

Obtaining and cataloguing ageing structures, preparation methods, storage and inventory








Daniel Ricard - DFO Science Gulf Region

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Standard operating procedures

HomeTools



techreport-english.... x









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Standard Operating Procedures for marine fish ageing in the Gulf Region of Fisheries and Oceans Canada

Daniel Ricard, Eliane Aubry, Andrew Darcy, Isabelle Forest, Karen Robertson, Marie-France Robichaud, Sylvie Robichaud, Nicolas Rolland, Joëleen Savoie and François-Étienne Sylvain

Gulf Fisheries Centre
Fisheries and Oceans Canada, 343 Université Avenue
Moncton, NB, E1C 9B6, Canada

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Obtaining ageing structures

- Samples from commercial landings
 - Port sampling
 - At-sea observers
- Samples from research surveys
 - Length stratified sampling
 - Sex and length stratified sampling

Cataloguing

- Procedures to identify the otoliths that are collected
- Maintain the unique identity of each otolith through the documentation of its source, date collected, fish species, fish length, . . .
- Ideally, storage of information in a database

Preparation

- Cleaning
- Polishing
- Mounting in epoxy resin
 - Clear resin
 - Opaque resin
- Mounting on wax
- Mounting on microscope slide
- Crack and burn
- Sectioning
 - Saws, noise and dust
- Imaging (more on that tomorrow)

Storage

- Ideal situation - Central quality-controlled environment with archival level documentation of physical samples - No deterioration of physical otoliths - Maintain the readability of otoliths
- Reality - Hapzard collections of different ageing structures located in a number of places, and with varying levels of documentation - Storage in glycerin that deteriorates otoliths in the longer term



Inventory of otolith collections

- OpenData and FGP datasets as a starting point
- write a metadata record for each “otolith collection”
- the dataset shared in the public domain is the summary of physical otoliths in the collection
- by also adding the number of otoliths that have been aged, the “git diff” on the OpenData dataset represents a [progress report of sort](#)
- Gulf Region otolith collections on [dmapps](#)
 - 4T American Plaice on [dmapps](#), on [OpenData](#) and on [FGP](#)
 - 4T Atlantic Cod on [dmapps](#), on [OpenData](#) and on [FGP](#)
 - 4T White Hake on [dmapps](#), on [OpenData](#) and on [FGP](#)
 - 4T Yellowtail Flounder on [dmapps](#), on [OpenData](#) and on [FGP](#)
 - 4T Winter Flounder on [dmapps](#), on [OpenData](#) and on [FGP](#)
 - 4RST Witch Flounder on [dmapps](#), on [OpenData](#) and on [FGP](#)

Thoughts and discussion