

OREHP Advisory Panel Meeting

Los Alamitos, CA

April 10, 2018

Attendees:

Gary Burke	Randy Lovell	Kirsten Ramey	Mike Shane
Mark Drawbridge	Ruairi MacNamara	John Riordan	Bill Shedd
Kathryn Johnson	Mike McCorkle	Rob Ross	Tony Vaught
Mike Kucura	Jim Moore	Jim Salazar	Dallas Weaver

Announcement: Rob Ross will be replacing Steve Foltz as the Advisory Panel representative for commercial fish buyers.

Hatchery Operations (Mark Drawbridge):

- Release total for 2017 was 114,230 fish
- There are currently 31,000 fish in cages
- An additional 40,000 fish are being tagged at the hatchery
- Some growout pens are currently not in use for a variety of reasons (lack of volunteer support, sand intrusion, storm damage, etc.)
- Broodstock management (executing previously reported plans)
 - Remove oldest fish
 - Reduce number of broodstock tanks from 4 to 3
 - Establish one breeding group of young fish
 - Renovate Catalina site and secure additional funding
 - Total number of broodstock on hand is 76
- Collaboration with South Carolina Department of Natural Resources
 - Discussing the potential use of genetic markers to tag fish
 - No formal quality assessment in their program
 - HSWRI conducted their standard QA on cohorts of spotted sea trout and red drum
 - Small sample sizes due to time constraints
 - Saw a variety of malformations of the head, jaws, fins, and vertebra
 - Saw malformations both similar and dissimilar to those in white seabass
 - Fish reared in ponds only showed little to no malformations

- Conversion of 320 L conical tanks to facilitate larval studies (previously used primarily for juvenile nutritional trials)
 - A few cohorts have been run through to get the team used to the system
 - Young broodstock from B4 were used
 - Extremely low mortality and malformation rates observed among three cohorts tested

Discussion of feed and enrichment types

- Collaboration with researcher from Tasmania regarding deformities
 - Walling behavior can be influenced by tank color, water turbidity, light intensity
 - They have been able to reduce jaw deformity from 30% to 3% in yellowtail king fish
 - Tank walls of experimental tanks at the hatchery will be painted to see if it affects walling behavior in white seabass

Discussion about vision and depth perception in larval fish

- Vacuum Degassing System (VDS) prototype development in raceways and J2 systems
 - More testing needed, but looks like it will be functional
 - Focused on chronic testing under summertime conditions rather than acute conditions (48 hour period)
 - Looking for simple and low cost solutions to gas supersaturation
- Currently supported research
 - Listed several current projects
 - Not accurately represented in the OREHP Evaluation
- Dick Laub Fisheries Replenishment Program (DLFRP) for culture of halibut
 - Funded separately and privately
 - Lots of replenishment research has been done with Japanese flounder already so not starting from square one
 - Modeling – working with Kai Lorenzen and Ed Camp
 - Lab performance studies (being planned)
 - Wild juvenile halibut can be caught more easily than WSB for subsequent comparison to cultured halibut
 - HSWRI's previous studies have shown that burying behavior in cultured fish not as good as wild fish but training options need to be evaluated
 - Do they need to be raised on sand?
 - Student projects

Request for the Department to respond to why halibut is no longer part of the OREHP (Bill Shedd)

Field Studies (Mike Shane):

- 74 wild white seabass were recovered from gillnet surveys

- Overall tag recovery rate for the gillnet survey from 2016-2017 is 10%

Discussion on tag retention and survivorship

- Working with Kai on release strategy and acoustic telemetry

Discussion about the gill net sampling program and how it has changed

Discussion about survival rates of fish at Catalina Island and modeling

- No tagged fish were recovered in 2017 from either the commercial or recreational fisheries
- A total of 2,177 fish were scanned in 2017
- In 2018, the oldest hatchery fish to date was recovered
 - Released in 1998, it was 20.5 years old

Research

- Working on conversion rate for Total Length (TL) and Fork Length (FL)
- White seabass gut contents of hatchery fish are similar to wild fish

Tag retention studies

- Fish are checked before leaving the hatchery and again before release
- Average tag retention rate is 95%
- Does tissue attach? What happens in the short term? Medium term? Long term?
- Are there magnetism differences? Does magnetism change over time?
- Other types of tags?
- Otoliths have unique signatures (isotopes) in hatchery fish
 - There has been some success in using DNA from otoliths to identify hatchery fish in South Carolina
 - Trying to figure out next steps, cheapest option
 - South Carolina has the ability to process samples and is willing to collaborate with HSWRI

Seabass in the Classroom

- Getting ready to release fish in late May/early June

Pathology (Mark Okihiro):

No pathology report was presented.

CDFW update (Valerie Taylor):

- 2018/2019 funds going through approvals
- Proposed Budget for 2018/2019 (handout)
- Program Evaluation

- Contract with California Sea Grant (CASG) still needs Department of General Services approval
- CASG will plan and prepare three meetings in southern California (Santa Barbara/Ventura, Los Angeles/Orange County, and San Diego)
- Asking for public comments on the future of the program

Request for detailed spending by the Department of SFRA Funds (Bill Shedd)

- Evaluation will be presented at the Fish and Game Commission meeting on April 18

Discussion about evaluation and having a separate meeting with SAC members present to answer questions

➡ Another meeting will be scheduled to discuss the evaluation after the townhall meetings in May or June

Next regular Advisory Panel meeting will be held in October 2018