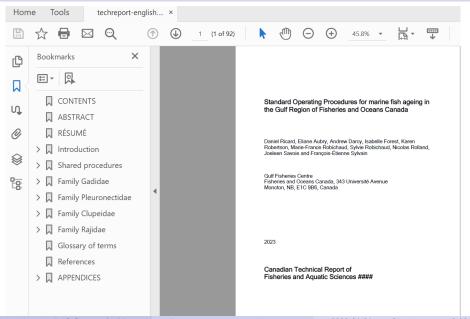
Obtaining and cataloguing ageing structures, preparation methods, storage and inventory

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Standard operating procedures



Obtaining ageing structures

- Samples from commercial landings
 - Port sampling
 - At-sea observers
- Samples from research surveys
 - Length stratified sampling
 - Sex and length stratified sampling
- Other sampling opportunities
 - Trapnet
 - Recreational fisheries
 - ...

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, but a well-curated spreadsheet or collection of ASCII files can work too

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

Workshop homework

• How can we best summarise the results of our regional homework?

Thoughts and discussion