Statistical techniques for stock assessments
fish5108statass Statistical stock assessment methods
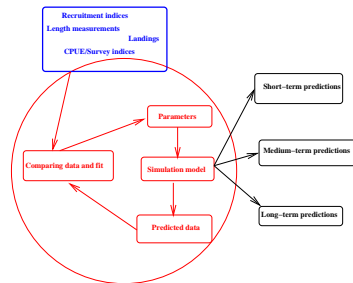
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Biological models

- Conceptual model of biology
- Mathematical description of the model
- Population models: Usually a forward prediction model
- Growth etc: Mathematical description of process
- Remember: **Parsimony!**

Formal statistical procedures

Model contains parameters
Model predicts data
Parameters are estimated by fitting model to data

Population models

Some basic population model types:

- Equilibrium bulk biomass/production model
- Dynamic bulk biomass model
- Dynamic age structured production model
- Back-calculation model