

Pacific Urchin Harvesters Association Annual General Meeting by ZOOM

September 6, 2022

Attendees: Geoff Krause, Karolyn McLeod, Mike Featherstone, David McRae, Darin Macy, Mike Boyd, Phil Montgomery, John Lindsay, Bob Hegedus, Scott Pederson, Tim Joys, Will Strong, Ron Ross, Alfa Wong, Cory (?), Kyle Davis, Conner (Lindsay?)

Afternoon- Christina Burrridge, Christine Hansen, Janet Lohead, Jenny Smith, Lyanne Curtis and Lynn Lee

Agenda

Call to Order

Morning Session

Approval of 2021 AGM Minutes

Motion to approve 2021 AGM Minutes 1°: Bob Hegedus, 2°: Dave McRae. AIF

Financial Report- Karolyn McLeod ([here](#))

Motion to approve Financial Report. 1°: Dave McRae, 2°: John Lindsay. AIF

Presidents Report- Mike Featherstone ([here](#))

Motion to approve Presidents Report. 1°: John Lindsay; 2°: Mike Boyd. AIF

D&D Report- Darin Macy ([here](#))

Motion to approve D&D report. 1°: Phil Montgomery; 2°: John Lindsay. AIF

Green Sea Urchin Report- John Lindsay/ Mike Boyd ([here](#))

Motion to approve GSU Report. 1°: Bob Hegedus; 2°: John Lindsay. AIF

South Coast Report- David McRae ([here](#))

Motion to approve South Coast Report. 1°: Dave McRae; 2°: Bob Hegedus. AIF

North Coast Report- Bob Hegedus ([here](#))

Motion to approve North Coast Report. 1°: John Lindsay; 2°: Kyle Davis. AIF

Processors Report- Alfa Wong ([here](#))

Motion to approve Processors report. 1°: Bob Hegedus; 2°: Dave McRae. AIF

Budget 2022-23- Mike Featherstone

Green Urchin ([here](#))

Red Urchin ([here](#))

Motion to approve 2022-23 Budget as presented. 1°: Phil Montgomery; 2°: Tim Joys. AIF

Election of Directors ([here](#))

Motion to approve slate of Officers as presented. 1°: Tim Joys; 2°: Dave McRae. AIF

Afternoon Session

Kelp Restoration Project- Lynn Lee ([here](#))

BC Seafood Alliance update- Christina Burrridge ([here](#))

Legal Update- Mike Featherstone- see President's Report ([here](#))

DFO Science and Management Update- Janet Lohead, Erin Wylie, Leanne Curtis ([here](#))

Social Media and Website Update- Ron Ross

Dive Computers- Sherri Ferguson

Urchin Marketing Strategy and Update- Geoff Krause ([Here](#))

Pacific Urchin Harvesters Association

Annual General Meeting

Detailed Reports and Discussions

Financial Report- Karolyn McLeod

PUHA 2021-2022 Financial Overview

Revenue was up in 2021-2022

CAFI Revenue was up due to money coming in after 2021 year end.

Increase in memberships & D&D price increase

Total number of membership and validations were down slightly.

Expenditures

Increase in President Honorarium and Secretary/treasurer

Dues and membership were down slightly

BC Seafood Alliance is higher due to GST not being taken

The brochures were translated into Spanish & Korean

Extra consultants charge due to fisheries & Ocean expenses related to survey/smash

Insurance costs were up

Legal Fees increased re: class action suit with UHA vs Federal Government \$16,000.00

Survey/Smash end of March- 7 boats participated @ \$4000.00 per boat

Travel was up due to Boston & Spain Trade shows.

VMS- 2 boats claimed for 2020-2021 & 2021-2022

Assets

Cash is down due to expenditures listed above

Term deposit remained the same with an increase in interest

Expenditures exceeded Revenue by \$18,099.03 in 2021-2022.

This resulted in PUHA having \$315,508.22 of net assets at June 30, 2022, comprised almost entirely of cash and term deposits, down from \$334,672.10 in 2020-2021

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President's Report

I'd like to start with a brief review of last season. I think we all thought and hoped we were thru the worst of Covid, however the disruptions related to the pandemic continued. Lockdowns in China, entry quarantine requirements in Hong Kong, travel restrictions and curfew in Japan and so on, even to this day.

Thru all of this we have managed to survive and overall prices and markets have held up and even improved in some cases.

The green urchin fishery continued to have strong landings (99.6% of quota) and increased pricing 2021-22. The stocks are healthy, and PUHA has continued its collaboration with DFO and stakeholders to increase the quotas. Good news is quotas will increase again for the 2022 -23 season. The market outlook is positive, and we expect to see growing increase in market demand from both Japan and China. The new IQ for 2022-23 is up around 700 lbs to 13,900.

Going forward, PUHA is developing options to expand the green fishery in the north, we look forward to continue to work with DFO and consult with the local First Nations to explore the fishing opportunities.

The red fishery in 21/22 was really a tale of two fisheries. In the south the quotas increased slightly, and the quality and landings overall have improved (over 80% of quota). The tweaks to the management plan prior to the season paid off well with new areas and decent product. The south was the good news story this past season.

The north however was a challenge for most of year. From the start in September to the end of the season, quality was challenging to find. Areas such as Banks Island, Tree Knobs and Dundas just did not turn on, as they have in past seasons. As a result, only 38% of the total north coast quota was landed.

The lack of quality is a real concern and a conundrum for fishermen and industry. The ocean temperatures were initially blamed for the lack of kelp, but the ocean has cooled, and the kelp is coming back. The management to allow fishermen to move areas, to find quality, is in place to facilitate those opportunities. There was a lot of effort put into the areas close to Prince Rupert, unfortunately those areas did not produce great quality. Perhaps it is a combination of many factors - areas need to be fished to groom the stocks and allow the kelp to grow, fishermen need to work the areas sometimes 2 or 3 times a season – taking the feed lines and feed holes – then moving on to the next area to let the urchins to fatten up over the next months. Hopefully, the new season will provide better quality and we can complete more quota areas.

There was a new area selection for this year with the south coast quota dropping to 40,868 lbs and the north has increased to 146,333 lbs. I think this is in part due to the challenges in the north

As we all know, fuel prices have increased 48% in the past year and grocery bills have increased 9.7%. This puts more pressure on the fleets to fish efficiently and work the areas more thoroughly. It will not be economical to return to Rupert everytime there is a blow.

D&D has had a challenge with harvest logs being submitted in a timely fashion. It is a Condition of licence that all harvest logs must be submitted within 30 days of fishing. Chasing harvest logs has added a significant burden to D&D. PUHA encourages all fishermen to ensure the harvest logs are submitted within the 30-day requirement.

DFO has mandated a switch to Electronic Logbooks by 2024. In the long run PUHA supports e-logs and hopes they will simplify the data recording for the fishermen, also at a lesser cost. The implementation and the rollout by 2024 will be a challenge for all the service providers and it remains to be seen how successful it will be.

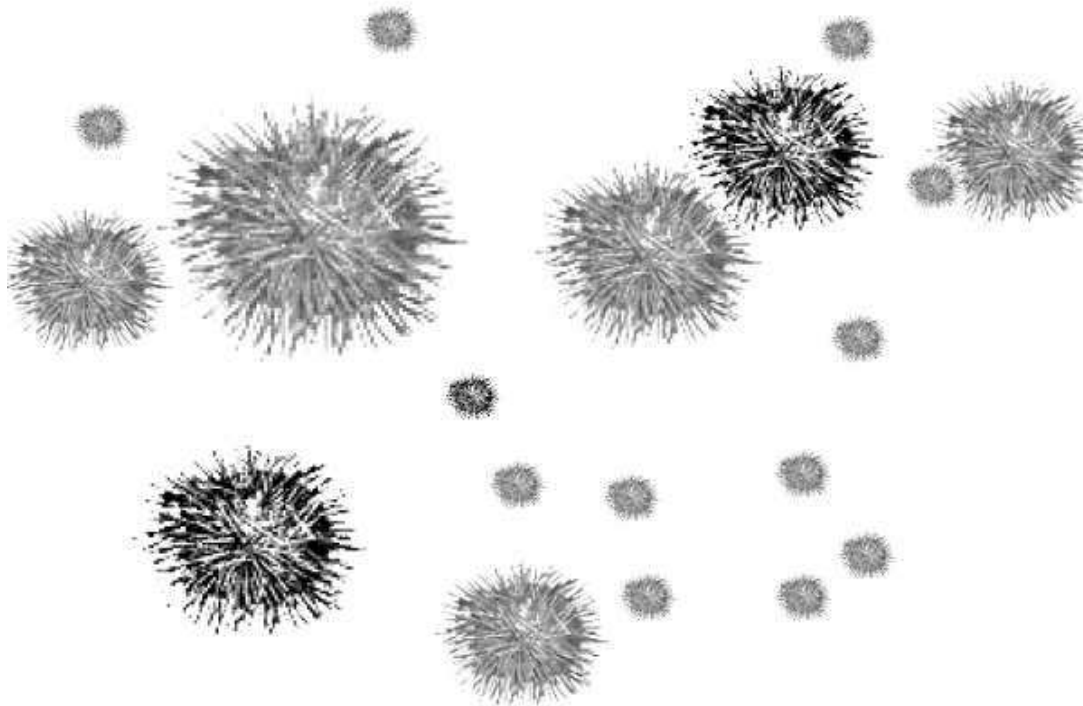
On the legal front, there was sad news just the other day that Chris Harvey, the lead in the legal case passed away from Covid. Chris was always a great advocate for the fishing industry and he will be missed.

The case is still moving forward and the Judge was granted the claim to proceed. The Crown had appealed and the CHN, Coastal First Nations and Eco Trust had applied as intervenors. The Judge considered the request but eventually ruled that the intervenors would muddy the waters and denied those applications. We expect the case will go to trial in the fall.

On another sad note, Ken Ridgway Jr passed away April 29th. Ken worked with his Dad Ken Sr., brother Clint, Cory Carmen and others fishing geoduck, sea cucumber and urchins for years. Ken was a long serving director of PUHA and often provided thoughtful insight to our discussions. Kenny will be missed. At his request there was no service and his family recently spread his ashes and had a private ceremony.

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D&D Report



2021-22

RED & GREEN SEA URCHIN FISHERY IN-SEASON SUMMARY

RSU 2021-22 SEASON REVIEW

RED SEA URCHIN FISHERY

- **North Coast Fleet**

- Harvest levels are well below average since September and
- Harvest levels are well below average in March. The lowest on record
 - Weather playing a huge role in the lack of harvest
 - Quality was lower than average, producing lower recoveries in all QMAS
- The protocol is not working as anticipated
 - The fleet still struggling with boundary QMAS of multiple blocks
 - Revisions approved will see a
 - Central coast block
 - A North Coast block
 - A Haida Gwaii block
- Only one block at a time. This should resolve the remaining issues
- The Kelp Restoration Project started on the 27th of March with Parks Canada, the Haida Nation, and PUHA – program went well
- The regular Haida Gwaii fishery commenced after the Kelp Project
- The delay in March Haida Gwaii fishing resulted in an increase in landed product for the month of April. Similar to the previous season
- Harvest continued in to May with the highest landings since the 1998/99 season
- June was small in landings, but July exceeded the last 4 seasons
- Only 38.5% of the NC TAC has been landed

- **South Coast Fleet**

- Vessels were active steadily into January and into February
- March had 40k out of the water
- April and May saw the live market program in Steveston become more active
- The live market program was active into July
- Commercial landings out of Campbell River was attempted but quality was poor
- Over 81% of the SC TAC has been landed

- **General**

- Undersize is noticed more coast wide
 - Bent rakes and new divers the main issue, but
 - Harvest bags are no longer dumped and sorted on deck of the dive vessels. They are being used directly for transport bags to the dock
 - Rocks and undersize is not being returned to the ocean floor.
- Buyer and processor complaints on the rise
- Harvest charts outstanding – an increase in late charts noticed and D&D will be into February of 2023 trying to finish this season's late chart submission – very hard on a fixed budget

Figure 1 – RSU Landings by Season to Date - 6-Year Trend

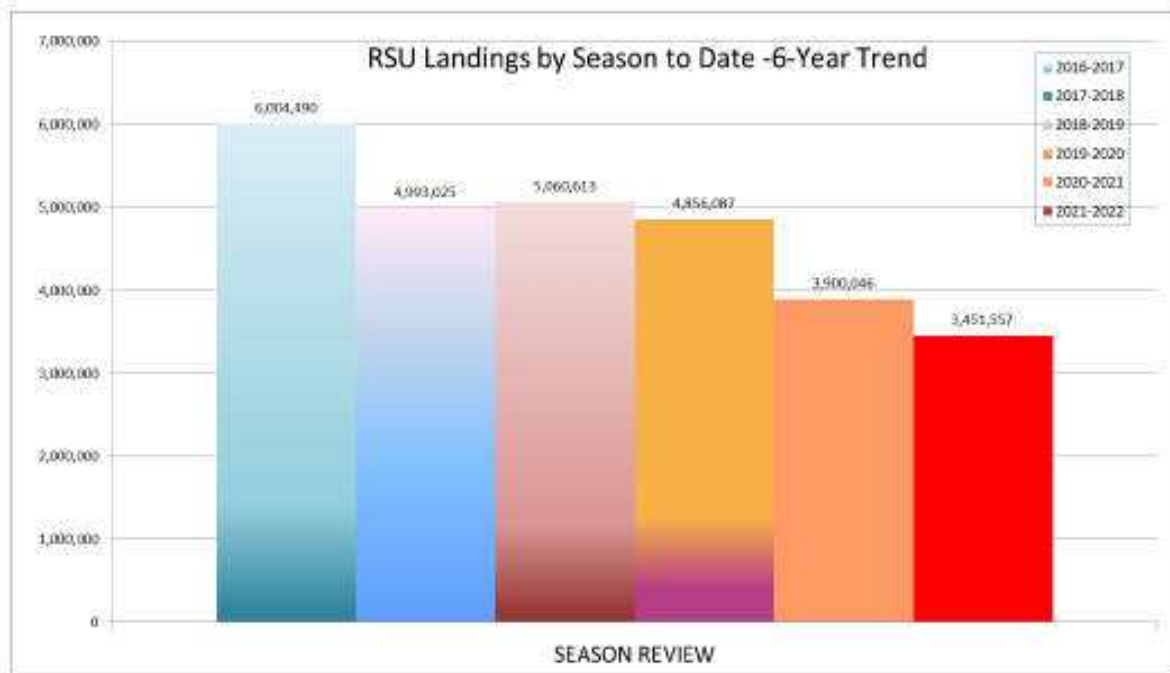
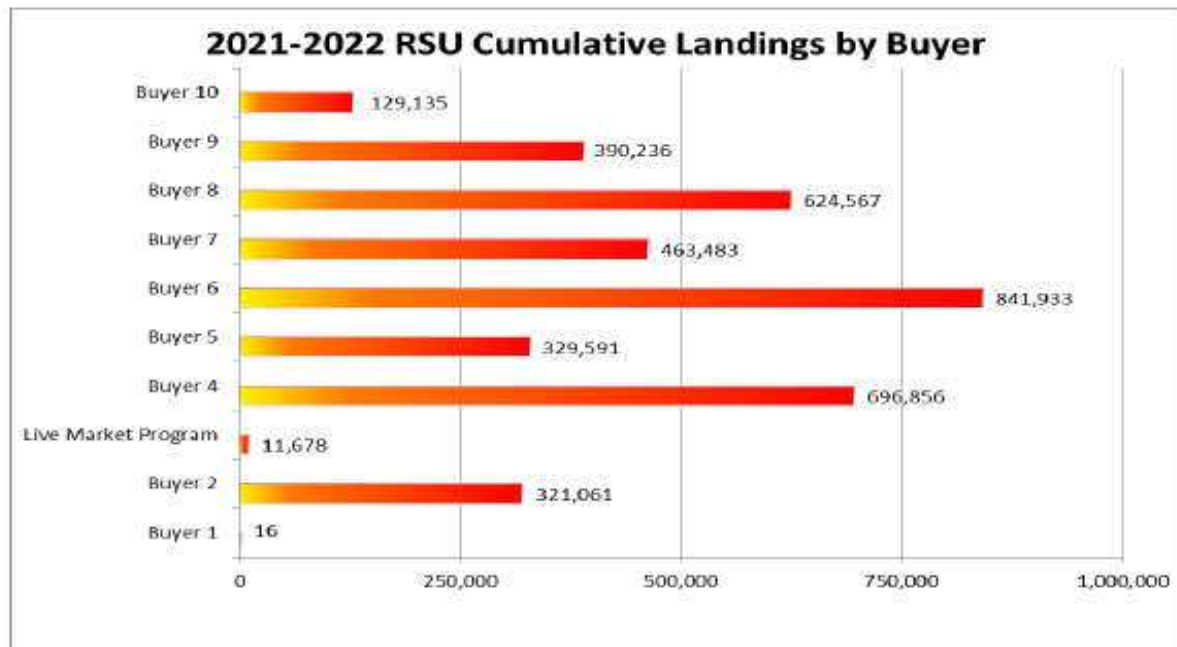


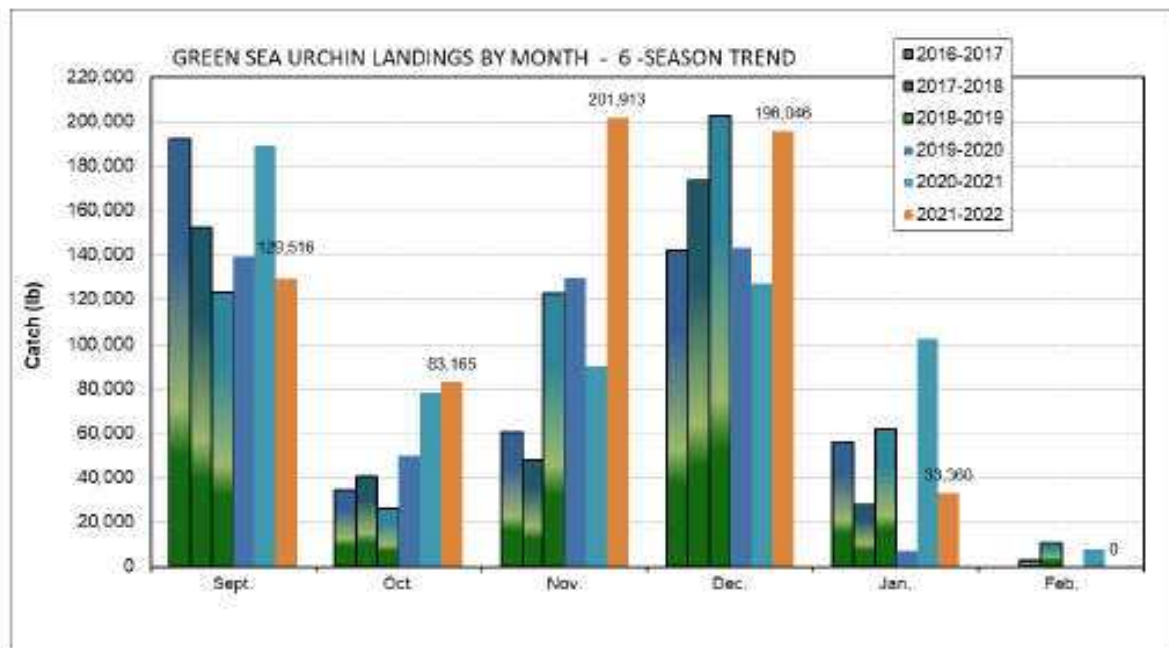
Figure 2 – RSU Cumulative Landings by Buyer



2021-22 GSU FISHERY

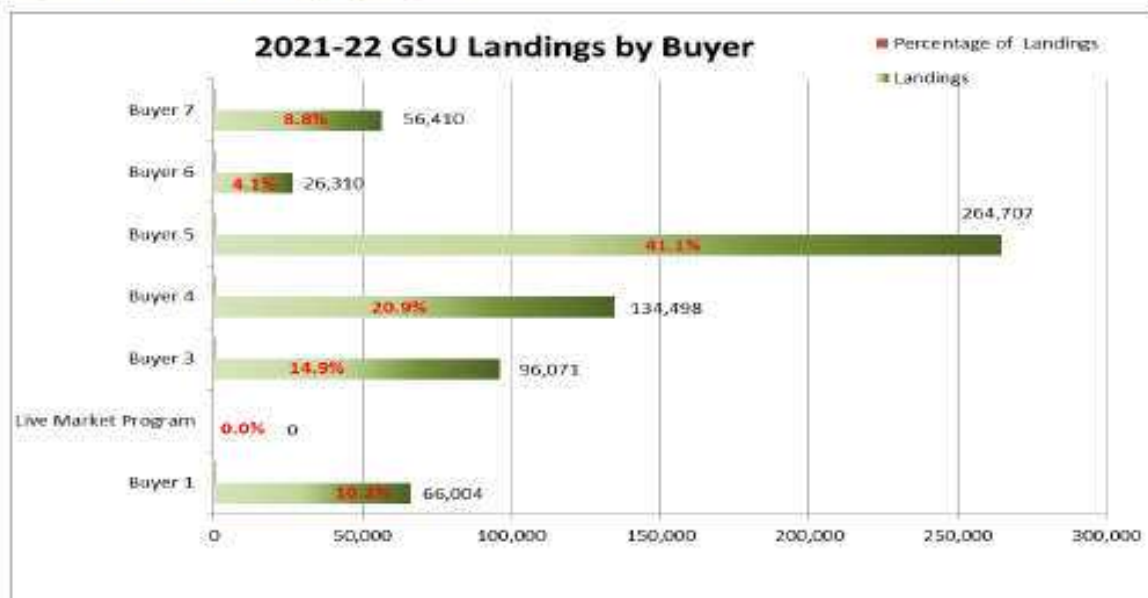
- The 2021-22 GSU season started quiet in September compared to the past few seasons
- Harvest out of the Victoria QMAs did not happen in September due to quality
 - The final pounds of the fishery are in the Victoria / Sooke QMAs
- Comox was an exploratory QMA and showed promise of increasing the TAC
- Sunshine Coast had one vessel scouting the exploratory QMA 16
 - A small landing occurred and more surveying is required
- Campbell River and Kelsey Bay commenced harvest and continued until the quota was achieved
 - Large biomass of GSU in all QMAs noticed
 - Cape Mudge RSU being overrun by GSU
- Adherence to Conditions of Licence overall good
- The break-up of QMA 12 into 12a – West and 12b – East seems to be working as expected
 - Large biomass of greens as the otters clean out the rsu population in the Port McNeill region
- Harvest continued and picked up steam in November and into December
 - Dropping sharply by the end of January
- Harvest levels exceed previous seasons

Figure 3 – GSU Historical Landings by Month 6-Season Trend



- By the end of January the PUHA fleet harvested 99.6% of the TAC

Figure 4 – GSU Landings by Buyer



Green Sea Urchin report

Most everything was covered by Mike's President's report and Darin's D&D report. There are lots of GSU in the area, but lots of smalls and/or marginal quality. The fishing went well last year though some pounds were left because of quality issues.

The guys would like to get the TAC increased this year with exploratory areas - including Howe Sound, Rivers and Smith inlets and parts of the North Coast. There was apparently some action up there in 1998/99 and great reports, but some sort of incentives are needed- the area is just too big and too far to do it entirely on spec. The multi-species surveys should provide some information and maybe even lead to new fishing opportunities, although the GSO management is still reluctant to break away from the index site assessment dependence and explore more flexible options. Mike Featherstone supports the idea that GSU are bouncing back in at least some places and that approaching the Metlakatla might be a good idea. DFO is still not great on supporting communications with FN's. It might be a not bad idea to push a bit for more exploratory ground and cooperation/collaboration in that area with the FN's and DFO.

There was a bit of a slow start to the fishery this year, primarily due to market issues but also because of quality. 200-300 otters were reported in the Port McNeil area. Spot jumps found they were not apparently feeding on the GSU was checked out in June. John confirmed there were few apparent otter impacts in Area 12 around Malcalm Island, but he still figures it is only a matter of time.

Thom Liptrot checked out Howe Sound for GSU during a cuke survey - should chase this down a bit a bit better idea of what is happening. John Lindsay shared that timing is key for Howe Sound- there are good numbers but again size remains an issue. July- August seems to work as a harvest window as the ulva (sea lettuce) dies back and provides lots of feed. They also seem spawned out by around the end of August.

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South Coast Report

Fishing went fairly well this year though guys had some trouble because of low numbers towards the end of the season. It worked well over the winter as a fill in when the North Coast was down because of weather but there was also an early start in August (around Signey/Victoria/Sooke?) that ran into some quality problems - skinny- so it might be better to leave it until at least mid September. Mexican production is flooding the US right now (September) while Peru is also very strong around this time of year.

NVI and Port Hardy were historically better early - but of course there are now otters - and etc. Quality around Sidney used to be best around December so it might be that shifting to Sidney and Victoria instead of Port McNeil might make sense again as a Christmas reserve. Quality and numbers in Port McNeil could be checked out for an early start to see if this makes sense. If it does - taking 50% of the quota early might be worth considering.

It used to be that Port McNeil, Campbell River and Kelsey Bay were the Christmas reserve, but the quality fell apart at the latter two areas around Christmas - so were dropped. Things change though and it might be worth taking a look at again. There is some interest in getting someone to check it out earlier- Will Strong has a boat in the area but needs divers. He also feels more areas should be open so fleet(s) are not concentrated in one area. There was some agreement on that.

Mike had a bit on Port McNeil:

The sea otter in Port McNeil situation, was brought up in the general discussion of changing the fishing sequence in the future. The discussion of changing the fishing plan, sort of a north to south fishing and save the Gulf for Dec idea, was proposed. The discussion then referenced checking Port McNeil asap. The idea being the sooner we get there the better chance we have to get what could be the last remaining urchins.

It was agreed to proceed with that. I am requesting all directors provide input on supporting the effort by paying for fuel, and perhaps funds for the crew? I think a fair day rate would be \$1,000(fuel and crew) but this is a new concept. We would have check any WCB requirements both for the divers and also who is the classified as the employer. We also need to check for possible insurance liabilities, as in how this is structured, paying for fuel maybe less responsibility than what I have outlined.

Included in the scouting we should request a brief report summarizing the dives, (like dive harvest charts) as well any photos or video of the otters. Underwater photos or video showing any devastation would be very graphic, like Lynn Lee's photos of the changing kelp forest over the past 4 years. "A picture says a thousand words." Once we have a report we will convene a directors meeting and discuss any options for adjusting the opening schedule. I think Cory or Kyle mentioned the 50:50 option and depending on what the report says and input from everyone, we should keep our options open.

I recommend a max of \$2,000 total, if we do proceed and to what extent. We can have a Yes or No on the \$2,000 to support the scouting, or provide your comments or recommendations.

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North Coast Report

The North Coast fishing suffered from a lack of good quality and poor weather. Some kelp is coming back but there are no notable changes in recoveries yet. Basically everywhere up that way- including Banks and Aristazabel had quality issues.

There was not a lot of effort along the West Coast of Haida Gwaii so we are unsure on how good the surveys were. Everyone was feeling rushed so the surveys were given short shrift. It was also noted that some of the best areas on the East Coast of Haida Gwaii have been removed from the fishery as part of the Gwaii Haanas National Park even though that may be counterproductive in terms of ecological management goals and overall marine productivity outcomes. Still Bull kelp from Masset around to Rose Spit is recovered like never before which may be good for this coming year. Intertidal algal production is not reported to be as favourable.

There was some discussion around the need to keep guys on the fishing sites so they can immediately take advantage of weather breaks, especially an issue around Haida Gwaii where the quality is poor in the fall meaning it only makes sense to head over in the late winter- early spring. It used to be that boats would hang out on the grounds for 30-40 days but now with faster boats attitudes have changed. There was some discussion on how increasing fuel costs should logically drive changes so effort becomes more efficient. Hopefully this will reduce guys' incentives to run back to port on just about any excuse.

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Processors Report- Alfa Wong

All markets are "sluggish" this year and competing sources of product are further affecting markets right now. Peru, Chile, Mexico and even Russia all start in August while China carries on producing until the end of September. It is worth noting that farm production of sea urchin is increasing in China. Peru is producing superior grades now on all quality parameters and has built a good reputation as a trusted supplier over the past 5 years or so. It is important to send high quality product early in the year to re-establish our good reputation and demand. If crap is sent the market repercussions will be completely predictable.

China is being difficult these days and shipping into the country is increasingly problematical. It is not only playing hard with its new CIPHER regulations but also using other issues to confound access. For example, they do not accept the scientific name change to *Mesocentrotus* in RSU.

On top of this, COVID lockdowns are nothing short of horrific and people are scared. The 2 month lockdown in Shanghai resulted in Shenzhen and Guangzhou moving on local clearance, however local agents are not allowed to enter the airport to assist or witness inspections and are getting the total run-around on getting things done. Production of Chinese uni winds down beyond September and Alfa is hopeful this will ease the entry process. There may be a bump in demand with the Autumn Festival but it will likely be temporary although demand should recover again in December, meaning it is a good idea to hold some production back until then.

Demand is also sluggish in Japan. Japan will accept wetter product when supply is limited but there is currently lots of supply internationally. On top of this the yen has declined by about 23% vis a vis the USD of late and made costs that much more painful. Russian urchins are projected to start showing up in Hokkaido next week and will likely further impact demand for GSU from Canada which is also being affected by the currency exchange rate movements.

The same problem is being seen in Korea. The international supply is good but their exchange rate is similarly down by about 18% against the USD.

The Hong Kong market is very sluggish, in part because there has been a bit of an exodus because of the changing legal situation there. This may prove temporary but it will likely take some time to play out. They are also still being supplied by Peru, Chile and China at this point so Paladin is still kind of waiting to see what will be happening this fall.

Alfa encourages all to work better together as we are likely to need every edge we can get. [\(Back\)](#)

Green Urchin Budget

PACIFIC URCHIN HARVESTERS BUDGET 2022/2023 GREENS

49 GREEN LICENCES (\$2499/1250)	\$183,701.00
CAFI REFUND	\$3,750.00
	\$187,201.00
EXPENSES	
D&D PACIFIC FISHERIES	\$122,451.00
GENERAL and OPERATING	\$10,000.00
PRESIDENT HONORARIUM	\$10,000.00
 CAFI MARKETING PROGRAM (MARKETING SUPPORT)	\$5,000.00
 consulting	\$5,000.00
 SEAFOOD ALLIANCE	\$5,000.00
 RESEARCH SURVEYS	\$28,500.00
TOTAL	\$185,951.00
 SURPLUS	\$1,500

Red Urchin Budget

PACIFIC URCHIN HARVESTERS BUDGET 2022-2023 REDS

REVENUE	
40 NC LICENCES @ \$5980/1500	\$299,200.00
45 SC LICENCES @ \$3225/1500	\$212,625.00
AMP refund 20/21	\$25,000.00
INTEREST	\$5,000.00
TOTAL	\$541,825
EXPENSE	
D&D PACIFIC FISHERIES N (40)	\$239,200.00
D&D PACIFIC FISHERIES S (45)	\$145,125.00
GENERAL and OPERATING	\$33,500.00
PRESIDENT HONORARIUM	\$25,000.00
DIRECTORS TRAVEL HONORARIUM	\$5,000.00
CAFI MARKETING PROGRAM (MARKETING SUPPORT)	\$30,000.00
 consulting	\$27,500.00
 SEAFOOD ALLIANCE MEMBERSHIP	\$10,000.00
WEBSITE, FACEBOOK, MEDIA	\$20,000.00
ONGROUND VMS COORDINATORS \$1000	
PER BOAT	\$8000.00
RESEARCH SURVEYS	\$0.00
TOTAL	\$543,325
DEDICIT	\$1,500.00

Election of Officers

PRESIDENT

Mike Featherstone
cell 604-230-1686
mike@oceanmasterfood.com

SECRETARY/TREASURER

Karolyn McLeod
PH. 604-524-0322
cell 778-882-1577
karolyn@puha.org

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DIRECTORS

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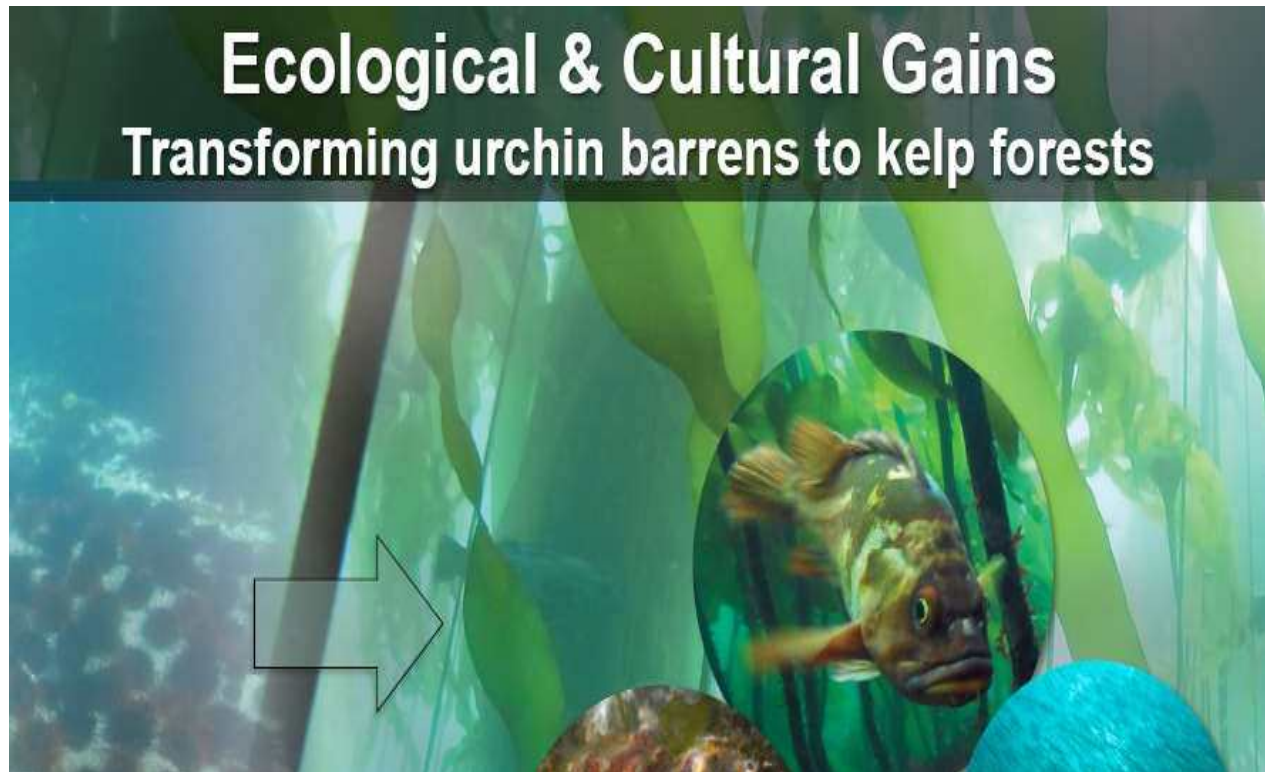
Kelp Recovery Project

Chiixuu Tll iinasdli

Nurturing Seafood to Grow
in Gwaii Haanas, Haida Gwaii, BC, Canada

photos: Lynn Lee

Pacific Urchin Harvesters Association AGM Sep 2022 . Virtual meeting
Presenter: **Dr. Lynn Lee, Gwaii Haanas NPR, NMCAR & Haida Heritage Site**
on behalf of Dan McNeill, Pauline Ridings, Mike Featherstone, Daniel Okamoto,
Nathan Spindel, Aaron Galloway, Gary Saunders, Emily Adamczyk, Luba
Reshitnyk, Ondine Pontier, Miranda Post, Robyn Irvine, Gulxa taa'a gaagii ng.aang
Nadine Wilson, Sgiids Kung Vanessa Bellis, and many many more team members



Haida Ethics & Values . Guiding Principles

Yahguudang—Respect



Gina 'waadluxan gud ad kwaagid—
Interconnectedness



'Laa guu ga kanhlins—
Responsibility



Designs by Tyson Brown

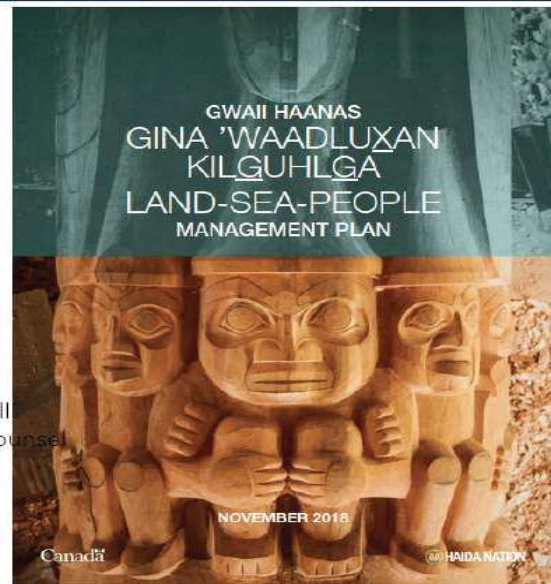
Giid tlljuus—Balance



Isda ad dii gii isda—
Giving and Receiving



Gina k'aadang.nga gii uu tll
K'anguudang—Seeking Wise Counsel



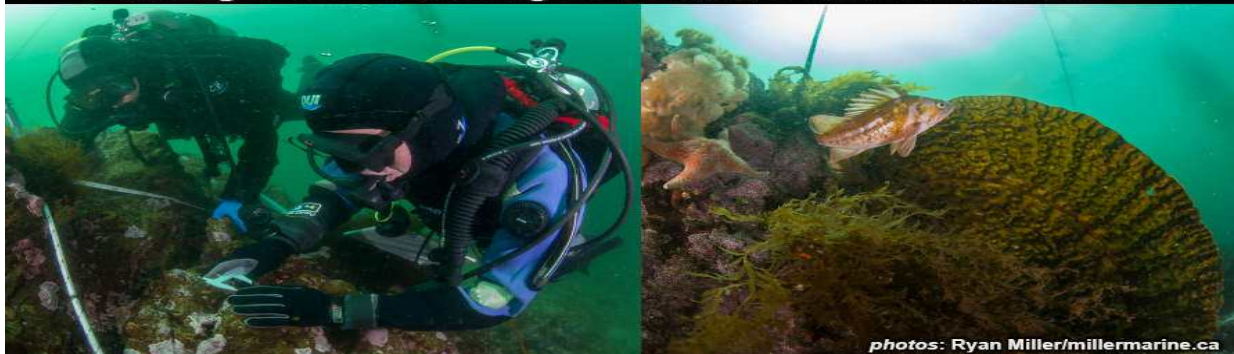
Resilience to Climate Change

- Increased physical shoreline protection
- Increased carbon cycling & sequestration
- Increased local dissolved oxygen
- Decreased local ocean acidification
- Nutrient subsidies to coasts & deepwater
- Potential source for blue carbon storage

photo: Lynn Lee

Restoring Balance in the Sea

- Training Haida divers in kelp community survey methods
- Subtidal kelp forest monitoring by Haida Fisheries & science divers 2017-2021
- Funding to assist training new Haida commercial divers



photos: Ryan Miller/millermarine.ca

Fall 2018 & Spring 2019 Restoration Work

- Commercial urchin divers harvest marketable urchins
- Haida Fisheries & commercial urchin divers harvest community food & crack non-marketable urchins underwater
- At least 75-95% of urchins removed or cracked



photo: Ryan Miller/millermarine.ca



photo: Pacific Urchin Harvesters Association

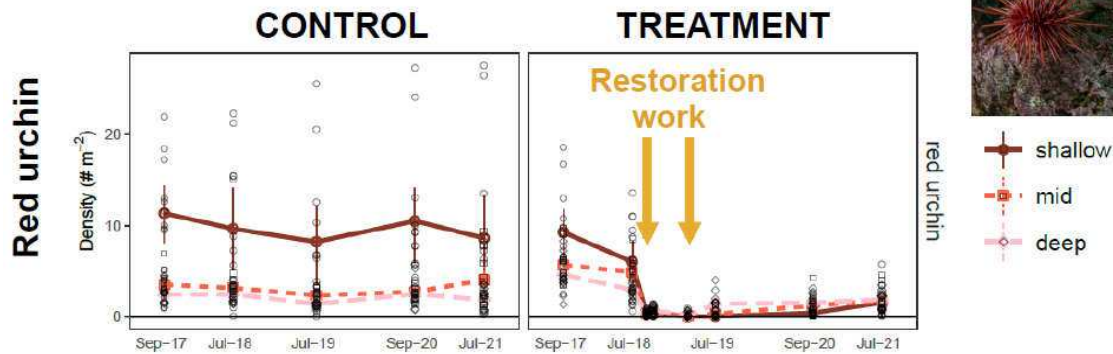
Spring 2020 & 2022 Maintenance Work with PUHA

- Harvest marketable urchins at site for markets & community food; Focused cracking of non-marketable urchins at site
- Supplemental harvest allowed in IFMP for AMB to approve at site & adjacent closed area
- Fishery monitored by a Haida Fisheries Guardian & GH staff

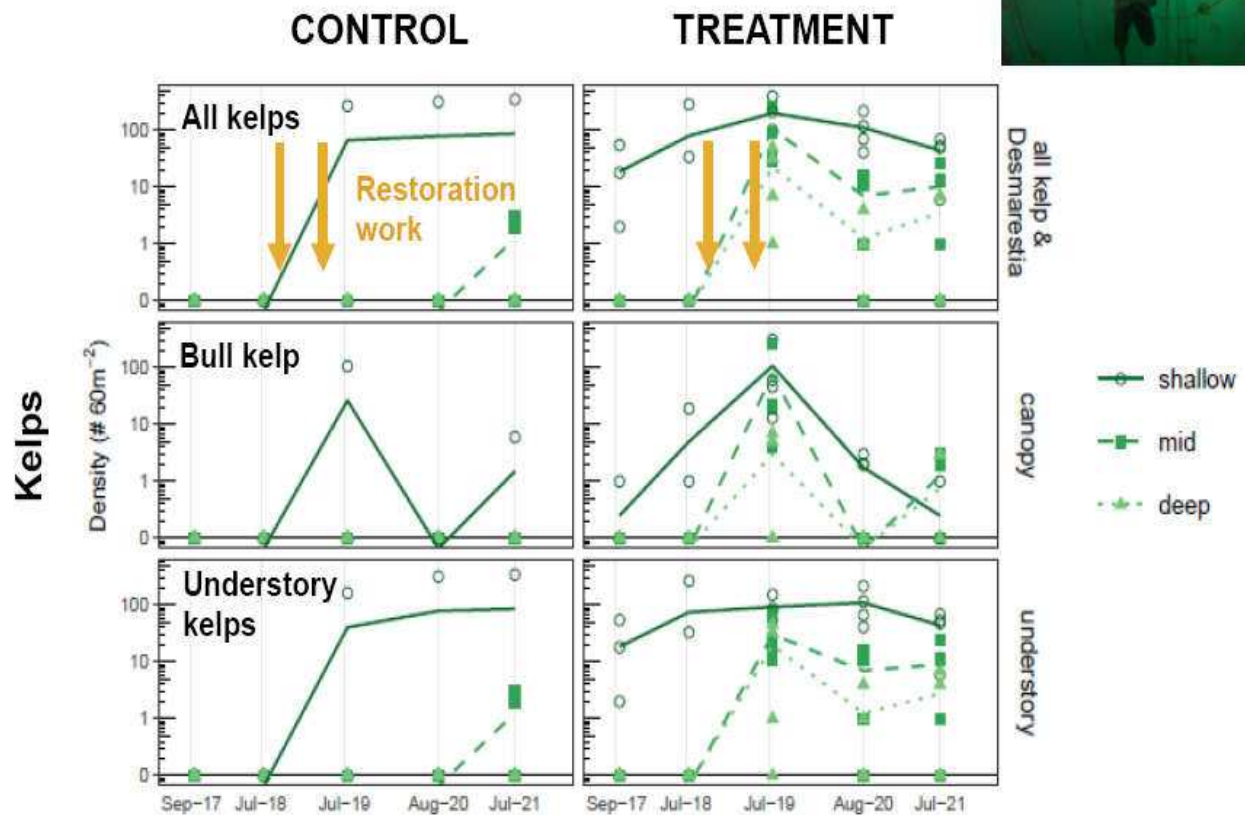


photos: Lynn Lee, Gwaii Haanas Parks Canada

Pre- & Post- Work... Urchin



Pre- & Post- Work... Kelp Recovery



July 2018

8 months after work...

July 2019



Luba Reshitnyk

Pre-restoration

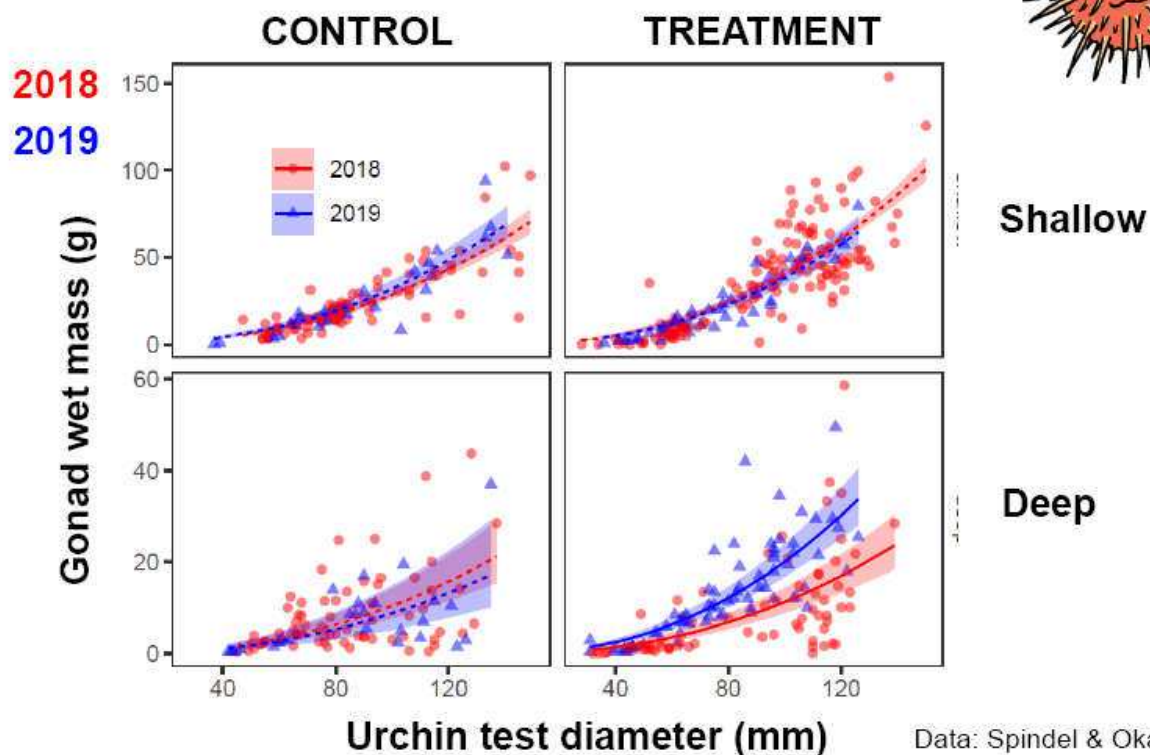
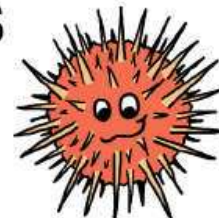


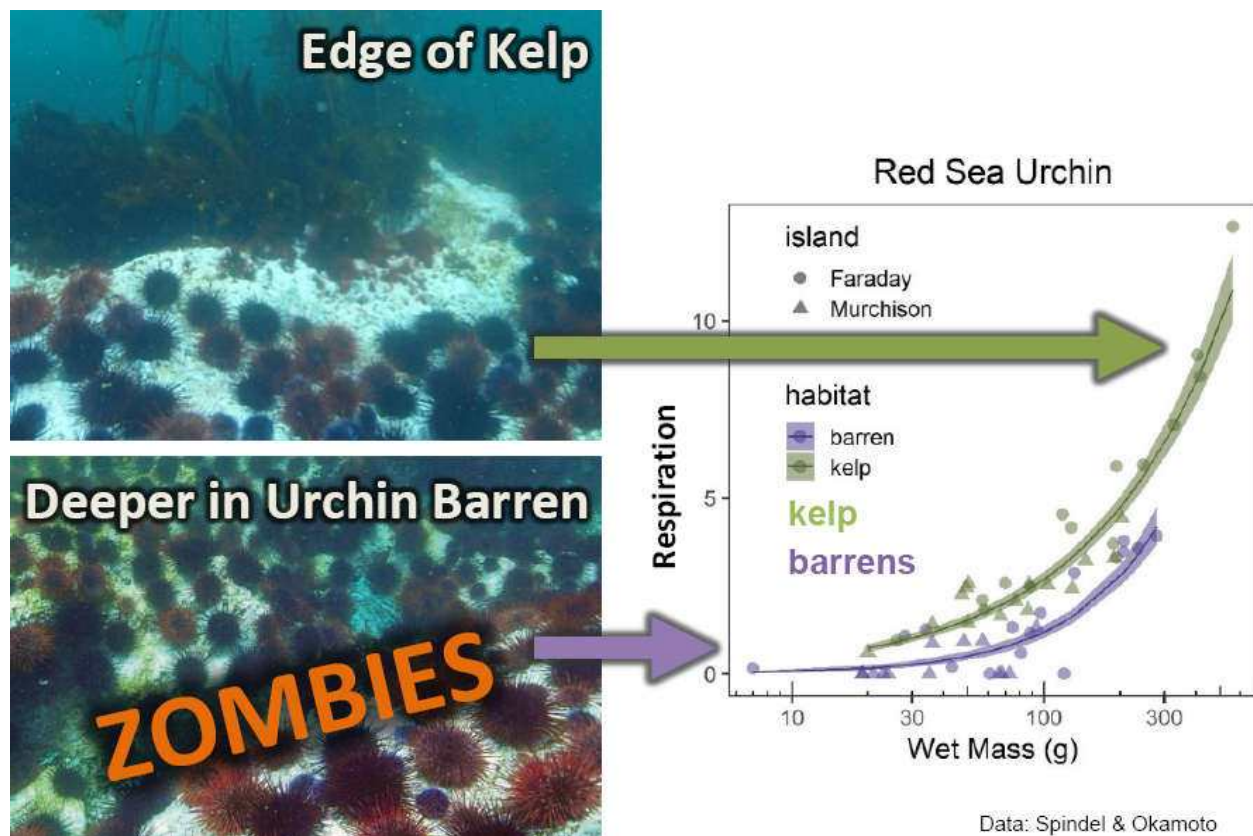
Thierry Boyer

Post-restoration



MORE KELP = MORE GONADS
especially for larger urchins





Does kelp restoration increase urchin gonad mass?



Innovative Management Opportunities

- Continued work with industry to maintain restoration area
- Alternative urchin fishing strategies to assist kelp recovery
- Explore ways to enhance kelp recruitment as needed



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BC SEAFOOD ALLIANCE: UPDATE TO MEMBERS

September 2022

Christina Burridge BCSA Executive Director

BC Seafood Alliance Presentation

Why We Still Need a Reconciliation Transition Plan for BC Commercial Fisheries

1. Northern Shelf Bioregion (NSB) MPA Network/Central Coast NMCA
2. Risks to science, fisheries management and industry contributions in Pacific Region
3. Reallocation w/o compensation
4. Potential changes to West Coast licencing
5. Coastal First Nations FRRA
6. GayGahlda Framework Agreement with Haida

SAME SLIDE AS LAST YEAR: IT'S ALL ABOUT ACCESS

The Parties recognize that transformative change in the collaborative governance, management, conservation and use of Fisheries Resources is required to support reconciliation of the relationship between Canada and Indigenous Peoples and the Parties intend that this Agreement will support transformative change.

Coastal First Nations Fisheries Resources Reconciliation Agreement

There will be a shift away from coast-wide fisheries management to area-based management, and this may require changes to stock assessment models, TACs, effort controls, and monitoring.

NSB MPA Network Governance Partners MPATT

June 30, 2021

NSB: What's Happened Recently

- December 2, 2021 letter from RDG pauses Scenario 2 Network Action Plan: inconsistent with DFO policy and management
- Senior Working Group set up to establish principles and processes and ensure progress by the CBD COP, Montreal, December 2022 & Impac 5 conference on marine planning February 2023 (designation of Offshore AOI? RCA closures?)
- The new NAP recently released and goes to public comment (bioregional, NVI, Central Coast, North Coast and Haida Gwaii), September 8-28.
- No role for MPT and for thorough socio-economic analysis

What We Know about the New NAP

- All management measures have been removed and will only be adopted as part of long-term implementation process, likely 2025-2030, through IFMPs
- "We don't manage fisheries through Oceans processes but through IFMPs"
- Scenario 2 is now included in the NAP as a "compendium" for technical reference
- No longer a "kitchen sink" for other issues (community-based fisheries, Reconciliation objectives, place-based management, collaborative governance, etc.)
- These initiatives will continue but through other processes
- Very difficult/impossible to assess socio-economic impacts so uncertainty for many years will deter any investment

What Can We Do?

New process seems to leave little role for our MPT or for solid socio-economic analysis of impact on industry and infrastructure

- Renew our calls for a Reconciliation Transition Plan since the direction is clearly political—indications that DFO would welcome this
- Arranging a series of sessions with DFO
 - Legal framework, Reconciliation agreements, treaties
 - Science and management implications
 - Marine zoning
- Need to flesh out our key principles
 - industry consultation and engagement
 - compensation
 - minimizing disruption
- Signed an MOU with Lax Kw'alaams to work together on a range of issues
- Re-engaging with Coastal First Nations

Other Engagement

- Signed MOU with Lax Kw'alaams for a BC Commercial Fisheries Reconciliation Partnership
- Could encompass commercial fishery management, science, marine planning initiatives, SEIA, increasing harvest value and even litigation
- Re-engagement with Coastal First Nations—ambition to be the largest fishing company on the Coast within a decade
 - Community-based —willing buyer/seller seller, dual fishing, account for bycatch
 - Corporate fishery, “similar” terms and conditions to commercial fishery
 - Collaborative governance rather than co-management
 - Priority species—crab, halibut, herring, geoduck
 - Science and Stakeholder tables bridge between new CFN processes and existing ones
 - Will it work, given tensions between Nations and complexity of plans?
- Province's Coastal Marine Strategy co-developed with FNs—MaPP on steroids?

Other Alliance Priorities

- NSB and related marine planning (e.g. Central Coast MOU for NMCA, BC's Coastal Marine Strategy) + development of Reconciliation Transition Strategy our main focus
- Making case for provincial exemption from Motor Fuel Tax and Carbon Tax (i.e., 16 ¢/litre)
- China: plant audits and access to CIFER list
- Other trade: Ukraine, UK-Canada free trade deal, Vietnam aquatic animal health issues
- Science: strategic plans for groundfish and invertebrates
- Possible changes to licencing policy

BUT access is always the priority, and we greatly appreciate your support

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Multispecies Survey Overview- DFO

A poster for the Multispecies Benthic Invertebrate Monitoring Program. The background is a gradient of blue and teal with a circuit-like pattern of white lines and circles on the left side. The title is in large, white, sans-serif capital letters. Below the title, the names of the project leaders are listed in smaller white capital letters. The location and affiliation are listed in even smaller white capital letters. At the bottom, there are two lines of text in small white capital letters, one of which is preceded by an asterisk.

MULTISPECIES BENTHIC INVERTEBRATE
MONITORING PROGRAM

JANET LOCHHEAD, DOMINIQUE BUREAU,
CARL SCHWARZ*, CHRIS ROOPER

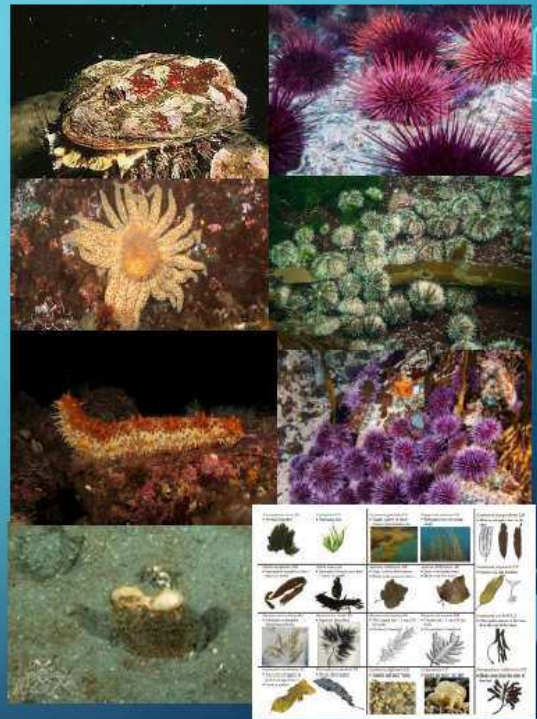
PACIFIC BIOLOGICAL STATION
FISHERIES AND OCEANS CANADA
NANAIMO, BRITISH COLUMBIA

PHOTOS COURTESY OF DOMINIQUE BUREAU AND PAULINE RIDINGS

*STAT MATH COMP CONSULTING

DATA

- sea urchin (red, green and purple), northern abalone and pycnopodia abundance and size
- giant red sea cucumber abundance (and size starting in 2020)
- geoduck counts
- habitat composition
 - algae communities: species and abundance (% cover)
 - substrate types and % cover



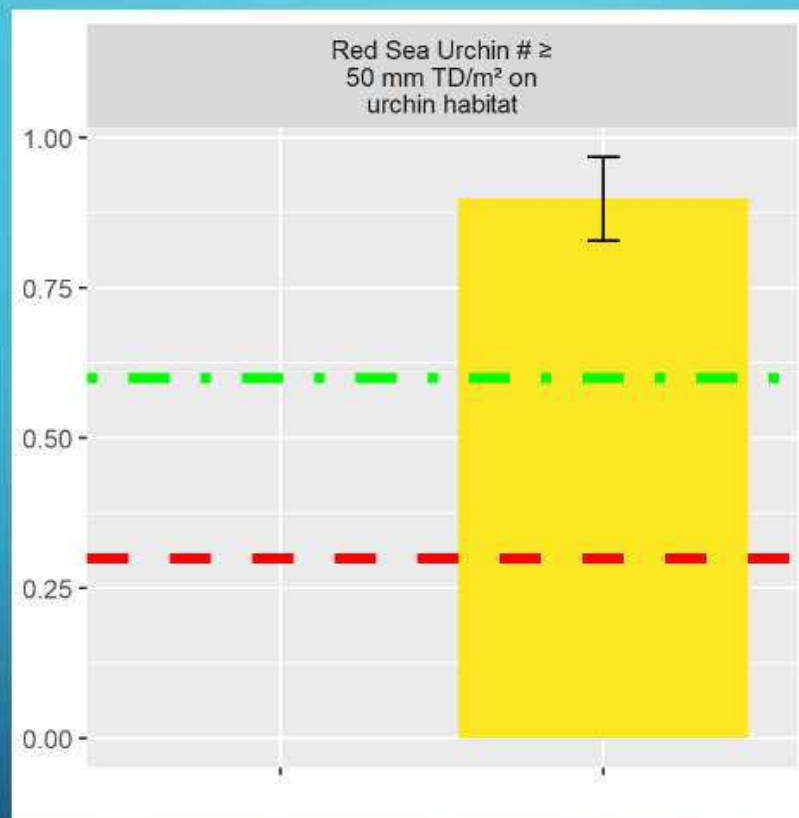
PILOT SURVEYS



MULTISPECIES MONITORING PROGRAM OBJECTIVES:

- Assess stock status against reference points: Are the commercially harvested stocks (sea cucumber, red sea urchin) in the healthy, cautious or critical zone?
- Collect data that will also be useful for COSEWIC assessments, habitat mapping, species distribution modelling, emergency response, MPA planning and monitoring programs, etc.
- Move towards an Ecosystem Approach to stock assessment and monitoring
- More efficient use of field time and resources

RSU DENSITIES



RECOMMENDATIONS

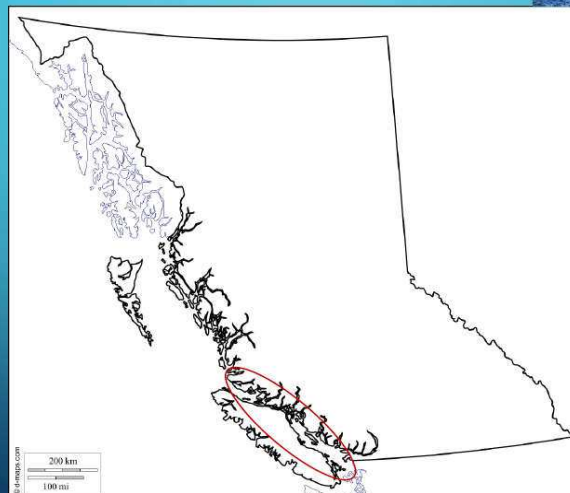
Pilot data were analyzed to inform optimal survey design (CSAS July 2022):

- Continue using the pilot protocol
- Exclude very protected and very exposed sections of shoreline to ensure sampling effort is focused on suitable habitat
- Survey at the same time of year
- Re-randomize transect locations at each visit
- Conduct at least 240 transects coast wide; likely a 3-year rotation

240 transects coast wide

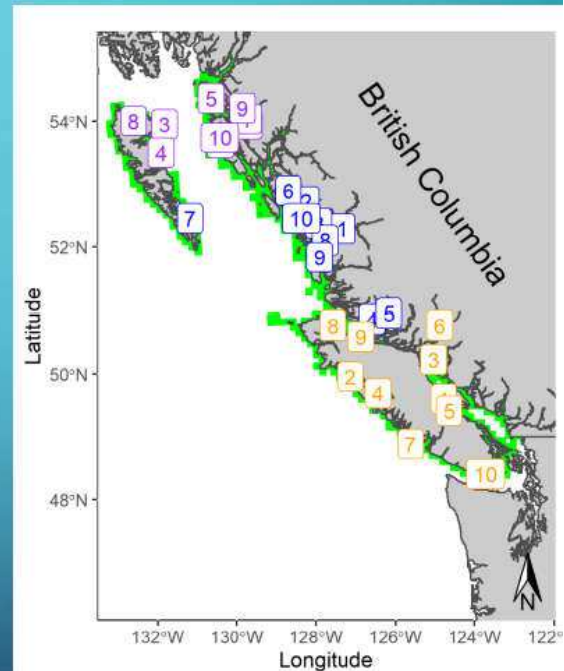
- Risk of not detecting when the density of the stock falls below the LRP set at 5%
- Risk of falsely determining that the density is below the USR when it is actually above the USR set at 5%
- 0-5% = “extremely unlikely”

2022 SURVEY



2023, 2024, 2025 SURVEYS

- Coast divided into 2 or 3 sections
- 10 randomly selected 50 km x 50 km grids, within each contains a random selection of 8-10 1km x 1km grid cells, where the transects are placed
- At least 240 transects after 2 or 3 years



QUESTIONS



Marketing Report

Based on data from Stats Canada Japan, Hong Kong, US, South Korea, Taiwan and China are the predominant destinations for BC sea urchin products. Hong Kong took the pole on the purchases of processed RSU uni last year (2021) at about \$4.1 M with Japan pulling in a fairly close second at \$3.4 M. South Korea at #3 with \$2.4 M, up steadily since 2018 when it was about \$900 K, then the US at \$1.2 M and Taiwan at \$1.1 M. China rounded sales of processed uni out at about \$800 K with the UK and Singapore accounting for about \$ 73 K and \$ 30 K respectively.

Japan is still our biggest customer once the live product is accounted for. They generally take in somewhere between \$3-4 M each year, primarily GSU I believe, while the US has taken \$300 - 900 K worth going back to 2017. One interesting development this past year though was that China took in just over \$1.7 M of live product last year, up from about \$485 K in 2019, the previous high from what I can see. They seem to have fallen back a bit to date this year, but that might just reflect the seasonal sales of the greens so it remains to be seen what happens this year.

Sales took a bit of a hit in 2020, falling to about \$15 M from about \$18-21 M range in the 3 years previous, but then recovered to about \$19 M in 2021. Hopefully it will stay that way, sales to June this year (2022) are about \$6.9 M compared to \$ 8.1 M for the same period last year, but with the way the COVID continues to hammer especially China and Hong Kong and their Zero-COVID policy these days, this is probably a bit of a stretch. The news coming out of those places is still pretty bleak, Hong Kong, Shanghai, Guangzhou, Shenzhen and other major centres, total lock downs that started in April are reportedly having severe impacts on many aspects of life all around the country. We in Canada quite simply have no equivalent experience to compare so it is hard to relate to. Still- hoping for the best- I see China just reduced its quarantine period for people coming in from abroad to 7 days in designated quarantine hotels followed by a further 3-5 days under isolation in their "home". That is a little bit heartening.

This past year we collaborated with the UHA and PSCHA to hire some locals to represent us at the 2021 China Fisheries and Seafood Expo in Qingdao and we have just committed to doing the same this year. Katie Lindsay had someone she has worked with there hire a couple of people take care of things for us and collect contact information. I put together a summary of the fishery etc to bring them up to some kind of speed so they could talk about it with visitors. We got about 31 contacts out of the effort but of course we did miss out on the more in-depth personal observations of what is going on in country. Everything on China that comes through media is well massaged and it is impossible to get a strong sense of where the country is really at or going.

We also had funding to attend the Hong Kong Restaurant and Bar show in September, but the organizers insisted on having in-city representation back in the Spring when I tried to organize a booth as they were not confident in the welcome that would be accorded to international travellers. They were right on that and we are taking a pass on Hong Kong again this year though it would be good to get back there sometime.

The first show we managed to get to in the last couple of years was the Seafood Expo North America, aka the Boston Show, in March this year. We shared an information counter with PSCHA in the BC booth and did not do too badly despite the general wariness of the public and most everyone at the show because of the ongoing COVID concerns. The number of visitors to the booth was comparable to previous years, though the number of Asians was way down. I am

also not sure how many were there for real business as much as just a chance to get and about and talk with people. I was pretty much covering questions on my own and cannot say the interest was overwhelming, but I am sure we made a bit of a mark by putting in an appearance- something which in itself is not bad thing these days

I also attended the Seafood Expo Global (SEG) in Barcelona in April with Fraser Riech. We were again part of the BC booth though we shared our info counter with the UHA as well as with PSCHA. It was a good show, there was a lot of effort from around the world that went into it but we were just not competitive and could not attract new eyeballs. There was still quite a bit of reluctance from people on getting out and about so the crowds were not as big as we have seen previously. Because of that, the report focusses more on the reconnaissance part of the mission than on the show per se. On that though, the BC booth was “questionably” executed: we had no samples to offer in the booth, no display of the seafoods from the province and nothing but static images to draw the attention of passers-by. To be fair to the guys who put it together, they were dropped into the deep end without a lot of guidance. The folks who took care of that stuff for the Province prior to pandemic all retired just before everything shut down and the new guys were only assigned to it a couple of months prior it happening. Hopefully we will be able to share some lessons and help make a better go of it next year. Given the way things are going elsewhere this may be the only real venue for meeting global seafood customers that is available for the next few years.

For the rest of this year we have the Seafood Expo Asia (SEA) in Singapore in September on deck - next week in fact. The last time the show was cancelled in 2019 we left our payments for the booth and furniture in place as a credit for the next go round, not thinking it would actually be 3 years down the road. Well - it is now here so that part is taken care of. We also have program funding for a couple of people to travel to it and for a side trip to South Korea. We will again be located right at the entry to the show which is great - though it does bear mentioning that the show is newly relocated to Singapore and is happening the week after the Food and Hotel Asia 2022, so is likely to be a bit underwhelming. Still- the SEA folks were good to us in Hong Kong and are promising the same in Singapore so it is worth a shot. Singapore is a very rich market that appreciates and is willing to pay fairly for good food, so it would be great if we could repeat our success in Hong Kong to some degree. The SEA is a bit of a boutique show, one that allows smaller players to shine whereas in the bigger shows, like the SEG and the CFSE, it is easy for us to get missed in all the other goings on.

Anyways- we have some funds set aside for Ron to continue with his social media and video work and also have the SENA in Boston again in March 2023 to finish things off for the year. Our total planned budget for this year worked out about \$104 K but with the savings on European, Hong Kong and China travel as noted above, we are probably closer to \$ 50 K as the travel costs were again the biggest part of the plan. I'd also just note that carrying the work forward after this fiscal will again require a new AMP proposal, probably best completed for submission prior to Christmas. Things are looking a “bit scary” moving forward, what with recession forecasts for China, because of their zero covid policies, and Europe, because of the Russian invasion and throttling of gas and oil supplies, and many other places because of rising inflation and interest rates but we shall see. It is still hard to make predictions about the future and we have to look ahead further than just one year.

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Note: Janet Lohead was going to report on : Janet Lohead (Fisheries and Oceans Canada) reported that Fisheries and Oceans Canada have developed publically available software for imaging analysis. There is a very simple analysis program, called 'AVLOG', for green urchin drop camera photos. There is a more complicated program called 'Video Miner', which is for multiple species and habitat variables. Finally, there is a third called 'ImageJ' 17 which can record measurements and well as counts and would be very useful for urchin assessments (see the Fisheries and Oceans Canada website for further details: <http://www.dfo-mpo.gc.ca>). Galway Marine Institute of Technology also use a program called 'Pro plus' which can record measurements and counts and would also be very useful for urchin image analysis. This program also allows images that have been squeezed due to the curvature of the lens to be squared for easier viewing. Comparative study between fixed frame camera and dive survey (Norwegian trials) A survey conducted in Tromsø, Norway tested the efficacy of fixed camera quadrats in comparison.