

Sea Urchin Zone Council Meeting May 7, 2015 in Bangor, ME

DMR staff: Trisha Cheney, Maggie Hunter and Jeff Turcott.

SUZY members: Larry Harris, Clint Richardson, Teresa Johnson, Joe Leask, Tracey Sawtelle, Steve Eddy, Chuon Muth and Duane Carver.

SUZY members not present: Atchan Tamaki, Jason Leighton, Mark Nickerson, Jeff Edwards, and Dean Norris.

Public: Justin Gebo, Sinuon, Josh Stoll, and Aaron Gilpatrick.

Research Subcommittee Meeting commenced at 3:40pm

M. Hunter: I would like to figure out who's in charge of this project. I know we were planning on surveying spots last fall and we didn't. We made no attempts to close it and that has not been done. Robert and I have been told by our supervisor that it is not going to be us who leads the project.

J. Gebo: I nominate Joe [Leask].

M. Hunter: I know Larry has done a lot of the planning.

S. Eddy: I think we can divvy it up. I can take the lead on re-seeding.

C. Richardson: When we first spoke about it, I thought it had to be Robert [Russell].

M. Hunter: He can be there to show you the techniques and evaluation and he interested in learning how to use the camera. He has dedicated two weeks over a two year time frame for this project.

C. Richardson: I will be over there in two weeks to set out the panels. If Robert is there, he can go with us. He has all the equipment, right?

M. Hunter: Everything except for the GoPro.

L. Harris: After the dust settles in June I can bring up a couple of grad students to help. The panels will be collected in late July as they start settling around the start of June. By the end of July it is pretty much over and you don't want to leave them out too much longer as growth will start to take over.

C. Richardson: I will have them set before the start of June.

M. Hunter: Have we identified the area?

C. Richardson: Will be in about 15-20 feet of water around lower Cat Ledges. Two sites.

S. Eddy: I thought we talked about three sites.

C. Richardson: I need more collectors, then.

L. Harris: I can get you more collectors.

C. Richardson: When you do put urchins there?

L. Harris: When it is cold.

S. Eddy: You are talking about habitat modifications, so there needs to be kelp beds.

L. Harris: Kelp populations are declining across the coast and being replaced by moss and introduced algae. Urchins are showing recovery – we are finding urchins now in our monitoring, but nothing like back in the 1980's.

S. Eddy: In the pre-proposals we were talking about bringing in adults and manipulating the environment. What other species are there in addition to kelp?

L. Harris: It used to be Irish moss - all kelps are declining. They are seeing this in Nova Scotia as well. In areas of upwelling there are good populations of kelp.

S. Eddy: Why here (Cat Ledges)?

C. Richardson: It is a cold river (Sheepscot).

L. Harris: The Isle of Shoals is not great; it has stabilized water column.

M. Hunter: Do we need to do it this spring?

L. Harris: This is not necessarily the only time we can do it. We can do it other years.

M. Hunter: Why this year?

L. Harris: To get a baseline. I will have them at Nubble Light, Winter Harbor, and Eastport – putting out panels. So, it will be within about a week when Clint is putting these out. I will come back in July to collect them. We can bring all the gear to do the quadrat photography at that point if it doesn't happen before that.

M. Hunter: Do you have students to evaluate the video?

L. Harris: Yes, my students will do this. The whole concept with this is that it is urchin harvester initiated.

M. Hunter: You will need to have a boat.

C. Richardson: Don't worry about that.

M. Hunter: I am just sad about what happened last fall, that it didn't happen.

L. Harris: We just need to identify the people; I know Clint and Joe are on board. I think Brian [Preney], potentially.

S. Eddy: I need names and letters of support from fishermen, the more the better.

C. Richardson: Jimmy Campbell.

S. Eddy: I need a list and the contact information to show we have the support needed for SeaGrant from the fishermen. The process for closing the area, how does that play out?

M. Hunter: Regulatory process through regulation. The piece of reopening it would have to involve special licenses.

L. Harris: The whole idea is to demonstrate that this works.

M. Hunter: That this is commercially useful. So can we leave it to you Clint to decide who the participants will be?

C. Richardson: I can do that.

- L. Harris: Because Clint and Joe showed the initiative, we can finally run with this. I would like to be able to say that this is fishery or industry initiated project.
- C. Richardson: I brought this up over a year ago, got the ball rolling.
- S. Eddy: So when do we close the area?
- M. Hunter: After we do the transplant – in the fall? If so, we need to close it by December fishing season.
- L. Harris: Need to do the transplant after the Jonah crabs back off.
- C. Richardson: I will be tending Joe in October and November anyways.
- S. Eddy: Do you have updated information on Jonah crabs?
- M. Hunter: I gave that 2014 data to you already, but nothing else is updated. We don't plan on surveying that area in the regular survey to save money as we have not seen anything there for years.
- S. Eddy: But you would survey for this project?
- M. Hunter: Yes.
- L. Harris: We have not really seen a lot of green crabs in the urchin sites. They might eat the little ones like rock crabs do.
- S. Eddy: Is there any literature about the interaction between green crabs and urchins?
- M. Hunter: There is one reference where they put an urchin and a green crab in a tank and the crab didn't eat the urchin. I will try to find that reference for you. So, in your proposal, instead of saying crab irradiation, we could just avoid the season when the crabs are around.
- L. Harris: Around the bottom of the ledges.
- S. Eddy: When did Amanda Leland do it?
- M. Hunter: First year in the summer and she used sublegals – August as it was when they had students out and the crabs ate them immediately. Next year they learned from that and planted them in April, and then the crabs go them in August.
- L. Harris: The Jonah crab population exploded at that time and you couldn't find a sea urchin anywhere around the Isle of Shoals and you couldn't find anything much else, 1 crab/m². They just blossomed and there was a massive buildup of mussels along the coast after that. First it was sea stars, then crabs – around 1998. Devastation. Now it is down to more historical levels.
- S. Eddy: So how do we get it closed?
- T. Cheney: We can do it by rule. We just need to know the explicit area. I could run the rule concurrently while doing the scallop public hearings in the fall if we have the information by then for what you actually want to close. We worked out some rough lines last fall, and I have that information that we had Mike Forges work on with us.
- L. Harris: We are going to go do the survey area first.
- M. Hunter: Next thing to happen is the pre-survey of the area and Robert can go out with you. Will you supply the bricks and tape for the bottom?
- L. Harris: Yes, to delineate the area.

M. Hunter: So Larry do you have a Maine Special License to do the urchin larval collections?

L. Harris: No.

M. Hunter: So we will need to do that.

T. Cheney: We will need to ID the participating fishermen, vessel being used, etc.

M. Hunter: Ok, we need to keep the momentum going.

L. Harris: If successful, the Sea Grant funding doesn't start until February 2016.

S. Eddy: I would start the hatchery process earlier. I would try to get them to spawn in December. We would have to condition them in the hatchery. The timing is a little dicey with all of this – the sooner we can get them out of the hatchery, the better.

J. Leask: During the full moon cycle they spawn and soften up anyway. You try to match that up. Historically have you tried to spawn them out of cycle?

S. Eddy: Yes, with Nicole Kirchoff we spawned them with lights and temperature. Come March, we would do an initial seeding of 5 mm urchins.

J. Leask: What became of those November urchins, the juveniles? Do you have track of where they went, the offspring? Study how well they grew?

S. Eddy: The project was very focused on spawning only.

Chunon: Have you tried to starve and feed them to see the difference?

S. Eddy: We didn't look at that.

Chunon: The ones that were fed will spawn first, right?

S. Eddy: Yes and a lot more spawn as well.

Chunon: The one with the most food will get better in the wild.

L. Harris: In the wild, day length turns them on. They build up gonads in summer and fall, but as the day length shortens towards winter, they start to produce eggs and spawn. You need to manipulate day length and temp.

S. Eddy: They need to be well fed.

Chunon: Do you guys ever study tasting the roe itself? If you fed the urchins with different feeds, it will taste different.

S. Eddy: We did that at the university and had a tasting, a blind tasting to try pellet food vs wild fishery. Wild fishery was what people preferred.

Chunon: University of Alabama they inject the urchin so they taste better.

S. Eddy: Too much fish meal, they don't taste good.

Chunon: Like under the fish pens? Do you ever study marketing?

S. Eddy: Jenny Sun from GMRI did a study and Frank Chang her husband did some of that. I can send you that. The global market is still really strong, especially Japan, it is just being supplied from different parts of the world. Russia and Chile freeze them.

Chuon: We can add taste, we can't change color. But in global market, we have been told that our urchins are too high [in price]. Our processors in Maine ship to New York, so the market itself is called "New York" Sea Urchins in Tokyo.

J. Leask: Are they still inspecting urchins in New York?

Chuon: Right now Wildlife [US Fish & Wildlife, USFW] is still on us. We have to give them 24 hours' notice and get them inspected before flying them out. We have to go back three years and give them our documents. There is a pending court case. We went to talk to the lawyer and Chellie Pingree about this. Problem is that they don't recognize urchins as human food. They need to recognize it for an exemption [for inspection prior to shipping]. We would be shut down if they give us a penalty. If no new people come in and it is the five who remain. Sea cucumbers are same as well.

J. Leask: They expect everything shipped through New York to be inspected. And there is a fee for weekends or holidays. They can give you an exemption.

Chuon: If ship them, we get a fine.

S. Eddy: The Harrington family has half the market for bait worms pay \$40,000/year for export fees.

Chuon: If we ship from Canada it is \$100 for the brokerage fee and if we ship the finished product after coming to Maine, we pay three times. Darringer is the broker on the US side. I don't understand why our license fees are still high.

S. Eddy: This came in as the USFW budget got cut. Timing of this was at same time as sequestration went into effect.

Chuon: There is only one inspector in all of Maine for all five ports. When we ship from Canada to Maine, there is only one inspector for Jackman, Fort Kent, and Calais. They don't even inspect the product, you just pay the fee. Now border patrol gets us if we don't have the right documents, they fine us \$1/lb., or \$70/tote. Whoever is involved in sea urchins should know what is involved in what it takes to get this product to market.

S. Eddy: I was working on the letter today for Chellie Pingree.

J. Leask: Atchan has conveyed to some extent what the feds are doing, but honestly we are not up to speed on it.

Chuon: He got hit hard by USFW and had to hire a lawyer.

J. Leask: You all got hit.

Chuon: Yes. That is why we all went to Chellie. Atchan has hired a lawyer.

J. Leask: He has filed a suit.

Chuon: We could be shut down anytime. All of us have broken the law according to them for shipping urchins and sea cucumbers to Hong Kong. They want us to send it back to US. That's just not possible – it would be cheaper to send an inspector over there than to have it sent back.

M. Hunter: Maybe we should put this on the next meeting agenda?

S. Eddy: There is an exemption for shellfish, but urchins are not included. The actual wording of the law allows you to expand the definition of shellfish. There are all sorts of fishery products out there that the USFW inspects.

Chuon: We need help to recognize that it has a short shelf life, we already pay the fees and get processed here, why inspect it? We need to let them know that this is food and not waste. The more people involved the better. We are involved with California as well. It's been almost a year now.

S. Eddy: Why are you shipping out of New York?

Chuon: Because of the direct flights, the broker finds the flight for us. 90% of the time the only direct flight with a big plane that can handle the seafood is out of New York.

S. Eddy: Ocean Air ships a lot of elvers out of Boston and they are more likely to not charge that fee there.

Chuon: I ship baby eels too.

J. Leask: So, cat ledges?

M. Hunter: We made you in charge of the project Joe. We are in agreement that this is an industry led project. So if you and Clint see something that needs to happen, you need to be doing it.

J. Leask: The more busy I get, the more of these things come my way. I appreciate the vote of confidence for the chair; I was floored at the last meeting. The only thing I want to accomplish in this capacity is seeing the urchins restored. I have seen some success in my area. The magnitude is really small. Time is against us as we don't have a lot of time on our hands, so we need to get most bang for the buck. I would like it to move ahead more quickly than it has, but I understand why Larry and Steve need their things.

L. Harris: I brought collectors for Clint and I will get three more for three separate stations. They will be put out the end of May by Clint and Joe. End of July I will come up with grad students and get the collectors with Robert and we will also do quadrat surveys to document the bottom and I will do the analysis of that with students. At the same time we will need Trish to put in motion the closed area through rulemaking to set that area aside. You guys drew the lines at a previous meeting and she has that information. Steve has the go ahead to put in a full proposal to Maine Sea Grant to do the re-seeding part of it so he can raise juvenile urchins which can be put out. This winter if everything goes well, you guys can get a special license and you can put the initial populations in the area to get the population going.

M. Hunter: And that will happen regardless of Steve's funding.

S. Eddy: We want to work on these same plots for the control and study areas. Do transplanting first, then small hatchery seed in March and then larger see in the fall. So we would be looking at what size is right, time of year, that sort of thing.

J. Leask: Has sea grant given you any indication of what they would like to see out of this?

S. Eddy: They said it was looked upon very favorably. I included information that when Amanda did it the work coincided with a lot of Jonah crabs. Only questions what was about Green crabs. So Maggie is going to get me information of that. They only selected a few pre-proposals.

J. Leask: I can draft a letter of support. I have been diving all spring on and off and I can vouch for green crabs and spawning. Right now in Zone 1 the urchins are still full. Jonah crabs are not moving right now, but it is a colder year- water is not above 40. I spoke to a fisherman at the DMR Advisory Council meeting earlier today and he said the stripers are not in yet, but there was another fish there. I have seen plenty of flats diving in the Penobscot. Alewives are in. Usually don't see flats til June. Temperature may be affecting some species differently.

S. Eddy: I have a list of 6 fishermen who are likely to be interested that I was going to contact for letter. But if you want to write a letter in support that would be great.

J. Leask: As a full council it would be great to have that endorsement. At last June meeting we had a vote of affirmation.

S. Eddy: Would be good to have full endorsement.

Chuon: The swipe cards may be a problem. My uncle knows urchins, but he won't be able to do this.

T. Sawtelle: How is it going to work in the winter?

Chuon: Really need to have a buyer sit in one place.

J. Leask: We are going to talk about that in the full meeting. Let Larry wrap up with pilot.

L. Harris: We are basically done, we will put out collectors, survey this summer, Steve is submitting a Sea Grant proposal to add a re-seeding part as well as the initial stocking and then we will work in monitoring.

M. Hunter: Talked about doing the stocking in November early December.

J. Leask: Let's take a couple of minutes break.

[BREAK]

Sea Urchin Zone Council Meeting

Commenced at 5:05pm

Approval of Meeting Minutes (04/09/15)

J. Leask: Any discussion?

M. Hunter: I just wanted Trish to talk about how we had to change a couple of things in the calendar because you picked days in the Whiting & Dennys Bays (WDB) area that were not normally scheduled Zone 2 days.

T. Cheney: That correct. The council recommended days in WDB that did not overlap with the selected days for the Zone 2 season. So, we made minor changes to the WDB proposed calendar to make it match up with the selected Zone 2 calendars.

M. Hunter: We can note that we have moved some days. For Early season Divers we had move November 30 to December 15 in WDB and for Late Season Draggers we had to move December 2, 3 and 10 to December 8, 23 and 29 in order for it to match up with the Zone 2 overall calendars [Appendix A for revised, proposed calendars].

J. Leask: No issues with gear conflict?

T. Cheney: No, divers and draggers will be up in there on different days.

J. Leask: When do scallopers set their season?

T. Cheney: They will set their season in June.

DMR Updates

T. Cheney: The Marine Resources Committee had a public hearing last week regarding items that are needed to be in place for the swipe card system to be implanted this fall. These include prohibiting tenders from selling product, as only the license holder has a swipe card and requiring urchin buyers to acquire the swipe card readers. There was no comment opposed to these measures and there was a work session yesterday on those items.

J. Leask: Can you keep the industry in the loop on upcoming legislative issues in the future?

T. Cheney: Yes, however, the hearings can be scheduled with only a week's notice. So, I recommend that folks contact the clerk directly to get those notices automatically emailed to them. Her name is heather.macklin@legislature.maine.gov. For more information about the Joint Standing Committee on Marine Resources, you can go to their website:

http://www.maine.gov/legis/house/jt_com/mar.htm

Discussion: Pilot Project

L. Harris: This project was proposed to be initiated by members in this room to do a pilot restoration project. The support will be provided by me, Robert Russell and Steve Eddy. Steve is submitting a proposal to Sea Grant for hatchery urchins. This is lead by industry and we are not proposing to use sea urchin research funds to do this. So hopefully this will help. There is a handout in the back [**Appendix B**]. I have been monitoring urchins from the Isle of Shoals to Cape Neddick since 1993 and this summer I will have a more complete document put together. We are putting out samplers at Cat Ledges this summer to monitor the natural recruitment at that site in addition to these other monitoring sites. Historically, if you look at Eastport and Winter Harbor it bounces around at a low level. There are a lot of small urchins in Eastport in the system, but I am not seeing them on my collectors, so they must be swimming in from somewhere. This year at Nubble Light and Isle of Shoals the numbers were up; we are seeing more urchins on the bottom, just as Roberts's survey have seen a little uptick and the divers are saying the same thing. We are seeing small urchins survive and recruit up for a few years. It does look like there is a small build back up of urchins which is good news for the future of this fishery. Basically, the whole idea is to try this idea which has been discussed over a number of years. Everything came together and this was proposed from the urchin community as this is really the best way for this to work if the industry takes the lead.

J. Leask: We covered this really well in the subcommittee meeting, but is there anything else that the audience would like to add? I would just like to re-iterate that with Clint's help we have been successful moving urchins. Sheepscot Bay and Penobscot have really cold, clean water which is critical for this species. I think this will be successful in a small context.

S. Eddy: Should we have a vote now that we have a quorum of council members? I would like to make that motion.

J. Leask: There is a Motion on table. Tracey Sawtelle seconded it.

MOTION: To Support moving forward with the Cat Ledges Pilot Project. VOTE: UNANIMOUS.

Chuon: What about Sullivan River? There used to be good urchins there.

J. Leask: That is good clean, cold water. That is very possible. This will set the stage for that.

Chuon: Above the falls.

J. Leask: Yes, in Taunton Bay.

S. Eddy: It would be very convenient to us.

J. Leask: Do you see anyone currently working up there?

Chuon: No.

J. Leask: There was a special license for that area, but I don't know about now?

T. Cheney: I am not sure of that status, I can look into it. [*]

L. Harris: We could do a second site there.

Chuon: It is a good area.

J. Leask: Steve's hatchery is right next to that area above the falls.

S. Eddy: I would certainly welcome it if Zone 2 harvesters would be supportive. But I would need to get additional hatchery product. Maybe Larry could supply it?

L. Harris: I would need additional funding.

Discussion: Swipe Cards

Chuon: I am opposed to swipe cards.

Sinuon: Me too, I like paper reporting.

Chuon: But, I would support fixed buying stations.

M. Hunter: I just want to say that we can talk about this hear, but you really need to submit your comments via the public hearing process.

J. Leask: I am also listening and can bring these comments back to the DMR Advisory Council. The guys in scallop industry are not really in support of it either and have some valid comments. Sometimes you need a tender to sell product, but you won't be able to do that now. What is to prevent a guy from taking a swipe card and selling to someone else? There are more questions to be raised here. It could mean a quota down the road. For example Tracey gets 7 trays times 38 days – could be good or bad. There is a lot more to the swipe cards.

T. Cheney: I just want to remind folks that this was part of the DMR accepting the Status Quo season for next year at the season setting meeting. All the measures that we have done to further cut days and put tote limits only was meant to stop the further decline, and are not enough to help the fishery rebuild. The commissioner was willing to back off asking for any more reductions this year if we would put the swipe card system in so we could get the dealer data in a timely fashion. Every year we are setting a season without a big chunk of the dealer data available. This would not replace harvester reporting – that is a separate data stream that we need in order to get location and effort information. This is meant to take the dealer data stream and make it real time – we would be able to get price and poundage on a daily basis with this in place.

T. Johnson: It is my understanding that this is a pilot.

M. Hunter: This will give us more up to date landings information; I am still waiting for landings information. And it may eventually let you pick your days, to fish more safely.

Chunon: You should require buyers to have a fixed buying station where they have to fax this information and send this to you. As far as a swipe card, what if it was a rainy or cold day?

M. Hunter: Rob will be at the next meeting to answer those types of questions.

T. Sawtelle: As far as picking days, people could be fishing seven days a week. I don't think the processors would want that.

M. Hunter: There will have to be more communication between buyers and harvesters.

J. Leask: Part of the weather days is conservations. To pick your days, that may result in higher landings.

M. Hunter: You may not get all your days. We always hear that at public hearings.

J. Leask: These issues came up at the DMR Advisory Council meeting, and the commissioner said he wants to move forward with it. I would like to work out all these issues first. What if my card malfunctions?

J. Turcott: We [Marine Patrol] gets called and we all have our own swipe cards. And then we would amend the data after the fact.

T. Sawtelle: How would that work if an officer takes an hour to get there and the guy wants to leave?

J. Trucott: I don't know if there has any been issues in elvers.

T. Sawtelle: But this is a winter fishery.

Chunon: Really need a fixed buying station.

D. Carver: My prime concern is that I don't know enough about it. I am not a dealer so I listen to you guys who are dealers on council. Open discussion is going to solve it. We started off because the dealer set the dates because we were worried about the market. My prime concern is that I don't want to see someone die. My daughter could hardly make it on the ladder after diving one time. I have had divers jump over with frozen regulators, in storm surge and trying to pick and trying to feel. Glen Wilson up around Bath area, well he was my divers. He is one of the most experienced divers around. All I know is what they are telling me. There is a lot of difference between Kittery and Rockland and Rockland and Eastport. If the swipe card will work, then I am in favor for it. I am tickled to death we are at least trying. Sooner or later someone will try to outmaneuver it. If we can keep working, everyone is talking and everyone is listening. If we can only come up with something that can help save people's lives. We have lost lives in this fishery. You have zero chance of saving them if they go over. It can happen so quickly. We gotta come up with something that will work. We just can't sit back and say it won't happen again, because it will.

J. Leask: No doubt we are in a dangerous industry.

D. Carver: Like the project Larry wants to do, you gotta put urchins where there is feed or they will die. I have worked with Brian Beal, he does amazing stuff and has a lot of money to work with, but he needs to listen to fishermen. He works mainly with clams, but he has worked with urchins. He grew them to a certain point and then they died. He did it with scallops too. He has even worked with lobsters. Nature will seed them faster that we can even think of.

J. Leask: Mother Nature does a much better job. Any more comments on swipe cards?

J. Gebo: Out west they have a swipe card and it gets swiped through the buyers. Works pretty well.

J. Leask: Are you able to sell a small amount, split catch with buyers?

J. Gebo: You can do that.

T. Sawtelle: I didn't think about selling to three or four people.

M. Hunter: I don't see why you couldn't do that.

J. Gebo: Landings form from the harvesters out west are written out on a sheet of paper and I hand it over when I swipe my card at the dealer and the dealer submits the forms for me. It has all the lat/lon, name of boat, effort information on it.

Chuon: This is what happens when I sell my crab. The guy punches it in and sends it away. But this fishery it is in the winter, it is dark and the harbor masters tell us to get out of there. That is why I recommend an office and a station to buy. Not running around.

M. Hunter: We are chasing you around trying to get samples.

Chuon: Most of the time in January we are buying from two divers for 14 totes and drive from Scarborough to Machias and then the next day the weather blows. Hotels can be expensive. The weather and the electronic [concerned].

T. Cheney: That is why we were looking at it as a pilot with the normal season set up for this year. We need this first year to work out the kinks.

Chuon: Half the time we are given a wrong number.

T. Cheney: That information would be loaded into the card automatically, so that issue would be addressed.

Chuon: What is the machine breaks? This is a different business – it is a five minute deal. You have to judge what you pay for by sight. It is not like lobsters. We know this guy will bring us good stuff. The buyers are older guys from a third world country who are experienced buyers, but they will not be able to do this. He can do the buying, not the paperwork.

T. Cheney: Don't you think that would help then with the paperwork issues that he has trouble with?

Chuon: Yes, but what if it froze up?

T. Sawtelle: Why are you even asking for price?

M. Hunter: It matters to the value of the fishery. This is a five million dollar fishery.

Chuon: The IRS has come after us. They have fined us in the past because we are not giving a 1099 to you [harvester]. If we keep doing that we will get fined again.

J. Leask: That is why Benny got into problems because he was paying cash and the IRS fined him because he wasn't giving 1099s. Now he buys with check.

Chuon: We can pay cash, but how many guys would sell to me if they have to take a 1099?

J. Leask: You realize you are making an argument for this swipe card.

Chuon: No reason to save this fishery if there is no market. We need to work together. It is a three step process: Fishing, processing and selling. Our market is 20,000 miles away. If we cannot keep this going, it is not going to be five processors; it will be one or two left.

J. Leask: That will tie into the FMP. It has been on the back burner.

Chuon: The processors are competing with the industry and the market, even the government. We are competing within the state and Russians.

J. Leask: There is an argument that the card should actually help you. The card is going to go into effect.

Chuon: If it goes into effect, that is OK. But I am urging for the buyers to have an office to it won't screw up.

D. Carver: My wife and I put in a 6 unit hotel in Beals. Right off the first winter we had far more business in the winter than summer because the divers coming. When they went to two zones we didn't have a reservation for 10 years. They could dive 5 or 6 days a week. We went out of business. Diver that I have would stay with us so he wouldn't have to pay for a room, but if he had to pay for lodging, he wouldn't come.

Chuon: This year we saw 21 totes, 14 totes per truck. I have fixed cost to pay for the guys to drive and hotel it is about \$1000. It is not worth it to go up there. I am worried next year that I won't be able to afford it.

D. Carver: He would call on the phone and drive south to try to sell his stuff and drive to Rockland and had to get a room just to sell his stuff. Then come back up north to catch the tide. I believe in trying to get the guys to try to dive and drag 38 days as there are expenses of truck, dive gear, etc. and if you can't get in so many days. They need to be able to pick your days so you can make a living at it. They are just trying to get a day in. The last day we dove there was something mechanical that broke down and we didn't go until past noon before he dove his first dive and he does until dark and he got only six totes and he was elated that he got his check.

J. Leask: Last winter was horrible.

Chuon: The guy with the 22 foot Maritime Skiffs had more days on in because they can go around, drive around with the boat. Dive one day in Lubec and dive in Ellsworth the next day.

J. Leask: The dealers being able to make money is why we went to four day week this year. I'm on the fence for swipe cards as there are a lot of arguments for and against.

D. Carver: I had a guy take a really low price once this season because he had to sell them.

Chuon: As a buyer, if it is a guy that is loyal, I will not burn him. But if you come at midnight after shopping around then I am going to give you the lowest price. If it is a guy that shops around, I am not going to give him good money. If I have a chance to burn a guy, I will burn him.

T. Sawtelle: He's honest! There are people that sell to him every day, and he treats them fair every day.

D. Carver: I know, I buy lobsters too.

Chuon: Urchins are different. My uncle is a good buyer, but he is not good with technology.

J. Gebo: Buyers got to make money too.

Chuon: Buyer costs more. I have 30 people waiting to work that I pay a salary too, truck on the road, I need to pay for the building. It can be \$10,000 a month. Insurance, unemployment taxes because I need to lay them off over summer but I need them back, insurance. I am worried about next year if I will have enough money. If it starts out at a \$5 urchin and I don't get enough money from Japan, I don't know if I will make it.

J. Leask: So, swipe cards is still on the table.

Chuon: I buy from guys from years, and he talks bad about me, but he always comes back because I treat him well.

D. Carver: My diver sells to the same guy all the time. He doesn't want to sell to someone else so he won't offend the guy he is selling to.

Chuon: Urchin price is not a weight price; it is a different business than other seafood. If you bought a lot of urchins, but the color is wrong, it is no good.

J. Leask: As a council in respect to having a voice, it must go through public comment. This is on our plates; we are going to be looking at this in September. I will take anything you want me to back to the DMR Advisory Council. If we don't make a recommendation here, it goes back to the public hearings.

T. Sawtelle: Does the council want to stay neutral? Comment period will be closed by the time we meet again.

J. Leask: Anyone want to make a motion on it?

J. Gebo: They have been doing this out west for years and it works there.

T. Sawtelle: We should have a vote for it or not. We didn't even discuss it.

T. Cheney: It was presented as a management recommendation along with status quo for the season. There was not much conversation as the council went right into picking the days.

J. Leask: I played a part in that and the begging of the last meeting was tumultuous. I felt badly for Brian. I would like to say we are either for this or against this as a recommendation. Or we can table it?

T. Sawtelle: Why this fishery? Why scallops and urchins? Why not lobsters?

T. Cheney: The lobster resource status is much different than these two fisheries.

T. Sawtelle: The lobster council has got a lot of pull. For this council, the past twenty years we are given an agenda and you have to pick your right and wrong – if it is a bad idea, the council supported it and if it is a good idea the department proposed it. We proposed totes limits 20 years ago but DMR didn't want to do it. You need to treat all fisheries the same.

J. Gebo: But we may be able to pick our days. What is the trouble with it – they get your pounds and money anyways.

T. Sawtelle: What next? What conservation it is going to give you?

J. Gebo: They can shut us down.

M. Hunter: They may be able to allow you get your own quota and change the entire management of this fishery.

J. Leask: We have to do something different. What if the swipe cards would allow us to sell our license? You then may have more ownership in the resource. I am a conservationist and I do transplant urchins and I have seen areas bounce back, really well. The things are in a cycle and the timing of the pilot project and the urchins bouncing back are really well. In some parts of Cobscook they are overrunning.

J. Gebo: In Alaska there is a research charge, and they were trying to buy back some licenses and the price has shot up.

T. Sawtelle: Maybe there could be a quota, maybe you could pick your days, maybe you could transfer it to someone else, or they could give you a Cadillac!!! All these stars we put up on the top five things we want to discuss and we haven't talked about it for two years!

C. Richardson: Your some cynical.

J. Leask: That was the next item on the list [FMP]. It's like the pilot project. I wanted to do it right away, but we need to do it so it is supported by science. So do we want to take a vote on it?

T. Sawtelle: I want an honest answer from DMR if this will do anything to allow us to pick our days.

M. Hunter: I have been advocating for the swipe cards because I want you to be able to pick days and fish safely.

D. Carver: We should test it out to see if it works.

J. Leask: Commissioner wants this. If we take a vote on it, it may not carry anyways.

D. Carver: What's the hurry?

J. Leask: We can table this until the next meeting. Leask motioned, Johnson Seconded.

MOTION: Table swipe card conversation to next meeting. VOTE: 6 for, 1 against, 1 abstention. Motion Passes.

T. Sawtelle: I was hoping to have an outright vote on it.

S Eddy: No one seconded that.

T. Sawtelle: I just want to know that it will allow us to pick our days.

M. Hunter: We want to allow you guys to fish in a safe manner.

Chuon: Why not make the license sellable? If I can buy 30 licenses, it is good for our company.

M. Hunter: The Maine legislature controls that, they don't want to make it so a young person could never afford a license.

Chuon: In different places they have it [transferability].

J. Leask: If you get a swipe card and you have x amount of totes on the swipe card, you could sell it, like in the groundfish industry. Men are getting older, attrition is going to catch up with us. This FMP is a means of addressing this. It would allow for someone who has worked in this fishery to be able to pass the license along to a son, or nephew or someone else. There are means.

T. Cheney: We need to think very carefully about transferability. The current license holders would essentially be "gifted" these licenses. Is it right to ask the next generation to buy you out, to fund your retirement? Would it price young people along the coast out of the fishery? We need to think about the long term implications of this.

T. Sawtelle: Is it right to put the guy out back of my boat out of business? DMR did it in the past with folks leasing licenses and allowed for the transfer of licenses.

M. hunter: That was a onetime thing to solve a particular problem.

J. Leask: But it did happen and it set a precedent.

T. Cheney: we need to deal with the licensing issues for many fisheries, not just urchins.

D. Carver: Keliher said he is not in favor of transferring licenses because the rich will control the fishery. There used to be 1000 people working in the quahog industry, now it's just a handful of guys. Money talks and they bought the quotas from the Carolinas and we had smaller boats that used to get buy in the summer time and it was flourishing and now there is almost nothing.

J. Leask: During the developing management plan idea of selling licenses was a high priority.

D. Carver: I'm a member of lobster union and wanted to look at being able to transfer licenses to family members. We had people having to leave the community to dig clams, but it is restricted. I am against the tiered system supported by the MLA. If you have bad year fishing, they will put me on a lower quota of a lower amount of 250 traps. I know of lobster licenses who didn't renew their licenses and lost it. I will go along with the commissioner and I don't think that any of these industries....I just sold my offshore permit, so I guess I am probably guilty along with a multispecies permit. For my state license, when I die, it will go back to the state. Everyone one of my grandkids went through the apprenticeship to get a student license.

T. Sawtelle: What if they don't have a grandfather to help them?

D. Carver: Look at Vinalhaven – they have people from all over the country coming to work on the back of a boat. They have the apprenticeship program, and some of these people on the wait list for years, there is no reason why they can't be allowed into the industry as there is enough resource. Like the urchins, if there is enough help they will come back. In groundfish, they fished them over 50 years and took everything now they are gone. For lobster they go in and out of the traps and been fed by the traps. You can leave Beals Island and sail for 20 miles and there are strings of traps.

J. Leask: Maine has the best aquaculture program.

T. Sawtelle: The scallops used to be able to tow and tow and you would catch nothing. Now they are plentiful. Don't know what happened, they go in cycles.

D. Carver: I don't like the idea of passing them [licenses] on. You can get a license by the apprenticeship.

T. Sawtelle: You can't sell your boat because you can't get a license.

D. Carver: If you are on the wait list for so long, you should be able to get a license. I think these licenses there should be more divers allowed. Break the moratorium and get more involved. It would help the dealers because they would have a supply.

J. Leask: That is the FMP, so would you support carry it over.

D. Carver: Yes. I have enjoyed this meeting.

J. Leask: So we will carry the FMP discussion to the next meeting.

June 18th will be next meeting in Bangor at 5pm. Research Subcommittee to start at 3:30pm in same location.

Meeting adjourned at 7:21pm.

Appendix A

Revised Whiting & Dennys Bays (WDB) Calendars currently proposed for rulemaking.

**Proposed 2015 - 2016 Sea Urchin Season for Maine Zone 2
Whiting and Denny's Bay Limited Access Area**

= Open = Closed

Early Season for Divers, Rakers and Trappers

October 2015							November 2015							December 2015						
S	M	Tu	W	Th	F	S	S	M	Tu	W	Th	F	S	S	M	Tu	W	Th	F	S
				1	2	3	1	2	3	4	5	6	7			1	2	3	4	5
4	5	6	7	8	9	10	8	9	10	11	12	13	14	6	7	8	9	10	11	12
11	12	13	14	15	16	17	15	16	17	18	19	20	21	13	14	15	16	17	18	19
18	19	20	21	22	23	24	22	23	24	25	26	27	28	20	21	22	23	24	25	26
25	26	27	28	29	30	31	29	30						27	28	29	30	31		

Late Season for Divers, Rakers and Trappers

December 2015							January 2016							February 2016							March 2016						
S	M	Tu	W	Th	F	S	S	M	Tu	W	Th	F	S	S	M	Tu	W	Th	F	S	S	M	Tu	W	Th	F	S
		1	2	3	4	5					1	2		1	2	3	4	5	6			1	2	3	4	5	
6	7	8	9	10	11	12	3	4	5	6	7	8	9	7	8	9	10	11	12	13	6	7	8	9	10	11	12
13	14	15	16	17	18	19	10	11	12	13	14	15	16	14	15	16	17	18	19	20	13	14	15	16	17	18	19
20	21	22	23	24	25	26	17	18	19	20	21	22	23	21	22	23	24	25	26	27	20	21	22	23	24	25	26
27	28	29	30	31			24	25	26	27	28	29	30	28	29						27	28	29	30	31		
							31																				

Early Season for Draggers

October 2015							November 2015							December 2015							February 2016							March 2016						
S	M	Tu	W	Th	F	S	S	M	Tu	W	Th	F	S	S	M	Tu	W	Th	F	S	S	M	Tu	W	Th	F	S	S	M	Tu	W	Th	F	S
				1	2	3	1	2	3	4	5	6	7			1	2	3	4	5		1	2	3	4	5	6			1	2	3	4	5
4	5	6	7	8	9	10	8	9	10	11	12	13	14	6	7	8	9	10	11	12	7	8	9	10	11	12	13	6	7	8	9	10	11	12
11	12	13	14	15	16	17	15	16	17	18	19	20	21	13	14	15	16	17	18	19	14	15	16	17	18	19	20	13	14	15	16	17	18	19
18	19	20	21	22	23	24	22	23	24	25	26	27	28	20	21	22	23	24	25	26	21	22	23	24	25	26	27	20	21	22	23	24	25	26
25	26	27	28	29	30	31	29	30					27	28	29	30	31			28	29						27	28	29	30	31			

Late Season for Draggers

December 2015							January 2016							February 2016							March 2016						
S	M	Tu	W	Th	F	S	S	M	Tu	W	Th	F	S	S	M	Tu	W	Th	F	S	S	M	Tu	W	Th	F	S
		1	2	3	4	5					1	2		1	2	3	4	5	6			1	2	3	4	5	
6	7	8	9	10	11	12	3	4	5	6	7	8	9	7	8	9	10	11	12	13	6	7	8	9	10	11	12
13	14	15	16	17	18	19	10	11	12	13	14	15	16	14	15	16	17	18	19	20	13	14	15	16	17	18	19
20	21	22	23	24	25	26	17	18	19	20	21	22	23	21	22	23	24	25	26	27	20	21	22	23	24	25	26
27	28	29	30	31			24	25	26	27	28	29	30	28	29						27	28	29	30	31		
							31																				

Appendix B

Larry Harris' Pilot Project Handout

PLANNING FOR URCHIN RESTORATION OF CAT LEDGES

Background: The demand for urchin roe continues to be high, both in Japan and in the US, but urchin stocks in the Gulf of Maine have remained low for a number of years with little sign of improvement. Zone 1 stocks may have improved slightly while Zone 2 stocks may be declining. After a number of years of discussion about stock enhancement, a harvester initiative to try a restoration of Cat Ledges in the Sheepscot Estuary has been proposed. General agreement and support from the Sea Urchin Zone Council and the Department of Marine Resources must be obtained before the setting up of a site to test concepts for reestablishing populations. The project would take place in a small area of the Cat Ledges that will be managed by a team of harvesters, with assistance in evaluating the project from DMR and scientists associated with the SUZC. The overall goal of the project is to develop a model system for restoration of urchin populations that could be adopted by industry members for other locations and on a broader scale, which would lead to a sustainable urchin fishery in the Gulf of Maine.

Timing: Planning and initial surveys will begin in spring of 2015 and be initiated in fall of 2015. The project is slated to take up to 5 years, depending on results. If the project is successful and urchin populations increase significantly, the team of participating harvesters will be able to harvest from the site for one season before the site is opened for general access by any Zone 1 diver.

Participation: The harvesters to conduct the project are Clint Richardson, Joe Leask, Brian Preney and David Foster (?). DMR participation will be from Robert Russell, Margaret Hunter and Trisha DeGraaf. Scientific assistance will come from Steve Eddy (CCAR) and Larry Harris (UNH). Additional interested parties are welcome and to be identified.

Study Sites: Industry members who have prior knowledge of Cat Ledges will conduct initial surveys to select appropriate sites for study. The sites will be determined in consultation with DMR and the SUZC.

Three sites will be selected in which pairs of plots will be designated. The first plot will be for urchin seeding and the second will remain as found as a control. If possible, two of the sites will be close enough to allow sampling by divers on a single dive.

Initial quadrat sampling will take place at each site to document urchin populations and community structure. The sampling will consist of direct counts and photographic sampling to have a permanent record of each site for long-term comparisons. A grid of transects with marked quadrats will be established for each plot and the quadrats will be surveyed using direct counts of all urchins and other motile fauna, particularly crabs; percent cover of algae and substrate type will be estimated using a grid of points. Each site will be photographed in a systematic way by taking pictures of meter plots along band transects to cover the site using a Go-Pro camera with lights to provide accurate color assessment. Photographs will also be taken of each sampled quadrat. The area of Cat Ledges encompassing the three sites will be designated a research site and will be off limits to urchin harvesting.

Each site will be marked with bricks painted with day glow paint and plastic colored tape (yellow for urchins and orange for control). Depending on locations of the sites, connecting markers may be established to allow team members to move from one site to an adjacent site while on the bottom.

Recruitment monitoring with samplers will be deployed in late May and collected in August. A set of recruitment samplers will be provided by Harris to be set out at all six plots in late May and then to be collected in early August. Fifteen astroturf collectors attached to wire frames, will be deployed at each plot. Each collector will be removed into a separate plastic bag while on the

bottom and returned to the DMR Laboratory at Boothbay Harbor where they will be preserved in 95% ETOH and then taken to UNH where urchins will be extracted from the panels and counted. Ten panels from each plot will be counted with the additional panels held as backup if needed for further analysis. The recruitment sampling will be repeated each year to document natural recruitment patterns and the results will be compared with sampling from other sites in the GOM carried out by Harris.

Project initiation: Once the sites have been designated, marked and surveyed, three to six totes from ledges in the region will be transferred to each of the three urchin plots and distributed on the bottom by hand. The harvested urchins will be of mixed sizes to simulate natural populations. The three sites will then be surveyed again to document the community at each site and plot at the initiation of the experiment. Transfer of urchins will be initiated in the fall of 2015, after water temperatures have dropped to below 10⁰C to ensure good survival of the transferred urchins.

Quadrat sampling of each site using photography will be conducted at least twice a year for the duration of the project. Cat Ledges are near the DMR Offices in Boothbay Harbor, which will facilitate monitoring. Analysis of the surveys will be conducted jointly by Russell and Harris.

Monitoring: Seeding by hatchery-reared urchins will be conducted by Eddy and CCAR. Juvenile urchins cultured during the winter of 2016, will be deployed at each site at two times. One set will be deployed in the early spring of 2016, while a second set will be reared in cages to a larger size to be out planted in late fall of 2016. The urchins from each treatment will be marked with distinct flurochrome dyes so that survival of sampled urchins can be distinguished between naturally recruiting and out planted individuals.

Communication of the project: Annual reports of progress will be prepared by the participating parties and reported to the Commissioner of DMR and the SUZC. The information will then be communicated to the industry at large to facilitate potential efforts by other interested parties at other locations.