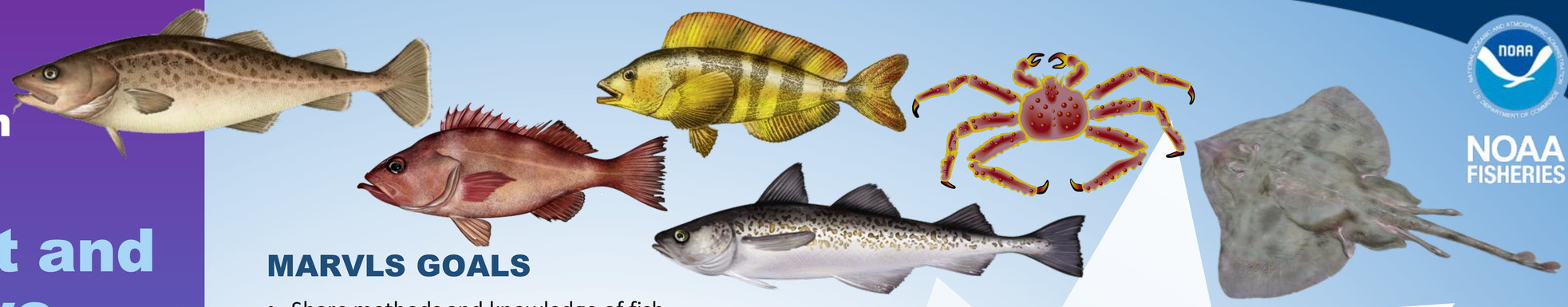
Introducing the Working Group on

Maturity Assessment and Reproductive Variability of Life Stages



Be MARVLouS

Susanne McDermott, Sandi Neidetcher, Christina Conrath, Paul Spencer
Alaska Fisheries Science Center,
National Marine Fisheries Service, NOAA

Introduction

Knowledge of the reproductive biology of fish and crab stocks is critical to stock assessment estimates of the reproductive potential (typically measured as spawning stock biomass) of the stock. Reproductive potential is a factor often used to calculate biological reference points used for fisheries management. While quantitative assessment of reproductive parameters is essential for stock assessment calculations, qualitative information on spawning dynamics is also important as fisheries management has begun taking an ecosystem approach to management. In addition, understanding the spatial and temporal dynamics of fish spawning is important for managing fishery impacts on protected apex predators.

TimeLine

2013

- AFSC reading group on reproductive maturity
- AFSC workshop and white paper on the status of reproductive biology research at the AFSC.

2014

- National MARVLS workshop hosted by AFSC in Seattle . Attended by Scientists from all NMFS science centers

2015

- MARVLS group organizes a symposium at the American Fisheries Society Symposium in Portland

FUTURE PLANNED EVENTS

2016

- MARVLS group participates in PICES them session in San Diego, CA
- 2nd MARVLS national workshop in La Jolla, CA

2017

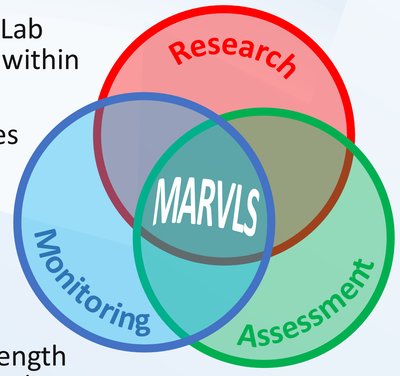
- MARVLS group plans to submit ICES theme session for meeting in Florida

DISTANT FUTURE

Marvls becomes a worldwide phenomenon

MARVLS GOALS

- Share methods and knowledge of fish reproductive studies across all science Centers
- Evaluate and standardize field and Lab methodologies whenever possible within and across NMFS science centers
  - Field Collection procedures
  - Histological techniques
  - Fecundity analysis
  - Databases
  - Nomenclature
  - Data Analysis of age and length at 50% maturity (A_{50} and L_{50})
  - Training methods for field collection, histological reading, and data analysis
- Work towards integrating reproductive variability into stock assessment and management of fish and crab species
- Most of all connect with your inner fish squeezer and listen to Captain A 50, our super hero!



MARVLS at the AFSC
How it all started...

Reproductive studies at the NMFS Alaska Fisheries Science Center (AFSC) have historically been conducted as independent studies, meant to inform particular stock assessments. It became apparent that the AFSC would benefit from a more integrated approach to collect reproductive life history information. This approach demanded the prioritization of future research by identifying knowledge gaps and management challenges. This led to the formation of the Maturity Assessment, and Reproductive Variability of Life Stages (MARVLS) working group and resulted in a reading group, and an AFSC workshop and white paper detailing the status of reproductive biology and maturity research at the AFSC.

MARVLS goes National

A reading group was established in 2013 with interested scientists discussing papers and tackling current issues and challenges connected with histology, fecundity and other reproductive ecology questions. It was soon apparent that scientists from all NMFS science centers working on reproductive ecology and life history were interesting in a platform allowing to share knowledge and exchange information.

Contact Information

If you would like to receive further information or would like to join MARVLs don't hesitate to contact:

Susanne McDermott	Susanne.mcdermott@noaa.gov	NOAA, AFSC, Seattle
Sandi Neidetcher	sandi.neidetcher@noaa.gov	NOAA, AFSC, Seattle
Christina Conrath	Christina.conrath@noaa.gov	NOAA, AFSC, Kodiak