Otolith Workshop 2011: Decoding the Otolith

Activity

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WORKSHOP GOAL

This workshop is intended to be educational, interactive, collaborative, and consensus building.

It will outline and prioritize issues related to lab-specific processes, otolith aging, alternative marking techniques, data sharing, collaboration, and management, as well as quality assurance.

WORKSHOP PROCESS

Part 1: Issue identification

Step 1. Participants divide into one of the predefined subject areas: lab specific processes, otolith aging, alternative marking methods, data sharing and collaboration, and data quality assurance.

Step 2. For five minutes, participants list specific research interests and concerns in that subject area.

Step 3. Each group then moves to the next subject area and provides additional specific research interests and concerns for five minutes.

Step 4. This process continues until each group visits each subject area and everyone contributes their research interests and concerns in each subject area.

Part 2: Issue resolution

Step 1. Groups return to their original subject area and suggest specific methods for addressing the specific research interests and concerns identified in Part 1 for three minutes.

Step 2. Each group then moves to the next subject area and provides additional specific methods for addressing research interests and concerns for three minutes.

Step 3. This process continues until each group visits each subject area and everyone contributes their methods for addressing research interests and concerns in each subject area.

Part 3: Prioritization

Each participant is given 2 sticky tabs per subject area. These tabs will indicate votes for the most effective, interesting, and useful methods for addressing the areas of concern for each subject. Then each issue and solution combination is listed in ascending order by votes by subject area.

WORKSHOP RESULTS

These results represent the prioritized issues and solutions related to otolith lab specific processes (Table 1), otolith aging (Table 2), alternative marking methods (Table 3), data sharing and collaboration (Table 4), and data management and quality assurance (Table 5) for workshop participants. "*None listed*" in the Issue column indicates a solution was provided without an issue listed, and "*No response*" in the Solution(s) column indicates no response was provided for a particular issue.

Table 1. Issues and solutions regarding lab specific processes.

Subject: Lab Specific Processes		
Votes	**Issue**	**Solution(s)**
10	Need for additional workshop.	specific lab methods workshop
7	Standardize measuring techniques	discussion
4	Not being able to measure thermal marks	micrometer Image Pro
2	Bad thermal marks	*No response*
0	Ring/band spacing data validation from vouchers for recoveries	*No response*
0	Placement of oto: same spot, same alignment, use grid painted on hot plate	*No response*
0	What to do with "dust"	Hobby glue guns are good for using thermo plastic dust Re-melted but not with good result
0	Supply list and vendors	*No response*
23	Total votes	

Table 2. Issues and solutions regarding otolith aging.

Subject: Otolith aging		
Votes	**Issue**	**Solution(s)**
12	How about a workshop? Methods, etc.	yes lets have one
7	How do you get KNOWN ages?	From known marks
5	Increase age verification	Take scales to match otoliths
1	Scales and otoliths are labeled correctly in field	Pay attention, use handheld
1	*None listed*	database
0	Fresh vs saltwater annuli - how to tell the difference	Otolith microchemistry isotope ratios
0	Wild ages vs. hatchery aging from otoliths	*No response*
26	Total votes	

Table 3. Issues and solutions regarding alternative marking methods.

Votes	Issue	Solution(s)
9	*None listed*	Info on ring spacing/time from Ron
6	Which unintentional methods make thermal marks less identifiable? Salt, shock, pick, stress	Initiate thermal marking on the same day eggs are picked
5	Practical implementation of alternative markings in production situations	*No response*
4	Method that gives real time recognition of hatchery vs. wild ID	1. CWT 2. Real time, at the processor
24	Total votes	

Table 4. Issues and solutions regarding data sharing, collaboration.

Votes	Issue	Solution(s)
8	Use similar computer programs among agencies	*No response*
5	Administrative support to enable coordinated/long term data storage	Coordinate fundraising/grant application efforts across agencies to assure admin support and IT positions
4	Formalized time for collaboration (like this workshop)	Each lab share the way they collect/mount/read otoliths
4	Data entry consistency for accessibility: facility (website) for data entry (non-department otolith labs: hatcheries, NOAA)	Statewide protocols/standards published in report/policy shaping data entry methods (fields: sub-district, hatch code, mark ID) Determine types of information that should or could be shared ASL, thermal marks, catch data put (everything) statewide on Oracle?
2	Get access to data collected	Website: views of specific data
2	Continue interagency meetings to avoid reinventing the wheel	*No response*
1	Method of sharing anomalies	*No response*
26	Total votes	

Table 5. Issues and solutions regarding data management, quality assurance.

Votes	Issue		Solution(s)
10	Employee turnover and learning curves for new lab staff; 2 votes		Cross-training (to understand "big picture" process/study, etc.); 4 votes Give lab employees more varied tasks to avoid burnout; 4 votes Ownership; 0 votes
7	Accuracy of ID for incidental marking chum release marks (quantifying accuracy)		*No response*
	How do we know what is known/correct?		Continue conducting blind tests between laboratories
6	Accuracy of data online	1. range 5-152 µm; 0 votes	*No response*
		2. No voucher available	If voucher does not exist, state on database Make all sites send in vouchers (send reminders); 6 votes
1	Online website: is there any way add an interactive pivot table?		*No response*
24	Total votes		