



Australia's National Science Agency

Update on Australian otolith collection, ageing and the SRP ageing workshop 2024

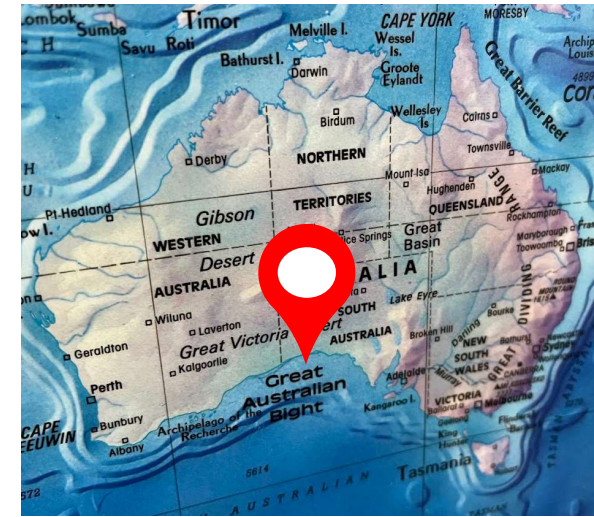
Jessica Farley, Naomi Clear

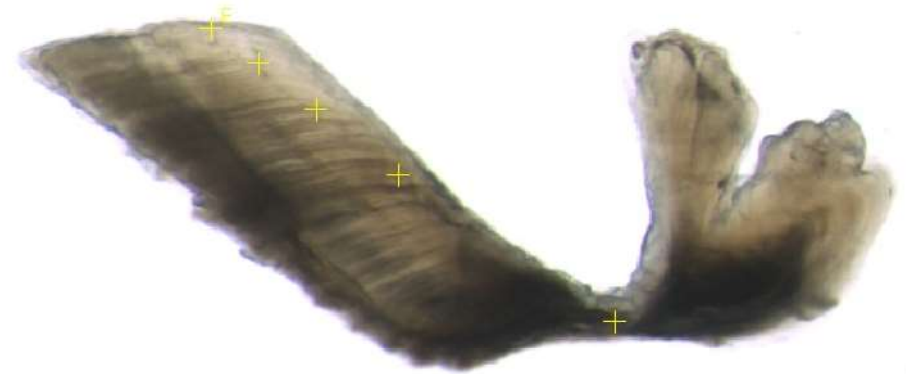
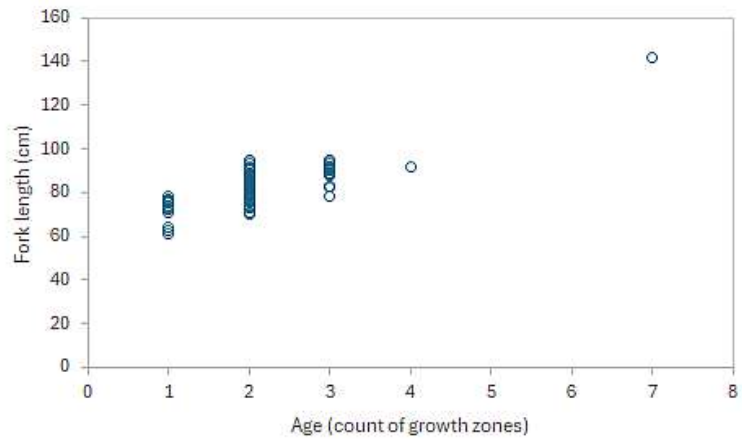
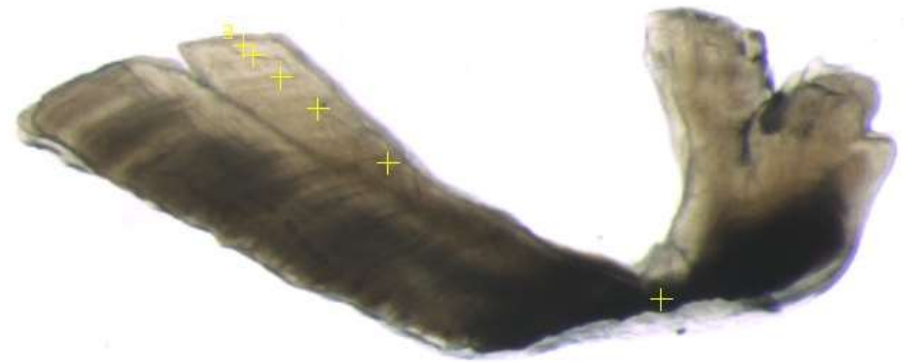
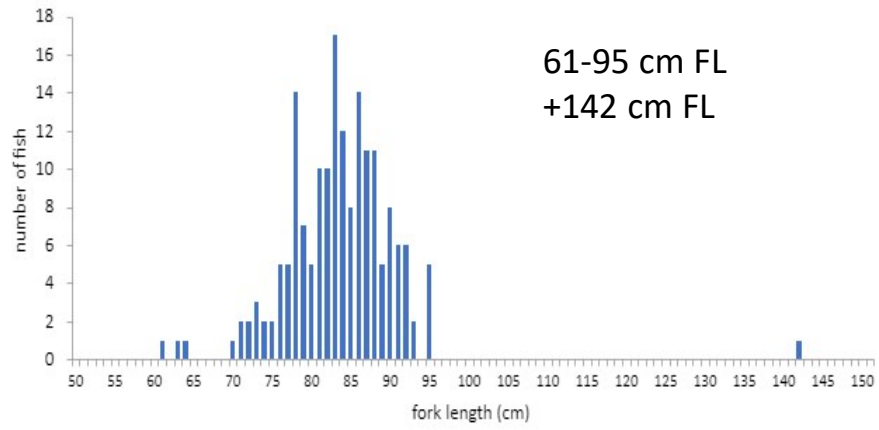
CCSBT-ESC/2409/15



Australian SBT otoliths & ageing

- Australian purse seine fishery in the GAB
- Otoliths collected during towing or after transfer
- 177 otoliths collected in 2023
 - 100 read by FAS
 - After reading calibration set (n=61)
 - Confidence score to reading
- 148 otoliths collected in 2024





SBT ageing workshop (SRP)

- Supported by ESC in 2023
- Proposed for early 2024 at the CSIRO labs in Hobart
- Rescheduled for later this year (dates?)

Aim:

- Improve age estimation protocols and quality control
- Improve decimal age estimation
- Revise the age determination manual
 - Particularly methods related to reading otolith margins.
- Provide capacity building for members who have not been involved in SBT age estimation.

SBT ageing workshop (SRP)

Preparation work:

- 100 otoliths prepared for daily age (42-79 cm FL)
 - Otolith size-to-daily age relationship required for estimating fractional age
 - Locate of the first counted annual growth zone in otoliths and vertebrae
 - Collected from 2001-2023 – examine change in juvenile growth?
- 41 otoliths from tag-recapture fish for annual ageing
 - “Known age fish” → useful for validating current ageing protocol
 - Some at liberty for up to ~30 years
- Measure annual increments & marginal increment analysis
 - Confirm time of year annual increments form in sectioned otoliths