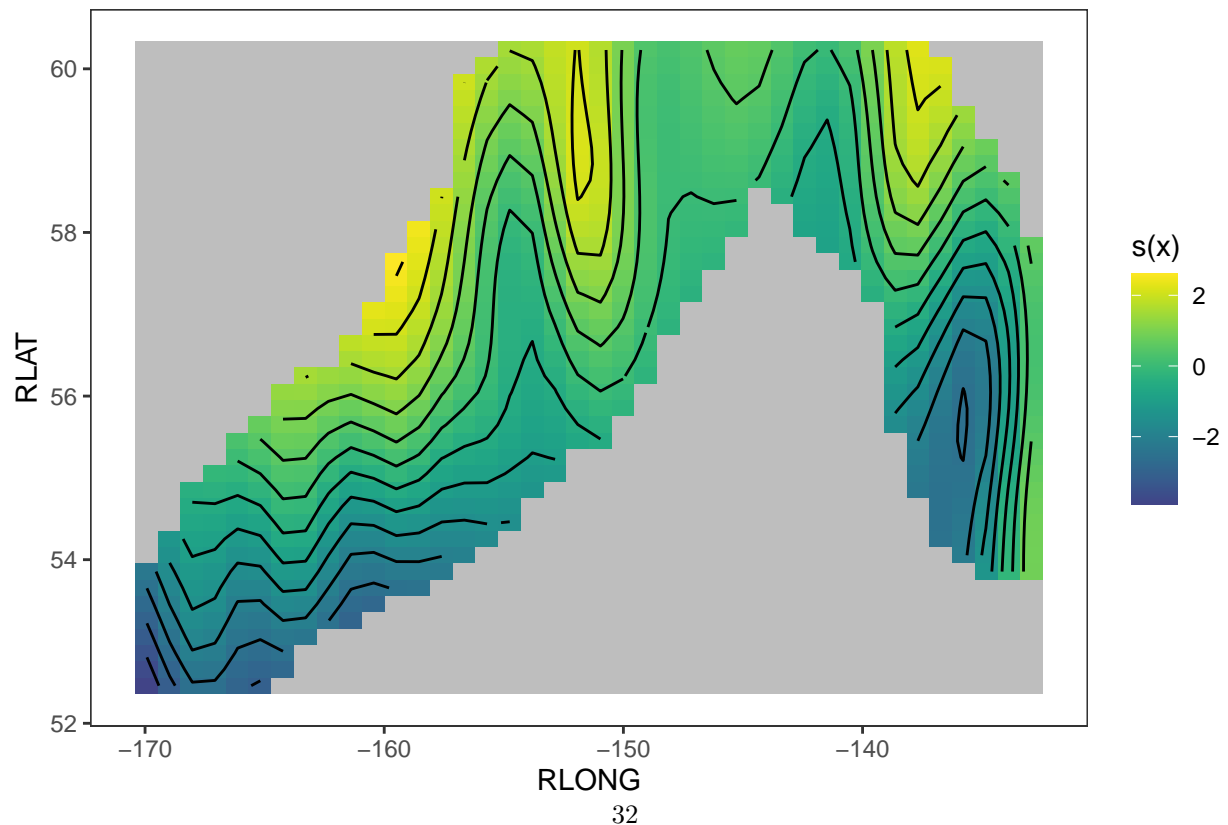


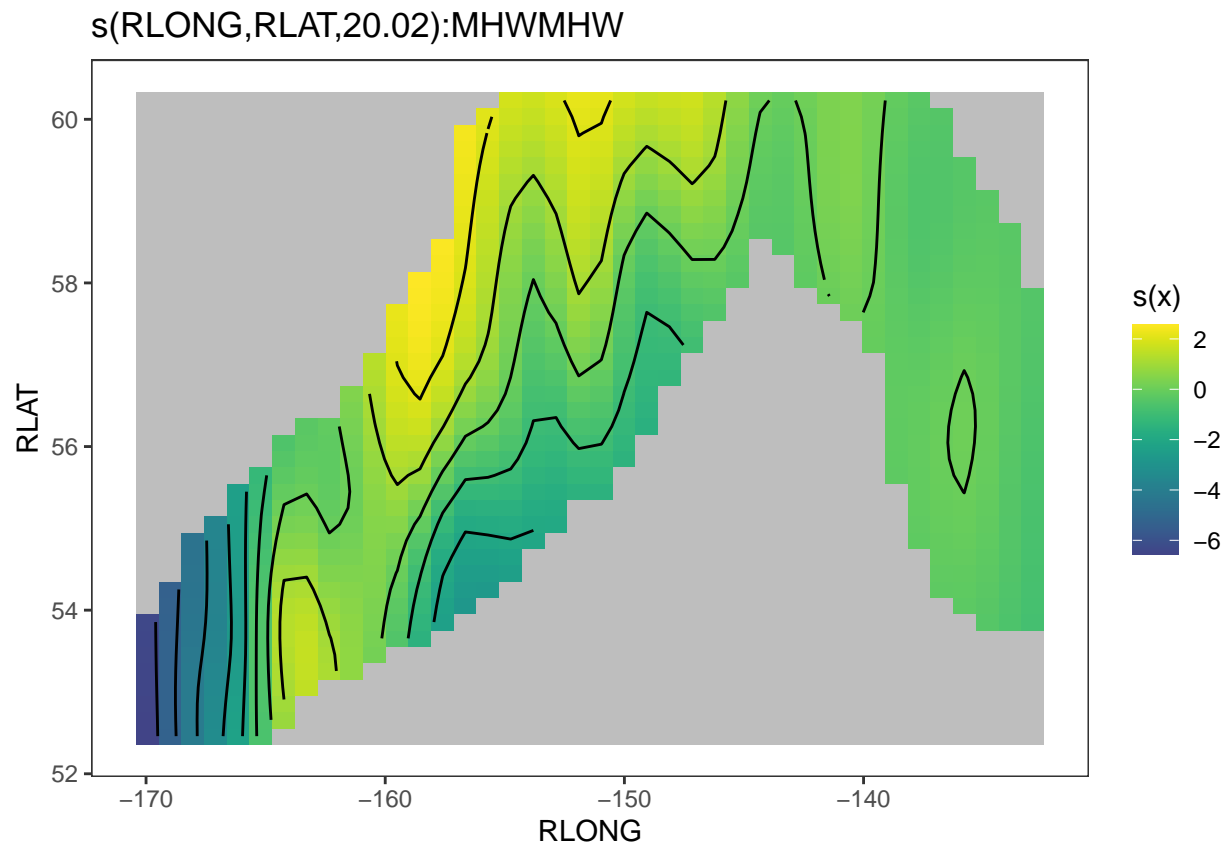
## Model 5: Osmerid Prey

Predator: Arrowtooth Flounder

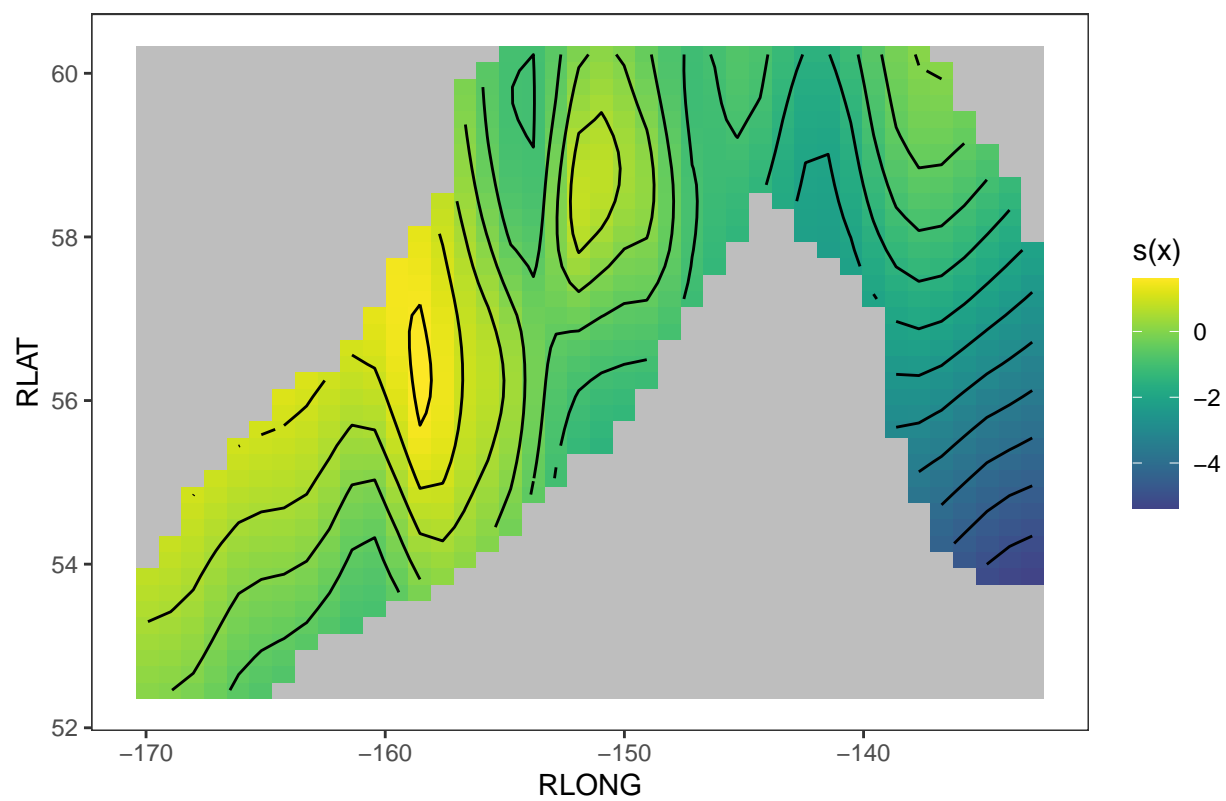


$s(\text{RLONG}, \text{RLAT}, 26.29): \text{MHWPre}$



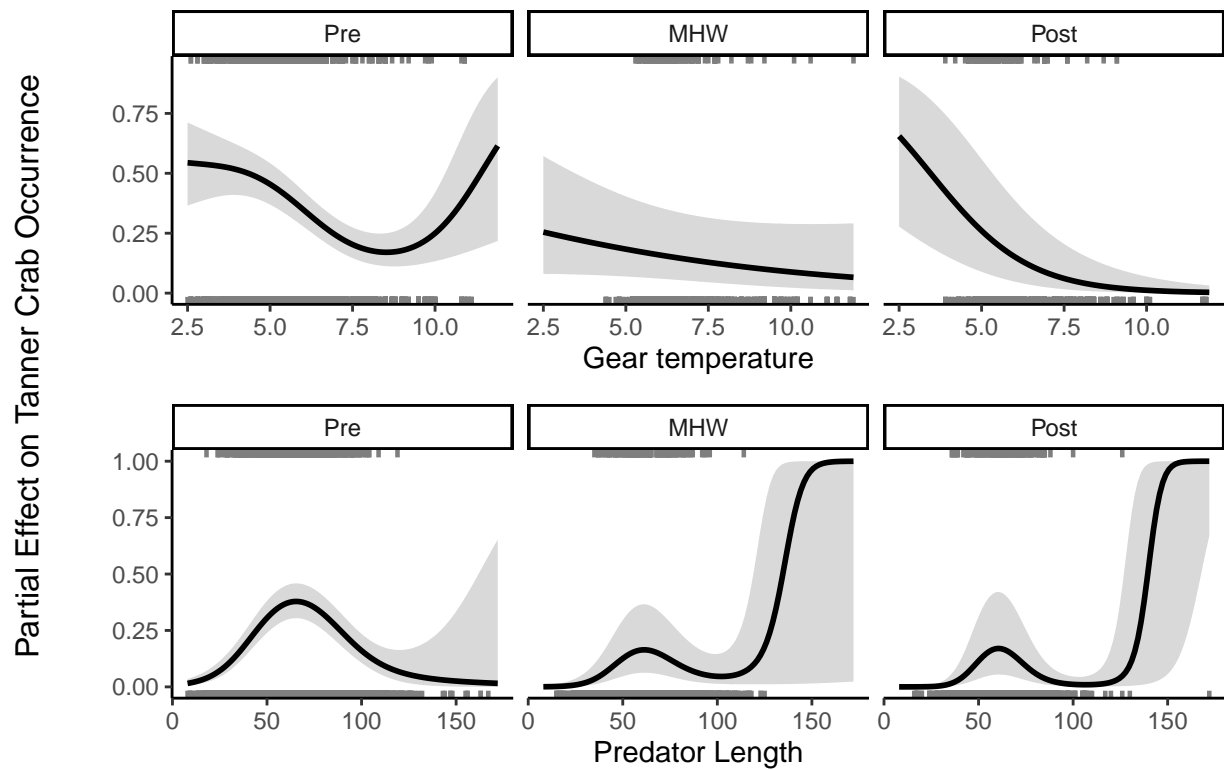


s(RLONG,RLAT,16.56):MHWPost

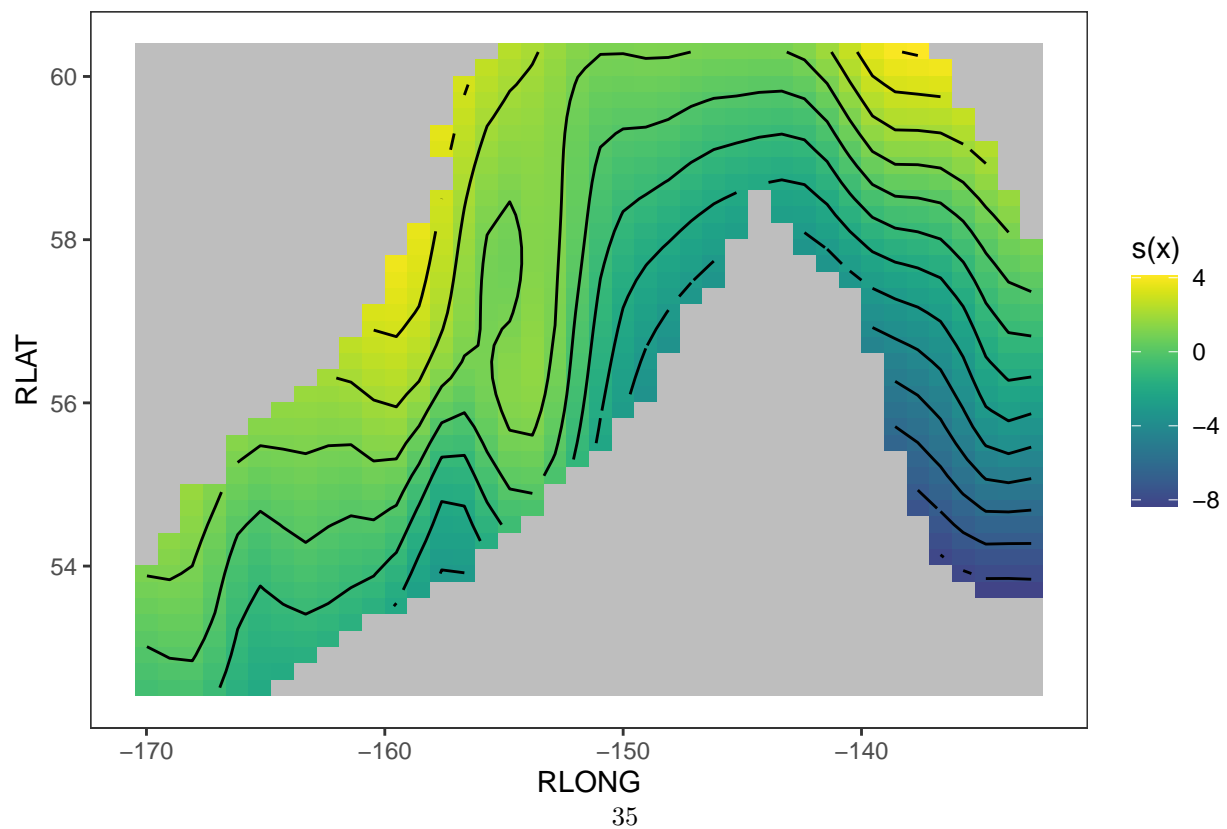


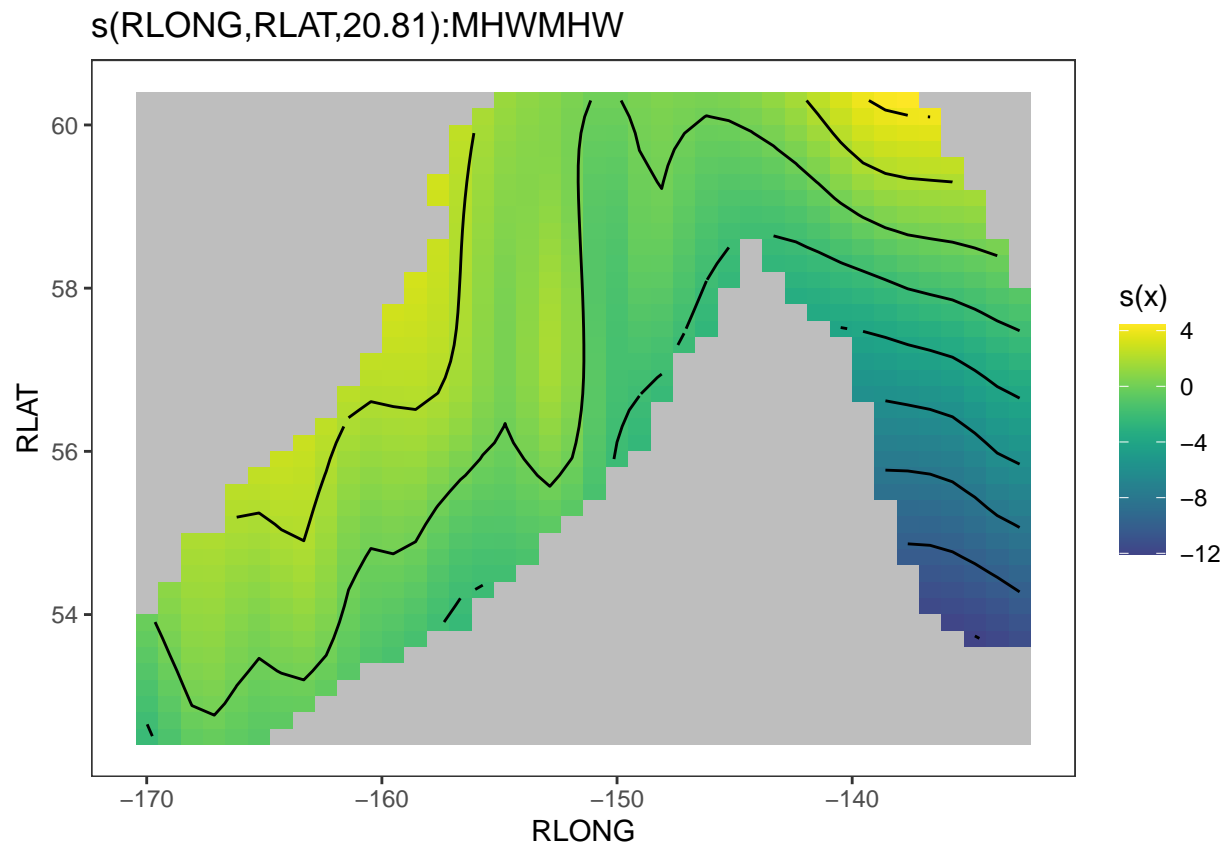
## Model 6: Tanner Crab Prey Occurrence

Predator: Pacific Halibut

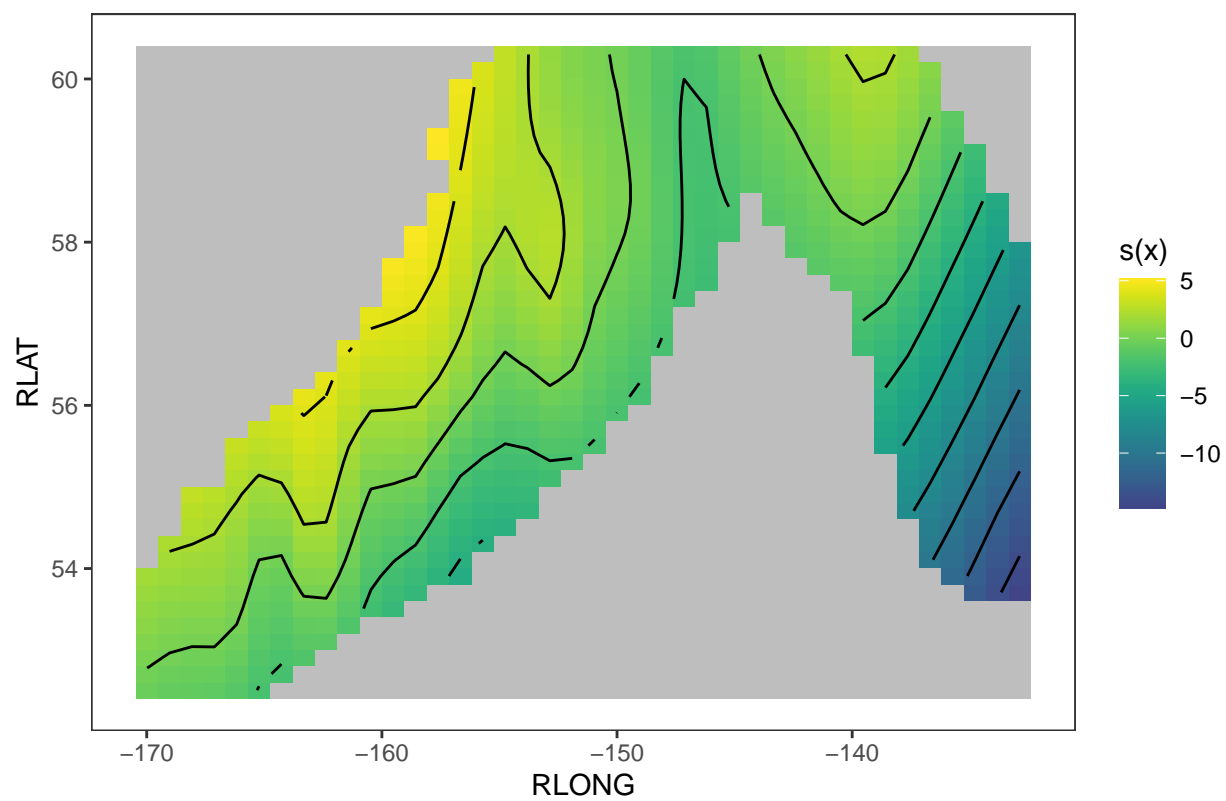


s(RLONG,RLAT,25.95):MHWPre



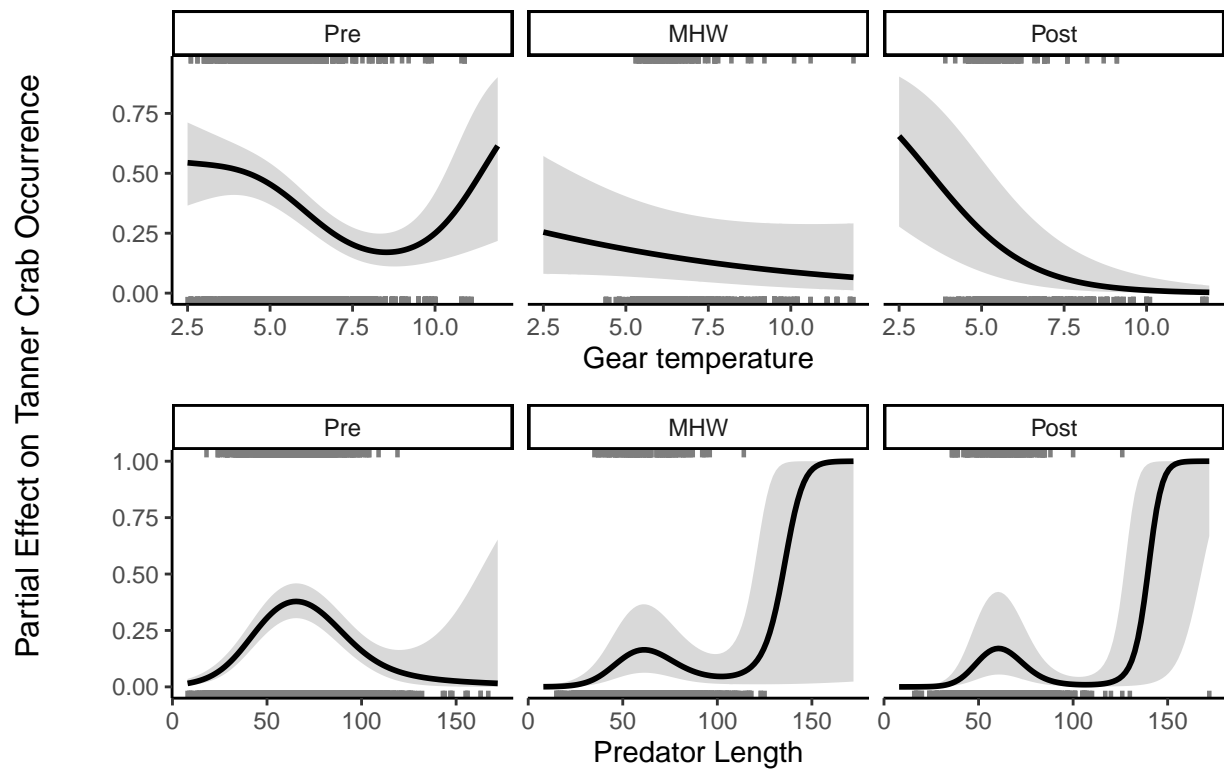


s(RLONG,RLAT,20.85):MHWPost

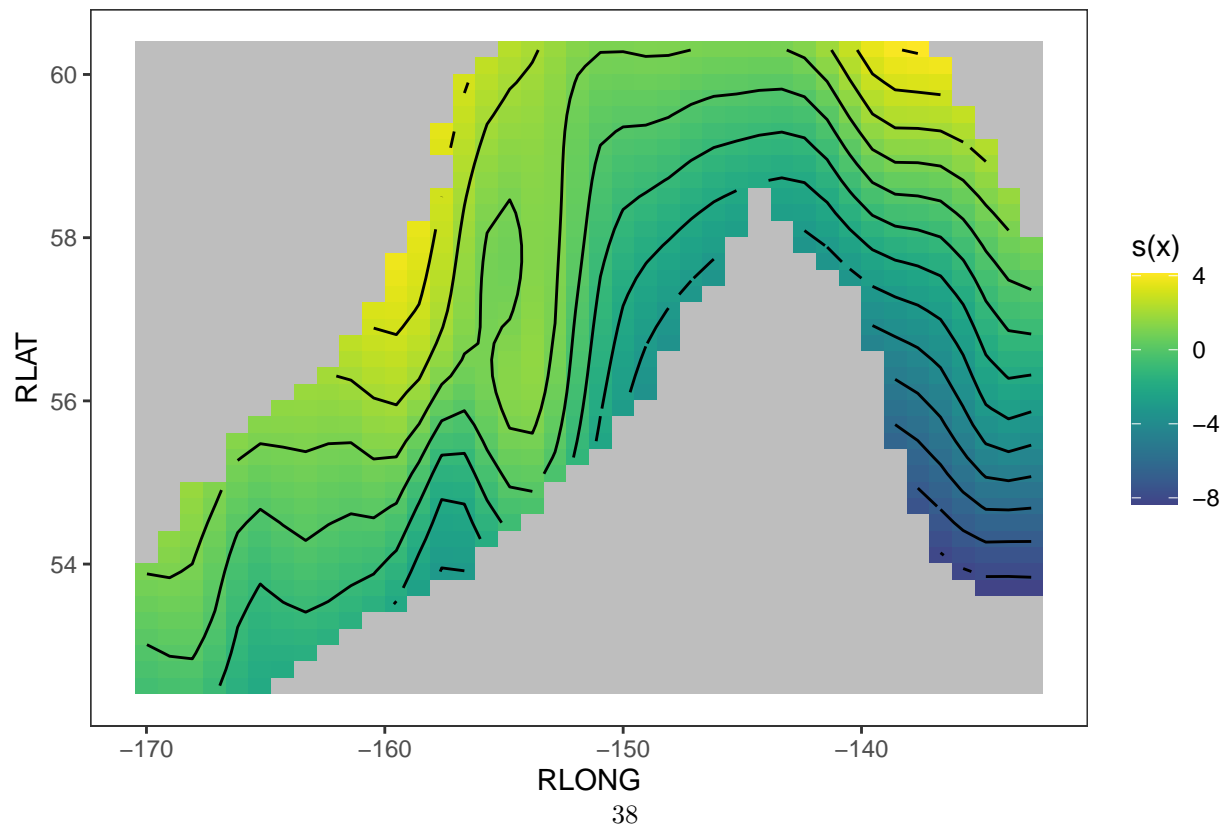


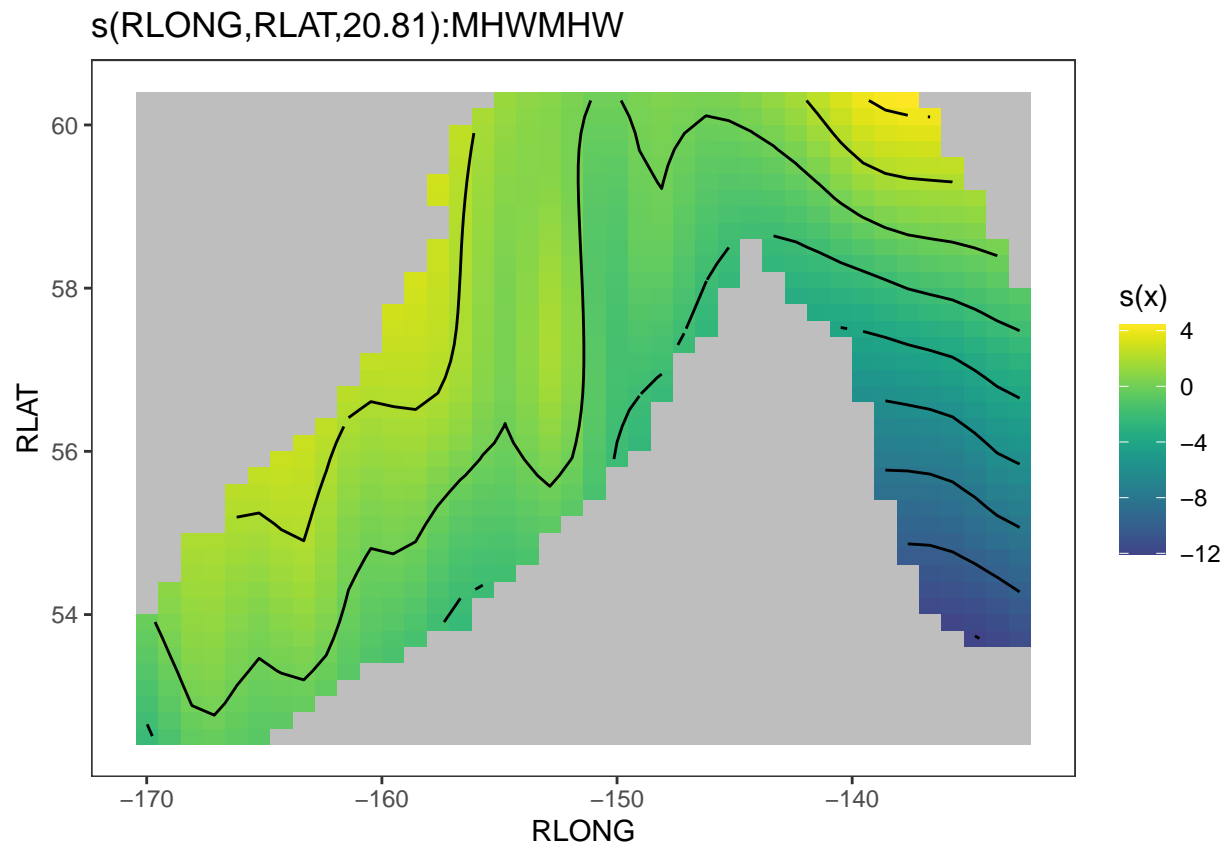
## Model 6: Tanner Crab Prey Occurrence

Predator: Pacific Halibut

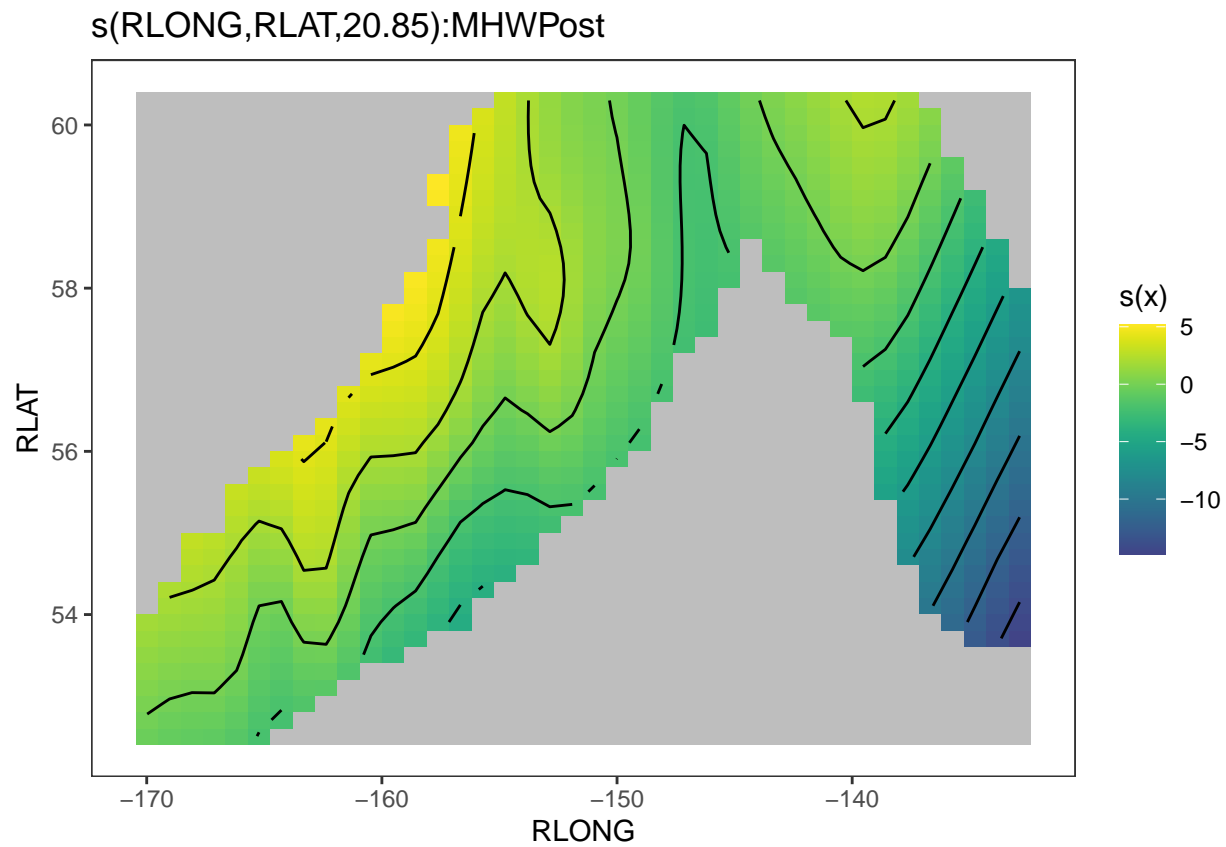


s(RLONG,RLAT,25.95):MHWPre



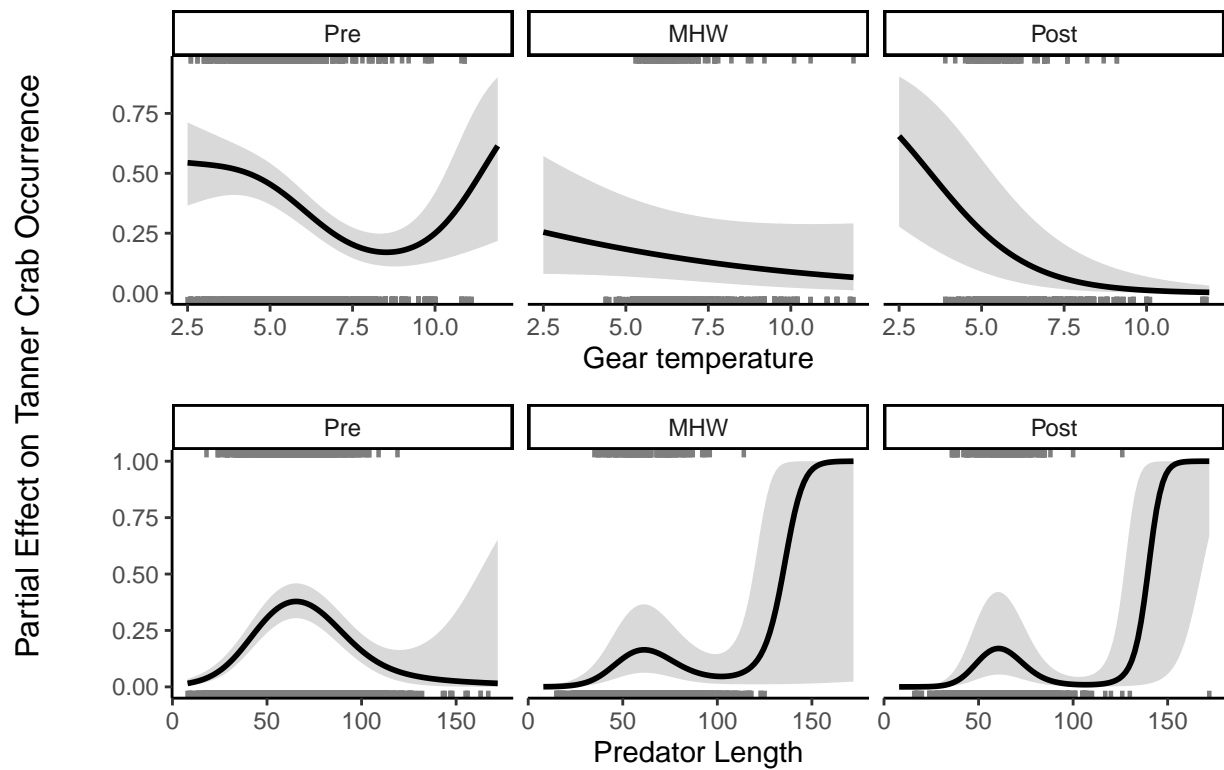




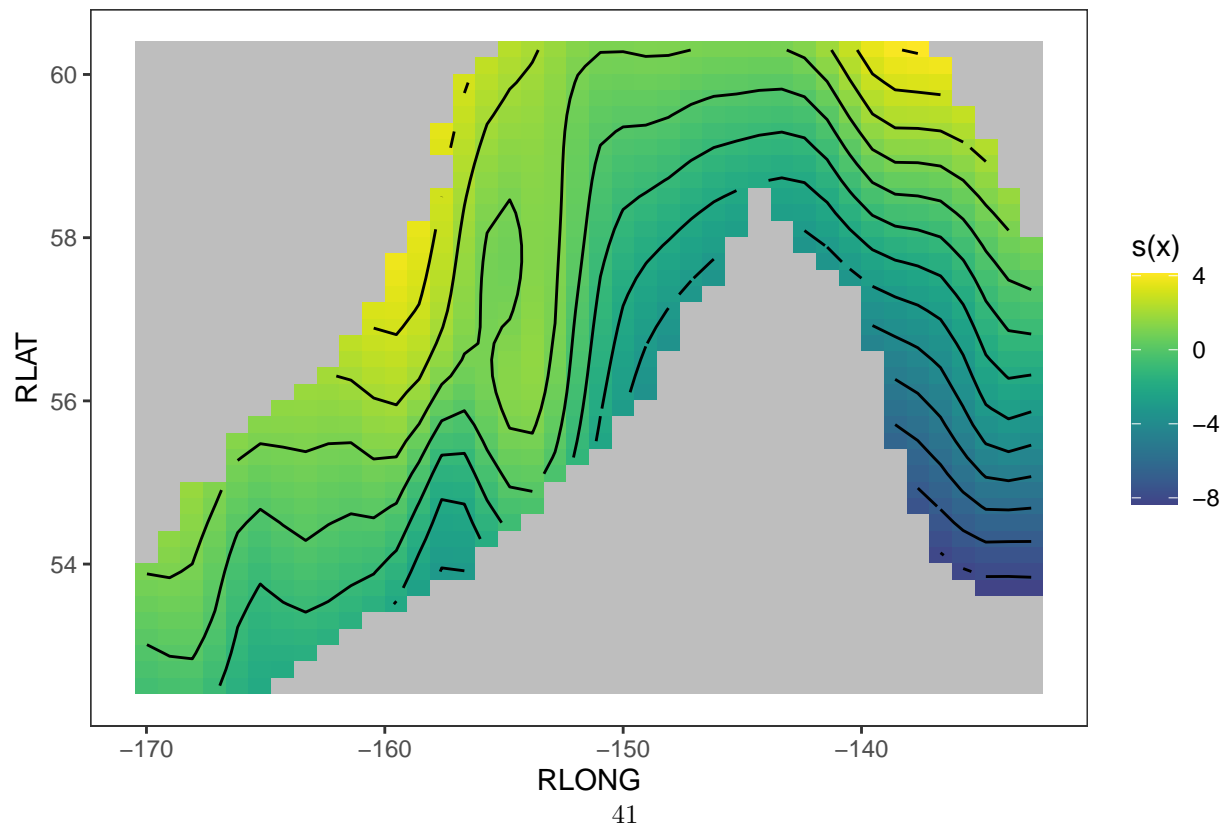


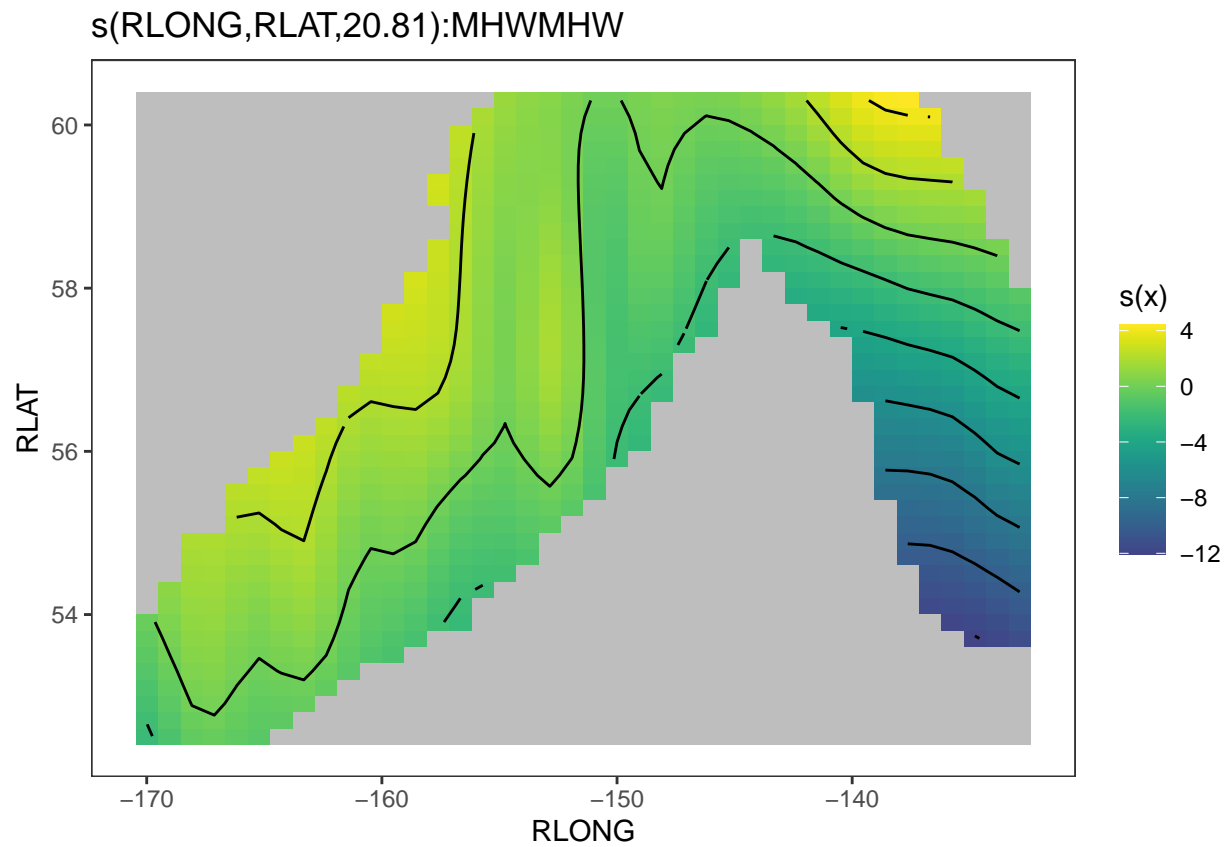
## Model 7: Paguridae Prey Occurrence

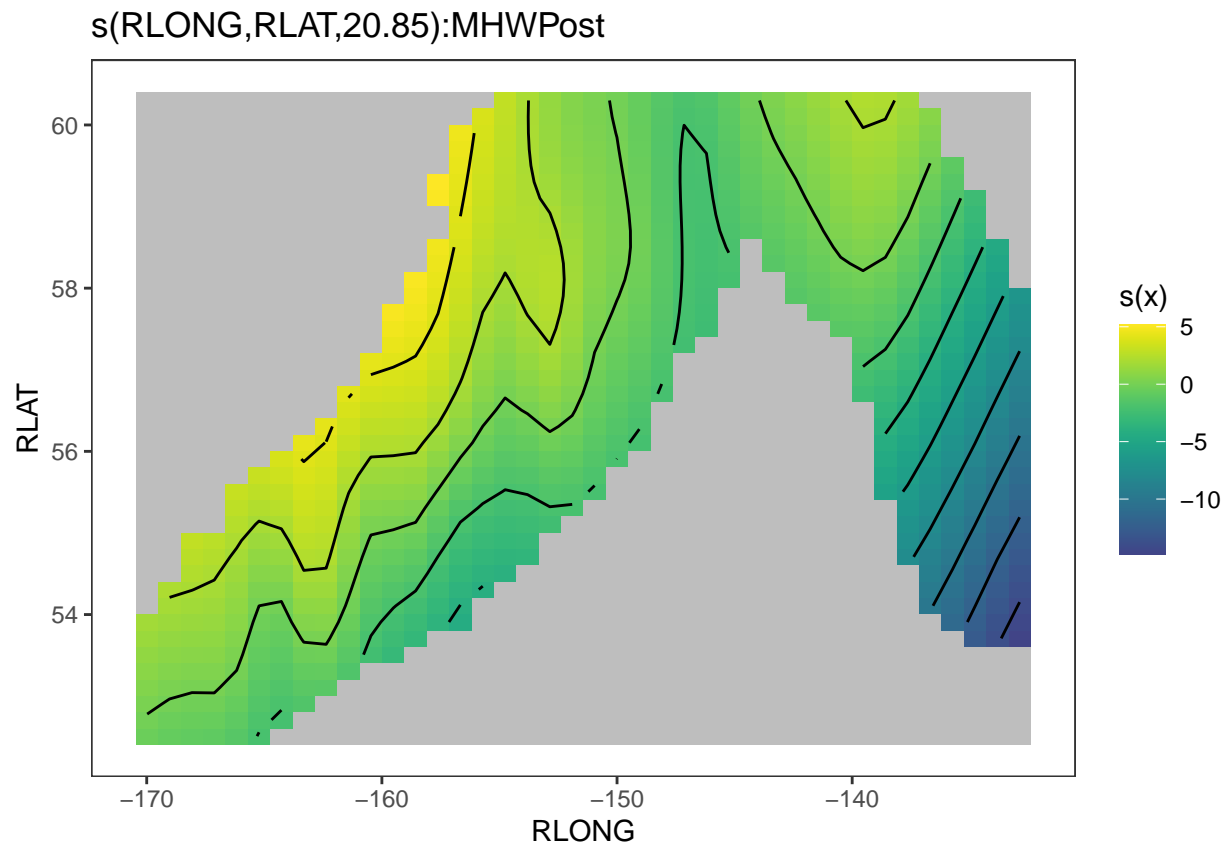
Predator: Pacific Halibut



s(RLONG,RLAT,25.95):MHWPre

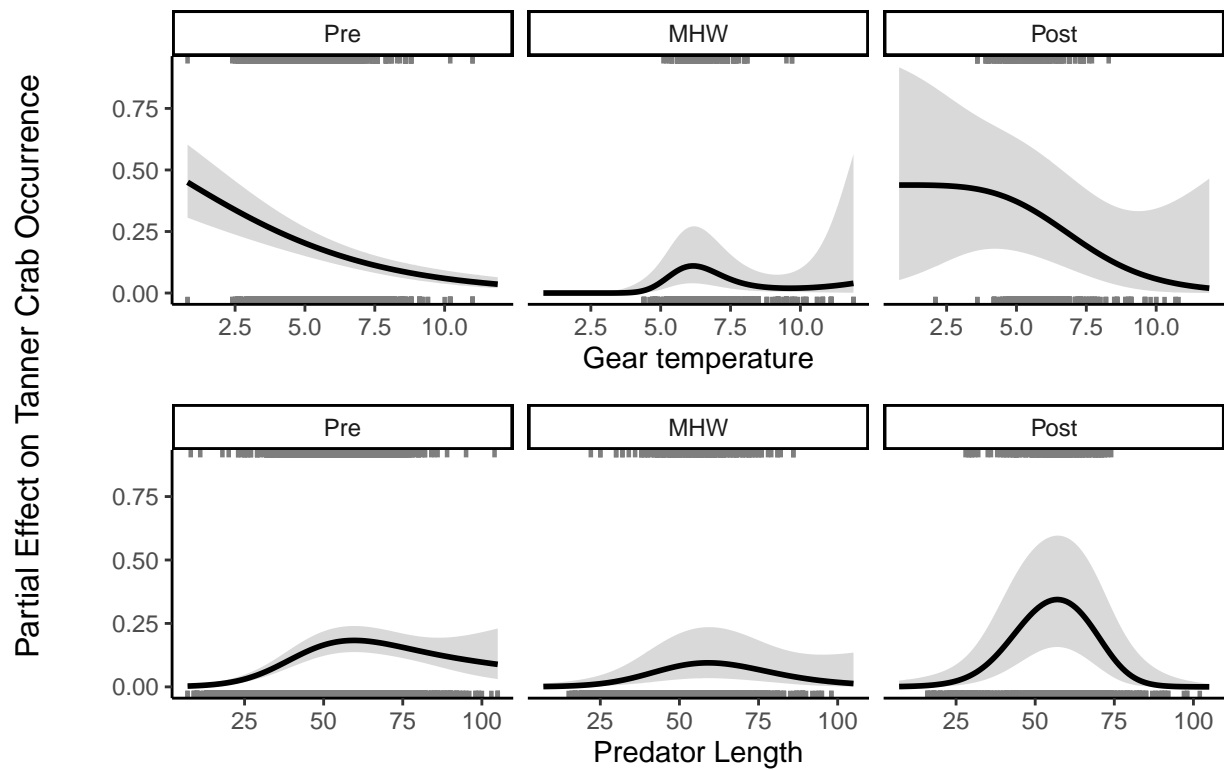






## Model 7: Paguridae Prey Occurrence

Predator: Pacific Cod



s(RLONG,RLAT,29):MHWPre

