

An updated summary of worldwide spawner and recruitment data

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Abstract

1 Introduction

This document is an updated version of Myers *et al.* (1995).

2 Data

Fisheries stock assessments published by a variety of fisheries agencies are the main source of data.

The data present in each assessment is collated in a spreadsheet file.

A PostgreSQL relational database is built to store the assessment results.

3 Statistical analysis of spawner-recruitment

Four different models are used to relate the recruitment R to the spawners S :

$$R = \alpha S^\beta \tag{1}$$

$$R = \alpha S e^{-\beta S} \tag{2}$$

$$R = \frac{\alpha S}{1 + (S/K)} \tag{3}$$

$$R = \frac{\alpha S}{1 + (S/K)^\gamma} \tag{4}$$

3.1 Normalising the data

3.2 The lognormal distribution

3.3 The Gamma distribution

4 Description of figures

For each assessment available, a summary figure is produced.

5 Acknowledgments

A Figures

B Stock reference

C Summary table

References

Myers, R. A., Bridson, J., & Barrowman. 1995. *Summary of worldwide spawner and recruitment data*. Can. Tech. Rep. Fish. Aquat. Sci. 2024. Canadian Department of Fisheries and Oceans.