

Sea Urchin Zone Council Meeting October 8, 2015 in Ellsworth, ME

DMR staff: Trisha Cheney, Carl Wilson, Maggie Hunter, Robert Russell and Les White.

SUZC members: Teresa Johnson, Joe Leask, Steve Eddy, Duane Carver, Tracey Sawtelle, Mark Nickerson, Chuon Muth and Dean Norris.

SUZC members not present: Jeff Edwards, Larry Harris, Clint Richardson, Jason Leighton and Atchan Tamaki.

Public: Kim Ovitz, James Fredette, Aaron Gilpatrick, Stephen Warner and Schuyler Belle .

Sea Urchin Zone Council Research Subcommittee Meeting

Meeting commenced at 3:30pm

Cat Ledges Pilot Project Update (Appendix A)

R. Russell: I'm available after the first week of November.

C. Richardson: Talked to Clint this afternoon and we are going to try next week sometime to clear the big huge kelp out so we can set the urchins in.

M. Hunter: It is important to survey for urchin abundance first.

M. Nickerson: We didn't see many urchins while we were there in the spring.

M. Hunter: It would be nice to document what is there.

M. Nickerson: We had the GoPros and ROV to take pictures when we went back with Larry to retrieve the collectors.

R. Russell: There was a full assessment plan before we move forward.

S. Eddy: There was a full assessment plan with the GoPros.

M. Nickerson: We did that with Larry.

S. Eddy: So before there are any big changes, we should document it.

M. Nickerson: We were just going to snap off some of the ends of kelp to clear it out a bit before we set out.

T. Cheney: Robert you would want to do a standardized survey with the same methods as the annual survey before moving forward so we can compare that data to the survey data, correct?

R. Russell: That is what I thought.

S. Eddy: We would need to document it first.

D. Norris: If things go wrong down the road, we want to look back and be able to say what the differences are between the sites.

M. Hunter: With the GoPro you are not going to be able to count urchins that are under kelp.

T. Cheney: We really need to do a rigorous assessment of the site before it is manipulated.

M. Nickerson: We could do that in the morning while the urchins are being transported.

D. Norris: Does that mean putting a quadrat down?

R. Robert: Yes, you need to put quadrats down to be able to quantify what is there.

D. Norris: There is a 90% chance you can get that info from the area adjacent to it.

M. Hunter: You can't assume that.

R. Russell: You really need to do it before you manipulate it.

C. Wilson: Why do you even need to clear it? Aren't you biasing the experiment?

M. Hunter: We are really trying to figure out if this works - what fishermen will have to do in the area to get this to work. It is part of the project, the manipulation.

M. Nickerson: Other places may not have to do it. There is so much kelp there.

S. Eddy: Wouldn't we want to randomly sample the whole plot, not just that one?

R. Russell: Playing with it before hand, even if that is part of the manipulation, it would be good to just wait on that.

S. Eddy: So, don't do anything until we are ready to put the urchins in.

R. Russell: So maybe instead you could look for transplant sources.

J. Leask: We hoped to take them from the area, but should probably leave those. We have it on the schedule to check out Muscongus Bay. Penobscot Bay looks great, but as far as logistics, that is a long way to take them. The best scenario is to keep them close, form where they come from. There are still patches of urchins deep in the Sheepscot, but that area has been open to scallop dragging and that has changed the dynamic. The kelp isn't going to bother those urchins at all. Clint and I move urchins, the big ones and we took seven trays in one place, four in another. I put four trays in a place just like Cat Ledges, same dynamics, side of the bay, etc. as where I put these urchins. I didn't do what I normally did, which is place them right side up on bottom, they got dumped. I went back last week and urchins were still there, but there were also urchins out on the bottom, all sized ones. In clumps, 10s and 20s, big ones at the base and the amount of seed surrounding was amazing. It is too bad that we missed this past year to do this and the cold weather really helped them to bounce back. What they are doing right now flies in the face of conventional wisdom in terms of the conveyor belt. If we can get these on bottom and have another cold winter, the urchins are doing really well.

S. Eddy: Sounds like you don't have a definitive site where you will get the transplants.

J. Leask: It depends on what DMR and the council needs. We have been slow to move because there are hundreds of crabs and signs of predation. Goal for this project is to get the bottom healthy again. Larry found amphipods at the site.

S. Eddy: Amphipods are predators of small urchins. He didn't note any crabs.

J. Leask: Before we move anything, if there are a lot of crabs there, it would be a waste of time to move the urchins. We had a warm late summer/early fall.

R. Russell: Before we start the project, we need to know where we are going to get the trays from. I am going to be in Muscongus Bay doing the lobster sampling, but I won't be in spots where I remember seeing the urchins. So, before we discuss the transplant dates, we need to know where they are coming from.

S. Eddy: We were talking about surveying the site just before transplant. If we find crabs, what do you recommend?

J. Leask: We could do crab adjustment. But once it turns cold, the crabs will leave. I realize you need to plan.

R. Russell: We just need to have an idea. By mid-November we can all be free to do it.

S. Eddy: Clint had suggested mid-November as the air matches the water temperature.

J. Leask: We have discussed two vehicles for moving urchins. My skiff can move fast from Pen Bay to Sheepscot in 45 min. But the best way is to have them wrapped in sea weed. But best option is to keep them in a live tank to give urchins the chance to revive and perk up.

D. Norris: Can find a decent junk bed when scouting?

J. Leask: Junk beds are not a problem. But if you have some good pockets in an area, best to leave them there.

S. Warner: How many trays?

T. Cheney: 9 trays total.

J. Leask: A few more because you don't want to crush them, the whole size range. Critical part of it is to increase biomass and in the spot I was talking about earlier, it increased at least four times. Only drawback of the area is that it is open; the condition of the seas and the crabs are against it.

S. Eddy: So, not much more to discuss in regards to Cat Ledges because it sounds like more planning is required with Larry present.

M. Nickerson: Pretty much. We could go take a look at it and assess it for crabs. When we were there earlier in spring when we set panels out there were a few crabs there but not that big.

S. Eddy: Two things you can do before we move forward. 1) Go back to site and assess crabs. And 2) find a site where we can take the trays from. What next?

T. Cheney: We could host a Research Subcommittee meeting in Boothbay later this month with Larry present to plan for the next steps.

J. Leask: The pink mussel shells are good for the little ones, so I want to look at the sites to see if there are those shells there as it is good for the small ones. Pin mussels are good for a food source, top shelf eggs are usually found there. If there are bigger mussel shells, there are a lot more small ones there. Since introducing the small ones, you need to look at conditions that are conducive to small ones.

S. Eddy: Have the sites been selected thought?

M. Nickerson: Not nailed right down, but the general area.

D. Norris: Usually at the base of the reef.

S. Eddy: So, turning to the Fisheries Management Plan. Maybe we could talk about the handout Trish provided a bit (Appendix B). So, let's start with the first item **"Promote growth of the resource while maintaining the viability of the fishery."** It seems that you should really have something about processors in here since the number one goal of the Goal and Objective Setting Exercise (Appendix B) from the April 26, 2012 SUZC meeting was "Considering the needs of the processors".

T. Cheney: The processors were not part of original FMP development. At that time, Atchan was the only processor on the council. Since then, Chuon Muth was added and has been regularly attending meetings.

S. Eddy: When the DMR drafts management actions they shouldn't burden them as only a few processors left.

T. Cheney: I think there are only five left. But you would want a sentence in there to the effect that mentions the processors and need to meet their needs. We can do that.

S. Eddy: So buyers sell to processors. No one ship live to Japan anymore?

D. Norris: No, but it used to be a big.

T. Johnson: Would we want to clarify that "fishery" should also include markets and processors?

J. Leask: I would like to mention something. The transferability of licenses, and that is high on Clints list. I don't see on this document.

M. Nickerson: Yes, what about transferability? Why is it not on there?

T. Cheney: Currently, none of our licenses in the state are transferable. And after taking a lot of time to look into it, particularly with lobster licenses and those discussions, the commissioner does not support making any licenses transferable due to the considerable risks associated with it to coastal communities. So, it is not on the list as it is not an option that the DMR would support.

[Transferability Discussion]

J. Leask: I have seen considerable support for transferability in this fishery, you can see it at the goal and objective setting meeting that it ranked very high on the list. If we wanted to have it as an industry, would DMR block that?

T. Cheney: I would have to have the Commissioner come and speak to the council about it directly.

S. Warner: I would suggest putting it in there to look at transferability, and to not close the door or at least keep it on the table. Commissioners do change and maybe a future one would support it.

T. Sawtelle: How much did DMR make off the elver lottery?

T. Cheney: I don't know, but much of it went to enforcement.

T. Sawtelle: There ought to be money set aside for each individual fishery.

J. Leask: I was told that we could get our elver license back at any time in the future, but then they shut us out. If someone held a license, then he should be able to get one again.

T. Sawtelle: They did open it up, but people didn't know they could get it.

D. Norris: In regards of latent licenses, they have been paying for the licenses this whole time and not fishing. If we are going to take them away, we should pay them back.

J. Leask: How many people have reactivated their licenses?

M. Hunter: Quite a few draggers recently.

J. Leask: I lost a groundfish permit. Then I bought another one, and they [NMFS] took that when they changed the quota. I do know that if all the permits held on, none of us would have anything.

D. Norris: If you want to get rid of latent licenses, then we can jack up the license fees and only people who would hold on to it would be the ones who would want it.

T. Sawtelle: I don't think we should jack up the prices.

S. Eddy: What if all the latent license came back in?

M. Hunter: I think it would be unlikely they would do that unless the prices went through the roof and the resource was rebounding. I keep thinking "What these people are waiting for?" Either waiting for transferability, for the resource to recover or price to go up.

J. Leask: Do you have how many licenses have been issued since the moratorium.

M. Hunter: It would be since 2004.

S. Warner: Are our license restricted by them?

M. Hunter: No, when we set the tray limit for example, we based it on who was active.

T. Sawtelle: The new licenses issued in 2004 were people who were leasing the licenses, and those folks didn't want to give them up.

S. Eddy: Has anyone gone through the exercise of how many people could be supported by the fishery at different biomass levels?

M. Hunter: We don't know, we have never been in this position of trying to rebuild the urchin stock. We have seen it be somewhat stable the past few years, but we don't know what it will take to rebuild it.

C. Wilson: We have been managing with days. How many people with the size of the resource - can that calculation be made? My thought process is why don't we actually manage to the resource or try to take the resource into account. It might be a different metric than people or days. The conversation in scallops the last few years has been with the science group in Boothbay is that we are not responding the number landings, but the amount of resource in a particular area, and how much is being removed in that area. There seems to be some glimmers of improvement in that fishery. Those have been some internal conversations. From a lobster perspective, I could never give the number of fishermen that could be supported by the fishery. The variables are too much.

S. Eddy: How many licenses are there? [317 in 2014]. Then stay at that level for a number of years, and transfer those.

C. Wilson: You could have 300 really active licenses or latent licenses. It is purely a question of this group of what you want. But it is disconnected from the resource. I was at the season setting meeting and it is like rearranging the deck chairs on how many days and where. I am sure that meeting has to happen, but at same time, I don't think the science group can set the number of days or the number of fishermen. I know Maggie has been asked to do that in the past.

J. Leask: There is some common sense with the science as well.

C. Wilson: I agree. But a fishery that doesn't have entry in 10 years has no future.

D. Norris: We are in the process of reducing effort. We now have a tote limit and lose people ever year. We should see the numbers start to go up.

S. Warner: I agree with Carl. He touches upon what the Shellfish industry does – how much product first and foremost, days are secondary.

C. Wilson: No fish, no fishermen.

S. Warner: You cut back if needed.

C. Wilson: It is still a product, and there is an opportunity and you can talk about licenses. We as a science group would like to change or support something that is tied to resource.

J. Leask: How much of it is tied to scalloping?

C. Wilson: We spoke about that and it is why the scallop areas are in the document. We have heard that some of the areas closed for scallops have benefitted urchins.

J. Leask: I have had the opportunity to see where all three fisheries operated in same spot: a scallop dragger, an urchin diver and lobster. There was a place where all the urchins were piled right up. You would have had to sweep aside the juvenile lobsters to get to the urchins. These fisheries, clamming or digging worms, these fisheries are more and more intertwined. There are places on Mount Desert Island that have huge mussel beds, and urchins do well there. A worm digger I know in the area said worms and clams died almost immediately after the mussel draggers had worked there. The dynamic of what you are managing is more than one or two fisheries. The way we fish our waters is intertwined.

S. Eddy: Do you want to manage the fishery with limiting people or bring in other mechanisms?

D. Norris: You need to be able to support a boat. 7 totes is around the bottom of what can be supported. If you had enough for everyone to have 7 totes, ok, but you can't go any further.

M. Nickerson: 7 totes would work in an area like Zone 2 where roe content is better.

S. Eddy: With more resource could you open it up?

J. Leask: Need to allow the FMP to do that. Maggie says things are stable, but I have seen things on an uptick in Zone 2. How would you feel about a different season in Zone 1 as it is not as good a roe count? Maybe we have the drag season later in January and March as the roe is better then. I asked that of Bill before.

M. Hunter: I think you need to ask your processors if they need September. The average was 7% this year.

J. Leask: Some guys have stopped buying all together. If our resource is not any good and you need to take more volume, then close it. The tote limit killed me, cut me down 1/3, but I can see where it worked overall. Some places in the state are cutting out 17% roe. We need to regulate by roe count.

D. Norris: The product is the combination of roe count, color and texture. You can get 17% brown roe, it will be B and C grade market though.

M. Hunter: You probably can't regulate roe, but you could incentivize fishermen.

J. Leask: Buyers consistently want A grade, may accept B grade during high demand times.

S. Eddy: Do they pay differently?

J. Leask: Yes.

M. Nickerson: If we move the September to February – March are we taking away roe to seed out?

D. Norris: The bottom line is what the markets want, good color and roe content. But in the end you have to go for the holiday structure and market.

T. Sawtelle: They want fresh product on the market each week.

J. Leask: We are at the end of time where we switch to the full council meeting. Do you have what you need Steve?

S. Eddy: We made a little bit of progress, but yes, we will follow up with a meeting that works for Larry before we do the field work.

Sea Urchin Zone Council Meeting

Meeting commenced at 5:17pm

Introductions

[Everyone went around room to introduce themselves]

Approval of Meeting Minutes (August 13, 2015)

[Approved]

DMR Updates: Swipe Card Implementation Delay

T. Cheney: Due to logistical issues, the Department is going to delay the implementation of the swipe card program until next fall.

DMR Updates: Chapter 26 Rulemaking – Cat Ledges Closures & Mesh Bag Requirement Removal

T. Cheney: We received some comments regarding the size of the proposed closure and a comment in support of removing the mesh size requirements for the mesh bags. The DMR Advisory Council will vote on the final regulation at their next meeting which is tentatively scheduled for October 20.

DMR Updates: Legislative Update

T. Cheney: A bill has been submitted for this upcoming legislative session that proposed to establish an owner-operator requirement for the drag sector of the fishery. Conceptually, DMR supports this requirement as it will ensure the owner of the vessel is more accountable for their actions behind the wheel, thus increasing stewardship and good fishing practices.

DMR Updates: Landings Update

M. Hunter: Landings from the 2014-15 season were up about 100,000 lbs. for both zones from the previous season. I was surprised as the weather was so bad.

J. Leask: Do you have any idea where the landings were or why the increase? Normally guys fishing for scallops?

M. Hunter: March was huge, and scalloping had ended [Cobscook] and that is where difference was.

T. Sawtelle: We had to fight to get two dollars.

C. Muth: Customers, sushi bars overseas - when the price is too high, they look elsewhere for cheaper product. Japan will still accept Russian urchins and the boats have been increased and they process in Japan. Our price is too high.

J. Leask: Do you think Japan is concerned about radiation?

C. Muth: Scallop fishing and sea urchin fishing on the same day with the scallop price higher is what has hurt us. The diver and druggers fishing on different days is really hard for buyers also because we drive six hours to Lubec and buy only 7 totes of urchins. Most of our customers only keep us because of our quality. Mashusho used to be the most famous urchin processor in Portland, and now he is gone (Machun). He is one of the best shippers in last 20 years, and in the last 5 years it was only 20 boxes a day. The people we have to compete are the domestic markets and they can't take all of our product. Jamie Keo only buys Canadian product. Surray won't buy from Maine, he is in Canada, and won't buy because of the price. They only buy once or twice a week. The exchange rate is killing us.

T. Sawtelle: The Canadian processors are full and they won't take any more product.

C. Muth: Me and Jon Chow have been buying and we have been competing so bad because of the weather and our customers are screaming. Keeping it the way it is is not good for the processors. The quality is really bad in Zone 1. They are not "topping", it is just what it is. The short spines are even worse.

M. Hunter: Lessie saw it as well in the port sampling.

L. White: I will go Tuesday and I need to talk to the buyers to find out where I should go.

T. Sawtelle: Wednesday is the best day to sample as it is both a dive and drag day.

L. White: Tuesday is just dive and that is the only day I could get someone to help.

C. Muth: Right now the deeper product is good, 40 feet.

D. Norris: Goose Island is where guys are.

T. Sawtelle: Everyone is not fishing Goose Island.

C. Muth: I buy from Eastport to Cutler, everyone says Goose is good, but not for 20 boats. It is reasonable, the color is nice and pack out is above 10%.

J. Leask: I have heard 16% in the feedline.

C. Muth: In my experience, I have never packed out more than 16%.

D. Norris: I have seen it, but dealing with a lot of divers and mistakes are made.

J. Leask: You have any average, but it takes one guy to wreck it.

C. Muth: If you pack out at 12% all year, you are a good buyer.

Discussion: Cat Ledges Pilot Restoration Update

J. Leask: Went into it in depth with Steve in the earlier meeting. We can come back to it as the next topic will take a lot of time.

Discussion: Fishery Management Plan Discussion

J. Leask: This is the big issue. We are at an interesting point. Trish brought a 1999 document out ["Matters Pertaining to the Management of Sea Urchins" document submitted to the Joint Standing Committee on Marine Resources by the DMR], and this was the start of the urchin council. The framework of this FMP will really guide our industry.

C. Muth: Too many days opening up costs more for us [buyers/processors]. Only a handful of the license holders really are active. Monday I sent out two trucks and only one bought urchins, 9 totes. A truck costs over \$300 to send Downeast.

T. Cheney: At the season setting meeting we had to strike a balance between your needs and Atchan's needs, as he wanted product five days a week. Joe negotiated the compromise of four day weeks.

C. Muth: Me and Jon Chow wanted three days, while Tamaki wants to have urchins over a longer period of time as he sells domestically. We have overseas markets and it is hard for us to keep up and the week is stretched too long and it doesn't work for us to come out and buy 12 or 13 totes. Any dragger needs at least 2 or 3 buyers to sell to. Is this a respectable business either way? Urchin buyers are disrespectful as we compete with each other and with the harvesters for a price. Jon Chow will have product from Newfoundland and that will hurt you guys. Chinda only buys from Zone 1, he doesn't have enough with competition and won't buy. He might buy up here, but I only buy down in Lubec. It is hard for a guy who depends on Maine urchins 80%. I don't know how it is going to work out. There are a lot of latent licenses and not a lot of guys not going.

J. Leask: You support more guys in the industry to provide more product?

C. Muth: Not more, but those guys who are holding on to the licenses, you need to take it away and give it to someone who needs a job.

J. Leask: At the last meeting we spoke about an apprenticeship program.

C. Muth: I just completed my Blue crab apprenticeship. I can't depend on just urchins to support me anymore. The fishermen made over \$2,000 for 7 totes this week, that is pretty good.

S. Warner: That's great, but in Zone 1 we have 15 days and you have to find someone to take time off to tend for you. The market has changed and we can't control that. But we can control the resource.

T. Cheney: They want different things and Joe struck a balance between the two.

M. Hunter: And you did address that at the last season setting meeting.

C. Muth: I think that sea urchins will last a lot longer than 10 years. There is enough resource out there for the market that is there. We have to compete with Lapson processor. I went from 20 people down to 8 to pick 50 totes until midnight. Even if we had more urchins, we wouldn't be able to process it. The resource is still there, there are a lot of urchins out there. The money is there and the product is there.

J. Fredette: I see that there in this document an Educational Component is mentioned. I am a tender and have learned a lot working with my dad and other divers. I think that is a good idea. My dad is holding on to license in order to be able to transfer it to me.

D. Norris: Nothing substitutes for time on the water, being a tender.

J. Leask: As far as transferability, I would take and hand teach someone my spots that I sustainably harvested over the years. Realistically, someone new coming into the fishery can do a lot of damage. You don't just put somebody green into an industry like ours. I'm imaging someone diving in Cobscook falls for the first time. I think apprenticeship would be good.

J. Fredette: If you had that, would I have to start all over?

T. Cheney: It depends on what the council decides. The idea the Department put forward was to create a wait list from the population of tenders currently in the fishery. This council has supported that in past conversations, along with folks who held a license in the past. Perhaps you take that population and randomly assign a number on a wait list, then there is some predictability as to when they could get into the fishery, with say a 1:1 or 2:1 exit ratio for dive licenses.

[Transferability discussion]

J. Leask: Season setting meeting – we need to start that conversation early this year. Trish said she would do two meetings this year for us to set the season so we can have more discussion about it.

C. Wilson: My perception of that meeting was people getting wrapped around the axel on the number of days and where in the calendar they go. Is that an impediment to conversation? Is there a way to back off on that conversation and focus on the resource?

J. Leask: People come out of the woodwork for the season setting meetings, more diverse interests. Last year I thought it went really well. I want to do it in a couple of meetings to give people more time to discuss. Right now we don't have DMR's recommendations and it is not ready. That is one of the things that has held us back in recent years and if that can be moved up this year it would help alot. The process is still the same, DMR provides its recommendations and we discuss then and then set season.

C. Wilson: Trish - what is your strawman for next season?

T. Cheney: We will have swipe cards in place. If we had that in place this past year, we would have known the landings were trending up when we were setting the season in early April.

C. Wilson: If our science group is trying to support your fishery and the resource in providing guidance for management, I would like to promote that we do that. What if we changed the dynamic and we could come up with a Total Allowable Catch (TAC)? Would that change the way you set your season? With a swipe card system in place, you would be able to do that.

D. Norris: You would have to believe that number.

C. Wilson: It would be an iterative process. You could change Roberts's surveys, and respond a little better with a new system.

J. Leask: We already do that. You have Robert's survey and Maggie gets that. We respond to that.

C. Wilson: The response is the number of days. If you have 200 people actively fishing now, and the price goes to \$10/lb. then your metric to control total removals wouldn't be able to control that.

J. Leask: Using my example of a reef that became barrens – should I be able to take more than 7 totes?

C. Wilson: You know if you come across that ledge, that doesn't mean you have to take it all and it flips to no longer being productive.

J. Leask: No, it would go back to the way it was 10 years ago and we would only harvest the feed line around the bottom. I would like to be able to take some of that product and move them to another ledge to seed it in and allow it to reproduce. In the meantime that ledge will get healthy. Would be great to be able to bulk up urchins like they do in Chile. It is easy to move urchins and get them to seed in. Urchins are doing what they are doing really well. Where there are urchins this year there are a lot of urchins, all the way from Zone 1 clear to Cobscook Bay, which Robert will soon confirm with survey results.

D. Norris: With urchins, in about one year out of 10 you get a good reseeding event; it doesn't happen every year. So nine years out of 10 you have to come up with an imaginary TAC. We have about 5,000 little different stocks of urchins. If you spent \$600,000 on your survey, you could determine your TAC and then in one year you take 12% of the biomass. Except in another year it changes. I don't see where you have anywhere even close to be able to come up with a TAC without it being a plain guess and I would hate to have to make a living off of that. Scales are what you look at. Anytime you take a graph and put it up there to tell a story. If you look at it now and you will see that it is a pretty well operated fishery. People have made a good point that the top of that peak wasn't even natural, they set the fishery up to kill them.

C. Wilson: The expectation of the Department is not to go back there. I am saying it is your fishery, what are the metrics that you want to strive towards and what can the science group do to support that.

D. Norris: My biggest issues are the areas that have died and not come back. Dusty bottom that has good conditions otherwise - why they can't they graze there anymore?

T. Johnson: Hearing what Carl is saying, what does the resource look like and managing from different perspective. Paying attention to the feedline, selective harvesting from there to make sure we don't get flips. Thinking of the number of days doesn't get at that. We need to start to think about that instead of number of days and number of pounds. What is the resource and paying attention to that first. How do we get that type of information to get that? I don't know enough about the scallop resource to manage that, to close an area or open it again. How do you get that?

C. Wilson: The Department would never be able to manage at that level. Coming in from my last conversation on urchins 15 years ago, this is a very different conversation we are having today. People are starting to think about how to handle things. Are there different tools with a stick or a carrot as well?

T. Johnson: I wouldn't suggest managing at the ledge level.

C. Wilson: If you miss manage a ledge, you are waiting 10 years for it to come back. If you educate folks on this, that is how you can get to that level.

D. Norris: We really are on a TAC in a sense, as the science says you have so many totes and so many days.

J. Leask: In Zone 1 with 15 days and 12 totes you have a total of 180 totes a year. For Zone 2 you have 38 days with 7 totes for a total of 266 totes a year.

C. Wilson: But what about counting latent licenses?

J. Leask: We don't even come close. How many are latent?

M. Hunter: About 2/3 (204) are active.

C. Muth: I want to put out one comment before I need to leave. I don't think that divers and draggers should have their own days. I think processors should pick the days. When fishermen are picking the days, a lot of them come and they scrape all day. The way I see it is the fishermen that is favored. They go out there and fish and bring them to us and we market them.

M. Nickerson: That just brings us back to same argument between Atchan's domestic market and your overseas markets.

C. Muth: It needs to be balanced out, not one guy controlling the fishery. Last year we lost out and got the four day week. I had to drive that far to get 14 totes.

J. Leask: It is also what we are stuck with, you wanted three days and Atchan wanted five days.

S. Warner: In Zone 1 at 15 days – we are allow 16, 000 pounds max for the season (180 totes).

C. Muth: It is easier when Zone 1 is the only area open. In Zone 2 the fishing area is stretched out across a large area.

J. Leask: We can't make a decision that will make everyone happy. You all compromised.

C. Muth: We can't depend on Maine 100%.

D. Carver: We chose the days on the calendar that we used as a guide. I brought up the idea of when we run into hurricanes or something extremely dangerous, we should be able to shut it down, like we do it with clams or quahogs. The apprentice program was discussed for the same reasons [safety]. There are multitudes of divers that have the bends and they can't even go back into the water anymore, they just didn't have the experience to know that you can't dive 7 days a week. This is a really good group, believe it or not. Divers should have extreme training. I am concerned about this.

J. Leask: Horrible tragedies have happened. [We lost a diver yesterday in Portland](#) and he was just diving on the wheel of a boat. Then there was the gentleman in Cobscook in the falls. They don't call it deadliest catch for no reason. A man needs to know when to call it. I get into problems on calm days.

T. Sawtelle: If you look back on the dates that we lost those boats, they weren't the really rough days.

D. Carver: But it is like this fella here who has a sincere interest in his son, he is going to train him the best that he knows how. I think they should go through an apprentice process. What has happened in the quahog industry, there were thousands of boats working constantly. Now there are only three boats and the owners are making millions and maybe 25, 50 people working at the most and they are working for three people. The dealers got the market and they took it over and they got someone to operate the boat at an hourly wage [Consolidation in the fishery due to transferability].

M. Nickerson: We can use that knowledge to set up something.

D. Carver: This fishery is not for everybody. It is only for a few that are in good shape. Getting back to days, if you pick and choose any day you could go out there, it will be a nightmare, no one could handle it. If it comes up a week and you know you are going to have a tremendous storm and you know you are going to have rain for a week, the commissioner should be able to shut it down and you go those days another week.

J. Leask: Right now we have the opportunity to pick our days; you can pick if you go out or not. Those folks that dove to 100 feet, they chose to not look at their tables.

D. Carver: It was so much money; they just strapped on a tank and would just go.

T. Sawtelle: For clamming it is posted on DMR website if clamming was closed. If one week was a bust, it would be better than freezing cold, killing what is coming up on the table.

M. Nickerson: That was every day last season, December was cold.

R. Russell: You really don't want the commissioner to tell you when to fish.

J. Leask: They shut stuff down on west coast due to roe count. In the event of really bad weather, could we carry days over?

T. Cheney: Weather days are taken into account with the total number of days right now.

M. Nickerson: Just because you have 15 days, you have 5 given to you for blowy days so you can get your 10.

T. Cheney: The Commissioner only has the ability to take days away for imminent depletion or unusual damage to the resource. We cannot give days back in-season; we would have to run an entire 90 rulemaking to change the calendar and provide more days.

M. Hunter: With the regulatory authority of the commissioner, you could set a longer season, and with swipe cards you could set a TAC and then shut it down when the TAC was met.

T. Cheney: Or we could slow it down by taking days out of the week, to stretch the season out. We do that in scallops right now.

J. Leask: If we are going to have a certain amount of time or poundage, I want the most money for them as we can get. If we can come up with a vehicle that allows us to dive to get the best price. I am interested in farming. I will take all 266 totes allotted to me, take a certain number right off the top and farm them. When the market is good, I will sell them and when it is bad I'll hold them. Chuon can get urchins from Canada in the meantime.

T. Sawtelle: I would want a year or two of using the swipe cards before implementing a season with say 45 days and then shutting us down when we hit the TAC.

J. Leask: You would need an Individual Quota (IQ) so all the urchins don't get all caught up at once.

L. White: Maybe you have a monthly quota.

T. Cheney: We currently have an administration that is very supportive of new ideas. In addition, with Carl as the new Science Director, we have a very supportive science team. We are in a good place to think about new approaches.

Discussion: 2015-16 Season

J. Leask: I wanted to start this conversation early. We will meet again in January and can continue this discussion.

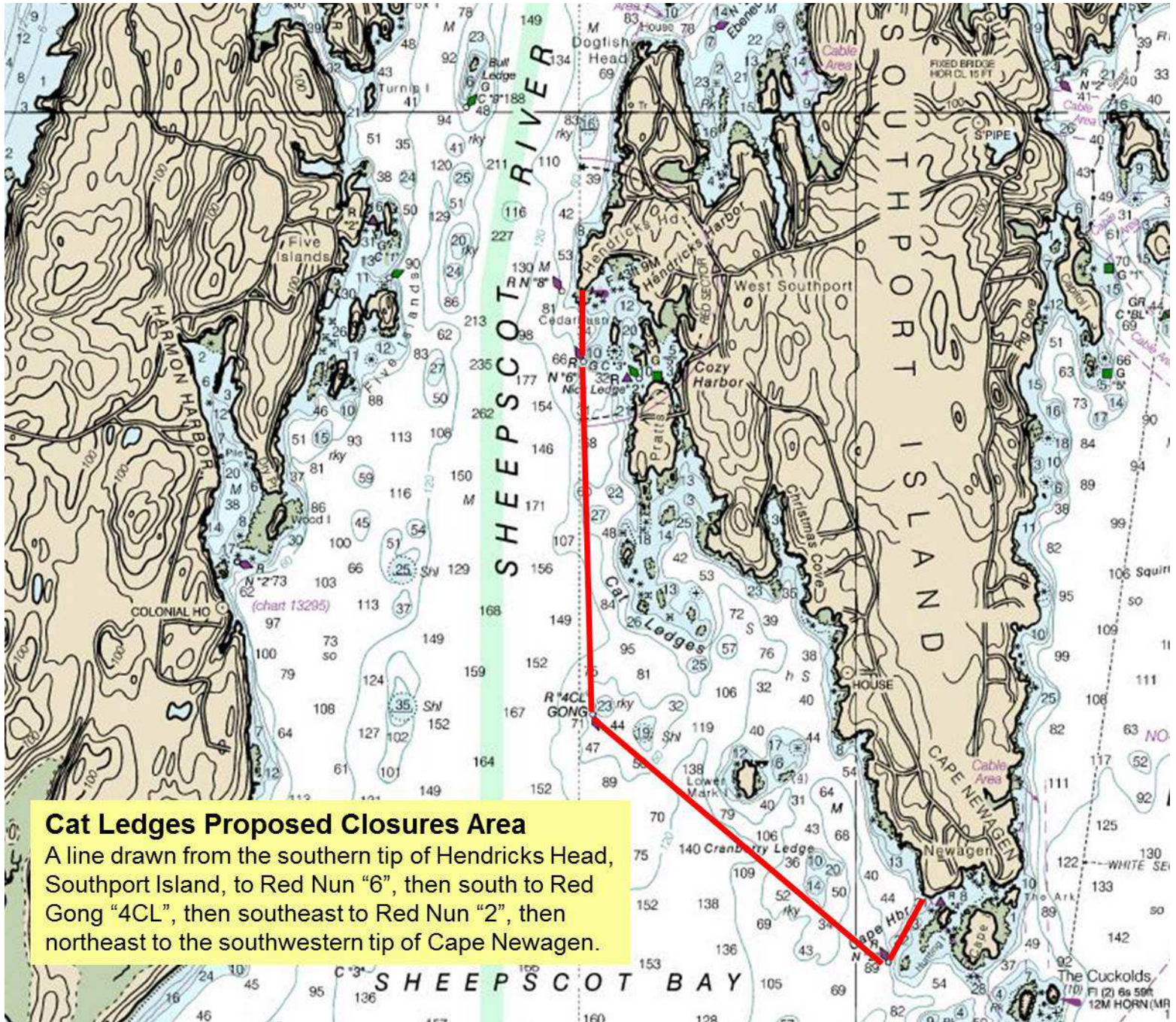
T. Cheney: We can provide a science update and recommendations at that point, continue FMP discussion and start the next season discussion.

Next meeting tentatively scheduled for January 7 in Augusta at the DMR located at 32 Blossom Lane.

Meeting adjourned at 7:19pm.

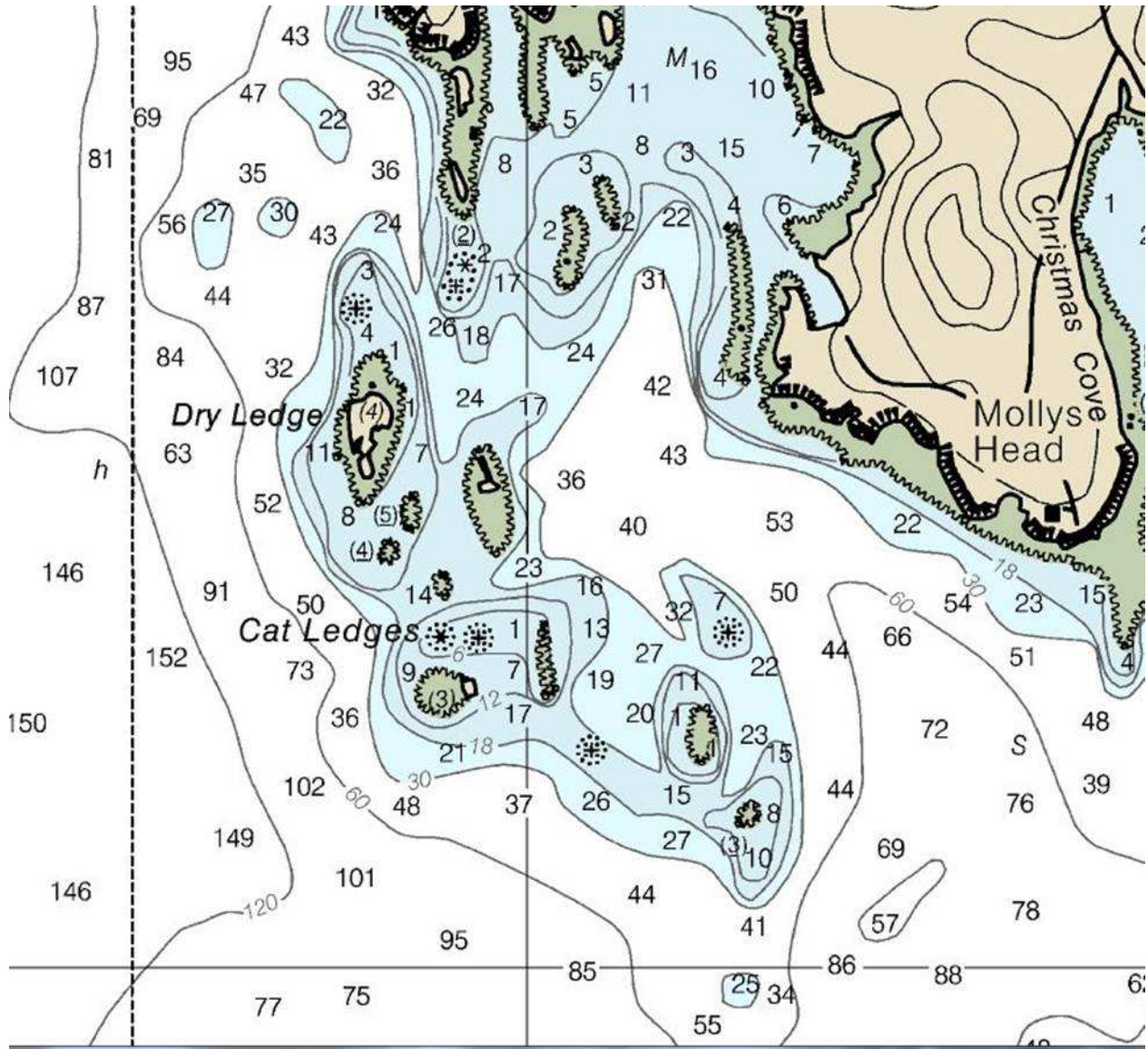
Appendix A, part 1

Proposed Conservation Closure for the Cat Ledge Pilot Restoration Project



Appendix A, Part 2

Study area for the Cat Ledge Pilot Restoration Project



Appendix B

Sea Urchin Fishery Management Plan Management Recommendations Document. Drafted by DMR staff to aid in conversation regarding the FMP's Management Recommendations Section.

MANAGEMENT RECOMMENDATIONS

The following Management Recommendations have been developed as mechanisms to further the Goals and Objectives identified in Section X:

1. Promote growth of the resource while maintaining the viability of the fishery.

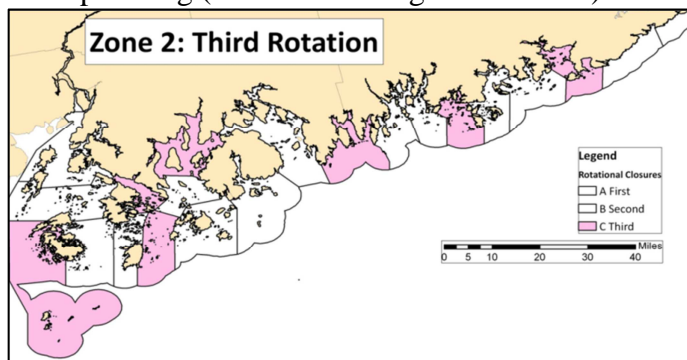
DIRECTION WE WANT TO HEAD: Rebuild the resource that supports a viable fishery now and in the future. Implement measures that incentivize harvesters to target quality vs. quantity and conservation minded fishing practices. Facilitate creative harvester-led initiatives which aim to restore depleted reefs/fishing grounds.

CURRENT ACTIONS:

- **Tote Limits & Culling on Bottom:** DMR & the SUZC have established tote limits and a culling on bottom requirement for divers in both fishing zones.
- **Pilot Restoration Project:** DMR & the SUZC are currently undertaking a Pilot Restoration Project in the Cat Ledge's area that aims to revive a once commercially viable reef by transplanting wild and hatchery reared urchins.
- **Owner-Operator Requirement:** A bill has been submitted for this upcoming legislative session that proposes to establish an owner-operator requirement for the drag sector of the fishery. Conceptually, DMR supports this requirement as it will ensure the owner of the vessel is more accountable for their actions behind the wheel (fines & suspensions), thus increasing stewardship and good fishing practices. Additionally, any newly reactivated license holders will be required to be the owner of the vessel being operated.
- **Swipe Card System:** Implementation of the swipe card system in the fishery has the potential benefit to provide more accurate data with which to evaluate potential management options.

OTHER OPTIONS:

- Total Management Overhaul
 - Total Allowable Catch (TAC)
 - Implement landings target limit
 - Evaluate Current Zone Structure
 - Consider elimination of Zones (Potential to spread out of effort and provide more flexibility/fairness/opportunity for fishermen?)
 - Consider further division of coast into more Zones, to enable improved, smaller scale management of the resource.
- Conservation Closures
 - Overlay closures in areas with high concentrations of sublegal urchins & are also closed to scallop fishing (rotational & targeted closures) to boost rebuilding efforts.



- Aquaculture seeding of hatchery reared urchins in conservation closures
 - Areas that have been depleted of urchins appear slow to recover. Some areas where fishing pressure has ceased entirely have seen no corresponding increase in urchin biomass. The purpose of this work would be to explore the potential to reestablish urchin populations in areas that were formerly commercially viable.

SUZYC RECOMMENDATIONS:

2. Establish a mechanism for future participation in the urchin fishery.

DIRECTION WE WANT TO HEAD: Devise an entry system that allows for future access. New licenses in the urchin fishery were last issued in 2004. The existing license holders, particularly the dive sector, are beginning to age out of the fishery.

OPTIONS:

- Establish an Exit Ratio of licenses retired to licenses issued
 - 1:1 or 2:1
- Select future license holders through a lottery
 - Give additional weight in the lottery to tenders and/or past license holders
 - Create a waiting list prioritized by 1) number of years past harvest license held and 2) number of years tending.
- Issue Dive licenses only
- Establish a time limit on latent licenses
- Require completion of an educational program as a condition of receiving a license
 - Course components would include safety training, responsible fishing practices

SUZYC RECOMMENDATIONS:

3. Increase safety in the fishery.

DIRECTION WE WANT TO HEAD: Implement a swipe card system that will potentially allow harvesters to eventually choose the days which they fish.

CURRENT ACTIONS:

- **Swipe Card System:** DMR is currently working on establishing a swipe card system in an effort to collect timely and accurate landings information. This system has the potential to allow industry to eventually pick their days, rather than be subject to a fixed season.

OTHER OPTIONS:

- Establish “potential” fishing days per week that a harvester may choose to utilize one of their fishing days, ensuring that dealers have enough urchins on any given day to process. This set up would also require additional coordination/communication between harvesters & dealers.
- Dean Norris has described a system used on the west coast where the open days for the coming week were set each weekend after reviewing weather and market forecasts.
- Require completion of an educational program as a condition of receiving a license
 - Course components would include safety training, responsible fishing practices

SUZYC RECOMMENDATIONS:

4. Increase Flexibility & Adaptability in Management

DIRECTION WE WANT TO HEAD: Move pertinent management measures from statute to regulation, in order to allow more flexibility in management of the resource by DMR & the SUZC.

OPTIONS: Consider legislation that would remove certain management elements (highlighted below) from statute, so that they could be addressed through regulation.

12. M.R.S.A.

CHAPTER 623 SHELLFISH, SCALLOPS, WORMS AND MISCELLANEOUS LICENSES

SUBCHAPTER 2-C SEA URCHINS

Article 1 Licenses

§6748 Handfishing sea urchin license

§6748-A Sea urchin draggers license

§6748-C Drags

§6748-D Sea urchin hand-raking and trapping license

Article 2 Limits on Fishing

§6749 Sea urchin harvesting season and open days

§6749-A Minimum size

§6749-B Sea urchins and lobsters; simultaneous possession or transport prohibited

§6749-C Rules

Article 3 Emergency Limitations: Sea Urchin Fishery

§6749-N Closed areas; zone identification

§6749-O Limited entry; exceptions

§6749-P Licenses by zone

§6749-Q License surcharges

§6749-R Sea Urchin Research Fund

§6749-S Log books for sea urchin buyers and processors

§6749-U Extension of closing dates

§6749-V Dragging closure

§6749-X Sea Urchin Zone Council

§6749-Y Penalty

§6749-Z Changing zones

SUZC RECOMMENDATIONS:

April 26, 2012 Ellsworth Meeting Goal Setting Summary & Results:

Sea Urchin FMP Goal Setting Exercise Results	Votes
Considering the needs of your markets and processors	26
Sustainable resource, sustainable communities	16
Recovery – long term & short term	13
Culling on Bottom	13
Transferability; raising value of fishery	12
Reseeding/enhancement (natural & hatchery)/Conservation Pioneers	12
Match of effort to resource	9
Research: what is killing urchins besides amoeba	9
Assess benchmarks	8
Protection of beds on brink of extinction	6
Water quality & environmental conditions impacting urchins	6
Consideration of impacts from other fisheries	5
Divers be able to take an apprentice	5
Enhancing the safety of the participants	5
Consider closures	4
Call in system	2
A place for all gear types in fishery	2
Didenum/Invasive Species impact 80% of Zone 1 Waters	2
effort reduction incentives	1
Ability to change dive license for drag license	1
Survey areas must be privatized/screened	1
Survey involve industry volunteers	1
Protection of marine ecosystems	1

FMP GOALS

BROAD GOALS

- SUSTAINABLE RESOURCE/COMMUNITIES
- REVIEW STATUS OF FISHERY; HISTORICAL CONTEXT OF FISHERY, ADDRESS IN STATUS W/ MANAGEMENT MEASURES
- SUSTAINABLE FISHERY FOR FUTURE GENERATIONS
- RECOVERY - LONG & SHORT TERM
- TRANSFERABILITY; RAISING VALUE OF FISHERY
- RESEEDING/ENHANCEMENT: NATURAL & HATCHERY
- PRESERVATION OF EXISTING URCHIN BEDS
- CULLING ON BOTTOM
- PROTECTION OF BEDS ON BANK OF EXTINCTION
- SURVEY AREAS MUST BE PRIVATIZED/SCREENED

FMP GOALS

- CONSIDER NEEDS OF MARKETS & PROCESSORS
- CONSIDER REMOVING ZONES - TREAT BOTH EQUAL
- ~~REACT~~ % ROE LIMIT
- CONSERVATION REQUIREMENT BY INDUSTRY PARTICIPANTS
- ZONE 2: NO MORE THAN 60 DAYS IN SEASON - REDUCTION
- RESEARCH: WHAT IS KILLING URCHINS BESIDES AMOEBA
- CONSIDERATION OF IMPACTS FROM OTHER FISHERIES
- WATER QUALITY & ENVIRONMENTAL ISSUES/CONDITIONS
- ALLOW HARVESTERS TO 'POND' OR 'HOLD' URCHINS OUTSIDE OF SEASON
- DINERS BE ABLE TO TAKE AN APPRENTICE
- HARVESTER BE ABLE TO PROCESS OWN ROE
- ZONE 1 SPLIT IN HALF. i.e. 30 days in E/W, 15 days in W/E

FMP GOALS

- SURVEY INVOLVE INDUSTRY VOLUNTEERS
- MATCH EFFORT TO RESOURCE
- EQUALITY (SIMILAR MANAGEMENT MEASURES - STATE)
- CONSIDER QUOTA / TOTAL ALLOWABLE CATCH (TAC)
- PROTECTION OF MARINE ECOSYSTEMS
- EFFORT REDUCTION INCENTIVES
- A PLACE FOR ALL GEAR TYPES IN FISHERY
- SHORTER SEASON: RECONSIDER SEASON
- RECONSIDER ZONES / PROVISIONAL ZONES
- MAX. ROE CONTENT / ECONOMIC YIELD FOR WHATS HARVESTED
- ENSURE VIABILITY OF INDUSTRY: HARVESTERS, BUYER & PROCESSORS
- CONSIDER CLOSURES
- ASSESS BENCHMARKS
- ENHANCE SAFETY OF PARTICIPANTS

FMP GOALS

- CONSERVATION 'PIONEERS' FOR RE-SEEDING FROM HATCHERIES
- CHANGE LAW TO HAVE ABILITY TO POSSESS UNDERSTOOD URCHINS. 2 SPOTS: INSIDE/OUTSIDE. LPA W/ SUPP LICENCE & SPECIAL BOUY FOR URCHIN CAGES
- CALL IN SYSTEM
- WATER QUALITY: ENVIRONMENTAL FACTORS THAT IMPACT URCHINS (CLIMATE CHANGE/OCEAN ACIDIFICATION) - RELATIONSHIP BETWEEN THESE FACTORS & FISHERY: ID POTENTIAL RISKS
- DIDEMNUM/INVASIVE SPECIES IMPACTS: 80% IN ZONE 1 WATERS
- GO 13 - UNLAWFUL TO TAKE URCHINS ON ANY DAY NOT OPEN TO HARVEST ON BOAT. REVISE TO ALLOW POSSESSION, BUT NOT HARVEST OUTSIDE OF SEASON.
- ABILITY TO EXCHANGE DIVE LICENCE FOR A DRAGGER LICENCE @ A SET AGE THRESHOLD