OREHP Advisory Panel Meeting Notes

Los Alamitos

April 17, 2017

Attendees:

| Tom Barnes | Rick Jenson | Jim Moore | Mike Shane |
|--|-----------------|--------------|----------------|
| Rafael Cuevas- Uribe Mark Drawbridge | Kathryn Johnson | John Riordan | Valerie Taylor |
| | Randy Lovell | Ry Rivard | Tony Vaught |
| | Mike McCorkle | Jim Salazar | Dallas Weaver |

Hatchery Operations (Mark Drawbridge):

- Great overwinter survival and general health
- 92% or greater survival
- Cooler water means less gas bubble disease
- One occurrence of *Flexibacter* at Channel Islands Harbor (CIH) happened while counting fish at the end of the growout cycle [Note: the suspected *Flexibacter/Flavobacterium* isolated was cultured and identified as *Psuedemonas anguilliseptica*]
- Carryover swim bladder issues
 - Unsure about effect on post-release survival
 - o Sampling 30 fish weekly from 23 days post hatch (dph) to 110 dph
 - Observation period from January to April 2017
 - Not seeing swim bladder issues with upcoming crop of fish
- Focus on training of growout pen operators
 - Highly variable feed conversion rates among growout facilities
 - Encourage hand feeding as much as possible to avoid problems with malfunctioning automatic feeders
- Earlier startup in December rather than January
- For shallower sites, fish need to be released sooner to avoid gas bubble disease (GBD) associated with increased water temperatures
- Trying to monitor water temperatures at growout pens year round
 - o Water in Huntington Harbor gets really warm
 - o CIH has much cooler temperatures year round

Discussion about the point at which increased water temperature leads to disease

Broodstock

- 127 fish right now
- Collection and management
 - Need to put effort into this area
 - Need to refresh some broodstock groups
 - o Remove oldest fish (about 50 fish are over 20 years old)
 - o Reduce the number of breeding tanks from four to three
 - o Establish one breeding group of "young" fish and examine egg quality of these fish
 - Use Catalina as holding tank for broodstock collection
 - Site management always an issue

Discussion about genetics of using smaller batches of fish

Fiscal Year 2017-19 Work Plan

- 18% budget cut during last cycle
- New contract period starting July 1
- No change to administrative services
- Fish production decrease overall production
 - o Instead of two runs, will only do one run
 - Stock 6 female equivalents
 - Smaller batches of fish to be used for research/education
- Growout facility coordinator position was cut

Culture Research

- Experimental systems used for nutritional studies
- Will retrofit one of these systems to be able to work with larval fish
- Continue to search for external funding
- Oregon State University nutritional studies, liposomes, enrichment studies
- Joanna Cobcroft looking at malformations in marine fish

Discussion about Artemia and live prey regimes

World Aquaculture Convention

- Texas Parks and Wildlife Department
 - Different production model
 - Sea trout and red drum spawning in temperature controlled tanks with growout taking place in ponds seeded with zooplankton
 - o Southern flounder
 - Huge involvement by Coastal Conservation Association (CCA) gift shop, docents

They offered to test some of the diets that come out of the OSU nutritional studies

Discussion about challenges of the Texas program (pollution, predator avoidance)

Field Surveys (Mike Shane):

- 1,818 fish scanned in 2016
- Looking at relationship between total length versus fork length

Discussion about recapture rate in Texas and other methods used to identify tagged fish

Pathology (Mark Okihiro):

- No major outbreaks of infectious disease
- Psuedomonas at Channel Islands Harbor growout pen
- Swim bladder deformities not being seen this crop
- Looking for more normal water temperature this year
 - This deformity largely disappeared from last few hatchery spawns

Discussion about domoic acid and increased water temperature

Department of Fish and Wildlife Update (Valerie Taylor):

<u>Budget</u>

- Sportfish Restoration Act (SFRA) funding cut by 20% (\$134,000)
- Used stamp funds to help offset costs
- Total for next hatchery contract will be \$1.2 Million
- Gillnet contract for next FY estimated at \$113,000

Evaluation

- Evaluation contract has been extended for time only
 - Was to end in September 2017, edits will continue
 - o End of contract is now December 31, 2017
 - Final document expected in December 2017
- The Department met with the Scientific Advisory Committee (SAC) chair and California Sea Grant (CASG)
 - o Facts checked against what was included in the report
- When the evaluation is complete, CASG has offered to help with next steps
 - Meetings to discuss next steps for OREHP

o \$50,000 for fiscal year 2017/18 set aside for next steps

Discussion about meeting note format

MOTION: Mike McCorkle made a motion to approve meeting notes by the Advisory Panel members before they are posted online. John Riordan seconds the motion.

Jim Salazar made a motion to amend the motion on the table to require that the notes be in summary form. Dallas Weaver seconds this motion.

The amended motion was approved. The notes from this meeting and all future meetings will be in summary form and approved by OREHP Advisory Panel members prior to posting.

Next meeting will be held in September 2017