Presentation of Panel Report

International Fisheries Stock
Assessment Review Workshop

28 Nov – 2 Dec

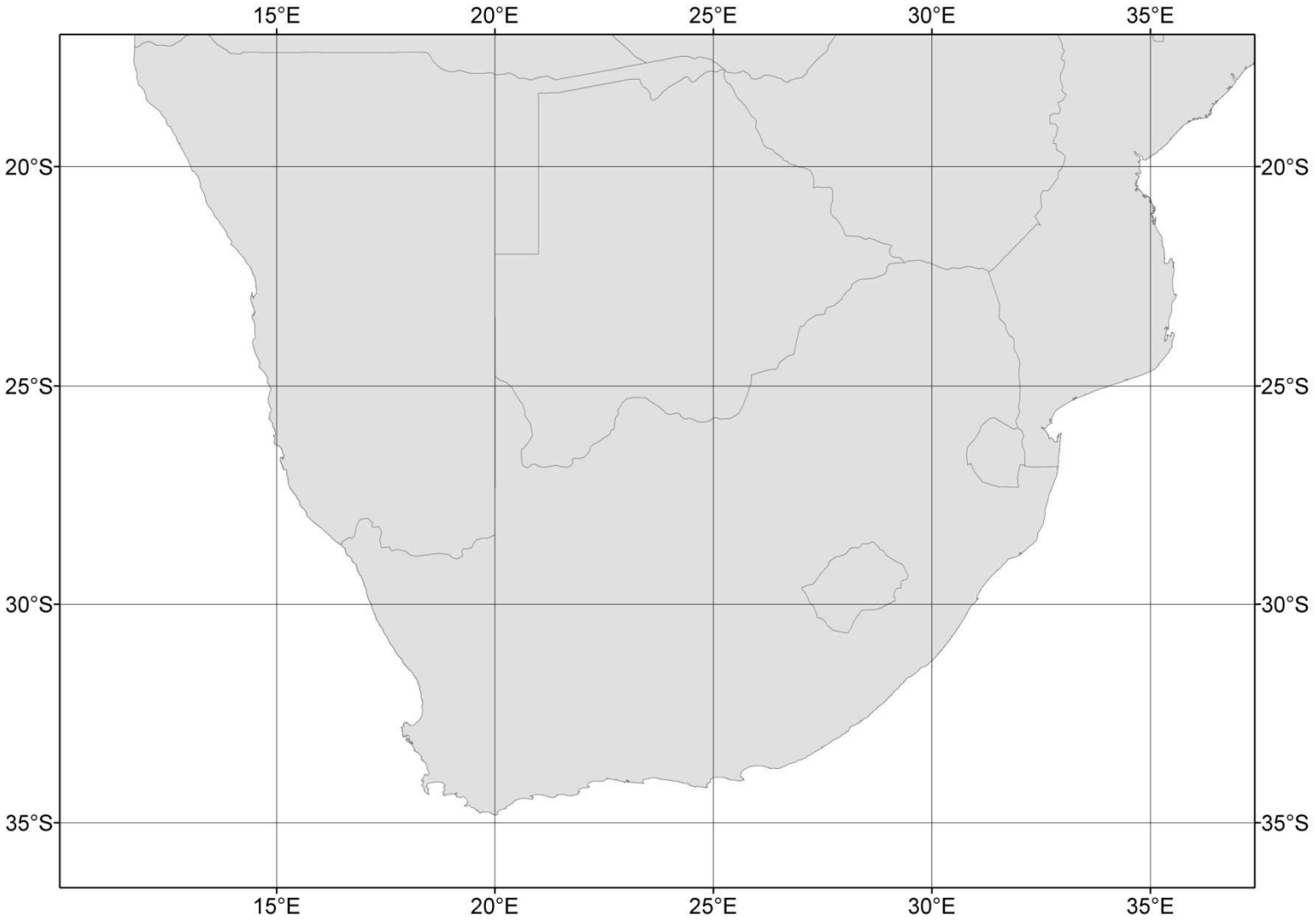
Focus of the review

- Hake assessments leading to possible joint assessment RSA / Namibia
- Pelagic fishery OMP, penguins
- Horse mackerel (bycatch)
- [MSC low trophic level requirements]

Outcomes of the review

- Technical comments on models, data analysis methods, OMP specifications etc
- Will focus on highlights (new information) and some general issues rather than the technical detail

Spatial structure



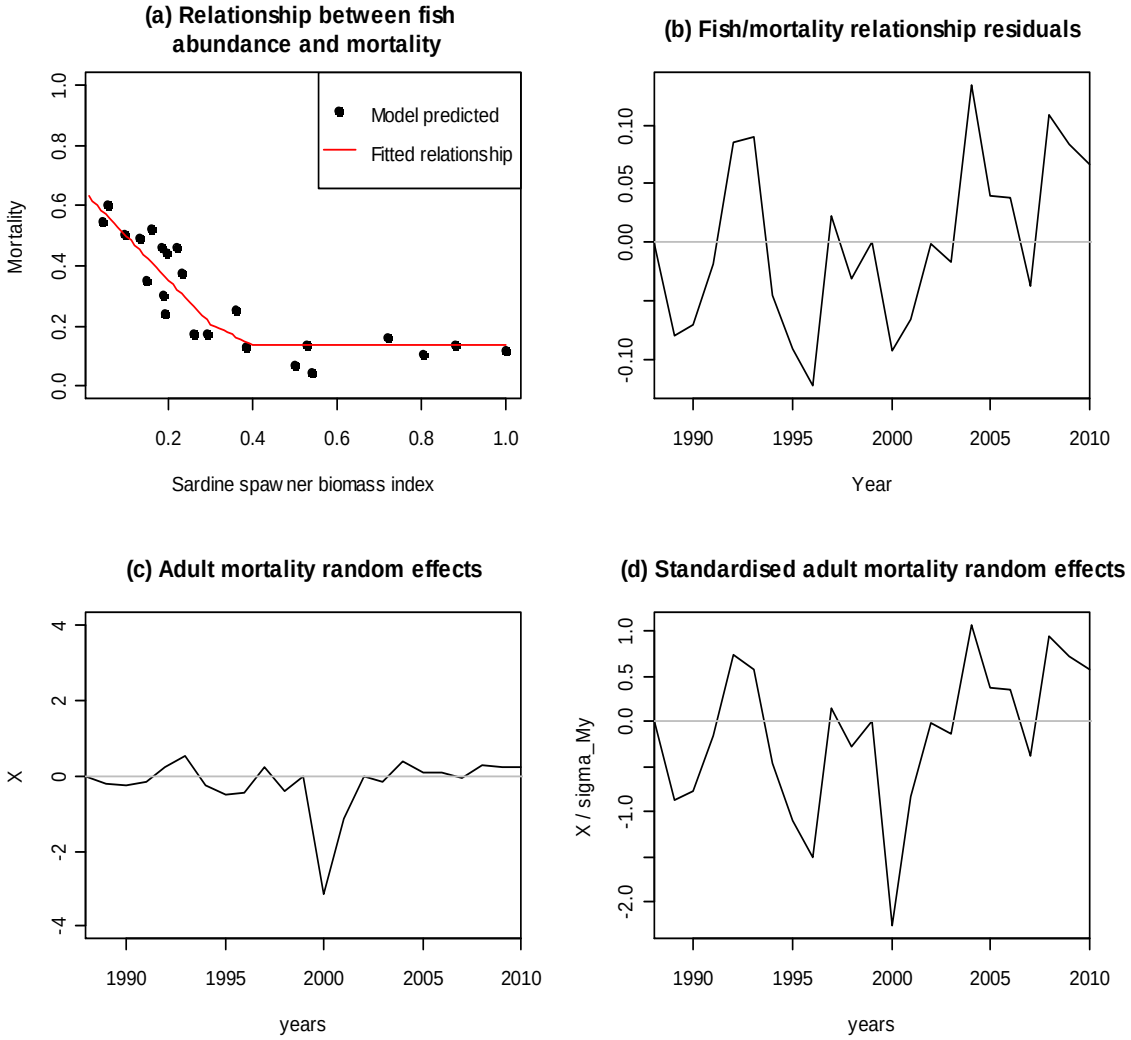
Sardine

- Evidence for spatial structure east and west of Cape Agulhas
- Not separate stocks – some mixing
- Raises issue of area specific TACs for the revised OMP
- The OMP will also address possible impacts on penguins (at a regional level)

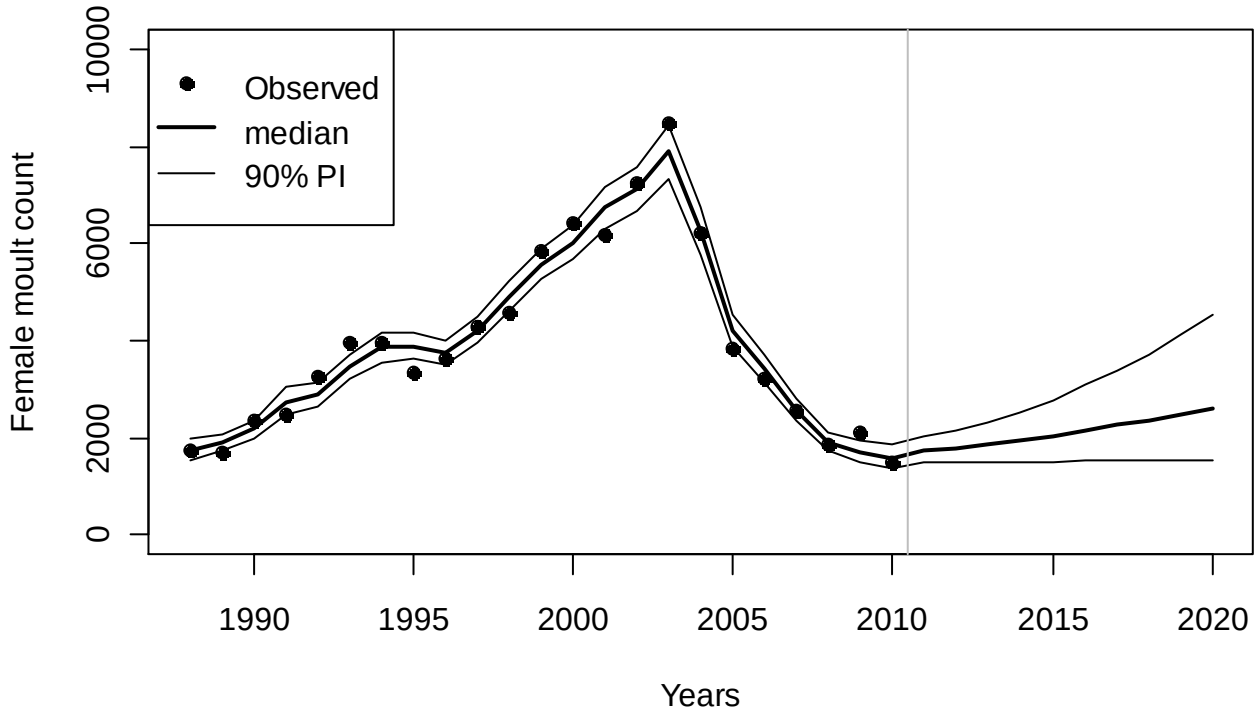
Penguin – sardine interactions

- MARAM study (Robinson and Butterworth)
- Effects of sardine abundance on penguin mortality (Robben Island)

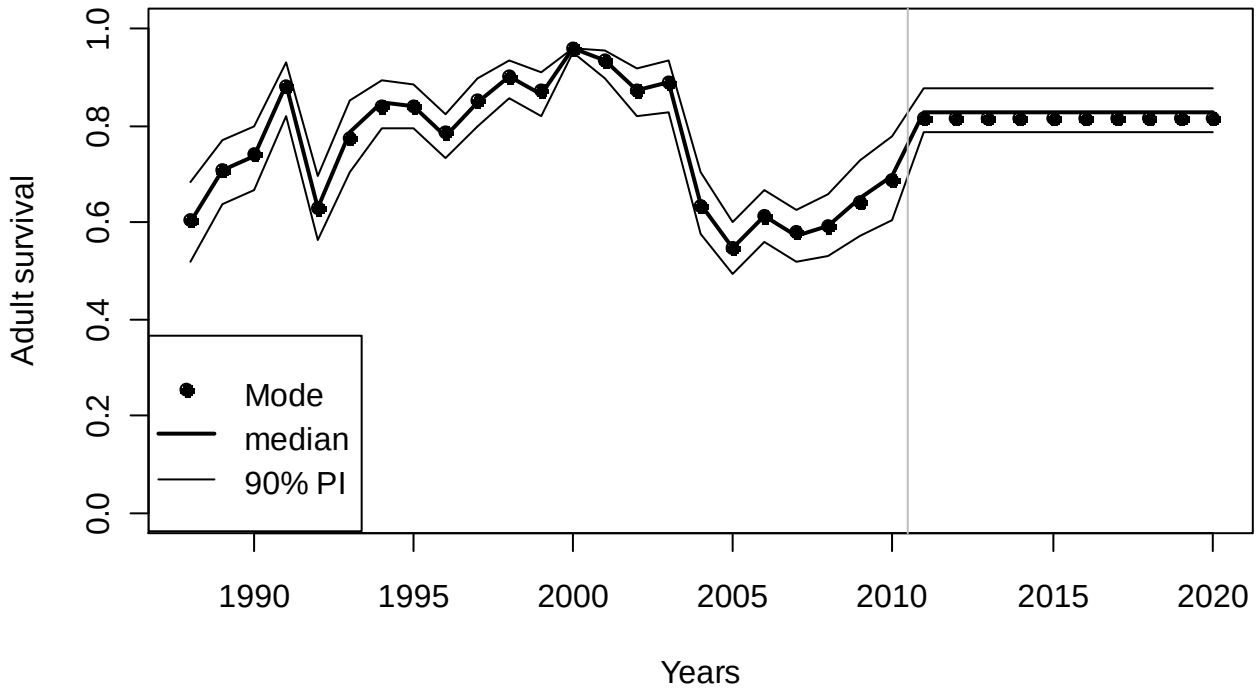
Penguin mortality



Female moult count



Adult survival



Penguin pressure model

- Work in progress
- Not formally fitted to data but considers more hypotheses and uses expert input
- Useful to synthesise existing knowledge (qualitative as well as quantitative)
- Not suitable for tactical management advice
- Helpful in identifying research gaps

Hake

- Genetic studies and spatial structure
  - Need for better coordination of field and lab activities
- Preparations for joint assessments
  - Quite a lot of work still to be done on data synthesis and analysis
- Spatial models for hake under development

General issues

- OMPs and decision analysis
- Spatial management
- Complexity of decision rules in OMPs
- Collaboration on ecosystem modelling
- Low trophic level fisheries

OMPs and decision analysis

- Discussed need for clarity on management objectives (but not too “tactical”)
- Decision and reporting performance statistics
- Identifying tradeoffs more useful than formal optimisation approaches
- Start to develop “ecosystem” level objectives?

Spatial management

- Increasing evidence of spatial structure at large spatial scales (e.g. east / west of Cape Agulhas)
- For OMPs, requirement is for data available at spatial level of the stock
- Finer scale spatial management will need to be addressed outside OMPs

Complex decision rules

- Decision rules for some fisheries have become increasingly complex over time
- This arises naturally from attempts to improve performance of OMPs
- At some point the complexity of the management strategy itself may become an issue (how many people really understand the OMP for the pelagic fishery?)

Ecosystem modelling

- Seeing increasing use globally to inform “strategic” issues in fishery management
- Complex models not yet suitable for tactical decision making
- Trend is to improve ability to fit more complex models to data – as this improves, there is likely to be pressure to start to use such models more tactically
- Be prepared and try to collaborate

LTL fisheries

- Two sessions devoted to discussion of recent changes to MSC (Marine Stewardship Council) requirements for low trophic level fisheries
- Changes require more conservative target levels to be set to restrain impacts on other parts of the food web
- Much of the discussion centred on use of ecosystem models to inform the changes
- Identified constructive research directions to resolve some of the issues

Concluding remarks

- As in previous reviews, the Panel was highly impressed with the quality and amount of information presented
- The amount of information and the number of issues covered did not allow for comprehensive technical review on all issues
- The “alternative report” was the highlight of the meeting!