Introduction

Assessment workshop

Arni Magnusson

Hafro, 16–24 Jan 2012

Topics

Statistics - likelihood, delta method, MCMC

Models - Schaefer, Coleraine, ADCAM

Software - AD Model Builder

Schedule

Day 1 Schaefer, likelihood

biomass models, intro to uncertainty

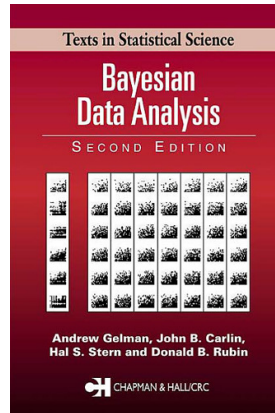Day 2 AD Model Builder, delta method, MCMC

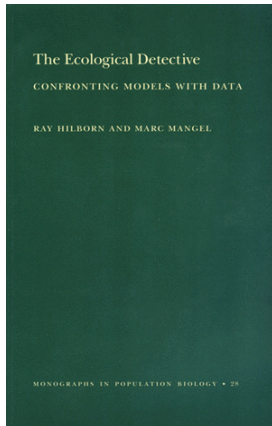optimization, advanced uncertainty

Day 3 Coleraine

generalized, age-structured, length data, sex-specific

Day 4 ADCAM

specific, age-structured, migrations

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Biomass models
AD Model Builder
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Biomass models

Fitting Surplus Production Models: Comparing Methods and Measuring Uncertainty

Tom Polacheck

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Ray Hilborn

School of Fisheries WH-10, University of Washington, Seattle, WA 98195, USA

and Andre E. Punt

School of Fisheries WH-10, University of Washington, Seattle, WA 98195, USA

Polacheck, T., R. Hilborn, and A.E. Punt. 1993. Fitting surplus production: comparing methods and measuring uncertainty. Can. J. Fish. Aquat. Sci. 50: 2597-2607.

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AD Model Builder

An Introduction to

AD MODEL BUILDER

for Use in Nonlinear Modeling and Statistics

Version 10.0 (2011-01-18)

David Fournier

AD Model Builder: using automatic differentiation for statistical inference of highly parameterized complex nonlinear models

David A. Fournier[a], Hans J. Skaug[b]*, Johnoel Ancheta[c], James Ianelli[d], Arni Magnusson[e], Mark N. Maunder[f], Anders Nielsen[g] and John Sibert[c]

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Coleraine

**COLERAINE
A Generalized Age-Structured
Stock Assessment Model**
USER'S MANUAL VERSION 2.0
R HILBORN, M MAUNDER, A PARMA, B ERNST, J PAYNE, P STARR

What makes fisheries data informative?

Arni Magnusson[1,2] & Ray Hilborn[1]

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ADCAM

ADCAM User Manual

(Draft Version)

Hoskuldur Bjornsson
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November 22, 2009