

Updates from NEFSC on the RecDST

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From the NEFSC RecDST team

Goals:

- Close the loop on stakeholder feedback.
- A sneak peek at the RecDST data dashboard.
- Low-stakes familiarization with the RecDST.
- Get early feedback on the RecDST data dashboard and RecDST interface.
- Provide information on data process.

Your Feedback From Winter of 2025

- 1) Authorization issues
- 2) Are there other fishery statistics that you would have liked to have seen summarized? - “one stop place for us to investigate the fishery, both past and future. Maybe a pipe dream....but you asked... hahaha”
- 3) Date slider difficulty
- 4) Years of data in the model

Data Dashboard - Work in progress

Purpose: Increase stakeholder understanding of the data used in the RecDST.

What to expect:

- A one-stop shop for RecDST data (not everything about recreational fishing) that will help answer questions about model outcomes/fishery status
- Intuitive figures, tables, and documentation

[Recreational DST Data Dashboard](#)

Explore the RecDST

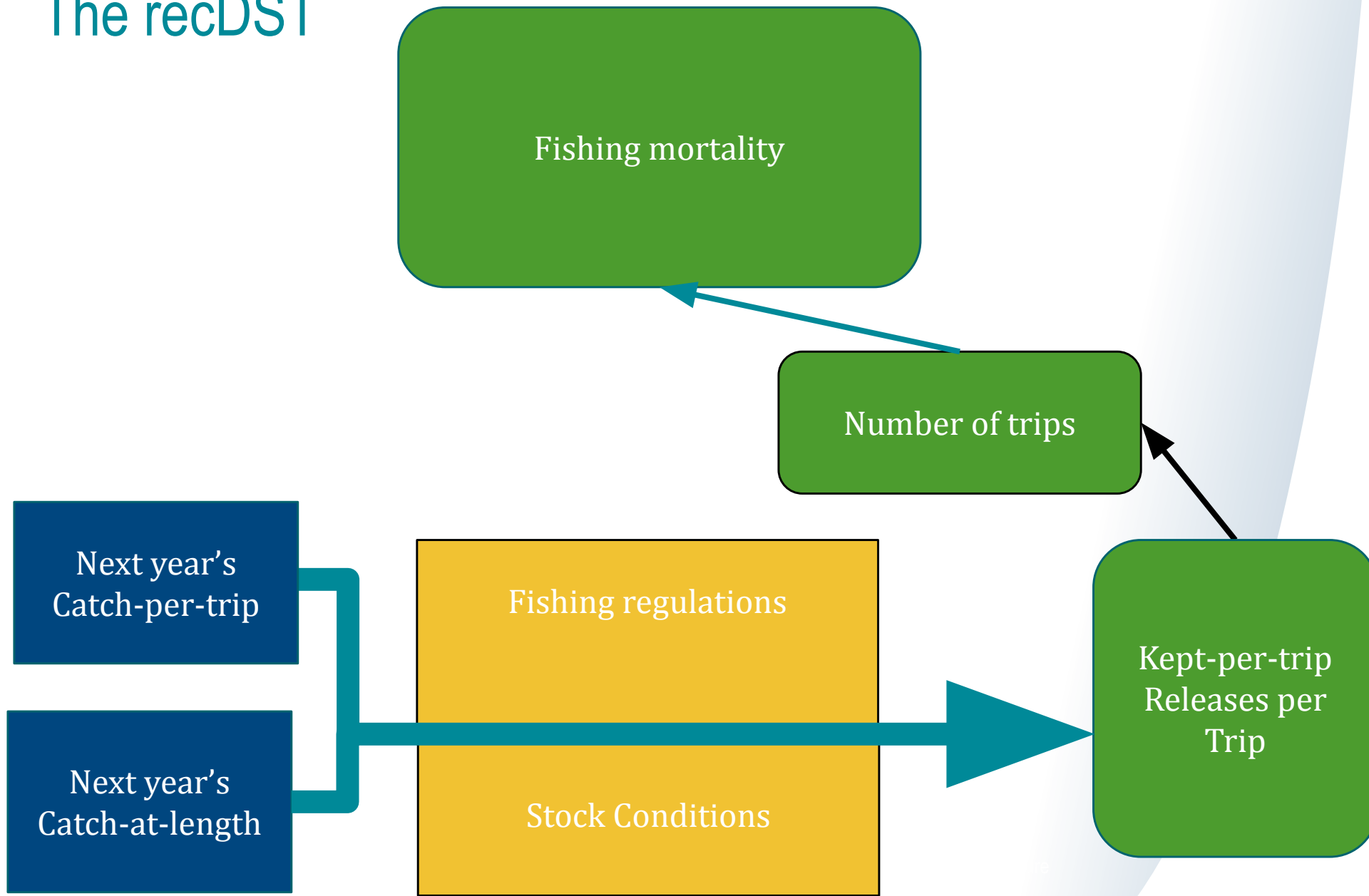
[Cod and Haddock app](#)

[Groundfish Model Summary Page](#)

In case you're interested, here's the:

[Summer Flounder, Scup, and Black Sea Bass app](#)

The recDST



People are Smart and Adaptable

When the world changes, people change their behavior.

- When the price of milk goes up, people drink more water and orange juice.
- When anglers can keep 10 fish on a trip, they fish differently than when they can keep 2.
 - Take more trips.
 - Take slightly different trips.

The Rec DST Strengths

- The DST is good at the modeling the number of trips.
 - The number of trips depends on quality of a fishing trip.
 - Quality of a fishing trip is based on:
 - Recent historical fishing
 - Adjusted by new regulations
 - Adjusted by updated estimates of fish in the ocean
- The DST does not try to model changes in behavior during a trip.

Models Are Only as Smart We Can Make Them

The DST is “trained” on recent historical data

- It knows that people catch 3 to 20 haddock on a trip.
- It has never seen people catch 100 haddock.
- It **may** have hard time analyzing a 100 haddock bag limit.
 - If people don't change how they fish at all, then the model will be pretty good.
 - If people changes their behavior on their trip a little bit, then the model will probably under-estimate harvest.
 - If lots of people start going out on 24-hour dedicated haddock trips and landing 60, 80, or 100 haddock per person, then the model could underestimate harvest substantially.

General Guidance

Most accurate when analyzing “small” and “medium” changes.

- Most accurate - changes to sizes and bag limits
- Less accurate - going from “some possession to zero possession”
- Less accurate - going from “zero possession to some possession”
- Most uncertainty – changes at times of the year when we didn’t see any trips that “targeted or harvested” one of the three species the previous year

Data inputs

	Groundfish	Summer Flounder, Scup, Black Sea Bass
Catch per trip distributions	1 Year of Data	3 Years of Data
Catch at Length distributions	1 Year of Data	1 Year of Data
Trips per year	~200,000 per year	~18,000,000 per year
Catch	~200,000 cod ~1,000,000 haddock	~30,000,000 SF ~40,000,000 BSB ~25,000,000 Scup

Pros and cons of using more data in the model

Pros	Cons
Less uncertainty	If additional data do not match “next years” conditions, the model can perform worse
Smaller effects of an odd observation of data	