

CLEAR EVIDENCE OF SARDINE RECRUITMENT



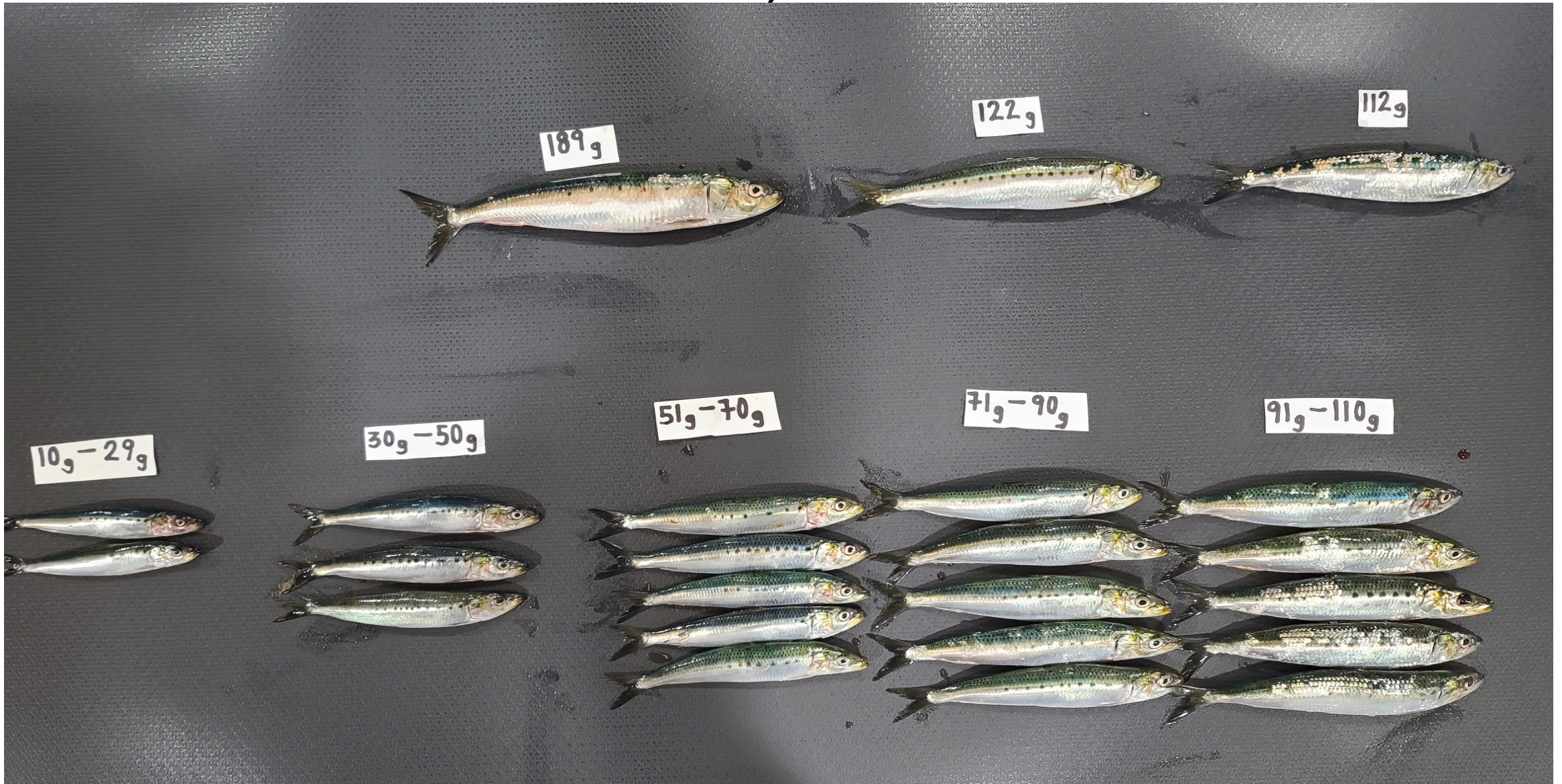
RANGE OF FISH SIZES FOUND IN SARDINE CATCH JUNE 8, 2020



JUNE 8 2020 SARDINE LANDING FURTHER DETAILS

- Sardine catch of one vessel the FV Trionfo (Captain Neil Guglielmo) – June 8 '20
- 2 sets made: (first set ~25 ton – 1:30am; second set ~ 10 ton – 4am)
- Random sampling and testing overall catch can be described as follows: Avg 80gms (std dev 11gms) Avg 21cms (std dev 0.7cms)
- BUT, we looked closer and found fish in all the size ranges shown on the previous photo
 - Smallest fish found in the 10-29gms size category on the attached photo was 20gms
 - Largest fish found in the 200gms/up size category was an incredible 280gms!!

RANGE OF FISH SIZES FOUND IN SARDINE CATCH JUNE 5, 2020



JUNE 5 2020 SARDINE LANDING FURTHER DETAILS

- Sardine catch of one vessel the FV Trionfo (Captain Neil Guglielmo) – June 5 '20
- 2 sets made
- Random sampling and testing (147 observations) overall catch can be described as follows: Avg 72gms (std dev 16gms) Avg 20.5cms (std dev 1.1cms)

RANGE OF FISH SIZES FOUND IN SARDINE CATCH
JUNE 10-11, 2020



JUNE 10-11 2020 SARDINE LANDING FURTHER DETAILS

- Sardine catch of one vessel the FV Trionfo (Captain Neil Guglielmo) – June 10-11 '20
- 2 sets made (one set June 10 pm – one set June 11 early am)
- Random sampling and testing (178 observations) overall catch can be described as follows: Avg 58gms (std dev 20gms) Avg 19.1cms (std dev 2.0cms)

UNDER 30 GMS	2.74%
30-40GMS	13.11%
40-50GMS	7.21%
50-60GMS	14.58%
60-70GMS	7.43%
70-80GMS	34.38%
80-90GMS	18.80%
90-120GMS	1.76%

MIXED AGE CLASS LANDINGS ARE A COMMON THING IN THE SHALLOW INSHORE WATERS WHERE OUR BOATS FISH

- It has been very common over the now almost 30 years of being involved with sardine and anchovy fishing and studying the catches we have processed, that mixed age class landings are very common in the inshore waters where we fish.
- This is very noticeable in Monterey landings. But this was also true of landings made in coastal waters of Ventura and Santa Barbara counties – and offshore at the Channel Islands
- Common to see only young juvenile fish in our catches then suddenly schools of larger / older fish migrate into the shallower waters where our boats were fishing and mix with the juvenile fish for a time, then migrate away, once again leaving primarily juvenile fish.
- **WHERE you are seeking evidence of recruitment makes a huge difference on whether you will find that evidence, OR NOT)!!**
- **It is very important to include inshore biomass in surveys going forward.**
- **Our industry is willing and able to provide the data now missing from stock assessments.**

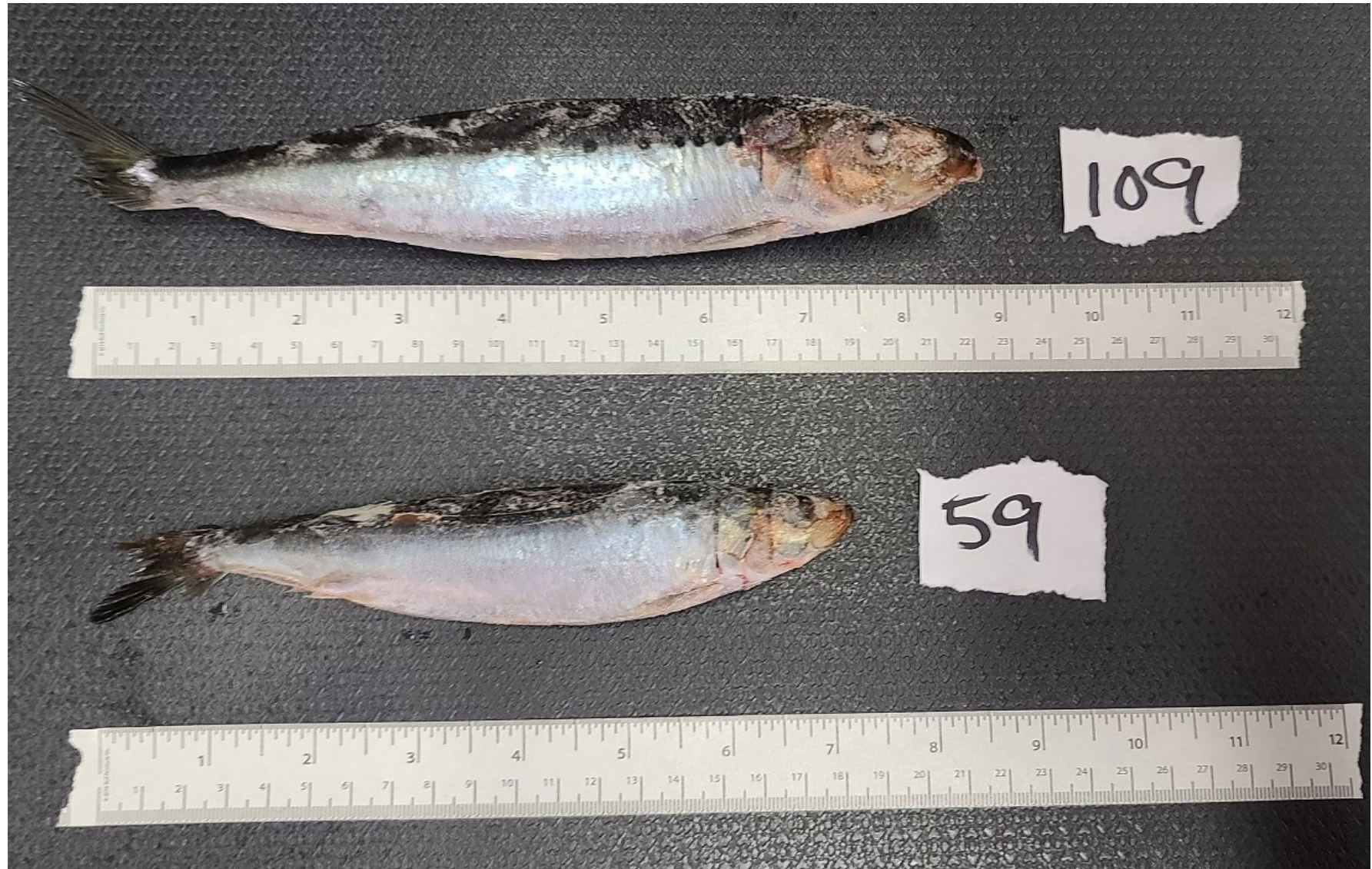
WEIGHT VS LENGTH



WEIGHT VS LENGTH



WEIGHT VS LENGTH



WEIGHT VS LENGTH

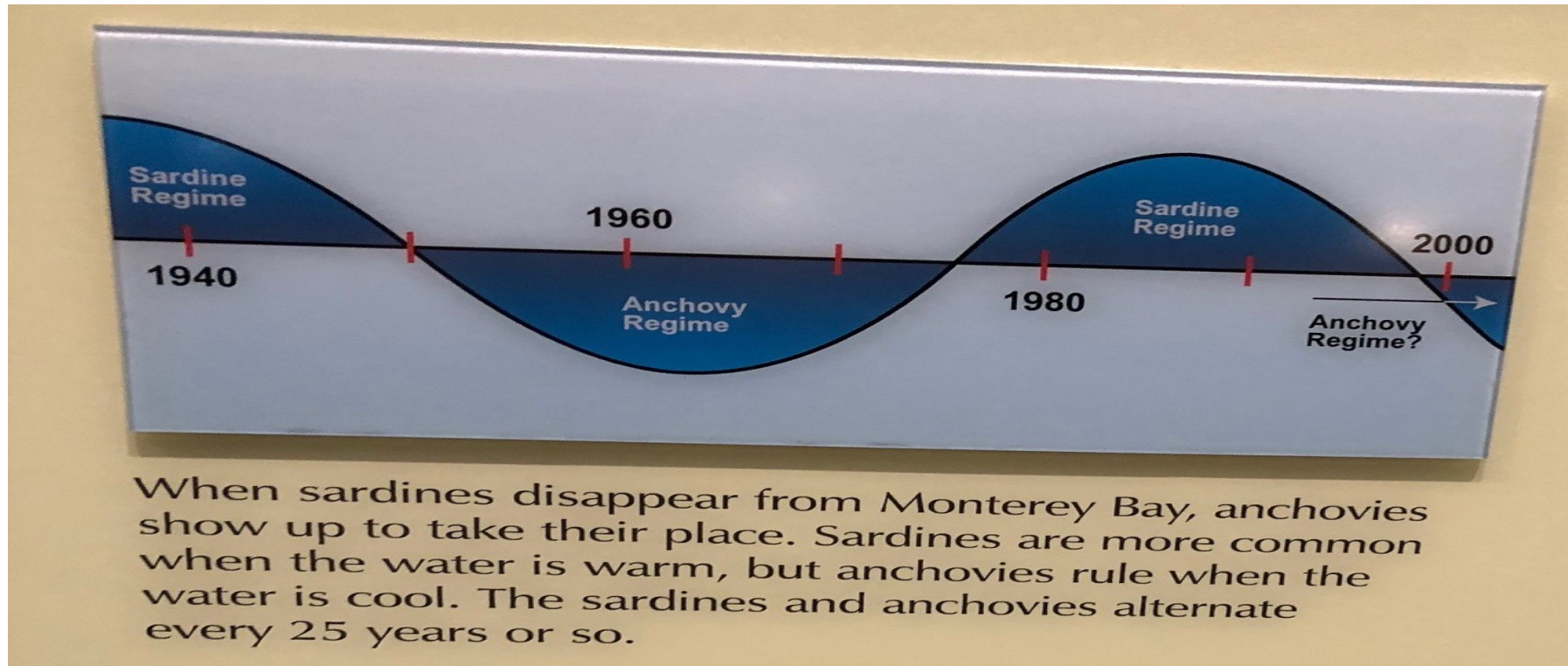


WEIGHT VS LENGTH



IMPORTANCE OF ALWAYS HAVING AT LEAST A SMALL DIRECTED FISHERY AND WORKING WITH INDUSTRY TO ADVANCE THE SCIENCE

IT IS A KNOWN THAT SARDINE AND ANCHOVY BIOMASSES VARY MOSTLY WITH ENVIRONMENTAL CONDITIONS
AND ARE IN CYCLICAL IN NATURE



IMPORTANCE OF ALWAYS HAVING AT LEAST A SMALL DIRECTED FISHERY AND WORKING WITH INDUSTRY TO ADVANCE THE SCIENCE

- Even when biomasses are low, small directed fisheries like the EFP directed fishery we are participating in now will yield valuable scientific data to better inform stock assessments for the future
- We thank the Council for supporting this directed fishing EFP
- We encourage the Council to support Alternative 1, with no more restrictions than 'status quo' management, so this EFP fishery can continue providing data to improve future stock assessments.

QUESTIONS?