

# 2022 Nematode and Shell Blister Disease Observations from the VIMS Dredge Surveys

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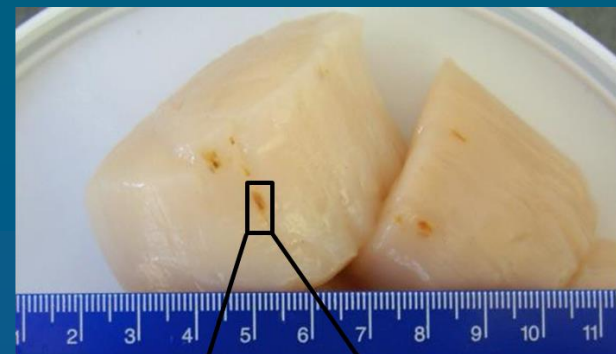
Virginia Institute of Marine Science

Sea Scallop Plan Development Team  
Falmouth, MA

August 31 – September 1, 2022

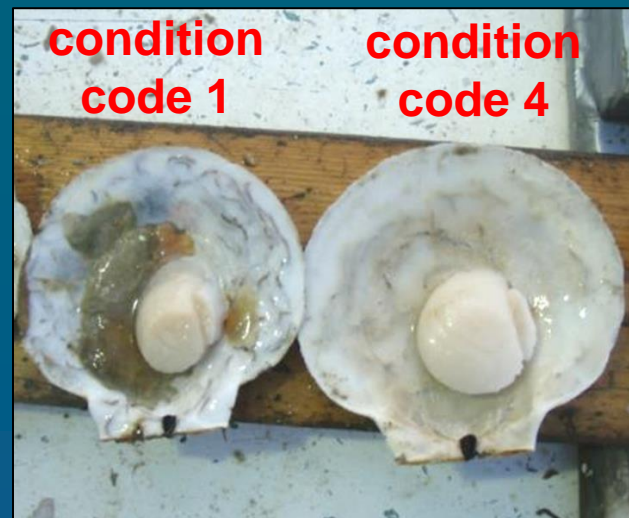
## Disease Observations

- All scallops evaluated for SHMW workups are also assessed for several diseases
- Nematode Infections
  - Gross observation of nematode lesions
    - Intensity - Mean number of lesions per scallops given a scallop was infected
    - Prevalence – Percent of infected scallops/sample
- Information used to document spatial distribution of nematode infected scallops for 8 years



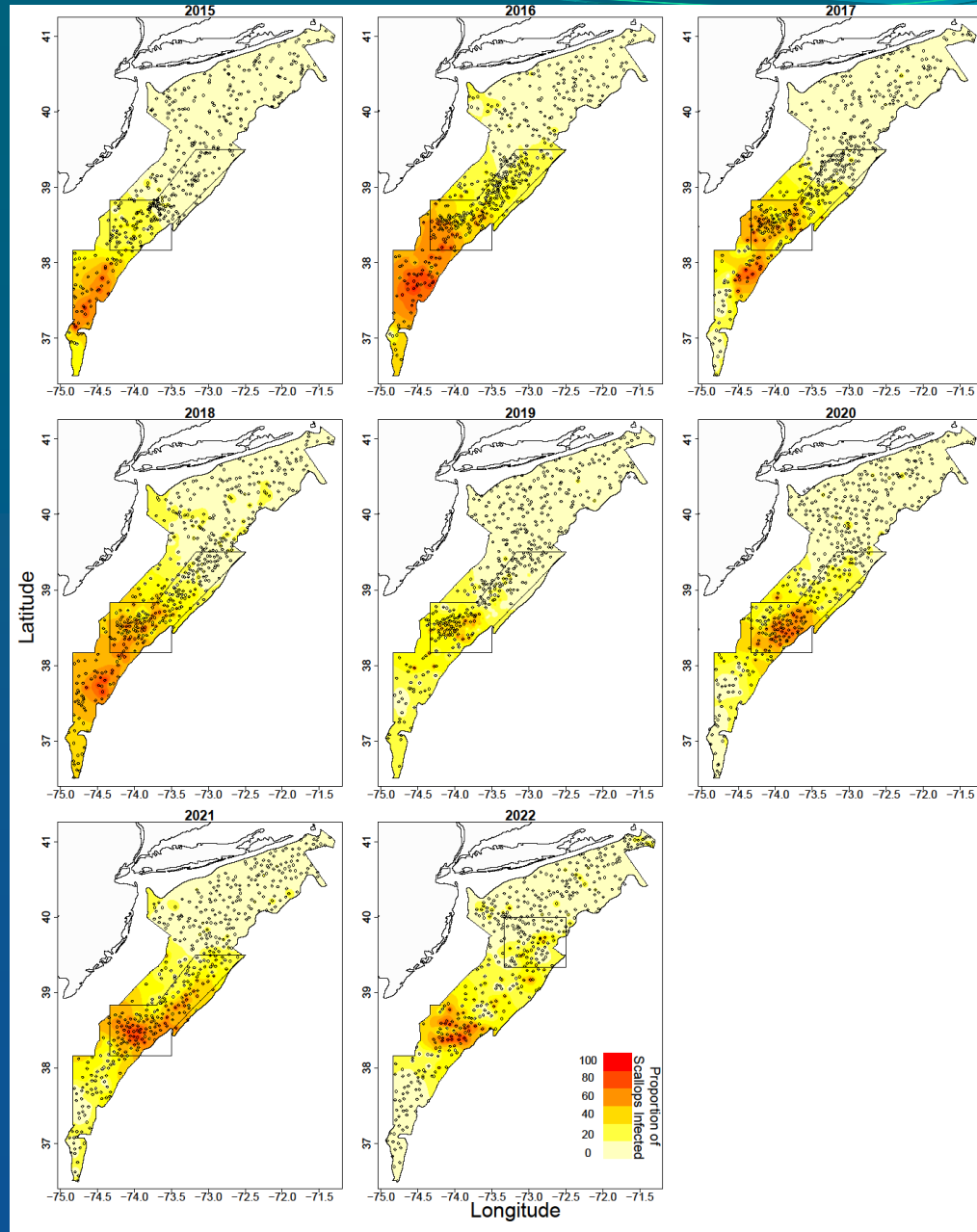
# Disease Observations

- Shell Blister Disease
  - Shell blister disease condition
    - Qualitative scale used to rate condition of blister: 1 (worst) – 4 (no blister)
- Increased number of scallops observed in MAB with shell blister disease in 2020 & 2021
- NL South Deep scallops with shell blister disease also increasing in 2021 & 2022

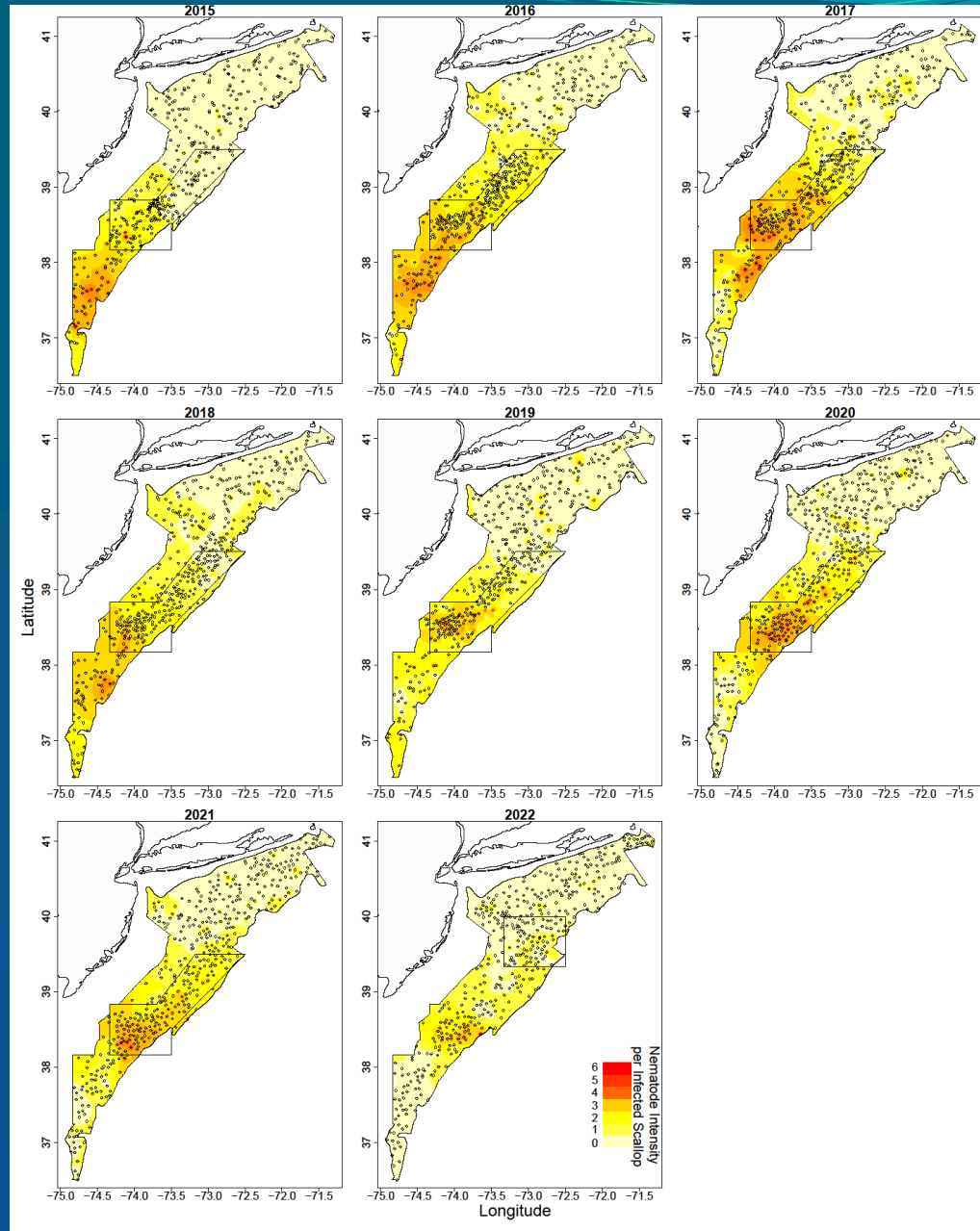


South Deep scallops April 18, 2022

# Nematode Prevalence 2015-2022

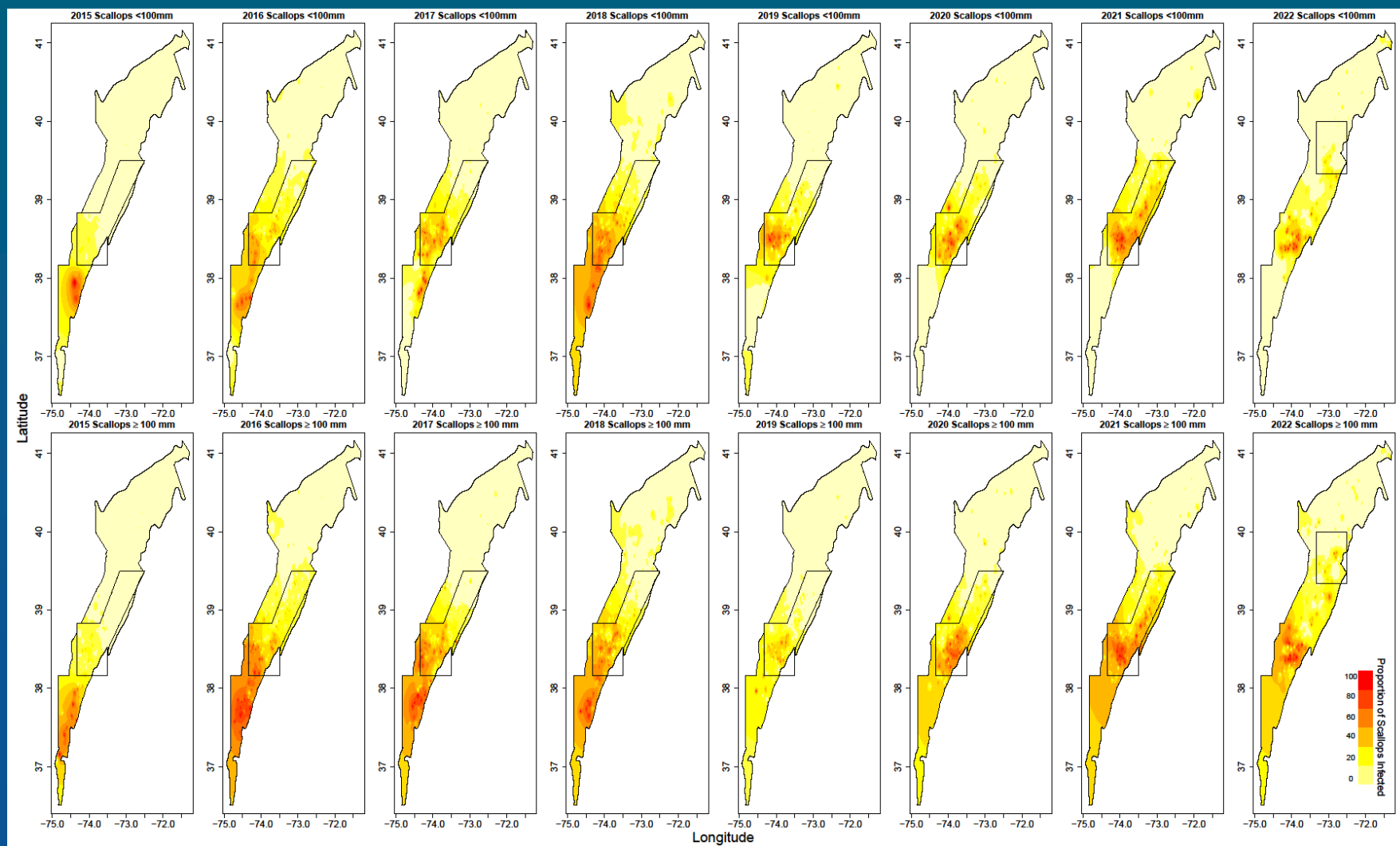


# Nematode Intensity 2015-2022



# Nematode Prevalence by Size

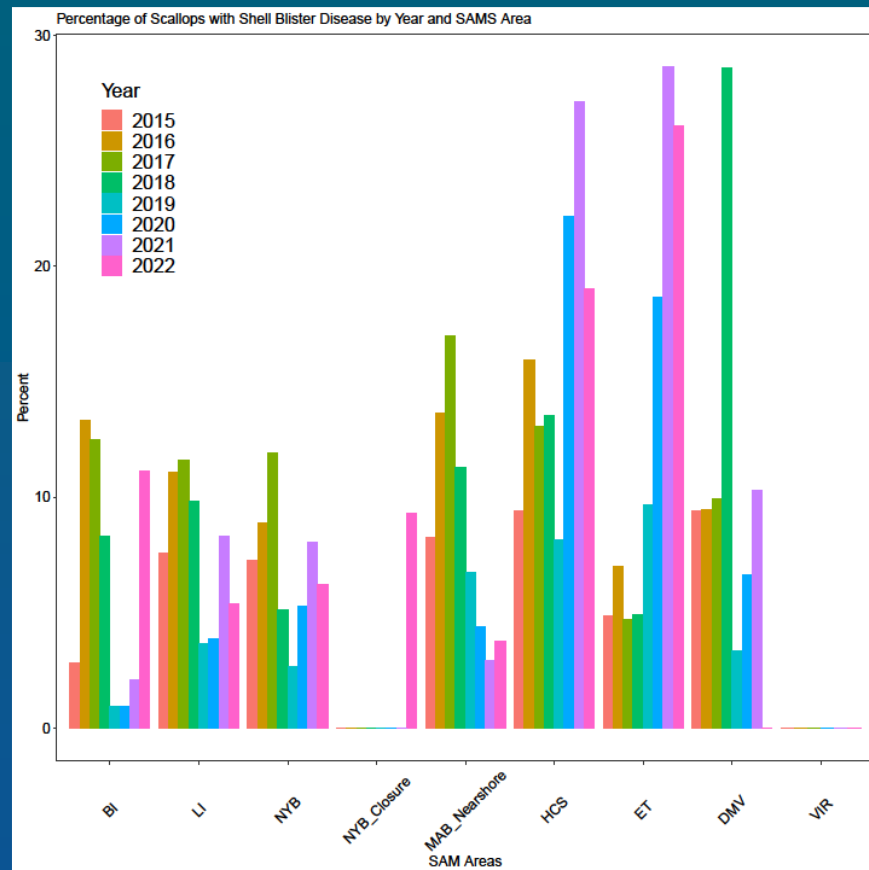
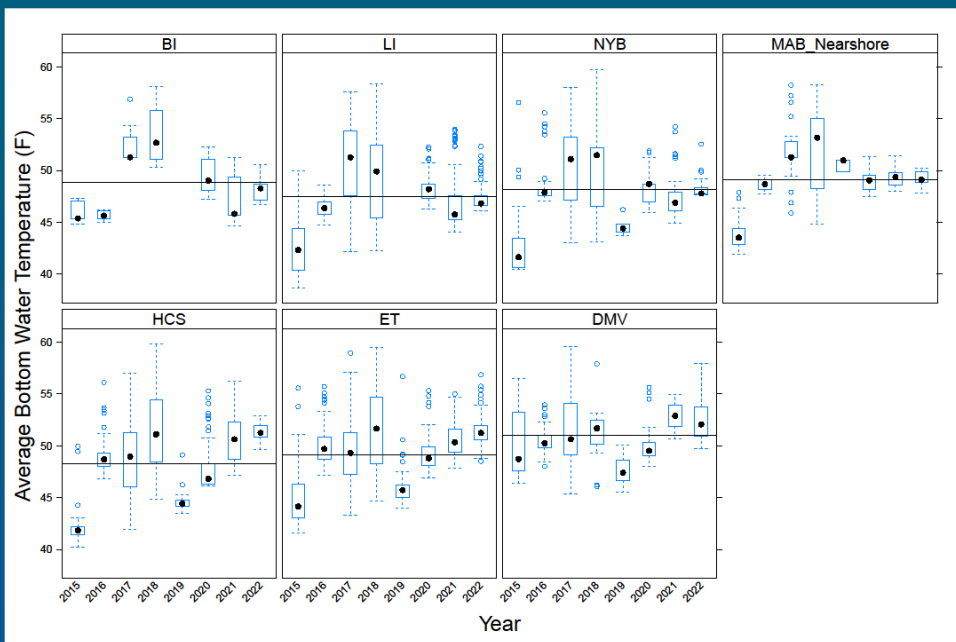
## 2015 - 2022



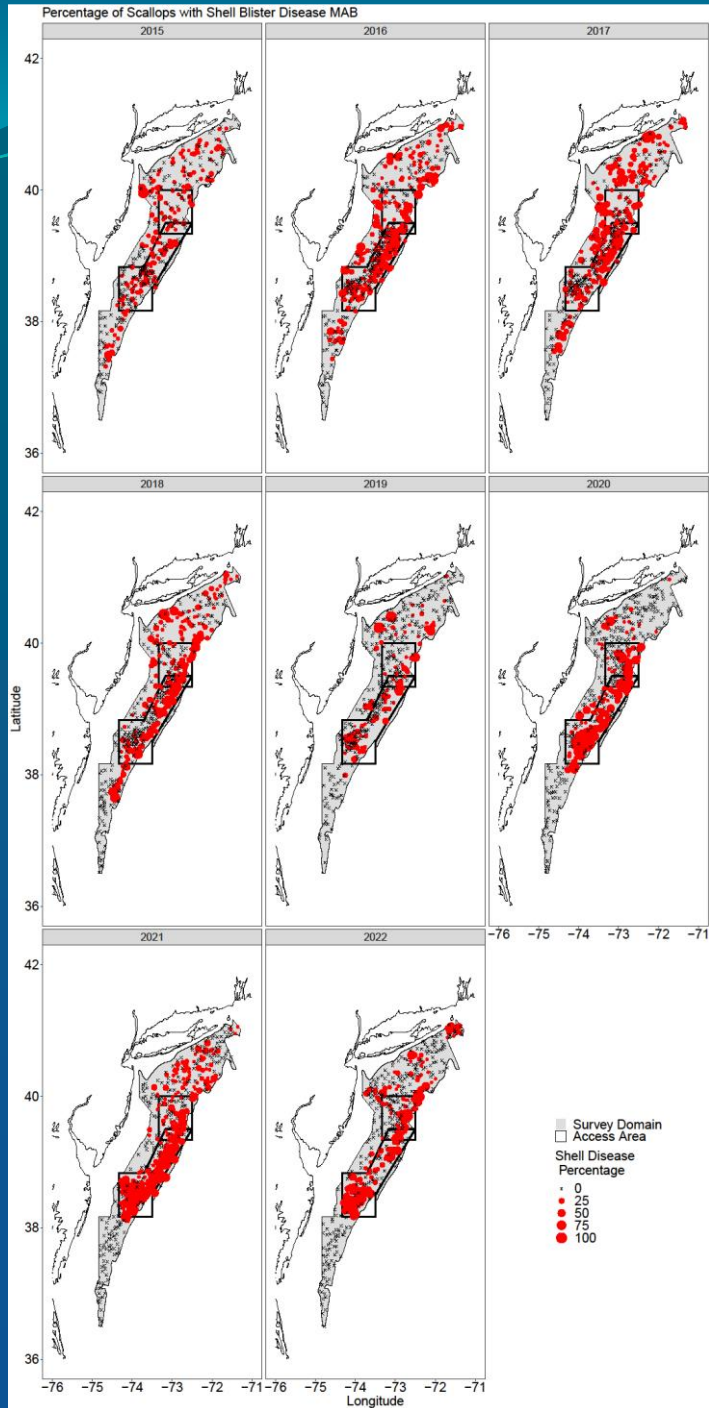




# Shell Blister Disease - MAB



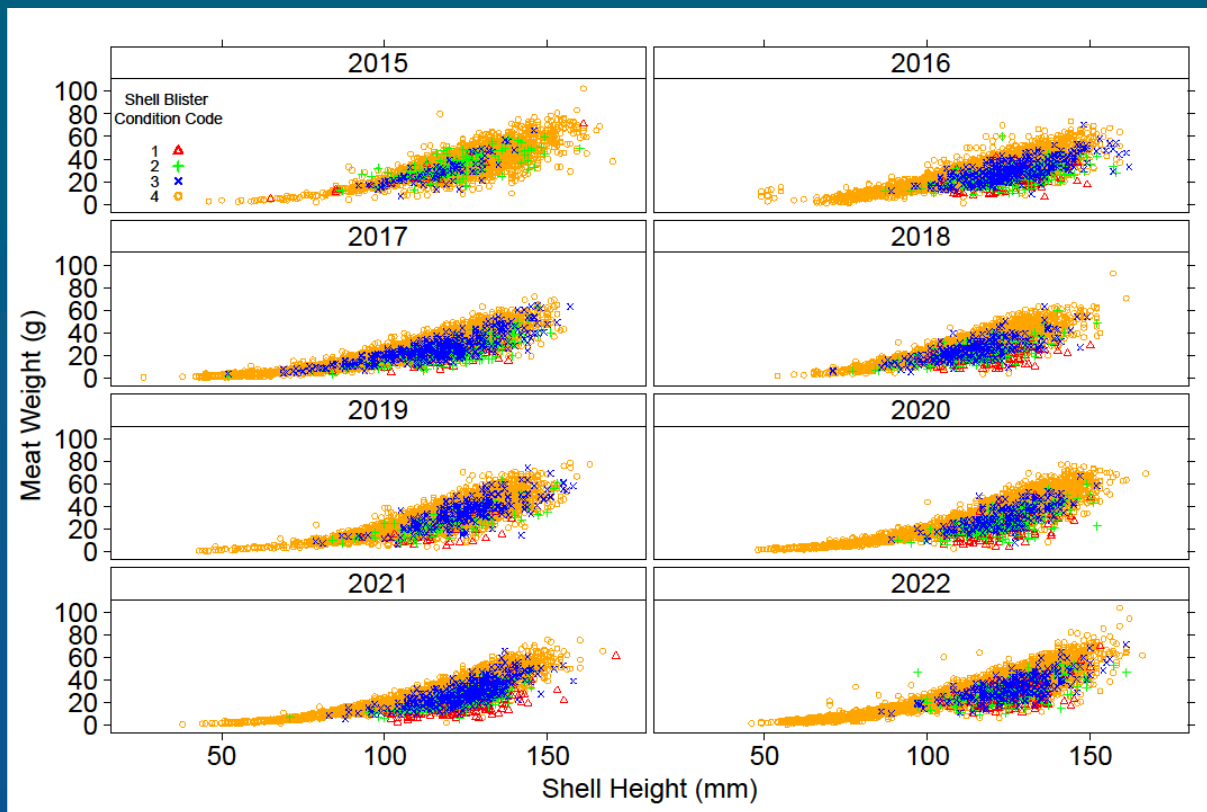




# Shell Blister Disease - MAB

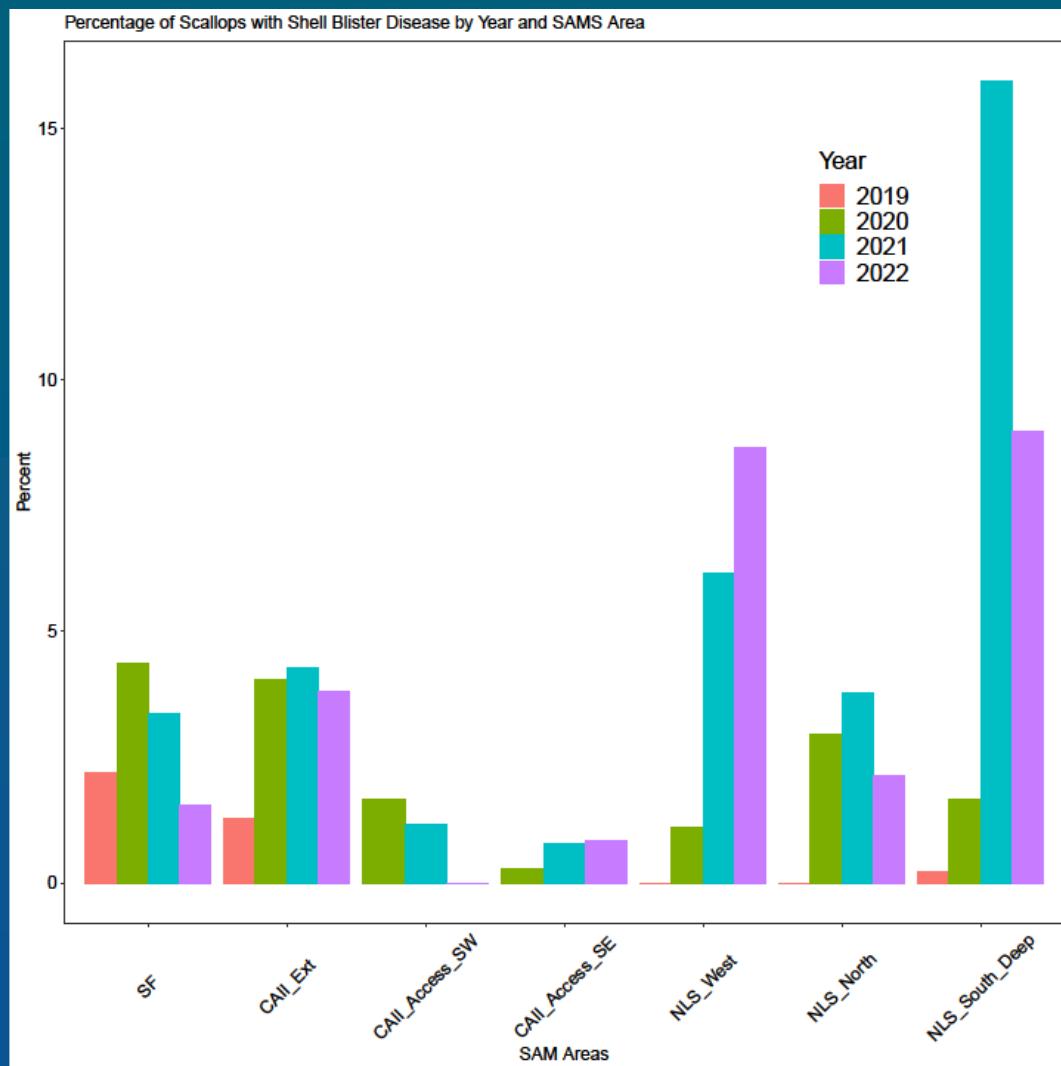
# Shell Blister Disease - MAB

- Shell blister disease can impact meat quality & yield
- As blister severity increases meat becomes stringy & discolored
- SHMW relationship is lower than expectation
- Preferred SHMW model in MAB for 2020 & 2021 had an interaction of latitude & disease condition
- 2022 any model with disease condition was preferred over other models



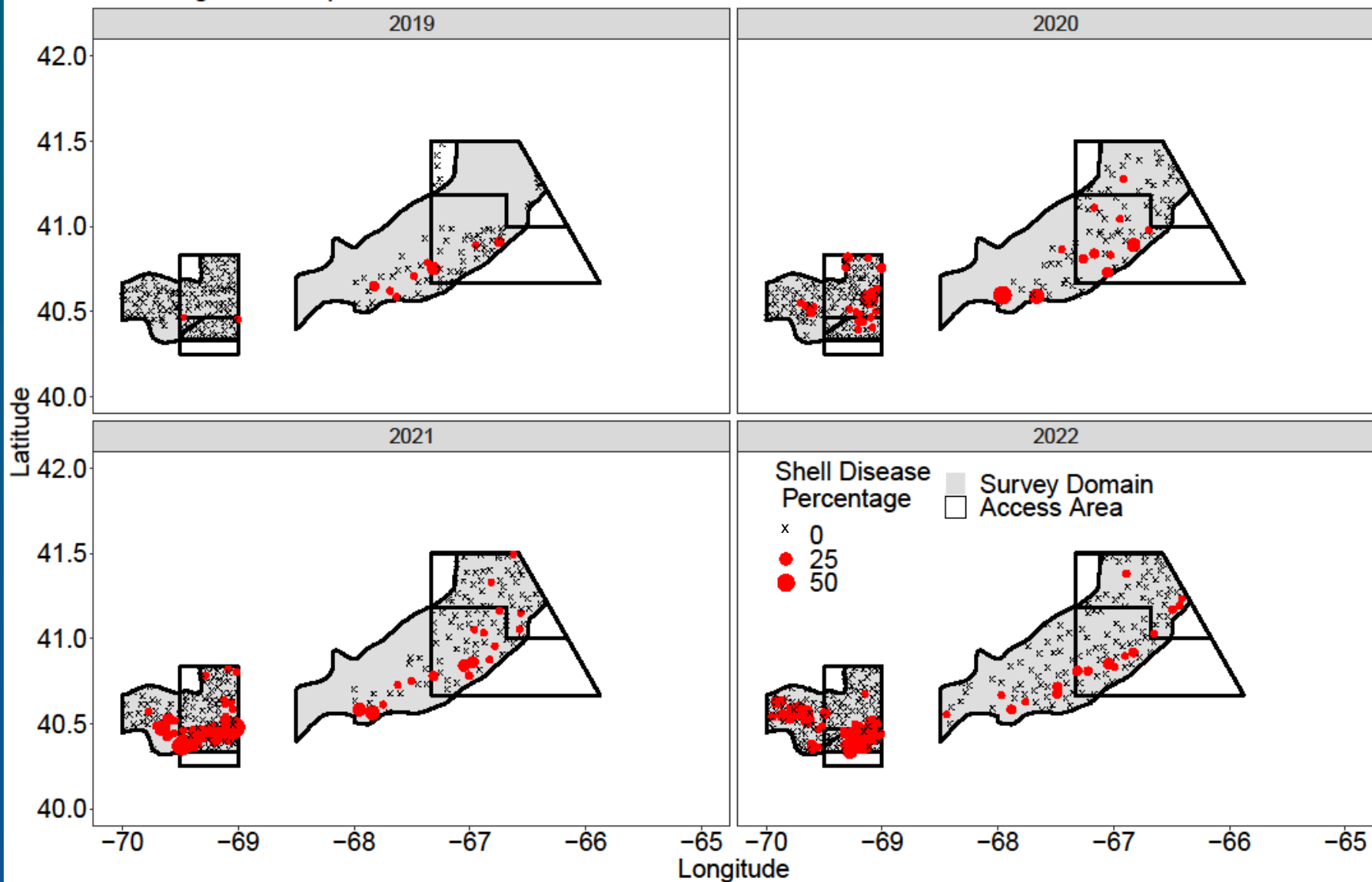
# Shell Blister Disease - GB

- Included data from 2019 – 2022 for all SAMS Areas
- High percentage of shell blister disease in 2021 & 2022 in NLS\_West & NLS\_South\_Deep
- SF & CAII\_Ext had highest shell blister disease but low overall percentage of scallops have disease
- No consistent trend across SAMS Areas

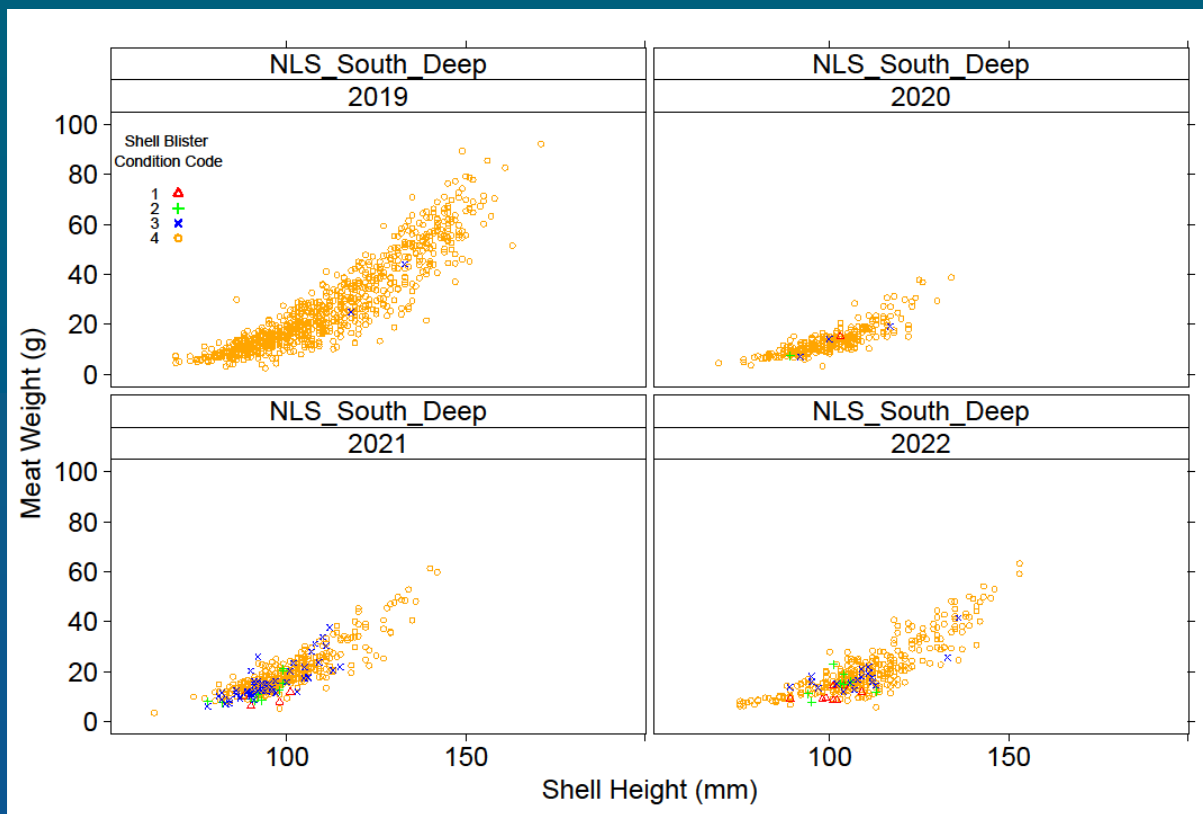


# Shell Blister Disease - GB

Percentage of Scallops with Shell Blister Disease GB



# Shell Blister Disease - GB



**SHMW relationship not generally impacted by shell blister disease**

**SAMS Area SHMW plots have similar result**