

ForAtlantis

fish610.080 EAFM Tools: Atlantis

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February 12, 2025

About ForAtlantis

This is a tool to visualize fisheries scenarios from the Atlantis model. The fisheries scenarios are for different: 1) fishing mortality, 2) selectivity, and 3) discarding scenarios. These scenarios can be explored by clicking the tabs above. The first graph on each page shows what has been changed in the scenario chosen in the checkboxes. Fisheries scenarios can be chosen for different harvested group and the effects observed for each functional group. This tool shows how the model simulates the Icelandic ecosystem from 1948-2012 and forecasts different fisheries scenarios from 2013-2043. The tool can be found here <https://mfdb.rhi.hi.is/shiny/ForAtlantis/>

The scenarios

Fishing mortality:

F0.50 = F1 decreased by 50
 F0.75 = F1 decreased by 25
 F1 = Status quo (fishing mortality as in 2012).

F1.25 = F1 increased by 25
 F1.5 = F1 increased by 50
 F2 = F1 doubled.

Selectivity:

sel1 = Status quo selectivity (L0.5 = 87cm).

dec1 = Lower selectivity for juveniles (L0.5 = 90cm).

dec2 = Lower selectivity for juveniles (L0.5 = 93cm).

inc1 = Higher selectivity for juveniles (L0.5 = 84cm).

inc2 = Higher selectivity for juveniles (L0.5 = 80cm).

Discarding:

SQ = Status quo discarding.

L0 = Landing obligation with 100MD2 = More discarding 2x SQ

How it works

The tool has four tabs: About, Fishing mortality, Selectivity and Discarding. The About tab has short description of the tool and the model. The Fishing mortality tab shows how the model forecasts scenarios with different fishing pressure. In the Selectivity tab the effect of changed selectivity can be observed and the effects of discarding can be visualized in the discarding tab.

Fishing mortality

You can chose different fishing mortality in the tick boxes. Here the historical fishing mortality (F1) is chosen and where it has been increased by 25

In the drop down menu for harvested group you can chose a different group to see the effects of changed fishing mortality of that group.

In the drop down menu below you can chose a functional group to see what effect changed fishing mortality of the group chosen above has on your chosen group.

The tools show how the scenarios effect: biomass, landings, discards and economic indicators

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