

Hádegiserindi um aldursháð state-space stofnlíkön

Þriðjudagur 17. september 13:00–14:00

Hafró Fyrirlestrarsal á 1. hæð

Anders er höfundur SAM-líkansins sem er grundvöllur ráðgjafar fyrir þorsk í Norðursjó og Eystrasalti, kolmunna og fleiri stofna innan ICES. Innan Hafró hefur líkanið verið notað í samanburðarkeyrslur fyrir íslenska ufsastofninn síðustu tvö ár.

Allir sem hafa áhuga á straumum og stefnum í stofnmatsaðferðum eru hvattir til að mæta. Sjá ágrip hér að neðan.

Speaker: Anders Nielsen is a senior scientist at DTU Aqua National Institute of Aquatic Resources. His research interests are statistical methods used in fish stock assessment, statistical software, and tracking marine creatures equipped with electronic data storage tags.

Title: Addressing challenges in single-species assessments via simple state-space assessment model

Abstract: A simple age-structured state-space assessment model is presented, as an alternative to (semi) deterministic procedures and the full parametric statistical catch-at-age models. It offers a solution to some of the key shortcomings of these models. Compared to the deterministic procedures it avoids the false assumption that catch at age is known without errors and allows quantification of uncertainties of estimated quantities of interest. Compared to full parametric statistical catch-at-age models, the state-space assessment model avoids the problem of fishing mortality being restricted to a parametric structure (e.g. multiplicative), and problems related to having a high number of model parameters compared to the number of observations. The main criticism of state-space assessment models is that they tend to be more conservative (react slower to changes) than the alternatives. A solution to this criticism is offered by introducing a mixture distribution for the transitions steps. The model presented is used for several commercially important stocks within ICES.