



NROC
Northeast Regional
Ocean Council

Ocean Planning
Committee

Marine Life Data Development

November 9, 2022

Overview of Work To-Date

- Development of marine life data products accelerated during development of Northeast Ocean Plan and Mid-Atlantic Ocean Action Plan, 2014-2016
- Contract with the Marine-life Data and Analysis Team (MDAT), led by the Duke Marine Geospatial Ecology Lab since 2014
- Individual species data products developed by each MDAT partner entity (cetaceans, birds, fish)
- Summary data products development guided by expert work groups
- Framework for presentation and description of data products on the Northeast Ocean Data Portal



Marine Life Data & Analysis Team (MDAT)

Duke University Marine Geospatial Ecology Lab (MGEL)

- Pat Halpin
- Corrie Curtice
- Jesse Cleary
- Debbie Brill

NOAA NCCOS – Arliss Winship (avian models)

NOAA NEFSC – David Richardson, Kevin Friedland, others (fish trawl data)

TNC – Marta Ribera

States – fish trawl coordinators and data managers



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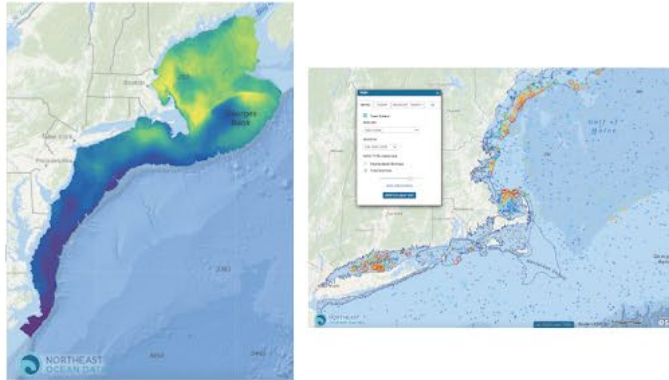
DATA ACCESS & EXPERT REVIEW

DATA MODELING & MAPPING

DATABASE & CURATION

DATA COLLECTION

FISH

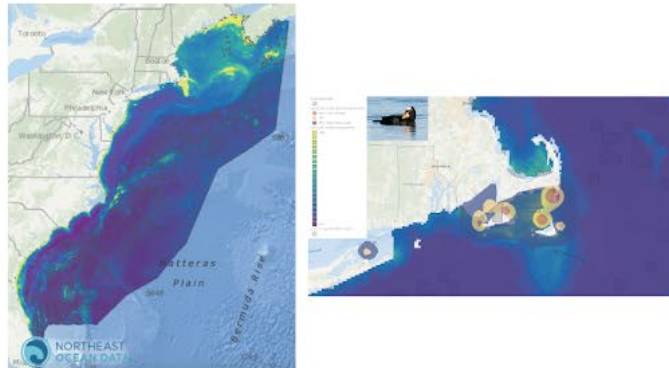


MDAT
 NOAA NMFS NEFSC
 The Nature Conservancy
 funded by:
 NROC
 MARCO

NOAA VIMS
 NMFS NEFSC
 NE States

NOAA
 NMFS NEFSC
 NEAMAP
 State Trawl Data

SEABIRDS

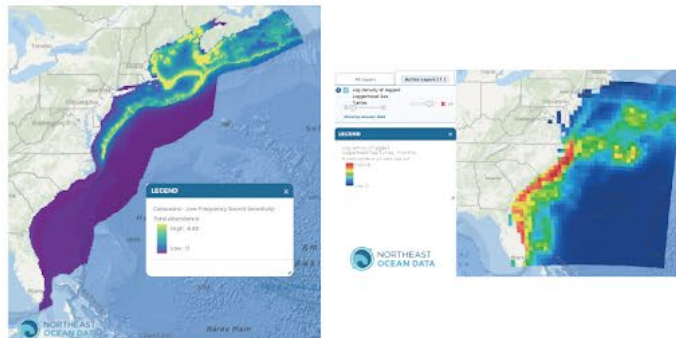


MDAT
 NOAA NCCOS
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 BOEM
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BOEM
 NOAA
 USGS

NOAA BOEM
 AMAPPS
 NMFS NEFSC & SEFSC

CETACEANS & SEA TURTLES



MDAT
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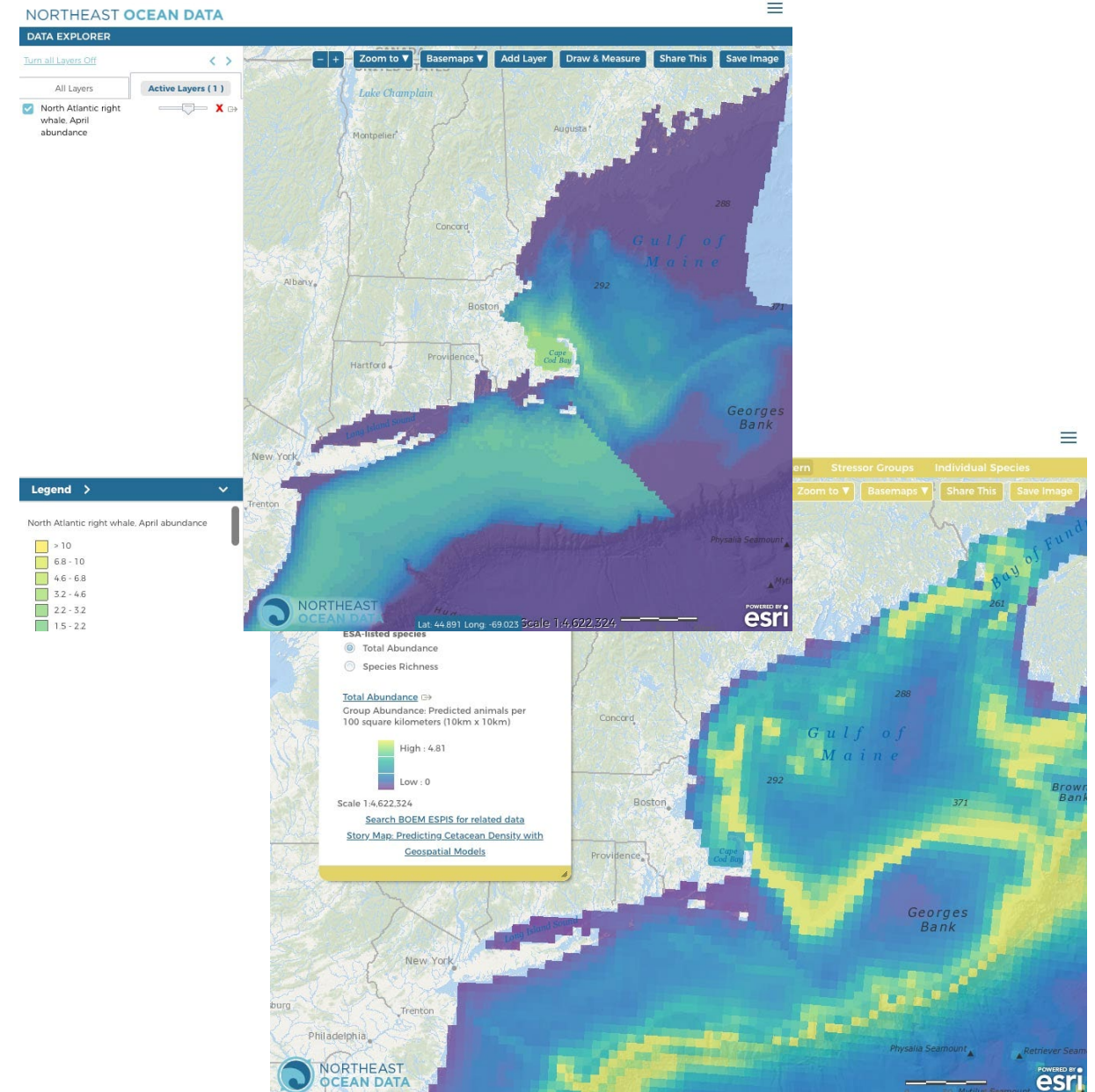
NOAA BOEM

NOAA BOEM
 AMAPPS
 NMFS NEFSC & SEFSC
 New England Aquarium
 CLEARWATER MARINE AQUARIUM
 IHR

Overview of Work To-Date

FY20 Regional Ocean Data Sharing Funds used to update and maintain products using the latest model outputs and to develop new products based on NROC & MARCO priorities with Marine Life Work Group input

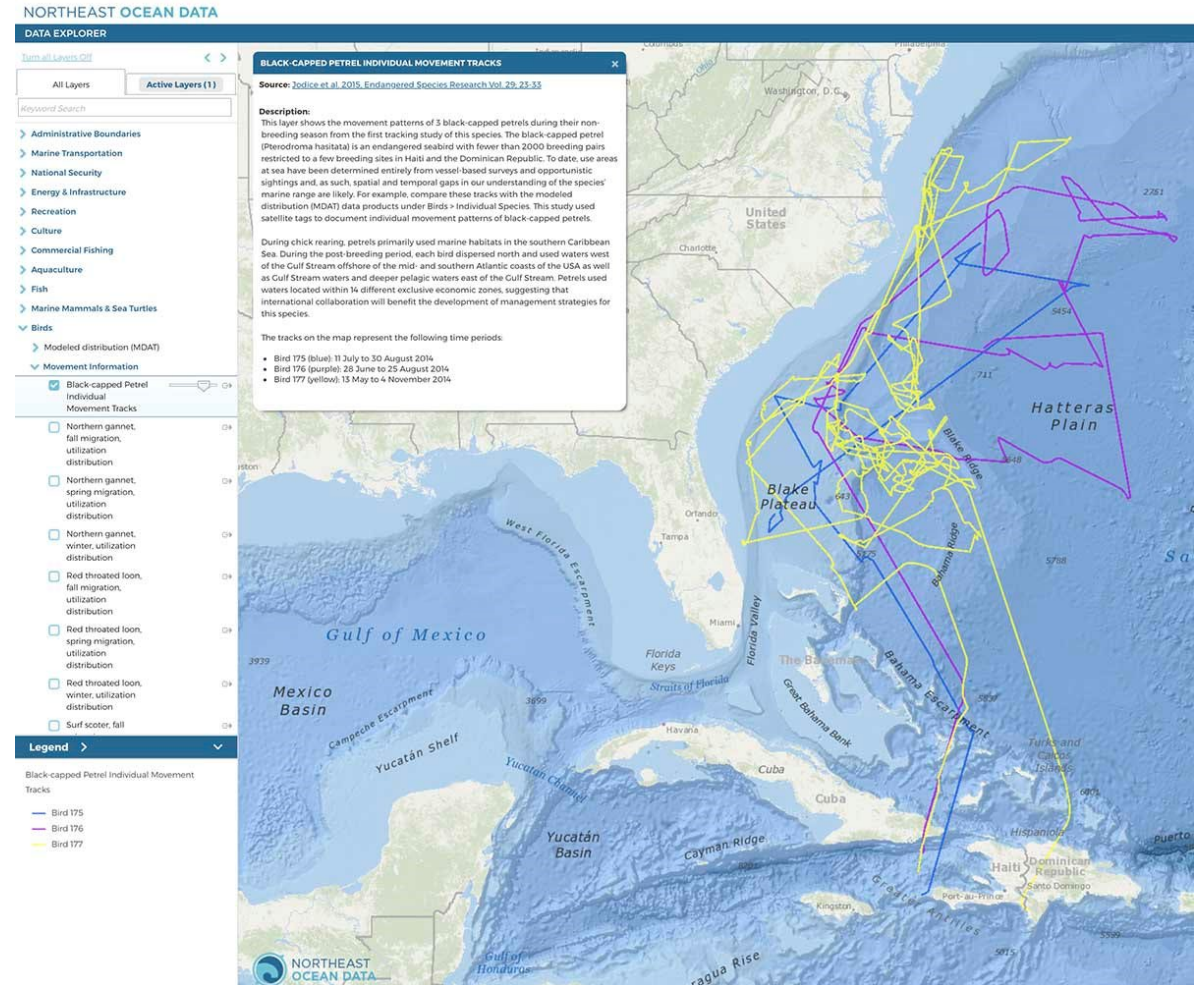
- Updates to NARW products and all cetacean summary products



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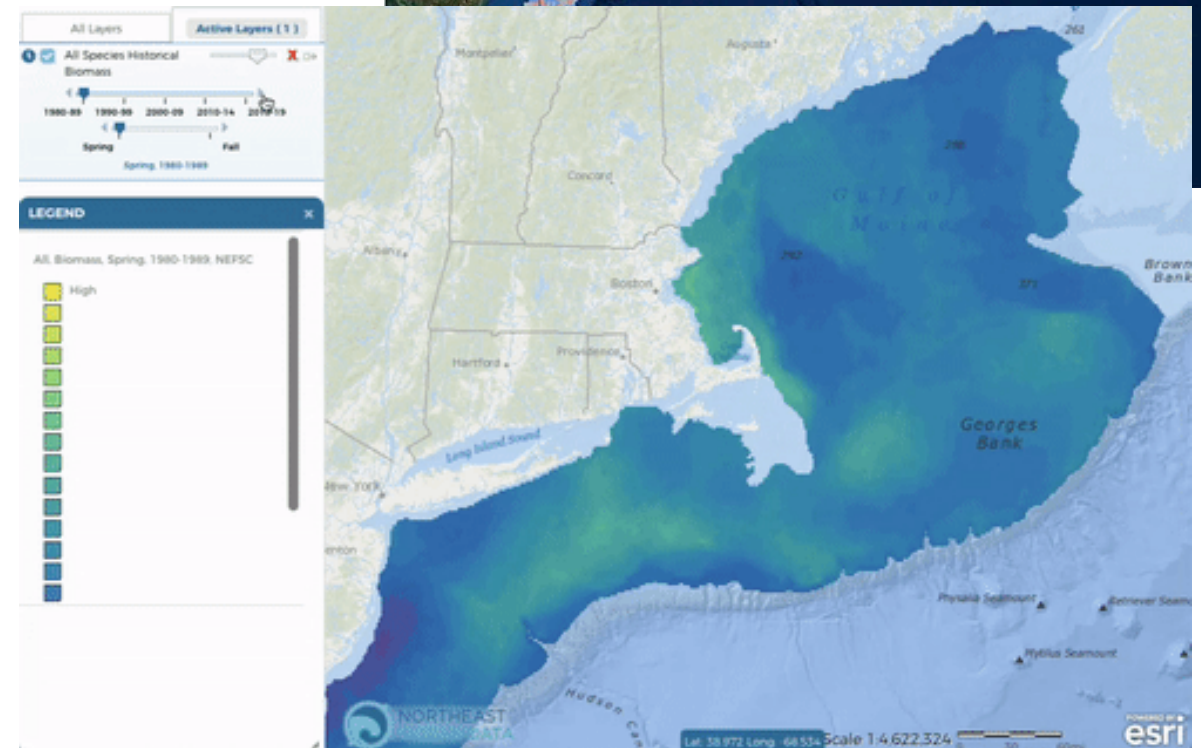
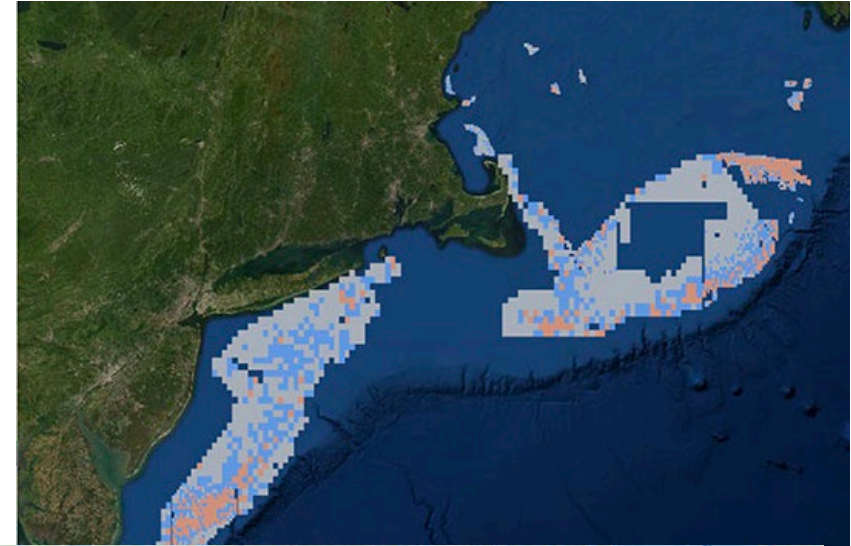
- Updates to NARW products and all cetacean summary products
- Avian movement information products



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- Updates to NARW products and all cetacean summary products
- Avian movement information products
- Fish distribution and range shifts

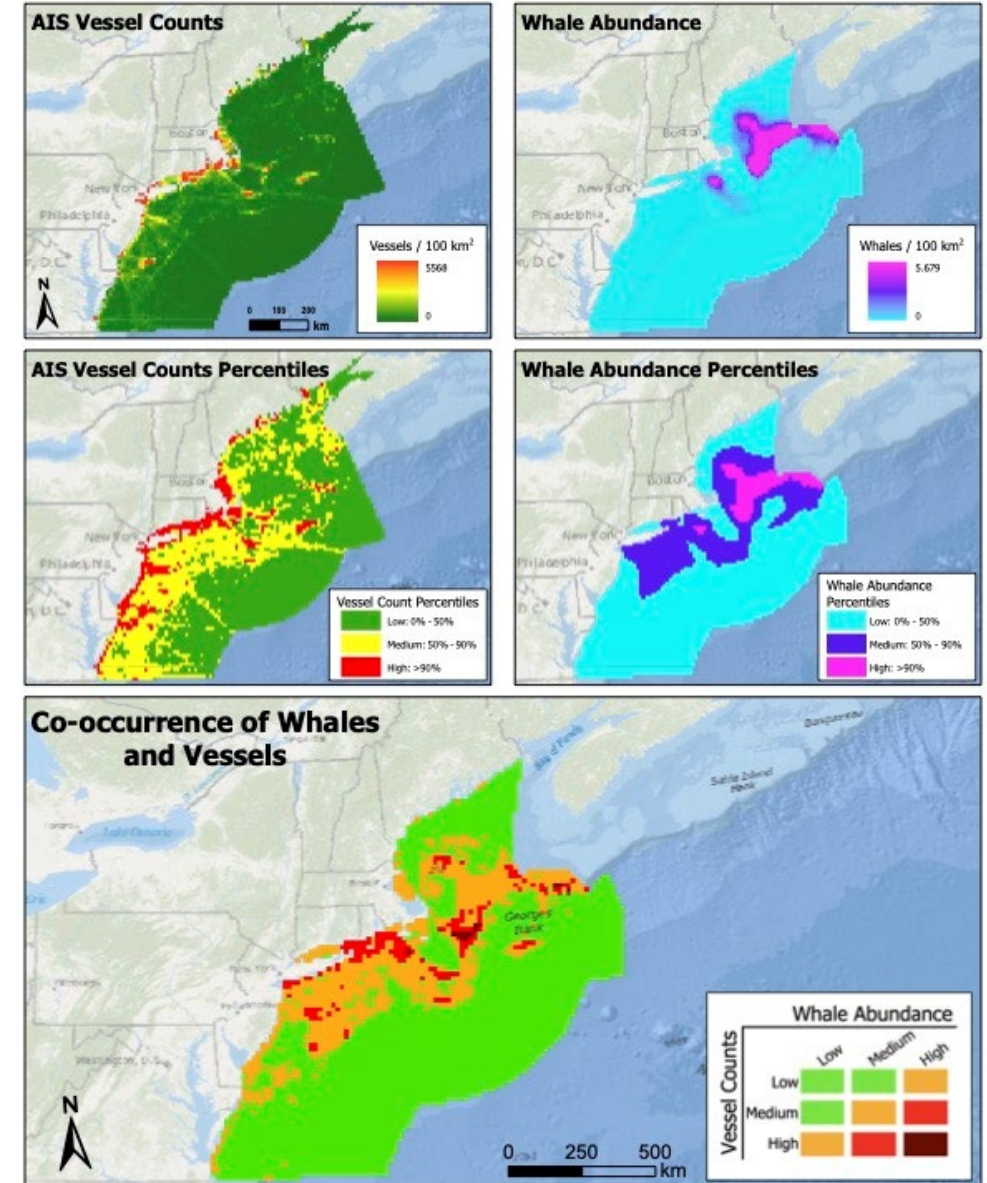


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- Avian movement information products
- Fish distribution and range shifts
- Species sensitivity and risk – cetaceans and ship strikes; fish and EMF

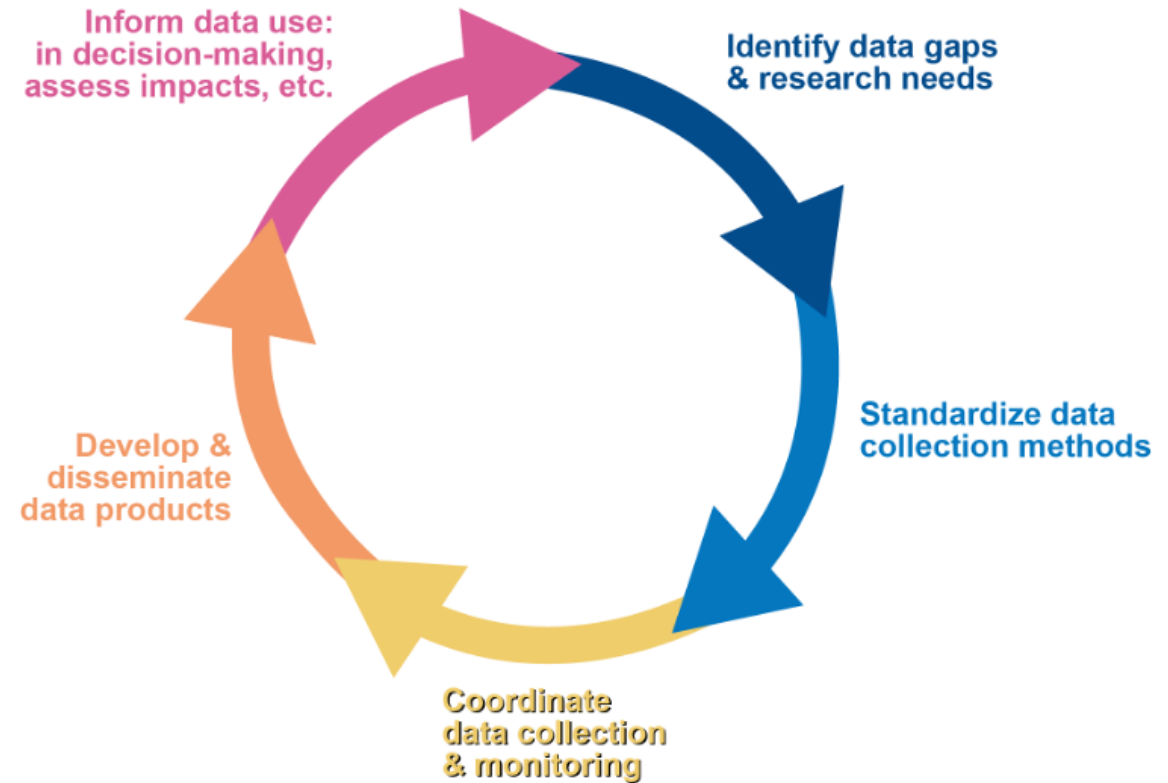
North Atlantic Right Whale, June



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- Updates to NARW products and all cetacean summary products
- Avian movement information products
- Fish distribution and range shifts
- Species sensitivity and risk – cetaceans and ship strikes; fish and EMF
- Coordination with RWSC and Project WOW



Potential IIA Scope

Bring marine life data products up to date and in alignment with new and emerging uses of the data products, many of which involve explicit assessments of change and evaluation of stressor impacts

- “MDAT 2.0”
- Collaboration and coordination
 - MARCO
 - RWSC
 - ISMN

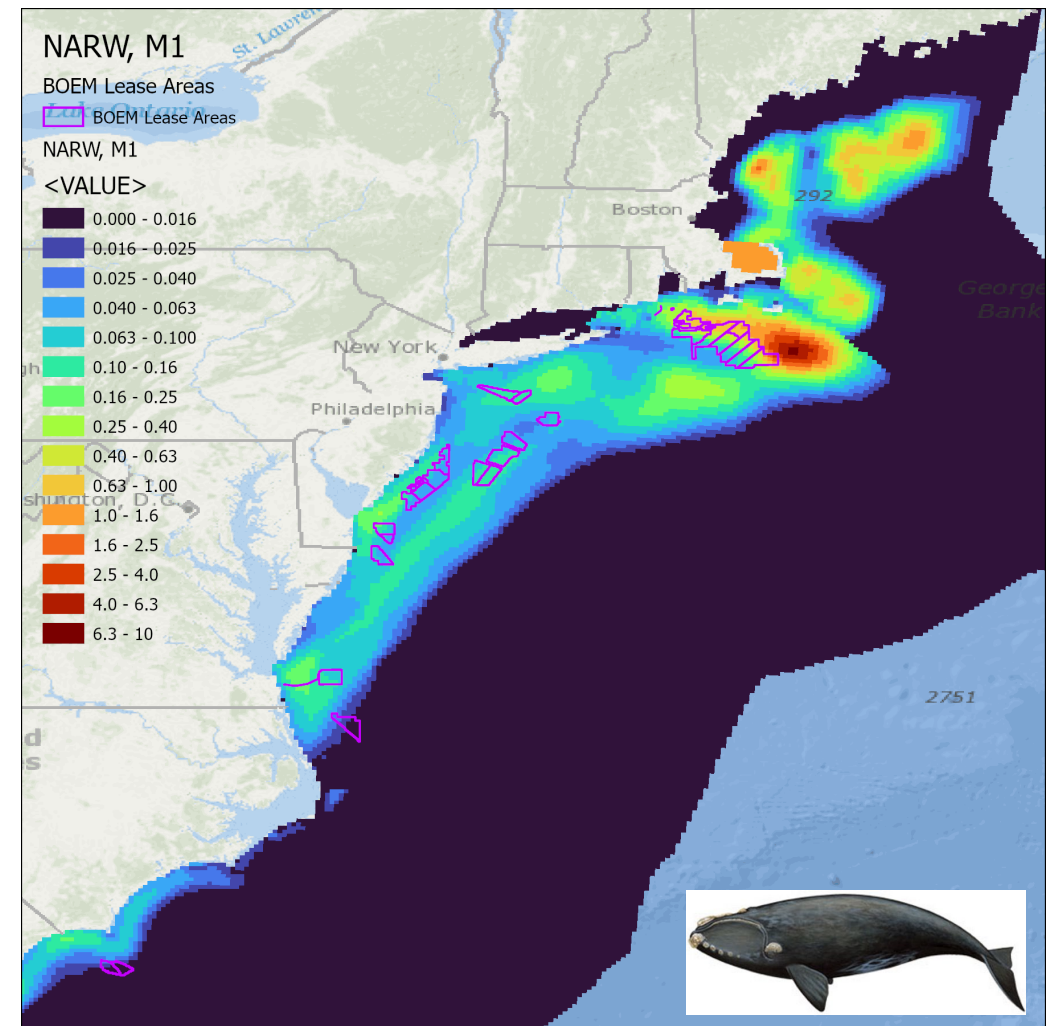


Potential IJA Scope

	YEAR 1	YEAR 2
1. Update cetacean and add new pinniped models	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2. Update avian models and add new avian density forecast models	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3. Add new sea turtle models (Navy and NOAA AMAPPS)		<input checked="" type="checkbox"/>
4. New species group products / summary products using 1-3 above		<input checked="" type="checkbox"/>
5. Integrate Northeast Regional Habitat Assessment (NEFMC+MAFMC) focal fish species products	Scoping	<input checked="" type="checkbox"/>
6. Innovation	Scoping	<input checked="" type="checkbox"/>

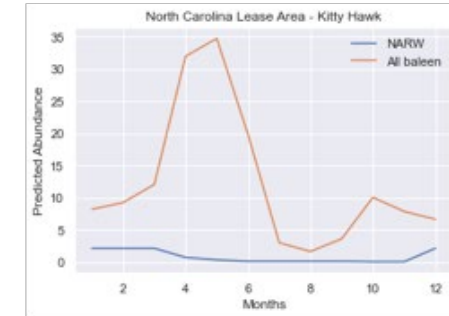
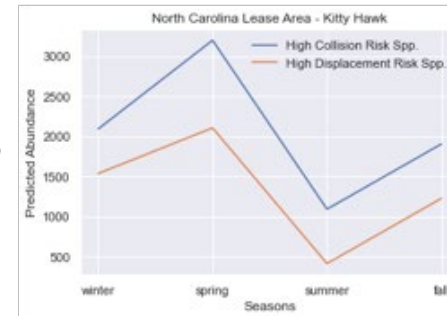
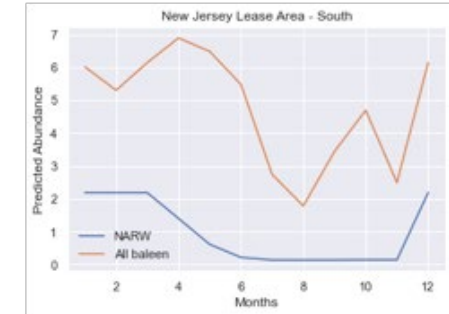
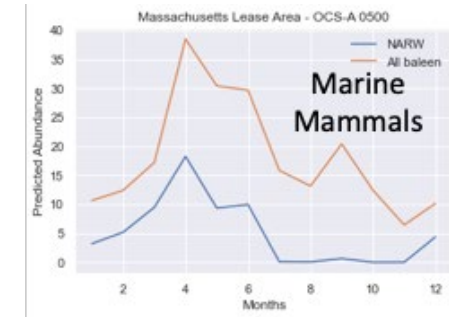
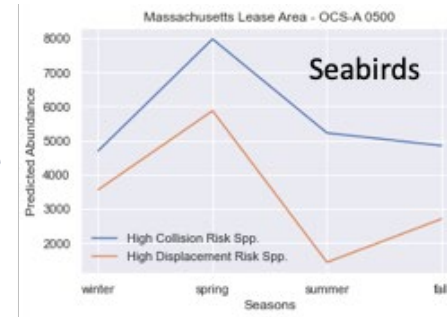
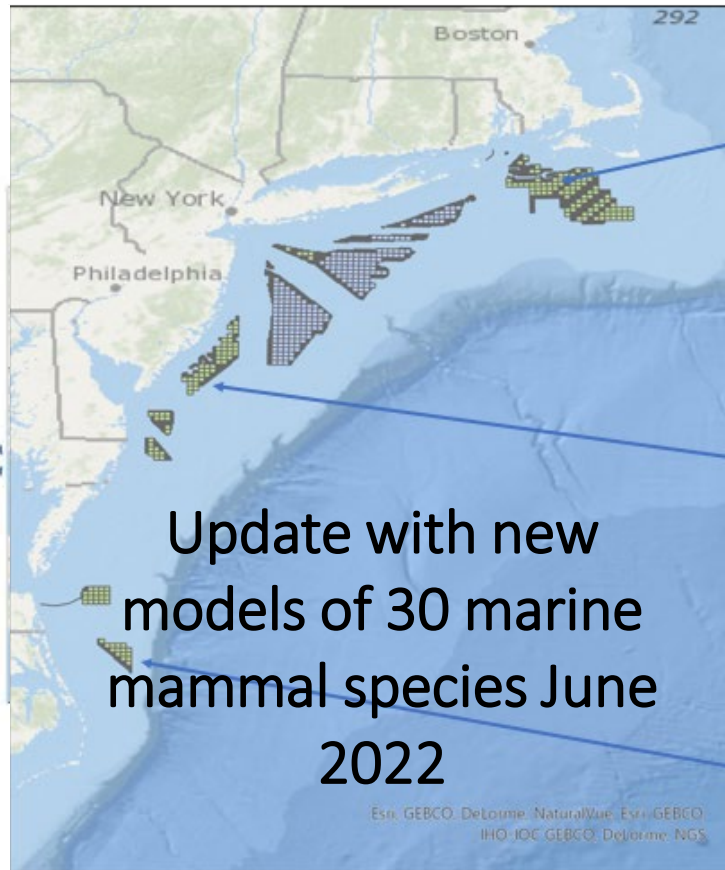
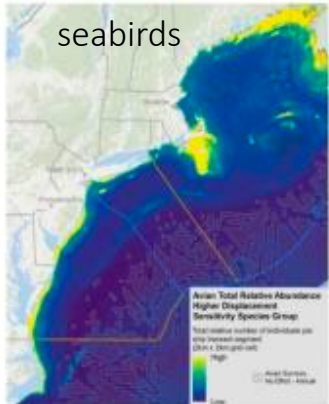
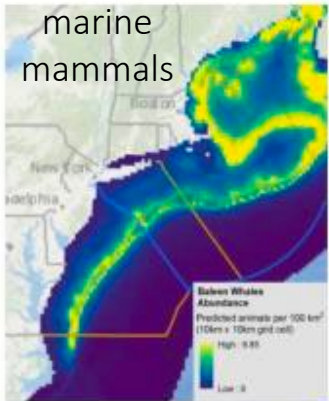
Potential IIJA Scope - Innovation

- Products showing change over time for multiple taxa – integration with ISMN and RWSC
- Distribution/abundance at different scales or analysis windows



Roberts et al. 2022 in prep

Potential IJA Scope - Innovation



Predicted abundance using models for seabirds (seasonally; Winship *et al.* 2018) and marine mammals (monthly; Roberts *et al.* 2016) for three WEAs

Potential IIJA Scope - Discussion

1. Management issues for which the data will be used/applied?
2. Areas of overlap with ISMN – how?
3. Scales – e.g., subregions, basin

Contacts

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