Casco Bay Ecosystem Monitoring Report notes

Importance of nearshore monitoring

* Paragraph 1: the word “hub” is used twice, and just kind of sticks out to me. Maybe change the second hub to “center?”
* Paragraph 2, sentence 2: “… eelgrass beds contribute to carbon sequestration and nutrient cycling.” The phrase “regulate climate” is too broad to be accurate here and I can’t think of a better way to integrate something similar without adding significant length. Removing it is probably the most efficient way to clarify.
* Paragraph 2, sentence 3: “… natural buffer***, protecting the coastline from*** storms and erosion.”

Species of note

* Italicize *Alosa* in *Alosa psuedoharengus*
* Adjust species common name capitalization styles in all figure captions (it’s all still AFS style guide recommendation instead of AP style guide)
* I’m hesitant to characterize all our “southern species” as “visitors,” per se. Some of them might be colonizers at this point rather than seasonal visitors. Can we just call this subsection Southern Species?

Emergent Trends – Beach Seine

* Paragraph 1, sentence 1: change “lower temperatures” to “decreased heat.” 2024 was still anomalously warm as compared to the 2003-2020 climate reference period—it just wasn’t AS anomalously hot as the previous several years. Don’t want to confuse readers by saying 2024 had “low temperatures” when they see in the warming report that it was like the fifth hottest year on record.
* Paragraph 2, sentence 1: needs specificity. Adjust to “Tomcod spawn in freshwater reaches of estuarine rivers from November to February, and juveniles will migrate downstream to the nearshore marine ecosystem by June.”
* Paragraph 2, sentence 3: “… makes them a useful indicator of ***climate-linked ecosystem change.”***
* Paragraph 3, sentence 1: “… all significantly ***influenced*** catch variability…”
* Tomcod plots: Do you want me to convert Celsius to Fahrenheit? Just now realized I’m using mixed metric-imperial units here (C for temp, inches for precipitation and snowfall).
* Paragraph 6, sentence 2: remove “however,” it sounds a little weird in the context that both herring and silverside grew 2.5 mm/ week last year.
* Paragraph 6, sentence 3: “… likely delayed spawning, slowing silverside growth rates ***in our observation period***.” Gotta be careful with implications here; we likely saw slower growth rates because we were observing younger fish than usual.

Emergent Trends – Jigging

* Paragraph 1, sentence 2: I think this sentence should be moved to follow the sentence containing the Sherwood & Grabowski (2010) reference. Also, should adjust to “We hypothesize that certain life history variants are more tolerant of higher temperatures, and therefore better able to adapt to climate change.”
* Paragraph 6, sentence 1: The previous paragraph said we caught 180 pollock, but this sentence says we have 184.

Rest of the report

* Do we want to include Latin names for all species discussed in the body? If so, here’s the list of species without a Latin name so far (mostly in jigging survey/ on the water):
  + Atlantic cod (*Gadus morhua*)
  + Atlantic pollock (*Pollachius* *virens*)
  + Pogie (Atlantic menhaden; *Brevoortia* *tyrannus*)
  + Atlantic mackerel (*Scomber* *scombrus*)
  + Atlantic bluefin tuna (*Thunnus* *thynnus*)
  + American plaice (*Hippoglossoides* *platessoides*)
  + Quahog (hard-shell clam; *Mercenaria* *mercenaria*)
  + Blue crab (*Callinectes* *sapidus*)