

# OHRC Fish Genetics Workshop

## Participant Survey

### 1) *What did you enjoy most about the OHRC Fish Genetics Workshop?*

- Learning what kind of research is being done and what could be possible for the future.
- I enjoyed the information on the latest technology.
- I enjoyed hearing about the use of genetics as a tool for fishery managers.
- With everything we were taught and all the explanations we were given, I left feeling like I couldn't do anything with that information. I have a wish list of what I'd like to see with selective breeding, but nothing's really changed for me.
- The presentations and chance to ask questions.
- Presenters provided info in an unbiased manner, giving the science behind the data and not a lot of political views. Did not come across as anti - hatchery. They tried to present their information in a manner that was easy to comprehend. Appreciate the extra effort that was put forth by your staff to provide meals and housing. The pig roast was great!
- The "Application of Genetics in Fisheries Management," was the best part for me.
- The ability to interact with the Research/Science personnel on a one to one basis. For far too long there has been a large gap between fish culturists and fisheries management. Fish culturists are the foundation and basic knowledge of fish culture and have always been more than willing to share that knowledge.
- More insight to what is going on outside hatcheries, which will eventually affect hatcheries. Sharing of this knowledge, and how we might make hatcheries better in the future.
- I enjoyed Renee's talk on project Croos. I thought this had some real worthwhile application on a timely basis.
- It was great that the presenters gave a refresher course in genetics to bring us up to speed without making us feel out of place. I really enjoyed hearing about the latest research and how it would apply in the hatchery setting
- What I enjoyed most was learning about fish mate selection, the genetics, and learning about the ovarian fluid and sperm when spawning.
- I thought that overall the workshop was very well done and professional. I probably enjoyed the lectures most. The lectures were explained in a way that even someone like me with little knowledge in the field of genetics could get a basic understanding of the work that is being done.

## **2) What did you enjoy least about the OHRC Fish Genetics Workshop?**

- I really enjoyed it all, wish it was all applicable for every hatchery.
- I would liked to have heard a little more on how we could actually apply this into real world application
- The least enjoyable for me was loosing 10 bucks (poker game)
- Some of the discussion material was so scientifically detailed, that it was way over our head of comprehension. Needs to be dummied down a bit more for us hatchery guys!
- The morning session was a good review of genetics although it would have been nice to have handouts to reference.
- Actually, nothing. It was all good.
- In some cases, a little over my head. But I was catching on and took a bit to warm up. It just had been a while since “I was in school”! There was a lot of info at once.
- Marc Johnson may have got a little more in depth than he needed to. He lost me a couple times.
- What I enjoyed least was the tour at the lab. I know they wanted to show the whole process, which looked extremely hard and a long, but I thought it was kind of boring.
- There really was not any part that I disliked.

## **3) What do you think could have been added/deleted to make the workshop more useful to you?**

- Anything that deals with hatcheries and how we can use it
- The open talk forum was great except for the hatchery vs. wild at Cougar could have been shortened a little
- No response
- A summary or powerpoint layout of the presentations.
- A tour of the facility and of any genetic studies that are currently being conducted there. Break up into small groups with one of the geneticists available for each group to discuss issues as they may relate to your specific facility or program.
- Maybe a little more basics to start the class, such as an explanation of genetics, why this is the direction that research is going, what prompted more research in genetics.
- Hand outs to their presentations or printed copies of their PP. Easier to follow along and then one wouldn't be scrambling to take notes. Then it also would have been easier to correctly share their info when I got back.
- Maybe some examples of projects that are specific to hatcheries. Or, possible future changes to hatchery operations.
- I think the presenters could have streamlined it a bit so that it was clear how the research would relate to the hatchery setting. It felt like I was thinking at times “this is really interesting but how does it apply to my job or my

hatchery?” For example, I could see where figuring out a better pairing match would be really beneficial for the captive brood stock that I worked with at Little White NFH, but it seemed really impractical for large scale production. It seemed like people kept bringing that up in discussion and it wasn’t until the afternoon that Neil Thompson affirmed that what we are doing on the production end of things is working and there is no need to change it. That this pairing research is geared toward endangered stocks with a high need for reproductive success.

- I thought it was good overall. I know I had a hard time following along sometimes when really getting detailed into the gene parts.

**4) What type of employee (tech, senior tech, manager) would you recommend attending this workshop in the future?**

- All employees benefit I think
- any person who is interested and motivated in learning
- You might offer this class to some of the Columbia River Management employees.
- As much as I enjoyed the workshop, I think managers are the only ones in any position to utilize the information.
- Any employee who is interested in genetics and how it relates to hatchery practices and management decisions.
- This is a good class for anyone who wants to further their education and get a better understanding of genetics; with that said they need to have some basic knowledge of genetics.
- All fisheries employees from technicians (the future of ODFW) through management. Genetics obviously is future fish culture and all fishery personnel need to get involved from the ground floor up. I found the class fascinating and could easily see and agree with the direction that genetics is going regards closing the gap in the argument between wild or native stocks and hatchery stocks.
- Same as this year. Up and coming technicians and tech seniors.
- Managers should definitely attend, but it should still be available to anyone interested.
- I liked the range of employees from tech’s to managers and it was great having Manny there too! I think it provided for a wide range of discussion and helped tech’s like me think long term about what the future may hold as we climb the ladder.
- The type of employee that I would recommend attending would be anyone (tech, senior tech) looking to advance in there career, or anyone interested about genetics.
- I would recommend this workshop to all hatchery employees as I can see the fish culture industry using genetic information more and more in the future.

**5) Did you like the 1 ½ day layout? Or, would 1 full day be better than having to stay overnight?**

- I liked staying overnight and getting away from everything, plus it sucks to drive that much in one day
- I liked the night stay
- I liked the over night stay for the networking aspect. It gives people a chance to catch up.
- The first day was brutal. A 3 hour drive followed by intense lecture is hard to handle, and a 3 hour drive after would have been even worse. If anything, spreading things out a little more into the second day could have helped.
- The 1 ½ day format was good. The 10:00 start time was good to allow people drive time, and the second ½ day was nice to break up the driving time.
- Yes. I would encourage a 1 ¾ or 2 day layout with the later half of the second day possibly touring NOAA or other parts of the Hatfield Research Center or even the aquarium. Overnight was excellent. It gave the opportunity, over a relaxed dinner, to interact with the research and scientific personnel. They were incredible, by the way, and were extremely helpful and acted pleased to interact with the fishery folks.
- Same as this year. One day would be just too much info and too much travel.
- Keep the day and a half layout. It encourages more discussion and interaction
- I liked the layout, especially because the manager cooked a pig for us to eat! Also because it's a bit of a drive especially for those coming from further away.
- The 1 ½ day layout was fine with me. It was good to see old friends and co-workers.
- I thought the one and a half day layout was perfect. Many of us had quite a distance to drive so it was nice not to have to do it all in one day.

**6) Was it useful to tour the genetics lab in Newport?**

- I had seen it before but I went to school and worked there in college so I am sure other people liked it
- yes
- Not so much for me.
- The tour was a little bit of a let down to me, partly because there wasn't a lot of new information. I didn't have any light bulbs click on at the lab, and I felt like I had questions to ask but didn't really have time to process and ask them before we went on to something else.
- Yes, but it would be better to maybe break up into 2 or 3 smaller groups. The rooms were small, so the entire group could not fit in to hear what was being said.
- The tour of the genetics lab is great for anyone who has never toured their facility.
- Absolutely! I've wanted to tour that facility for years.

- Yes. Maybe break off into smaller groups and tour different areas at different times.
- Absolutely, most of us didn't even know it was there, and what all they could accomplish without have to outsource.
- I enjoyed it. It probably depends on the individual...I'm still interested in school so I liked seeing what they do and where they work. I was curious about the ODFW offices next door and what they do?
- Not really to me.
- The tour of the genetic lab was helpful in really seeing and understanding what researchers do on a day to day basis. If you have never been exposed to a research lab you can't really get a clear picture of what goes on until you see it in person.

## **7) Any other comments?**

- Thanks for putting this together!
- I think that some of the information was a little over my head, but as the talks progressed I really enjoyed them. The after event was excellent you and your staff did an awesome job to invite and make everyone feel welcome. I would like to thank you and your family for opening up your home and the food and night was perfect so thanks for all you did.
- No response
- I definitely got the impression that there was very much an "us and them" mentality between the presenters and the hatchery workers. The geneticists seemed to be at a point of having so many options available to them as far as where to take their research next, but they didn't understand how that could help a hatchery. I think we, as hatchery workers, all felt put on the spot when asked what we wanted to see. Personally, I'd like to see fish that don't residualize, handle being pushed or held back on growth, handle being ponded too thick or thin...the list goes on. How practical is that? How long will it take to get anywhere on any of that? How can I be a part of that process? I'm a tech 1. I feed the fish when I'm told to, in the amounts I'm told to at the times I'm told to.
- Well organized for the first time putting on the workshop. Appreciated having experts in the field of genetics presenting their knowledge as it relates to fish culture.
- Overall this class was very informative and well presented.
- I highly recommend this class. I brought the information back to the crew and two members asked to go to the next class. When they found out that the class had a positive emphasis towards hatchery and hatchery reared fish, they were excited. As we briefly discussed, more classes that would help ODFW personnel and fisheries are needed. With budget cuts many classes given by the USFWS (Fish Health, Genetics, Cold Water Fish Culture, etc.), many valuable education opportunities have been lost. The OHRC is an excellent source to learn new and better fish culture methods. Please consider giving other classes even if they are small classes with one instructor and only a

handful of technicians. On the other hand, possibly you could host a USFWS Cold Water Fish Culture class for the west coast. Thanks again for everything. I thoroughly enjoyed the class and the facility and look forward to visiting in the future.

- Always try to keep it audience specific. For most of us, we wanted to know how this applies to, or will affect us in the future, “at the hatchery.” Emphasis may change when addressing a different group. Thanks again Ryan to your family and crew. You guys went above and beyond.
- Thanks for all of your hospitality and please thank your family too! I really enjoyed the delicious meals and the opportunity to talk with others working in fisheries!
- I thought the mate selection was pretty interesting and would like to definitely learn more about that once they find out more from studies.
- Frankly I am surprised more people were not interested in attending. I know that I was an alternate and I greatly appreciate all and any extra knowledge that is available to us here at the hatchery level. I would have enjoyed a tour of the research center and the overall hatchery grounds. I think that would have been helpful in understanding other research that goes on up there.