

## **SURBA and its data file.**

SURBA (Survey-based assessments) software was developed for use where commercial catch data are limited or uncertain, but survey information are available.

The SURBA 2.0 program requires a single input file to be prepared, in a specific format. The accompanying EXCEL file is designed to help users enter their data in the correct format. Instructions are given in red text. Further information is provided in section 3 of the accompanying programme documentation.

The data file features:

- File title
- Data structure (number of ages covered, plus group information, years of data)
- Period of the survey
- The survey index data (over the age and years specified in the file)
- The weighting within the program for ages (i.e. how well those ages are sampled by the survey gear)
- The default catchabilities (which may need to be adjusted through trials to ensure negative fishing mortalities are not calculated by the program. This is a current weakness in SURBA).
- The age range over which the mean fishing mortality is calculated
- The parameter information required for projections
- Biological information at age by year for natural mortality, maturity and stock weights

All attendees are urged to read the accompanying user manual, so that they have an understanding of what the software is trying to do.

Attendees should consider standardising their survey indices if they know factors have changed over time. For example, if surveys have moved area, this will affect the results. This can be performed using GLM analysis.