

**Oregon Department of Agriculture and Oregon Department of Fish and
Wildlife
Dungeness crab and biotoxin Rules Advisory Committee**

**July 20, 2017 – Meeting Notes
Charleston, Oregon**

RAC members present

Mike Lane
Joshua Beer
Bob Browning
Dave Wright
John Corbin
Justin Yager
Cari Brandberg
Andrew Bornstein (phone)

Staff present

Caren Braby
Stephanie Page
Hugh Link
Kelly Corbett
Alex Manderson
Judy Dowell
Troy Buell

Review of the updated draft rules

Stephanie Page explained the major changes to the draft rule since the last meeting. The main changes included a revision of the first paragraph to reflect the proactive efforts of the agencies and industry to monitor and manage the crab fishery to protect public health, more consistency in use of acronyms, and language describing the steps to reopen an area after a biotoxin in meat related closure.

Hugh Link asked if there are similar procedures for PSP. After some discussion the group recommended adding a sentence saying that the fishery could be managed similarly to manage other toxins using the best available scientific information about strategies to protect public health.

Stephanie Page discussed the timeline for having a public comment period on the draft rules and adopting them. This included publishing the DRAFT rule on

September 1st, public comment period from September 1st to October 15th, public hearing around Sept 15 and publishing permanent rule before 17-18 season starts. Committee members discussed whether the biotoxin zones maps need to be finalized prior to going to public comment. Caren Braby recommended that we go to comment on the rules and have draft biotoxin zone maps ready, but the point of not attaching the map to the rules is so that the zones can be adjusted as needed.

Hugh Link asked if the rule should be more clear that ODA gathers crab samples with help from ODFW and industry. The language in the rule will be updated to say “ODA will oversee the collection of...” rather than “ODA will collect...” Alex Manderson noted that the rule language needs to keep ODA in the lead role on testing and that outside labs are not an option for testing, for several reasons including transparency, consistency and the FDA accreditation required.

Caren Braby, Troy Buell, and Kelly Corbett introduced the concept of calling the zones “harvest area” and only referring to them as “biotoxin zones” when an issue has been detected. The Committee supported this concept, and ODA will add definitions to “harvest area” and “biotoxin management zone” to the rules and update the references to these terms throughout the rules.

The committee discussed the terms “recall” and “adulterated.” ODA explained that “adulterated” means something in the product is harmful. Hugh explained that there had been some confusion about the term in the past event. Judy Dowell explained that the term “recall” is very broad and does not necessarily mean product must be destroyed. For example, a product with an undeclared allergen may need to just have an updated label added to the product. Or a crab with a biotoxin zone where viscera had been tested above 30 ppm would just need to be eviscerated.

Caren asked if there is a definition of adulterated in law. Stephanie Page explained that ODA’s general food law refers to and explains adulteration and ODA will consider adding a reference to in the biotoxin rule if it makes sense.

Standard Operating Procedure and Associated Documents

Caren reviewed a draft Standard Operating Procedure describing how some of the various tools the committee has discussed would work together.

Committee members discussed what needs to happen in the event of a biotoxin problem in the meat. Some folks discussed that pots need to be pulled immediately, but this does not work for all boats and there may need to be an option to open up pots. John Corbin noted that while biotoxin in the viscera can bounce around and be more of a surprise, a biotoxin in meat issue should not be

a surprise. What if results come back Friday afternoon - industry should be notified immediately (regardless of what day results come in). ODFW stated there are more issues to discuss about how to implement closures due to biotoxins in the meat and we hope to utilize the majority of the August meeting to do so.

Dave Wright noted that the committee discussed notifying industry when the testing will be done and posting the results online. Dave added that one of the biggest things we will be looking at in this process is traceability.

Has anyone ever seen meat at above 20 ppm? We are not aware of this. Justin Yager noted that it would be interesting to eviscerate the crab while the animal is still alive because that would prevent any toxin from leaching into the legs through the cooking process. Judy Dowell noted that ODA did do some testing this winter on DA levels in the leg meat (but this testing was not set up to detect leaching, it was to look at the relationship between levels in viscera and meat) - we tested the leg meat on all crab that had results in the viscera above 6 ppm. We ended up with 75 or 80 results. The 130 ppm was the highest viscera and 2.9 ppm was in the meat of that crab. While not a direct test, the results indicate that leaching probably only occurs at low levels. At the tri-state conference Jerry Borchert mentioned that it is wildly variable. Caren Braby noted that what we do currently is the "worst case" scenario and the most protective of public health. ODA also stated they are aware that some leaching of DA occurs but the protocols for sampling are more precautionary.

Troy mentioned he thought that a study had looked at leaching during the cooking process. Judy mentioned that at the March Crab Commission meeting, OSU researchers had noted that DA does leach from the viscera during the cooking process.

Justin Yager noted that a year would be needed with very high DA levels in order to do the study that he is suggesting. Judy mentioned that based on the testing that ODA did, DA can get into the meat at various levels in the viscera but is still well below the threshold, and it is wildly variable. It is unknown if this is due to leaching or not since the meat and viscera samples were cooked together. Cari Brandberg noted that if we do not cook it when it is whole, it does leave folks who do whole-cooks vulnerable.

Joshua Beer said that perhaps FDA could come back and say crab must be destroyed if it is whole cooked, but the levels would need to be extremely high in the viscera for there to be a concern in the meat.

Mike Lane asked if the water is ever tested and how the crab are cooked. Judy explained they are usually cooked in batches of 12. Mike noted that if there is a

high level of DA in the water it could move into the other crabs in the pot and Judy noted that it is known that a small amount would leach.

Alex Manderson noted that if there was a lot of leaching going on, we would see more consistency in the results and he believes the leaching is not significant.

Judy Dowell also noted that ODA's recommendations to recreational crab fishers include discarding the cooking water due to potential leaching. Justin noted that his suggestion for the study was more to find out whether we can find out if evisceration can be an option at higher levels in the viscera than what is currently allowed and noted again that this would need to be done in a year with very high biotoxin levels.

The committee began going through the Tools table. Stephanie Page introduced the first tool in the table which relates to mechanisms to facilitate traceability of crab. Committee members discussed the level of responsibility involved in keeping records for traceability and asked Dave Wright about what is required for HACCP licensed processors. Dave explained that Pacific can trace live crab as well as processed. They can track crab all the way to the last point of sale and then that establishment may be able to reach out to their customers. Carie Brandberg asked if retailers are able to contact the end consumers. Committee members noted that some retailers do have that ability but that what we are trying to get into place with increased traceability of crab through the markets is about notifying buyers prior to the ultimate consumer and not trying to set up a system to track down individual consumers.

The committee looked at the next tool in the table, which was providing notice to industry if monitoring continues beyond the season opener and notifying the industry of sample dates and results. ODA asked about the best way to do this - committee members discussed multiple strategies. (1) emailing out the sampling schedule and updating the web site; (2) put out sampling schedules to help processors avoid setting up a whole cook; (3) creating a map with color coded zones.

It is easier for the fishermen to get a text that says "go check the ODA web site." Justin said that the biggest thing that would help the fishermen is electronic log books.

Judy Dowell explained she thinks that if ODA had the capability to do a mass text, we could send out a text that says "crab will be collected from XYZ areas" or "new crab samples are being arranged - go to the ODA web site at X link." We could also do one - then we just need to send out a text and update the web site. Then we could do the same thing that says "we have results in for XYZ areas - go to the web site." Troy Buell noted that a challenge with text and email

systems is that people have to go sign up for them. That is what ODFW does. Mike Lane noted that if you put out an alert through a text - you will reach a big group of people. Fishers noted that the VHF radio is a good communication tool to reach the fleet on the water. ODFW noted that they sent short messages to the USCG for radio broadcast in Feb to help communicate the in season emergency actions that were taken, but this would not be an appropriate tool for routine updates. .

Kelly Corbett noted that we have over 400 permits in the industry and have over 5000 people subscribed to the ODFW listserv. This includes recreational harvesters, media, NGOs, buyers, processors etc. All regulatory changes to the commercial fishery are broadcast using this larger listserv. Hugh Link noted that the Crab Commission has updated their web site to link to the results on ODA's web site.

Mike Lane noted that in November when we have crab marketing meetings, they can receive information on how to sign up for text alerts. Caren Braby mentioned that using the contact information from the ODFW licensing information might be an effective mechanism to set up a more targeted group for routine sampling updates and results.

After more discussion the committee agreed that it makes the most sense for folks to go to the ODA web site to find out about upcoming sampling events. A committee member then asked about notifications about updated results? It was suggested that ODA could send texts to a more targeted listserv saying that new results are available, go online to find them. Would like the agencies to have discretion on when to send the texts about results, because we don't want to flood people with text messages to the point that people start ignoring them.

The next tool in the table was the recommendation from last meeting that all dealers get an ODA license. There were discussions about what additional burden this would put on licensees. Cari Brandberg explained that she has been talking to other dealers about the records that they keep and she has heard from folks who are keeping those records. Stephanie Page noted that the requirements of this particular type of licensee could be established if legislation is created. Committee members discussed several folks who were following best practices and the value of following best practices vs requiring something in law.

Troy referred the group back to the first item in the table, which would be ODFW requiring bills of lading through rule or some other strategy and could be implemented more quickly than legislation. Cari Brandberg noted that ODA was checking with them and that they needed to have the area on their invoice where the crab was caught from. She asked if that was already a requirement and the agencies responded that was not a requirement. She said that buyers are also

asking for fish tickets when they buy crab from her and she has to create one that does not show the value on there. Hugh Link suggested some kind of best practices recommendations that would help make things work better in a biotoxin event. Dave Wright noted that there is a way to reach out to the live buyers and discuss this with them.

Caren asked about whether there is added benefit of ODA licensing the dealers or if there is another way to accomplish the same thing. Stephanie Page explained that if ODA gets very high cooperation when it reaches out to crab receivers that are not licensed and asks for records required by ODFW, there is not a lot of added benefit of ODA licensing these dealers.

Could ODA gain authority to get records of ODFW licensees so that ODA could get records of folks who are not licensed by ODA? The group discussed this and decided it was a tool worth pursuing and would accomplish the same goal as getting licensing authorities.

The group discussed the electronic fish tickets and electronic logbooks concepts. John Corbin noted that there has been resistance to this in the past. Justin Yager noted that is the right thing to do. Troy pointed out that the ODFW Commission would need to do rule making and this depends on fleet support - if there is a lot of support, it will go smoothly, while if there is a lot of controversy, it will be much more difficult.

Caren pointed out that the group could develop a recommendation around this concept and lay out next steps. Bob Browning pointed out that if industry members start talking to their peers and explain that it is a recommendation of the group, it is more likely to be successful. Caren asked if the group supports the development of electronic tools for the entire fleet and group members said yes. Caren asked what the benefits are - John Corbin said data entry, but also from ODFW's perspective it can go right into a database instead of being having to be entered monthly. If we get into a recall situation or something like that, we have real-time data on what's happening. Hugh Link said it is a benefit to the fisherman because it can be used in a fishing business - it shows your plot lines, etc. Justin Yager noted that as long as the data is kept private it would be a very valuable tool for many issues. Bob Browning noted that most boats do not have laptops on board. Kelly noted that the concept had been to develop the application for a tablet or smart phone. Need waterproof and coffee proof technology. John Corbin said that cost of the hardware for some within industry could also be an issue - paper logbooks are very inexpensive. Cari Brandberg also noted that WiFi or other service would be needed for the tablets/smart phones. Privacy would be another issue. Justin Yager said if it is built right, it should be better than the existing system. Cari said that it supports compliance because it makes it easier. She loves electronic fish tickets because she does

not have to calculate it or mail it off, and it is very simple to submit the required reports at the end of the year.

Troy explained that the requirement can be species specific - e.g. electronic tickets are required for sablefish because it is a federal requirement. Caren noted the real value of electronic fish tickets is that they are real time. Bob Browning noted that he loves them. Cari noted there is a learning curve for folks who are less familiar with technology.

Judy Dowell - could fish tickets be modified to require that crab landed out of state submit fish tickets? Caren said no we do not have authority to require crab that is landed in another state to submit fish tickets and both CA and WA have different harvest area frameworks in place than OR. Justin Yager noted that electronic fish tickets would be very helpful all along the coast. Caren noted that another challenge is there is not a universally favored system for entering these data and we want to avoid burdening the industry. Alex Manderson suggested talking with OSP about their experience with their new electronic logs for tracking field work and compliance issues.

John Corbin noted that we are always going to have these border issues - if Seaside has a toxin event and I am fishing in both WA and OR and I run them into Ilwaco, how do we deal with that? Could CA fishermen be delivering into Oregon? That is also a possibility. The committee acknowledged that landings of OR crab go into the other two states but all we can do is focus our efforts in Oregon where we have the authority to do so and communicate with the other states asap when we have issues in the future. Caren also mentioned the states had a brief Tri-State update and ODFW brought up this issue with them. To start discussions on tools that could be implemented to improve traceability in the short term Caren Braby went through a short presentation to orient the traceability discussion. Judy Dowell then went through ODA standard practices for tracing products for recalls in order to get input on how a similar process could be done with crab and what tools/records would be needed to facilitate that traceback. Judy stated that ODA goals for tracing product is to stop the product in place so it is not sold beyond where it is when there are elevated results and to figure out much adulterated product made it through to consumers and how much was stopped.

Working Lunch

The group returned to the Tools Table, reviewed what can be accomplished when, and discussed some of the items in more detail. The communication item on page 2 can be implemented for the 2017-2018 fishing year. The group discussed strategies to delineate harvest areas, including bills of lading, fish

tickets, dock tickets, and “crab tags” similar to the shellfish tag system. ODFW would not be able to implement the tool of adding harvest zone to fish tickets for at least a year due to limited IT capacity. The group identified some challenges with the bills of lading - i.e. one bill of lading accompanying multiple loads of crab, doesn't account for crab that hasn't moved from first receiver and does not include fishermen signature for confirming area of harvest. Several Committee members stated they did not feel that the state should micro-manage how tracing product occurred at the plant level but just require certain information to be maintained.

Caren asked, if bills of lading are too difficult should we require evisceration along the entire coast for crab that are landed between a hot crab sample collection and the hot result? Multiple Committee members indicated this type of action would be extremely costly to industry and would be unwarranted.

Is a separate document that identifies the crab and where it came from and how much, rather than a bill of lading, a more workable option? The Committee supported a separate form. How do we make that a requirement? ODFW could create a separate ‘crab’ required record that basically has that effect. It could double as the bill of lading and that would be a specific business choice.

Committee indicated that they would prefer that a rule say that they have to keep some kind of record with a list of required information on it, rather than have it tied to a specific type of document such as a bill of lading. ODFW thinks that they could require this by a temp rule for the upcoming season. The information would include date of landing, signature on the piece from fisherman to first receiver (this would probably just be recommended), harvest area, amount of pounds, the seller, and the buyer. The committee discussed whether to require the fish ticket number to accompany the load and agreed that this is not necessary. The committee also discussed how long these records would have to be maintained and it was suggested that they would likely have to be in place as long as the product was on hand.

Another item on the tools table initially said that ODA would license dealers of live crab but this will be reworded to say give ODA authority to get records required by ODFW for food safety or some language to that effect. ODA and ODFW will do follow-up research on the best policy tool to accomplish this and then can put a better time frame on that tool.

Also, the committee recommended pursuing an electronic fish ticket system & electronic log books. Cost can be an issue and needs to be friendly to the small fleet. Once it is user friendly to the small fleet you have a home run. Mike Lane noted that small boats don't move as much and so being able to regenerate strings without having to rewrite the whole thing would be helpful.

Kelly mentioned that nobody is currently working on electronic logbooks. The Nature Conservancy and Pacific States Marine Fisheries Commission put in for a grant recently to work on creating a web based application but did not receive the grant this time around. Recommendation - recommend that system be required once it can be developed in a way that works for the whole fleet.

Discussion of Biotxin zones now known as 'harvest areas'

Kelly introduced the map with the harvest areas - these options have been posted to the ODFW web site. The first two options were also presented at the committee's June 20 meeting, and the 3rd option establishes 4 harvest areas with equal number of sampling sites per area and more equal spacing of sampling sites within the harvest areas. Altogether there are the same number of sampling sites in the all three options maps. Anything tracked in the harvest area would be affected if there is a biotoxin event.

It was discussed that when you have an event right on or near one of the harvest area lines you might need to close more than one area. Kelly explained that is why we spaced the sampling sites evenly in option 4. Another option would be a hybrid of options 1 and 3.

Scott K (through Bob Browning via text) said that he had visited with several other fishermen and they had recommended 30-mile zones with the same preseason test sites, which would work out to about 10 zones. Justin said he had concern about giving up test sites and reducing confidence for meat quality as well as DA.

The Committee discussed crab movement and how that affects the definition of zones and the need for buffer areas around a sample site where elevated DA is detected. John Corbin said that even more challenging than crab movement is the randomness and small sample sizes of the testing. Justin said that from what we have seen, there is some correlation to certain areas having high levels and not others so we have some fair warning of where problem areas are before action needs to be taken. He doesn't think crabs are bouncing around all the time and said nobody was super surprised at what we saw off the Umpqua this past crab season after the results we consistently had preseason.

Cari commented that she liked the spaced out stations that are outlined in option 3. Alex said this may help avoid any particular area feeling like they are under the microscope by equaling out the number of test sites per harvest area. Troy

mentioned that actual tagging studies have documented that crab move 1 to 3 km per day.

John and Cari pointed out that larger zones mean larger areas are unavailable to live crab buyers during evisceration events. Bob and Justin said that we are protecting the live market by having larger areas, it errs on the side of caution and public health and splits less traditional fishing grounds.

Caren said that one of the things with lines and preseason sites is that they are often political - the benefit of option 3 is that it splits the state up more evenly. She asked if there is anything about the current sampling transects that people really want to keep? Bob said some of them are close to the ports so that is helpful. Dave asked what works for the state. Caren said that having them not established politically and having them based on science is helpful.

Justin said that often when we are drawing lines we are drawing for closures/delays which triggers other management actions and given that we are talking about evisceration it is different. Troy said he is hearing that people want to be more strategic with the areas for in-season action. Alex said it seems like it may be helpful to have more lines and opportunity for people to still fish rather than blocking an entire area out. There was lots of discussion about more harvest areas adding flexibility to the process to avoid taking action on areas arbitrarily. ODA stated that the likely protocol with smaller areas would be to have management action apply to at least the harvest areas immediately to the north and south of the harvest area where elevated DA was detected for precaution, but this set of a minimum 3 zones could be adjusted based on where the problem was identified.

Dave said that it is probably going to change no matter what we do. Bob noted that we have not asked OSP how enforceable the systems are. It was stated that enforcing issues for an evisceration differs from enforcing a closure and we definitely need to have OSP at the next meeting to discuss closure regulations if DA gets into the meat. Justin noted that the reason there are lines based on landmarks is so that they are easily enforceable. Caren noted that this not going to be ocean-based enforcement - it is more a matter of making sure that the crab go to the required first receiver.

Where do we go with these zones? How do we get public input on them so we can finalize them for the season? Can we do an online survey? We are not talking about closing the state, but evisceration can make a huge impact on your price. John said he likes the 30 mile zones because it takes all of the politics out of it and you know that a 90 mile section will be closed.

The group concluded that they seem to be leaning towards establishing 12 zones with the understanding that management action would likely apply to buffer harvest areas around the area with the elevated DA levels. We talked about having a public comment period from September 1 to October 15 and having a public hearing some time toward the end of September (note: will most likely be scheduled September 26 at Hatfield Marine Science Center Library in Newport, with an information session at 4 pm and hearing at 5 pm.)

The group talked about the next meeting, which has been set up as a conference call on August 15 with the option to meet in Newport in person as well. What do we need to discuss? What if we have meat about 20 ppm - how do we close the fishery in the least disruptive way possible? Also might look at some ODFW draft language for the "required records" rule. Also, update on zones and how we will present them to the broader industry for input. Need Oregon State Police to participate in the call on the 15th or we should reschedule the meeting.

DRAFT