Sea Urchin Zone Council Meeting Summary August 17, 2016 in Ellsworth, ME

DMR staff: Trisha Cheney, Maggie Hunter, Robert Russell, Troy Dow and Rob Watts.

SUZC members present: Teresa Johnson, Steve Eddy, Larry Harris, Joe Leask, Mark Nickerson, Clint Richardson, and Tracey Sawtelle.

SUZC members absent: Atchan Tamaki, Chun Muth, Jason Leighton, Duane Carver, and Dean Norris

Public: Max Ritchie, Justin Gebo, Bill Sutter, David Tarr, Jeremy Card and Kim Ovitz.

Sea Urchin Zone Council Research Subcommittee Meeting Summary

Meeting commenced at 2:00pm

The subcommittee discussed updates on the Cat Ledges Project. Joe Leask went diving on the site earlier the day before with Clint Richardson and David "Skip" Foster to retrieve the settlement panels for Larry Harris who received them today. Joe reported the urchins sites looked good and that while the urchins had spread out the last time he had visited the site in June, they had now bunched up a bit more to consume algae that had regrown. He did report seeing some rock crabs near the site, however, he did not see any evidence of die offs. Larry will work up the panels and will share the results with the group at the next meeting. It is felt that more urchins are needed at the site as there are not enough to maintain the barrens at the moment. Algae is growing back more quickly that the urchins are able to keep up with. Also, since urchins have variable feeding rates that are dependent on temperature, the warmer water has caused urchin feeding to slow. It is expected that they will start to feed at a faster rate next month. The group decided that it would be good to collect temperature data. Trish will reach out to James Manning from NOAA who has an e-Molt project where temperature loggers are attached to fishermen's traps along the coast of Maine and perhaps there are data sets that could be made available or even a recorder that could be placed at the site long term.

Larry then commenced the discussion regarding the <u>Saltonstall-Kennedy (S-K) grant opportunity</u>, for which the #1 priority is marine aquaculture in this funding call. Last year the group had submitted a proposal that included a hatchery rearing and outplanting of juvenile urchins at the Cat Ledges site. However, the proposal was turned down by both Maine Sea Grant and SK. While restoring wild fisheries is not the same as aquaculture, the cornerstone of this proposal should be the hatchery seed outplanting for sea ranching. It would address the question of how do you establish a lease site which would allow urchin populations to increase over time. However it was noted that hatchery reared animals are different than the wild stock that would be settling in a site as hatchery product that is selected for particular traits may interbreed with wild urchins and their offspring do not fare as well as the wild animals which have naturally adapted to the local environment. This concern can be mitigated by selecting local broodstock from the area that will receive the out planted hatchery stock, however it is possible that diversity could still be reduced from hatchery animals as they may only have a limited number of parents that are actually spawning. It was voiced that Cat Ledges could be a demonstration for how to establish a commercial site which is algal dominated that would assist natural settlement and survival of wild animals using hatchery reared urchin instead of competing with the fishery for wild animals. It was noted that while the history of urchin aquaculture in the Gulf of Maine has had bad starts, there have still been valuable lessons learned from these efforts. The last proposal was criticized for only utilizing on outplanting site; therefore, there was a lack of replication, so this will need to be addressed.

It was noted that there remains some industry concern regarding aquaculture itself and in the past some harvesters have expressed concerns regarding closing bottom off to commercial harvest, as well as the use of limited wild animals for transplanting. While the goal would be to eventually open areas back up to the commercial fishery, we have not fully discussed how this would happen. Also it would be possible to purchase urchins from fishermen to mitigate this concern. The pre-proposal is due on September 20th and a budget of around \$300,000 for two years of work can be requested. These funds could cover the costs associated with rearing the hatchery product, funding to reimburse fishermen for their boat time and fuel, undertaking some mark-recapture work in conjunction with Bowdoin College, increasing monitoring costs associated with additional study

sites to ensure statistical significance. It was suggested that Robert Russel be the point person on the project from DMR. Overall, the aim would be the demonstration of how to establish a commercially viable aquaculture lease site. If the pre-proposal is accepted, then a full proposal would be submitted and award recipients would be notified in early 2017 and funding released in the fall of 2017. However, if the group was notified that they were successful, Steve could gear up the hatchery after the initial notification knowing that the funding would be released later in the fall of next year. Maggie raised the concern that better data should be collected moving forward that would more accurately capture how many urchins were transferred and how many acres the barrens increased as these could be both measure of success. Kim Ovitz did subsample data collection that would help provide an estimate of how many urchins were transferred, however. While the intention would not be to turn the Cat Ledges closure into a commercial lease site, a smaller lease site could be established within the closure area that would be more limited in scope. The lease site would eventually be exclusive to other fisheries and multiple species could be raised to help defer costs, such as mussels or seaweed.

Bill Sutter expressed concern that the regulatory hurdles are too big to overcome in order to even undertake this demonstration project. The only current option is either 4 Limited Purpose Aquaculture (LPA) sites, which is too small or a larger, full scale lease site, which would be economically restrictive. Steve responded that David Quimby currently has an LPA with a few hundred hatchery reared urchins on it and substantially more to come that are marked. He will share the results of this work when it is available. Steve also mentioned that there is a natural co-occurrence between European oysters and sea urchins and those two species may lend themselves well to being combined on a lease site. Larry reiterated that this would be a demonstration project for restoration to see if transplanting big urchins to disturb the bottom at the site would promote natural recruitment and commercial viability is still a long way out. Larry replied that the goal would be to answer the question of if it is possible to use small hatchery urchins to establish a disturbed bottom in an area. Bill responded by asking how would this work would transition over into the commercial fishery? The current scale of management is too big and needs to be smaller – so long as there is open access in the fishery, this won't work. The current leasing structure will not enable commercial success. The Legislature set leases with a maximum of \$100/acre and that is what the DMR implemented. Management could address this cost; otherwise efforts will be undermined by the commercial fisheries open access. He wished to know how management was going to move forward to address this discrepancy and how to undertake this parallel effort. Perhaps an aquaculture lease could be the way in for future participants; they would need to establish a commercially viable site prior to being granted entry to the fishery. If this does work, how would it get implemented? This is a discussion that the industry needs to have.

Joe and Mark plan on going down to dive the Cape Ann site that was reported to have had a green sea urchin population explosion to see what may have contributed to the recovery. Want to find out if urchins possibly came from deeper waters to repopulate the shallower site. Massachusetts and Maine currently have a reciprocal agreement that prevents a harvester from one state to also hold a license in the other. This is due to the fact that years ago Maine shut its fishery down for a month and all the harvesters shifted down to Massachusetts. Then the Massachusetts guys tried to get a Maine license, but Maine no longer allowed non-residents to obtain a license. So, if you hold a Maine license, you cannot get a Massachusetts license. Massachusetts harvesters must obtain a Coastal Access Program (CAP) license in order to harvest urchins in state waters.

The subcommittee ended with Larry making the commitment to pull together the SK pre-proposal together with Steve's input. A draft will be emailed around amongst those who have corresponding on the Cat Ledges Project. If someone would like to get on this email list, please email Trisha Cheney directly at <u>trisha.cheney@maine.gov</u>.

Sea Urchin Zone Council Meeting

Meeting commenced at 3:42pm

Welcome & Introductions

J. Leask welcomed the group and asked everyone to introduce themselves around the room.

June 22, 2016 Meeting Summary

Tracy Sawtelle moved to accept; Larry Harris seconded. *VOTE: UNANIMOUS. Approval of minutes passed.*

DMR Updates: Sea Urchin Research Fund/Surcharge Account Information (Appendix A for handout)

Maggie Hunter provided information on the status of the Sea Urchin Research Fund (SURF) account to the council for the timeframe of September 1, 2015 to August 30, 2016. The account started out with a balance of \$107,913.33 and ended with \$75,049.50 indicating that they fund is taking in less revenue than is being spent. \$51,111.00 were collected in license fees, while \$71,668.88 was expended primarily on the survey (\$33,858.00) and personnel (\$20,974.43) resulting in a net loss of \$32,863.83. This indicates that there are only a few more years before the account can no longer support the current programs expenses unless some other funding comes through. There had been some discussions regarding raising surcharge fees with the legislature this winter, however, the Governor preferred that the Department submit legislation which would allow for 50% of all license fees to be retained by the Department instead. While this may provide the Department with an additional revenue stream, all those funds will be collected into one account and then program needs will be prioritized. With several programs operating without the support of license fees or surcharges, such as sea-run fisheries (salmon, smelt, river herring, etc.), it will likely be programs and personnel associated with those fisheries that will be prioritized, not sea urchins. DMR science staff has been considering cutting back the sea urchin survey to once every two years and has already tried to obtain efficiencies in the program by reducing sampling in areas that are not commercially viable for the fishery, such as western Maine. Without additional funding, the Department will have to continue to pursue this route and try to identify other sources to back fund, however, the account is likely to bottom out in 3 years. There was some conversation regarding the Legislature having raided the fund in the past, but this is not the case as current law does not allow them to do so. Bill Sutter believes that the license fee retention will be the Legislatures' first step to taking DMR off the General Fund completely and the Department will then have to support itself fully from license revenue, similar to the Department of Inland Fish and Wildlife. There was some discussion regarding a landings fee to be paid by the dealers based on potentially \$0.10/Ib which could generate \$200,000 if landings are maintained around the 2 million pound level. However, with landings fluctuations, funding revenue could also fluctuate. Another option discussed was raising the surcharge with a bill submitted by a legislator. However, concern was expressed that this may cause some people to drop out of the fishery, resulting in lower revenues from a smaller pool of license holders.

Maggie then handed out information regarding historical numbers of harvesters, processors and buyers (Appendix B). There are currently a total of 305 harvesters, 40 tenders, 11 buyers and 5 processors in the fishery. There were some questions regarding the fluctuating license numbers, particularly in years where it appeared to go up. This is potentially due to licenses being suspended from the fishery in one year due to a violation and then being re-issued with the violation period was over the following year. There are also tribal licenses that had to start being declared in 2010. The question was asked as to how many licenses have been re-issued based on medical reasons? *After additional conversation, it was determined that the topic would be carried over as an agenda item for the next meeting. MOTION: moved by Clint, Seconded by Joe, PASSED.*

DMR Updates: Swipe Card Implementation

Rob Watts from the landings program attended the meeting to provide an update to the council on the upcoming swipe card implementation. The swipe cards are currently being printed and all eligible license holders will be mailed one along with a letter in the next week. License holders will still need to purchase their license prior to fishing. The urchin dealers are going to start to get trained next week on the platform they are using (Android, windows or iOS) and will be provided with the swipe card reader hardware/software package. If swipe cards malfunction in the field, Marine Patrol officers will have cards that can be used to facilitate the transaction that day and harvesters will need to obtain a replacement swipe card through the licensing office. Harvesters will NOT be able to sell their product without a swipe card. Roe percentage will be collected through "set" bins and will be based on what the dealer has stated at the transaction. The software interface that the dealers will be using will be customized for the fishery and ports that they commonly use to allow for quicker transactions. Harvesters will still need to

complete their harvester logbooks as effort and harvest locations information comes through that data stream. LEEDS is in the final stages of testing to be able to enable electronic reporting, so harvesters will eventually be able to report on their tablets or phones in the near future. Concern was expressed that some of the buyers may drop out of the fishery as they have been skimming/keeping a second set of books when reselling urchins and harvesters will be paid less inevitably.

Discussion: Picking Days

Swipe cards could enable the possibility in the future of harvesters being able to pick their days. This first year will allow us to test the infrastructure and work out any issues. In past conversations we have come to the conclusion that it is likely that some set days are going to be required for this to work from the dealer's point of view, as they don't want to be sending trucks Downeast seven days a week. There would also likely be a reduction in the number of days that harvesters get as weather days are currently a conservation measure and the average Zone 2 fishermen fishes 19 days out of the possible 38. Fixed buying stations were discussed for this fishery, with a concern expressed that the price paid to harvesters may drop as there would be no competition amongst buyers at the dock. Also, fixed "locations" for purchasing urchins were discussed. Either way, the days would need to be spread out to prevent a derby in the fishery, such as a harvester can only use so many days per month over a 3 month period for example. Currently, fishermen have about a 3 day work week and perhaps they could be given 4 possible days to choose to fish their 3 on depending on weather.

A member of the audience stated that if picking days, then the fishery is going to go to a quota system, and if on a quota system, why have a daily trip limit? Could allow 21 totes to be harvested per week and allow a guy to get them all in one day if needed. It was argued that the trip limit should stay in place as it incentivizes harvesters to bring in quality urchins, especially for the draggers. It was also mentioned that the harvesters and dealers will have to have much closer contact if going to a pick your day system and also that fishermen should be allowed to opt out to take the 38 or 15 set day season if they preferred. It is possible that the Department would considering rolling this out in Zone 1 first to evaluate picking days in the first year as it is a smaller population of harvesters and landings. Perhaps could consider 10 day season that you can pick your days as 15 days was intended to allow harvesters to obtain 10 fishing days originally. The was concerned expressed that buyers may pay more when weather is bad due to lower supply, incentivizing harvesters to fish in bad weather.

CARRY CONVERSATION OVER TO NEXT MEETING AGENDA.

Discussion: Cat Ledges Project

The council touched back on the discussion which was had earlier by the Research Subcommittee (see above).

Discussion: Fishery Management Plan (FMP)

The last time the FMP was discussed was at the October 2015 SUZC meeting. A discussion document (Appendix C) had been developed based on previous conversations and work the council had done which included four Management Recommendations. The fourth item, "Increase Flexibility & Adaptability in Management" can be addressed in the upcoming Legislative Session in 2017 and pertains to Zones. The Department plans on submitting a bill that would remove the Zone section of law and bring it in to regulation so that it could be addressed through regular rulemaking should there be a future need to amend or remove the Zones in a possible management framework overhaul. The Department has a tentative three year management outline which includes implementing swipe cards in the fishery this year and moving the Zones from law to regulation. The council had a brief conversation regarding moving the Zone item from statute to regulation, however, made no formal recommendation on the matter. Another component of the three year timeline would be to evaluate a tracker pilot program. The DMR has submitted a proposal for 40 tracker units to be used in a collaborative project with industry to help collect higher resolution spatial data associated with fishing activity as well as to evaluate a potential electronic reporting component for harvesters. The tracker could log all the effort and location information during a trip, the harvester then fills out his report and when he sells to the dealer, when his swipe card is swiped, all that information gets attached to the dealer ticket, providing for comprehensive reporting. It would also allow harvesters to review their information and effort and has an SOS component on it that may provide the industry member with a discount on their insurance policy. The proposal, if successful, would provide 20 units to sea urchin industry volunteers, while another 20 would go to the scallop fleet. High resolution spatial data could provide the tools needed for more effective, reef level management.

Other Business

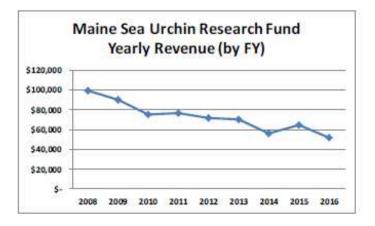
Kim Ovitz from the University of Maine will be sending out a survey to industry members over the coming months. This information is confidential and it would be University of Maine data, not DMR data. This information will help inform the final development of the FMP as well with evaluating next steps for considering a new management approach to the fishery. It is an opportunity for members of the industry who do not normally participate in meetings to have their valuable input collected and documented. Kim has been participating over the past year at the SUZC meetings and has provided a great amount of assistance in the Cat Ledges Project. This information could provide a great amount of value to future discussions at the SUZC. Kim will share results with industry through the SUZC meetings, a summary document and a peer reviewed paper. This work is externally funded and no funds from the Sea Urchin Research Fund are being used. Kim will bring cookies to the SUZC where she presents her results.

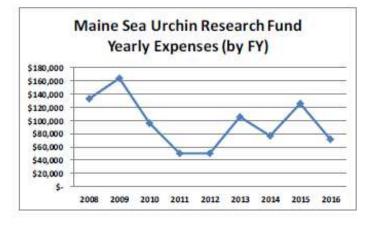
The next meeting has yet to be scheduled at this time.

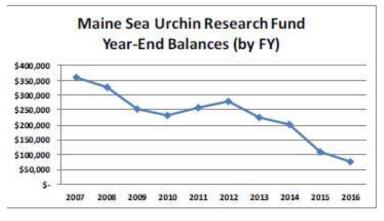
Appendix A

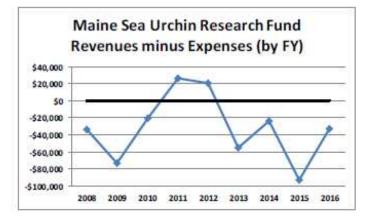
Margaret Hunter's Sea Urchin Research Fund (SURF) Status Report

SEA URCHIN RESEARCH 8/16/2016	(7/	2016 FY (7/1/15-6/30/16)				
BALANCE FORWARD (b	\$					
REVENUES						
14	LICENSING FEES	\$	52,101.00			
26	MISCINCOME	\$	10.00			
	TOTAL REVENUES	\$	52,111.00			
TRANSFERS						
2953	ADJ/ALL OTHER	\$	(0.88			
2979	TRANS/INDIRECT COST	\$	(13,305.07			
	TOTAL TRANSFERS IN/OUT	\$	(13,305.95			
EXPENSES (Personnel)						
31-37	SALARIES AND WAGES	\$	13,494.45			
39	FRINGE BENEFITS	\$	7,479.98			
	TOTAL PERSONNEL EXPENSES	\$	20,974.43			
EXPENSES (All Other)						
40	PROF. SERVICES, NOT BY STATE	\$	33,858.00			
42	TRAVEL EXPENSES, IN STATE	\$	1,964.53			
46	RENTS	\$	1,597.96			
47	REPAIRS	\$ \$ \$ \$ \$ \$ \$ \$	526.90			
48	INSURANCE	\$	80.60			
49	GENERAL OPERATIONS	\$	9,100.57			
50	TRAINING	\$	30.00			
53	TECHNOLOGY	\$	667.75			
55	MINOR EQUIPMENT	\$	579.37			
56	OFFICE & OTHER SUPPLIES	\$	28.10			
85	STA-CAP	\$	2,260.67			
	TOTAL ALL OTHER EXPENSES	\$	50,694.45			
	TOTAL EXPENSES	\$	71,668.88			
BALANCES						
	CASH BALANCE	\$	75,049.50			
	LESS: UNTAKEN DICAP	\$	7,140.52			
	NET FUND AVAILABILITY	\$	67,908.97			
	REVENUE LESS EXPENDITURES	\$	(32,863.83			









Maine DMR August 16, 2016

Appendix B

Margaret Hunter's License History Report

Maine Commercial Sea Urchin Licenses

	Zone 1 Zone 2										Statewide							
Year	<u>Dive</u>	Drag	Rake	Unk	Total	Dive	Drag	Rake	Unk	Total	<u>Dive</u>	Drag	Rake	Unk	Harv. Totals	Tender	Buyer	Proc
1992											829	246			1,075			
1993											1,437	567			2,004			
1994											1,725	1,000			2,725	843		
1995	611	237	3		851	580	404	5		989	1,191	641	8		1,840	736	96	18
1996	501	167	2		670	562	327	4		893	1,063	494	6		1,563	730	70	19
1997	405	133	1		539	514	287	2		803	919	420	3		1,342	648	65	20
1998	348	95	1		444	460	260	1		721	808	355	2		1,165	544	51	18
1999	332	87	2		421	437	252	2		691	769	339	4		1,112	538	42	15
2000	313	74	2		389	407	242	2		651	720	316	4		1,040	530	31	18
2001	281	65	2		348	383	240	2		625	664	305	4		973	453	30	11
2002	246	53	2		301	343	242	1		586	589	295	3		887	355	23	12
2003	182	44	2		228	289	224	1		514	471	268	3		742	276	18	13
2004	134	30	2		166	261	206	1		468	395	236	3		634	212	12	12
2005	106	27	1		134	234	187	1		422	340	214	2		556	155	13	13
2006	83	24	0		107	213	178	1		392	296	202	1		499	150	13	12
2007	75	24	0		99	195	164	1		360	270	188	1		459	142	12	12
2008	61	21	0		82	188	163	1		352	249	184	1		434	138	13	12
2009	60	18	0		78	181	152	1		334	241	170	1		412	192	12	13
2010*	54	18	0		72	167	157	2		326	221	175	2		398	97	11	11
2011*	49	15	0		64	156	159	1		316	205	174	1		380	78	7	10
2012*	47	16	0		63	143	143	5		291	190	159	5		354	67	11	10
2013*	49	15	0	2	66	125	134	3	2	264	174	149	3	4	330	62	9	7
2014*	47	14	1		62	109	125	9	12*	255	156	139	10	12*	317	46	11	5
2015*	46	14		1	61	108	134	1	1	244	154	148	1	2	305	40	11	5

Early and Late Harvester Licenses

		Zone 1											Zone 2												
Year		Ea	rly		Late				1	Undel			Early				Late					Undcl			
	Dive	Drag	Rake	Total	Dive	Drag	Rake	Unk	Total	Dive.	Drag	Unk	Dive	Drag	Rake	Unk	Total	Dive	Drag	Rake	Unk	Total	Dive Dr	ag Rake	e Unk
2003													155	90	1		248	134	134			268			
2004	-								1				125	78	1		204	136	128			264			
2005	34		1	35	60	3			63	12	24		115	77			192	119	110	1		230			
2006	41	2		43	40	4			44	2	18		98	69			165	117	109	1		227			
2007	38	2		40	37	6			43		16		90	54			144	105	110	1		216			
2008	38	1		37	25	8			33		12		67	49			116	121	114	1		238			
2009	35	14		49	25	2			27		2		71	55			126	110	97	1		208			
2010*	31	12		43	23	5			28		1		70	59	1		130	99	98	1		198			
2011*	18	11		29	31	4			35				62	62			124	94	97	1		192			
2012*	24	13		37	23	3			26				52	51	2		105	91	90	3		184	2	5	
2013*	28	12		40	21	2		2	25		1		42	49	1		92	83	85	2		170		0	
2014*	28	11		39	19	3	1		23				38	43	1	3	85	71	82	3	6	162	10	1	5 3
2015*	25	10		35	21	4			25			1	39	39			78	65	85	1		151	4	10	1

Notes:

No tender license until 1994. No zones until 1995. No buyer/processor permit until 1995. No raker/trapper license until 1995. Entry closed, no new harvester entrants 1995–1998, and 2005–present. Limited entry, harvester license lottery 1999–2004. * 2010–2015 include about 10–20 tribal licenses, mostly draggers.

DMR does not always have information on whether tribal licenses are late or early, or dive, drag, or rake.

Appendix C 10.16.15 Fishery Management Plan DRAFT Discussion Document: Management Recommendations

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.

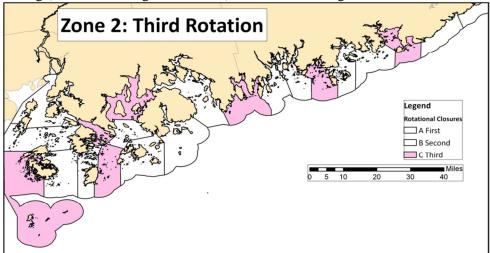
DIRECTION WE WANT TO HEAD: Rebuild the resource that supports a viable fishery now and in the future. Implement measures that incentivize harvesters to target quality vs. quantity and conservation minded fishing practices. Facilitate creative harvester-led initiatives which aim to restore depleted reefs/fishing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

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
 - o Total Allowable Catch (TAC)
 - Implement landings target limit
 - o 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.

SUZC 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
 - o 1:1 or 2:1
- Select future license holders through a lottery
 - o 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

SUZC 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
 - o Course components would include safety training, responsible fishing practices

SUZC 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
Aility 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	FINP GOALS
, BROAD GOALS	* (QUSIDER NEEDS OF WHRKETS & PROCLESSORS *
 SUSTAINABUE DESOURCE COMMUNITIES PENEN STATUS OF PISHERY, HISTOPICAL CONTEXT OF FIGHERY, ADDRESS IN STATUS IT MINAGENERT MERGINES SUSTAINABLE FISHERY FOR FUTURE CONFERENCES RECOVERY - IOND - SHORT TERM TEANSFERABULITY, RAISING VALUE OF FIGHERI RESEDING/ENHANCEMENT, NADRAL - HATCHERY PRESERVATION OF EXISTING URUPAL - HATCHERY PRESERVATION OF EXISTING URUPAL - HATCHERY PRESERVATION OF EXISTING URUPAL - HATCHERY 	 (ONSIDER PENNINING 20NES -TREAT BOTH EQUAL THEFT % POE LIMIT CONSERVIATION REQUIREMENT BY INDUSTRY PARTICIPANTS ZONE Z: NO MORE THAN GO DAYS IN SENSON - REDUCTION OUSCARCH: NITHAT IS KILLING URATING BESIDES AMOREDAX CONSIDERATION OF IMPACTS FROM OTHER FISHER/ES WATER QUILITY & ENVIRONMENTAL ISSUES/CONDITIONS ALLON HAPUESTERS TO 'POIND' OF 'HOLD' URCHINS OUTSIDE OF SENSON DIVERS BE ABLE TO TAKE AN APPENTICE
· PROTECTION OF BEDS ON BRINK OF EXTINCTION · SURNEY ADDAS MUST BE PRIVATIZED/SCREDUED	. HAANBYER BE ABLE TO PROLLESS OWN POE , ZONE I SPUT IN HALF. 12. 20 days in Early 5 days in West
FIMP GOALS • SUPVEY INVOLVE INDUSTRY VOLLIN TEERS • MATCH, EFFORT TO RESOLRCEX • EQUALITY (SIMILAR MANAGEMENT MEASURES - STATE) • CONSIDER QUOTA / TOTAL ALLOWABLE CATCH (TAC) • (ROTECTION OF MANNE ECOSYSTEMS * • ORTOFT REDUCTION IN CENTIVES* • A PLACE FOR, ALL GEAR TYPES IN FISHERY • SHOPTER SAFSON : RECAUSIDER SAFSON • MECON SIDER ZONES / IDEMUSSION & MANNES • MIN. POE CONTENT/ECONOMIC FIELD FOR WHATS HARVESTED • MIN. POE CONTENT/ECONOMIC FIELD FOR WHATS HARVESTED • MISSESS BENCHWARKS ** ***** • ENHMANCE SAFETY OF PARTICIPANTS**	FINP GOALS • CONSERVATION PROMETRY FOR RESERVING FROM HARDARENE • CONSERVATION PROMETRY FOR RESERVING FROM HARDARENE • CHANGE LAN'TO HAVE ABUILY TO POSSES UNDERSTED UCENCE & SPECIAL BUOY FOR VERHING CASES • CALL IN SYSTEM. • MATER QUALITY ENVIRONMENTAL PRODUCTION OF INTERNAL • MATER AUGUST (STEAL) • MATER AUGUST (STEAL) • ATTER AUGUST (STEAL) • AUGUST (STEAL) • ATTER AUGUST (STEAL) • AUGUST (S