

Highlights of RAS

NEANS Panel Meeting

May 6, 2020

Judith Pederson and RAS Participants

Native, Cryptogenic, Non-native



Native anemone
Edwardsia lineata



Cryptogenic sea slug
Cuthona gymnota

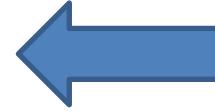


Little club tunicate
Clavelina lepidatus

And Changes in Status Thanks to DNA Analysis



Native Tunicate, *Molgula manhattensis*



Vase Tunicate, *Ciona intestinalis*

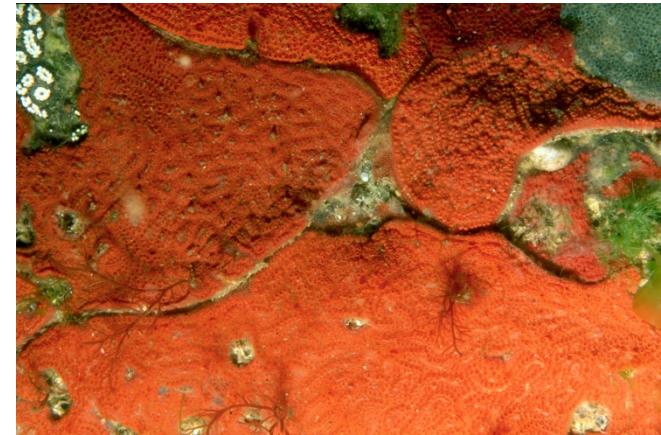


Old Faithful Species

Found at 80-90% of all sites visited



Star Tunicate – *Botryllus schlosseri*
is both native and non-native



Purple/orange/tan/yellow sheath
tunicate, *Botrylloides violaceus*



Asian Shore Crab, *Hemigrapsus sanguineus*



European Green Crab, *Carcinus maenas*

Other Old Faithfuls over the Years

Larry Harris and
Kevin Cute in
foreground



Jan Smith



Gretchen Lambert



National Geographic filming
Jim Carlton for a video

Old, New and Expanding, and Ephemeral



1. *Botrylloides violaceus*, wide spread tunicate that appears at nearly all locations
2. Newly introduced bryozoan, *Tricellaria inopinata* that is found from New York to New Hampshire
3. Calcareous worm, *Dianthus elegans*, appeared for only a summer and is called ephemeral

The difficult “smalls”



Megan
McCuller
identifies
bryozoans



Bryozoan



Isopod



Niels Hobbes identifies crustaceans,
including amphipods, isopods

Smaller Species are underrepresented in all categories, and few are classified as introduced or cryptogenic

Adaptations of organism from South to North

- Warm water species adapted to northern climes



Codium now found in
Nova Scotia, adapted to
colder climates



Gratelouphia is considered
a warm water species and
is now found in New
Hampshire