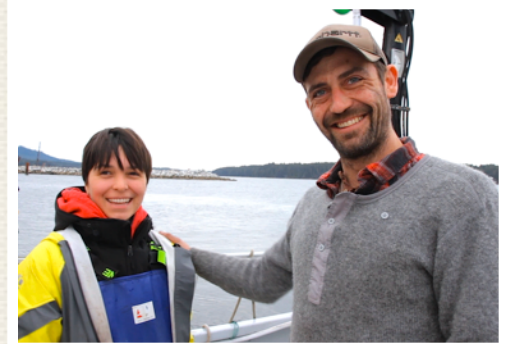




PUHA NEWSLETTER



Presidents Report Mike Featherstone

As we come into March, there is usually some optimism and excitement for the opening of the Haida Gwaii fishery. This year however, the feelings are mixed. The market has slowed, and demand not as strong as previous seasons. Prices have weakened, although good

product still fetches reasonable pay. It does seem harder to find the primo A grade. At the time of writing this report, it the earliest date the "Nurturing Kelp to Grow project" will be March 17th, depending on weather and safe travel to Haida Gwaii. The regular commercial fishery will

follow after the project around March 20th. PUHA's role in the "Nurturing Seafood to Grow" Project at Murchison Island in Haida Gwaii consists of removing any and all urchins on the study site, followed by an adaptive fishery in the previously closed area.



PRESIDENTS REPORT



MARKETING REPORT



D&D PACIFIC REPORT



Presidents Report /Mike Featherstone Page 2

PUHA has advocated for this area to be reopened under a regular fishery management protocol, DFO also supports this approach. At his point these requests have been denied, so we will continue as previous years. On a bright note, PUHA did receive an award from Parks Canada for its participation and role in the project, and the project is progressing very well. PUHA has advocated for this area to be reopened under a regular fishery management protocol, DFO also supports this approach. At his point these requests have been denied, so we will continue as previous years. On a bright note, PUHA did receive an award from Parks Canada for its participation and role in the project, and the project is progressing very well.



As you know, we lost around 20% of our quota in Haida Gwaii when Canada created the Gwaii Haanas National Marine Conservation Area (NMCA) in 2020. Originally the proposed protected area was much larger, but in collaboration with the Haida, the Archipelago Marine Board and Fishing Industry the impacts were lessened, while still preserving the cultural, fishing and historical significant places of interest for the Haida. This was considered a win-win outcome and a good example of collaborative management, unfortunately, some prime areas for urchin fishing were lost. We can only assume these areas are turning to urchin barrens.



Fast forward to 2024 and Canada has announced another NMCA in the Great Bear Rain Sea in the central coast, a mere 20km distant from Gwaii Haanas. This process has been far from an example of collaboration, in fact the creation of this NMCA seems more as a last resort after the failure of all the consultations for the original Northern Shelf Bio Region Marine Protected Area. Even now after the announcement there are many more questions and very few answers. Industry keeps being told that “we are working on it” What are those famous words that scare everyday people? “I am here from the Government, and I am here to help”. There is no sense of comfort for our Industry in that response.

For PUHA supports protected areas. In the 80's, in collaboration with the Province of BC, DFO, First Nations and Community groups our Industry closed 5 prime areas to be used for study, adaptive management, and community cooperation. As it turns out some of these areas are still closed but there has been no new research planned. If there is no interest perhaps these areas should be returned to the fishery.

Lately, PUHA has been receiving numerous requests for Kelp Reforestation - Smash Projects. What an irony that is, considering our quotas have been limited and we are now excluded from fishing in the MPA's. Yet there are NGO's and Community Groups applying to wipe out the overgrown urchin populations. It seems there must be a better, creative way to lower urchin populations, how about:

INCREASING THE QUOTAS and LOWERING THE RESTRICTIONS ON URCHIN FISHING!



Presidents Report /Mike Featherstone Page 3

Meanwhile, C&P are charging fishermen for urchins 1 or 2 mm under the size limit. It seems the world really is going mad. What has happened to common sense?



Coming next season is another round of area selection. DFO will be sending out notifications and instructions to all licence holders.

PUHA is looking for any quota recommendations, changes to current red or green quotas, for the next season. Please contact D&D, any PUHA director or e-mail PUHA with your advice.

We have a new addition to our newsletter. Lawrence Andersen will be providing safety updates and training information. Currently, PUHA is collaborating and assisting to draft a Best Practices Manual and ultimately supports a dedicated Dive Safety Officer, with Fish Safe, to facilitate and train crews in the Best Practices. This work is being made possible through the Steinman judgment, in remembrance of Connor Brown.

It has been a challenging season, we will come thru it on the other side, and make the best of our product and our Industry. Look for Geoff's update on current marketing activities following.

LINKS:

<https://vancouver.sun.com/news/local-news/bc-seeks-6-million-in-properties-allegedly-tied-to-illegal-crab-sales-scheme>

<https://bc.ctvnews.ca/b-c-man-gets-250k-in-fines-for-illegal-prawn-fishing-in-protected-area-1.6781442>

<https://www.theguardian.com/environment/2023/nov/30/shoot-or-shelter-why-the-return-of-sea-otters-to-haida-gwaii-isnt-welcomed-by-everyone>

<https://www.seafoodnews.com/Story/1272814/Japan-January-Marine-Product-Imports-Up-0-point-4-percent-in-Volume-But-US-Sockeyes-Fall-70-percent->

<https://www.seafoodnews.com/Story/1272712/Fishy-Business-After-Russia-Invaded-Ukraine-Its-Seafood-Industry-Thrived>

<https://www.seafoodnews.com/Story/1272694/Government-of-Canada-Invests-in-Clean-Technology-for-Fisheries-and-Aquaculture-Industries>

<https://thefishsite.com/articles/scalability-achieved-for-seaweed-based-plastic-alternative>

<https://www.castanet.net/news/BC/472662/Rays-of-hope-for-kelp-and-climate-in-south-Salish-Sea>

<https://globalnews.ca/news/10206313/fisherman-will-fransen-rescued-23-hours-ocean-watch-reflection-new-zealand/>

<https://www.livescience.com/planet-earth/rivers-oceans/10-mind-boggling-deep-sea-discoveries-in-2023>



Marketing Report/Geoff Krause Page 4

Markets outside of the US are still not looking or doing well. The US is doing great, at least by the numbers on the surface, mainly because of the more than a trillion dollar injection of funding through the Inflation Reduction Act (IRA) and the Crating Helpful Incentives to Produce Semiconductors (CHIPS) Act, but even there concerns about the spending, and about a guy with the initials DJT, are roiling politics. In Canada, as in over in Europe, the UK, Africa and parts of Asia - including the second and third and fourth largest economies in the world - China, Germany and Japan respectively- are flirting with or even in outright recession. It seems from the news that lots of people everywhere are nervous because there still seems to be no end to the political polarization, turmoil and hostility or the accompanying geopolitical games that we all cannot help but see. And all that is happening even before we are really hit by a tsunami that is predicted to come with the introduction and exponential spread of Artificial Intelligence (AI), to say nothing of the growing impacts from Global Climate Change. These are, by just about anyone's estimation, interesting times and they look to stay that way for some time.

It is easy to get wrapped up in the whole thing and get worried because there is no way to know how it might end, but that is not likely to be very constructive or encouraging. I remain an optimist and feel that it is more likely that we are going scare ourselves straight as opposed to blow ourselves up and so remind myself that in times of great peril there is also great opportunity. The way I see it, we already have to tools and technology we need to transform how our "civilized" world works and it is mainly fear of change that is holding us- humanity- back. Vested interests and "the powers that be" are seeking to preserve their place at the top of the heap but the changes now are inexorable and - again as the saying goes- resistance is futile. With that last bit in mind I feel it is better to prepare for what looks to be a dramatically different world in the not too distant future and start laying a strong foundation so we might thrive.

I am pretty sure I am just about to lose a bunch of you guys- but please - stick with me for just a little but yet. Consider for instance- the threat posed by AI to all sorts of jobs- including perhaps especially, according to a recent International Monetary Fund study, clerks, lawyers, bankers, financiers, and bureaucrats and managers in government etc. That's going to cause a lot of social disruption, especially in the upper echelons of our societies. Lower skilled jobs are likely to be similarly impacted but skilled trades are unlikely to be replaced because those jobs demand too much on-the-fly flexibility. I would point out that even less likely to get the chop will be fishermen, especially ones working out of small boats close to shore. Divers also have the advantage of being highly capable agents to directly affect Ecologically- based Management Actions to address and mitigate nearshore ecosystem failures- like -say -the ongoing demolition of kelp beds by exploding urchin populations. That is something I think will be in very high demand in the not too far future. I think it is important for the dive industry especially to keep in mind that your profession is very likely going to be critical in the future to the preservation of fisheries, and even of more general marine productivity. So, despite the difficulties this year, I encourage you to keep your chins up, build your pride and imagine how if you hang together and plan "big", your future is bright. Assuming, of course, that we don't blow ourselves up in the meantime.





Marketing Report/Geoff Krause Page 5

Bringing things back down to Earth here, we have made some good progress of late on the international marketing program. We got some preliminary numbers to go with our AagriMarketing Program approval back in mid-December and also permission to transfer some funds between years as the agreement simply did not show up in time to allow utilization of the budgeted travel support this fiscal. We were allowed to reschedule trips we were not able to actually complete this year to next year so we have lots of time to plan and make arrangements. It also means we do not have to de-commit the attached funding. That is something seen as preferred all around. It took a while but we got the Contribution Agreement back and signed just this last week so we are now officially “on the move”,

We have just one more trip to complete this fiscal- that would be the Seafood Expo North America (SENA) in Boston which starts next Sunday (March 10). Lawrence Anderson, Fraser Rieche and I are meeting Franco Chen from Great Ocean Ventures and will be carry the flag for PUHA and the PSCHA. It is hard to know what to expect there but we will all just stick to our business and get a measure of what things are really like in that part of the world. Hopefully the polarization and hostility in the media will not translate into the show and we'll manage to avoid talking politics etc.

Next up is going to be the show in Barcelona, the Seafood Expo Global. Fraser and myself are going to be joined by Thom Liptrot and Al and Barb Shanks from PSCHA to check that one out. That too is likely to provide some interesting insights as the whole of southern Europe is apparently feeling some degree of desperation because it is midst of what is described as a serious “once in 500 years” ongoing multi-year drought. This of course has serious implications for the Europe of the future if it turns out to be related to Global Climate Change as indeed recent research indicates, we don't need to talk about that now.

Our program over the next few years includes trips to Japan and South Korea, multiple trips to Barcelona, Singapore and China as well as short side trips around the Singapore and China shows to Thailand, Vietnam and Malaysia as potential SE Asian markets of interest. These latter trips are provisional, depending on how the budget is looking when the actual costs are added up. The Seafood Expo Asia in Singapore remains our single largest commitment and we are working with the PSCHA and UHA to present the best possible face to this part of the world.

Singapore itself has one of the highest per capita GDP's in the world and boasts a highly developed and sophisticated food service sector that offers great opportunity to those providing high quality seafood. They, and we, are part of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and our government is providing extra support to encourage engagement and trade growth between members. We are hoping to gain significant inroads into that market and other SE Asian over the next couple of years once more direct flights are available from YVR. Until recently, air shipments to Singapore were transhipped through other airports like SeaTac, Narita, Hong Kong and Incheon (South Korea), increasing handling costs and complicating logistics. Recent indications are that direct flights are apparently being established out of YVR several times a week in short order.





Marketing Report/Geoff Krause Page 6

I do not have a lot more to add to what Mike has said on the markets at this point, so am not going speculate. Hopefully we'll get a better idea of what is happening when we meet and mingle with US and other international buyers and clients at the SENA show next week.

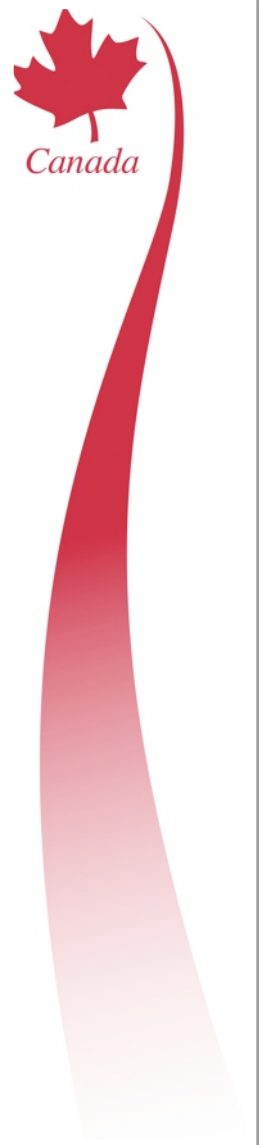
As far as the urchin control efforts to assist with kelp recovery, the Murchison Island project may have been one of the first to explicitly pilot it as a strategy but it is being adopted in other areas. Similar programs are being pursued in California, the southern coast of Australia and I believe Tasmania and Japan. I will be attending a zoom workshop Friday reviewing the Saturna Island urchin barrens and Bull kelp declines. I have heard there are other similar initiatives being discussed in BC because growing urchin barrens impacts are getting ever tougher to ignore.

That's about it for now. Good fishing eh.

LINKS:

- [2023-12-03- SciTech: Mutated tribe natural divers after developing 'sea nomad gene](#)
- [2023-12-05- NYT: China's Rising Debt Spurs Moody's to Lower Credit Outlook](#)
- [2023-12-08- PhysOrg: Study- Philippine sea cucumber may have biomedical applications](#)
- [2023-12-09- Reuters: China's consumer prices fall fast, factory-gate deflation deepens](#)
- [2023-12-10- PhysOrg: Efforts to save California's kelp forests show promise](#)

- [2023-12-12- Visual: Submerged coastlines with GCC](#)
- [2023-12-14- Foreign Affairs: All we have to fear is fear itself](#)
- [2023-12-25- SCMP: Hong Kong catering suffers 11% drop in business' on Christmas Eve](#)
- [2023-12-25- NewTraders: 10 Simple Japanese Habits That Will Make Your Life Better](#)
- [2023-12-28- Guardian: China cracks down on negativity over economy in bid to boost confidence](#)
- [2023-12-29- NYT: How a Crisis in Truck Driving Could Change Life in Japan](#)
- [2024-01-02- The Economist: Xi Jinping and China face another tough year](#)
- [2024_01_04_ G&M: Canada must face the facts: China is now closed for business](#)
- [2024_01_05_ G&M: Why are so many young Chinese people depressed?](#)
- [2024_01_06_ SCMP: It's not Beijing that's turning Hong Kong into just another Chinese city](#)
- [2024_01_13_ SCMP: Irresponsible brinkmanship puts Asia's prosperity, stability at risk](#)
- [2024_01_14_ SCMP: Foreigners who stayed during China's Covid lockdowns are now leaving](#)
- [2024_01_18_ NYT: China's Economy Is in Serious Trouble](#)
- [2024_01_21_ SCMP: Dare not spend': Consumers in China](#)
- [2024_01_23_ Indeed: 25 Do's and Dont's of Social Media for Business](#)
- [2024_01_23_ G&M: Investors give up futile wait for China to fix economy](#)
- [2024_01_23_ Economist: Few countries are better placed than Vietnam to get rich](#)
- [2024_01_28_ Economist: AI-generated content is raising the value of trust](#)
- [2024_01_29_ SCMP: China's rose-tinted growth through jaundiced eyes of wary foreigners](#)
- [2024_02_10- The Economist: China's well-to-do are under assault from every side](#)
- [2024_02_15- The Economist: The growing peril of national conservatism](#)
- [2024_02_16- G&M: Latest detentions raise renewed questions about safety of foreigners in China](#)
- [2024_02_16- Foreign Affairs: The Taiwan Catastrophe](#)
- [2024_02_17- Economist: How China stifles dissent without a KGB or Stasi of its own](#)
- [2024_02_17- SCMP: The Hong Kong of 20 years ago is gone. It's time to accept it](#)
- [2024_02_18- Nikkei Asia: Hong Kongers' fears of extradition to China are coming true](#)
- [2024_02_18- SCMP: Some background on Malaysia](#)
- [2024_02_18- SCMP: Bureaucratic logic to sharpen city's tourism edge](#)





D&D Pacific Report/Darin Macey Page 7

North Coast Fleet

- Minimal landings for the North Coast
- Vessels are working hard not to make this season one of the worst in landings since 2008
- The fleet spent the winter working against weather and market
- Currently, vessels are split into two groups fishing down in Campania and up close to Prince Rupert
- Haida Gwaii QMAs will commence mid-March with the Kelp Project
 - The east side QMAs will commence after the kelp project

South Coast Fleet

- Vessels still grinding out harvest but the market limiting landings
- Harvest from Barkley Sound and Campbell River QMAs including the group in Port McNeill plan to be active into March
- Live Market in Steveston is random around weather
- Vessels scouted the coastline of QMA 11(not the inlets) with nothing to report
- Logistics in the south coast have improved relating to offloading and trucking
- Green Urchins pushing out reds in historical red territory
- Port McNeill QMA has the first season of multiple reports of the biomass lost to Otters. First time in a long time we did not finish Port McNeill
 - Next season should see the Port McNeill QMA open around December 1st

General

- Harvest charts outstanding (past 30 day timeline) is still an issue
 - DFO is handing out tickets (similar to traffic fines) for breaches in the conditions of licence: dockside and from a desk - examples
 - Chart not filled in by midnight of dive date
 - Chart not submitted within 30 days of dive date
 - QMA / Subarea corrections by chart
 - D&D is calling everyone in efforts to eliminate this issue
 - The Whale closure zones in the Gulf Islands may see an adjustment in closure as it relates to the urchin fishery. Loss of kelp(bull kelp most likely) has locals concerned



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

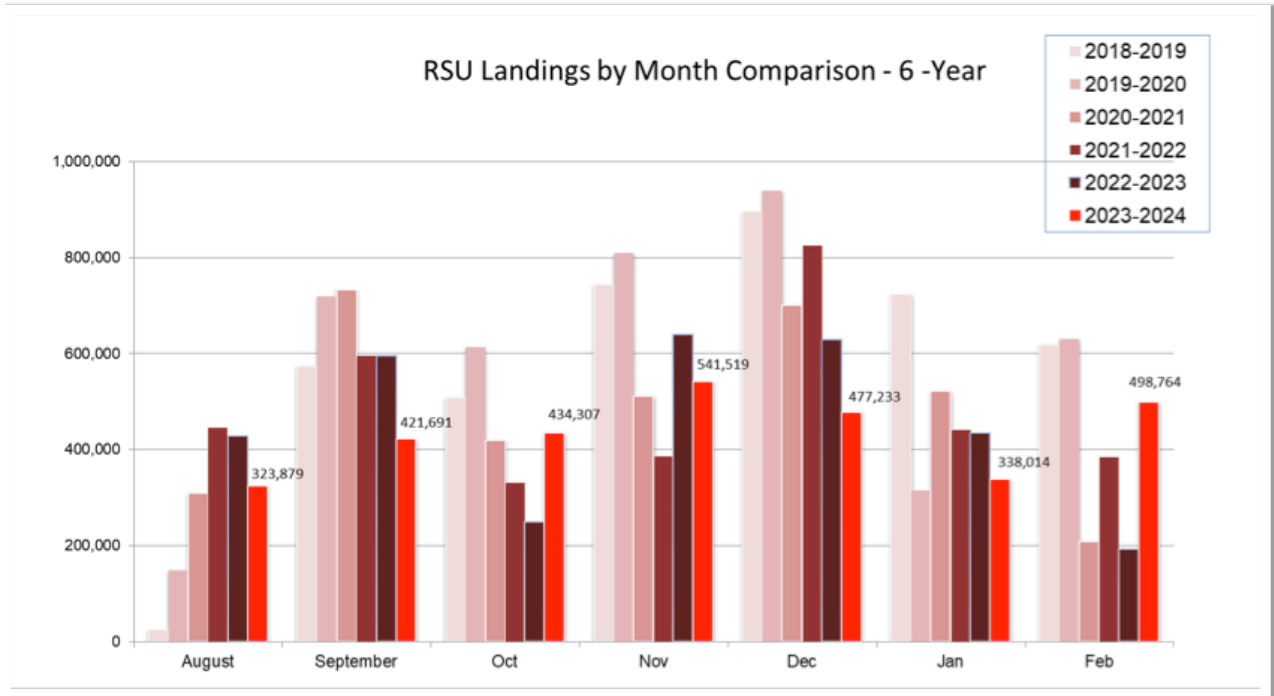


Figure 2 – RSU Landings by Season to Date 6-Year Trend

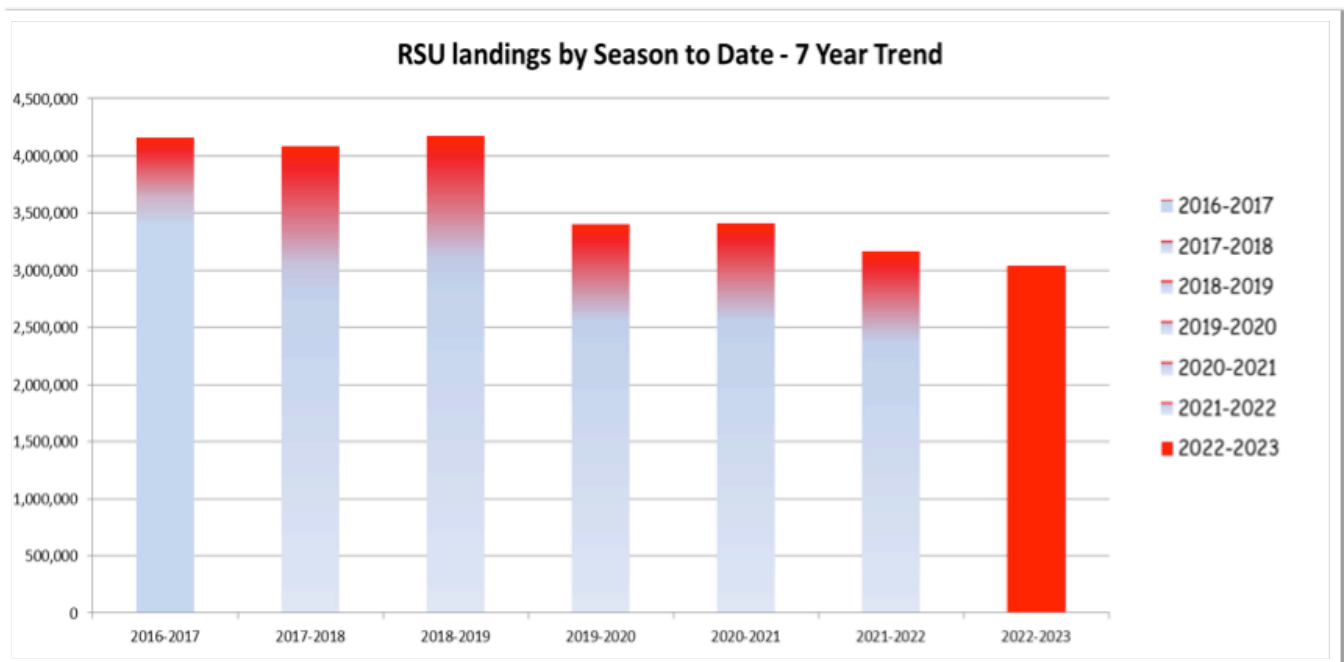




Figure 3 – RSU Cumulative Landings by Buyer – November, 2023



GSU FISHERY- 2023-2024 Season – November, 2023

- The fleet worked hard around a poor market
- October almost made up for the minimal landings in September
- November and December landed close to normal
 - Poor market had vessels cancelling last minute
- Vessels and buyers struggled to finish tabs as January landings surpassed the last two seasons
- Undersize is minimal, but we still see C&P sampling for undersize infractions down to millimetres
 - Many kelp groups involved in research, even the general public are requesting DFO to allow them to crush green urchins coastwide
- Mainland QMA 11 was surveyed (excluding the inlets) with no landings
- Sunshine Coast QMA has seen no activity since the fall
- The bulk of remaining quota is out of Kelsey Bay and Victoria and Sooke
- Currently, we have achieved 93.2% of the TAC
- Sporadic landings expected through the spring when market allows

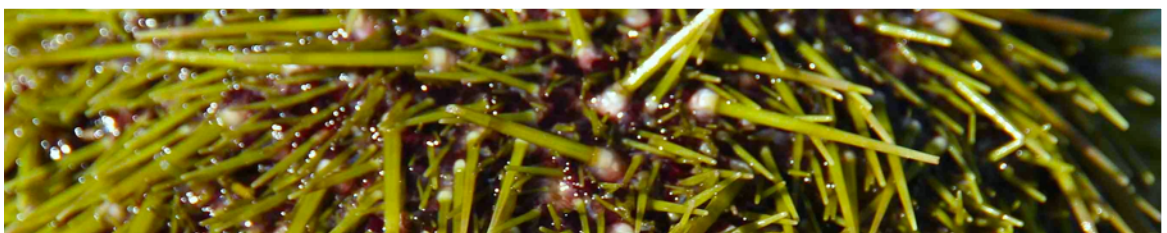




Figure 4 – GSU Historical Landings by Month 6-SeasonTrend

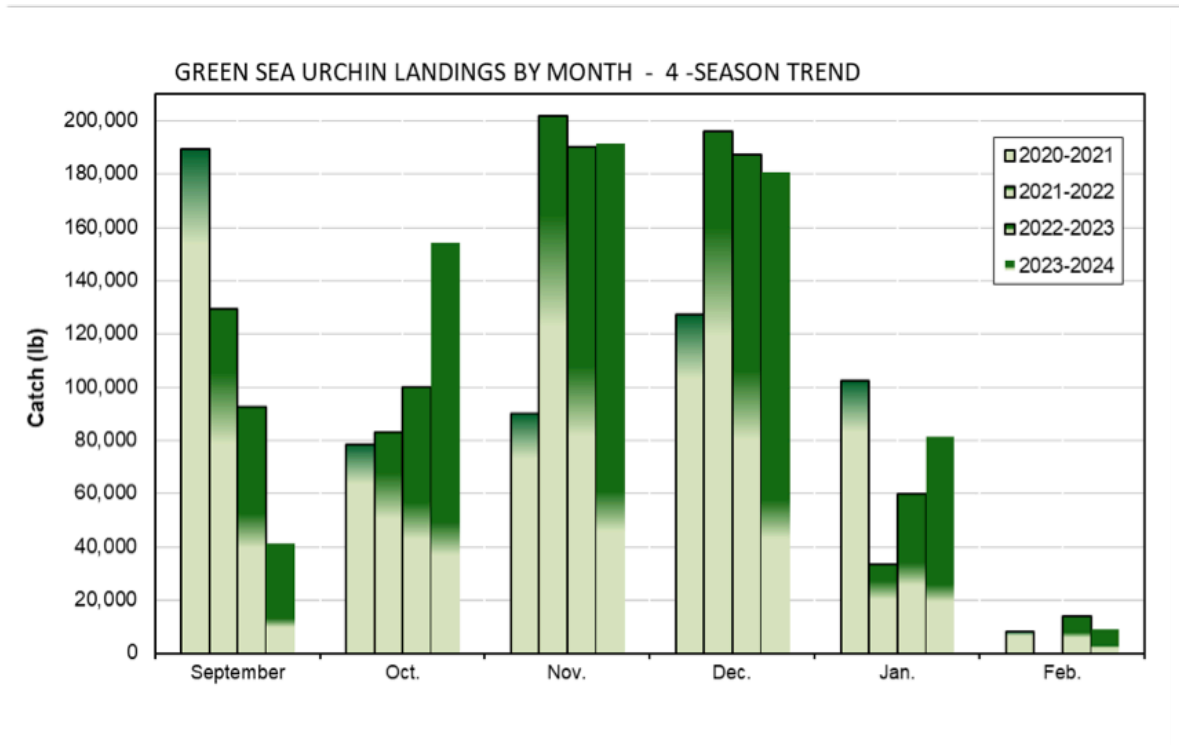
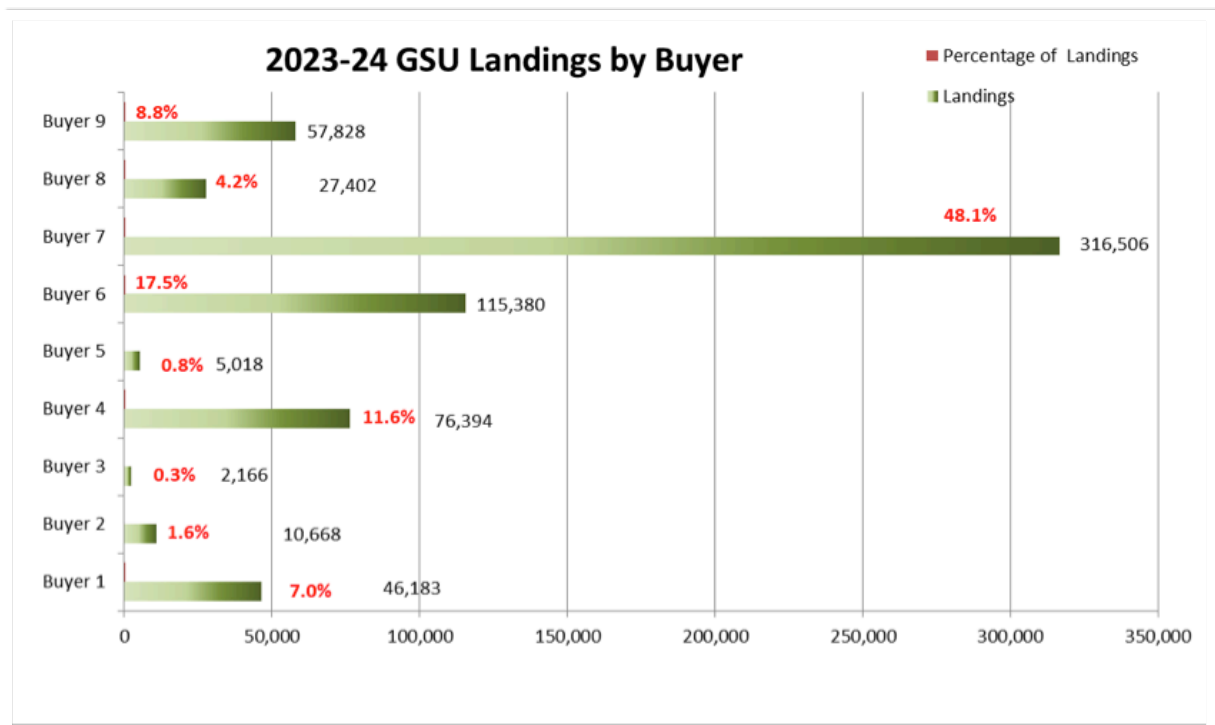


Figure 5 – GSU Landings by Buyer

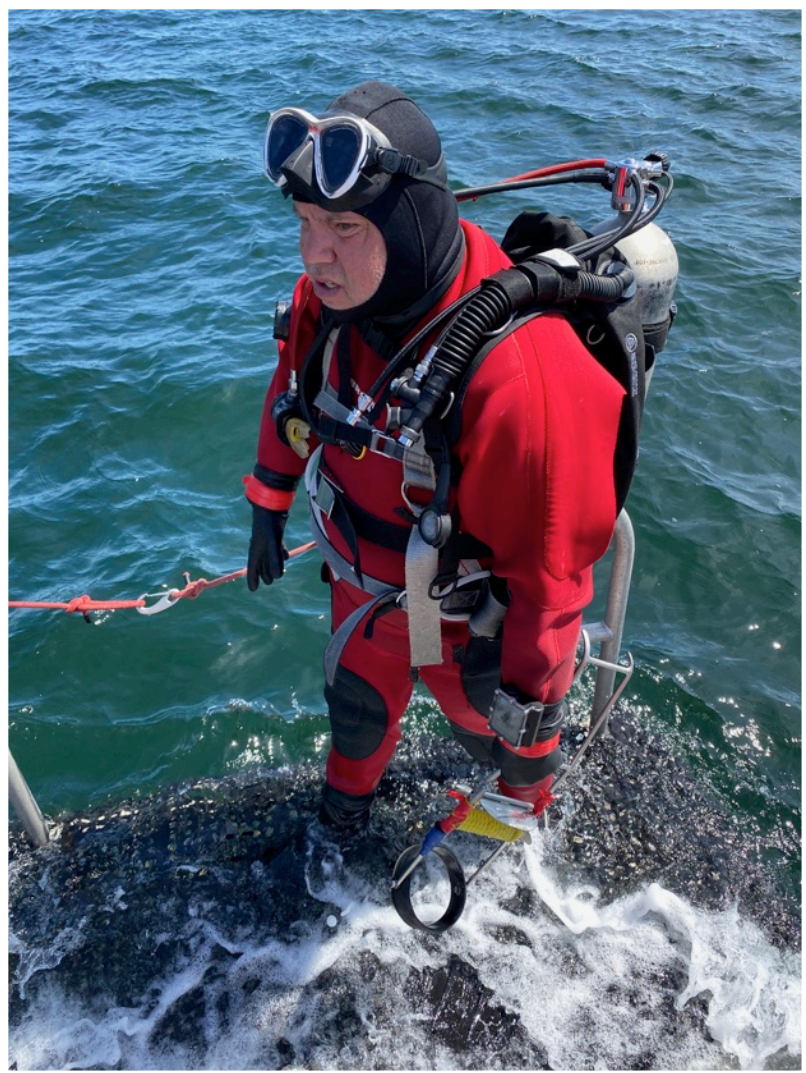




Safety & Training/Lawrence Anderson Page 11

Kudos to all the participants in the most recent SVOP course that was taught in Prince Rupert. The Red Sea Urchin Fleet was very well represented in this class. Fishsafe BC will be putting on the following courses in their Steveston Campus. If there is enough interest, they will run private courses for the Urchin Fleet on Vancouver Island this coming summer. It would be great idea if all crew members had their SVOP for compliance for Worksafe BC and Transport Canada.

April 9-12	Stability
April 22	ROC-M
April 23-26	SVOP
May 6	ROC-M
May 7-10	Stability

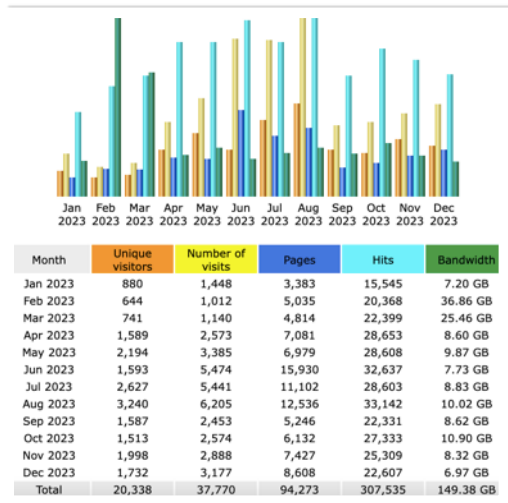


In addition; Mike Atkins, Orca Safety, Worksafe BC, and myself (Lawrence Anderson) have been working diligently to come up with a best practices manual for Seafood Harvest Diving. As of this moment this document is in for final approval. We hope to get these manuals out to the fleet by the beginning of next season with some guidance from Fishsafe BC implementing this.



2023 was a busy year in the media department at PUHA. The website was updated with Japanese, Cantonese and Mandarin translations, both webpages and video translations <https://translate.puha.org/ja/about-us/>. Instagram and Facebook have a loyal following with 728 followers and 606 likes on Facebook and 368 posts and 585 follower on Instagram. There are dm's on both Instagram and Facebook stretching from Alaska to Mexico and some on the East coast wanting more information on the industry. More local requests are: how do I get involved with the industry in terms of a career? This was the impetus for the Recruitment Page which was launched with an 8 minute video and instructions on how to enter the industry in terms of requirements and certification. A pop-up was implemented on the homepage so that when users launch www.puha.org it will re-direct interested people to the Recruitment page or click past it to the website.

The following graphs are statistics for traffic metrics on the PUHA website. The first (on left) is for the number of visitors/hits in the year 2023 and the second (on right) is who visited. In the past, August has always been the busiest month for traffic, maybe because it's the start of the fishery. When it comes to the second graph, the United States has always been #1 followed by Canada.



Locales	Pages	Hits	Bandwidth
United States	us 1,153	3,307	576.97 MB
Canada	ca 82	1,139	195.05 MB
Great Britain	gb 72	72	612.58 KB
Germany	de 71	72	314.46 KB
Russian Federation	ru 47	101	1.51 MB
China	cn 44	179	15.29 MB
India	in 43	45	1.45 MB
Spain	es 25	25	116.61 KB
Netherlands	nl 24	31	254.11 KB
France	fr 22	24	224.33 KB

Recent field work took place in Port McNeill December 16th-19th, with good participation in both the fishing activity and offloads. The weather held in terms of “blow days” but the rain made for some soggy shooting.



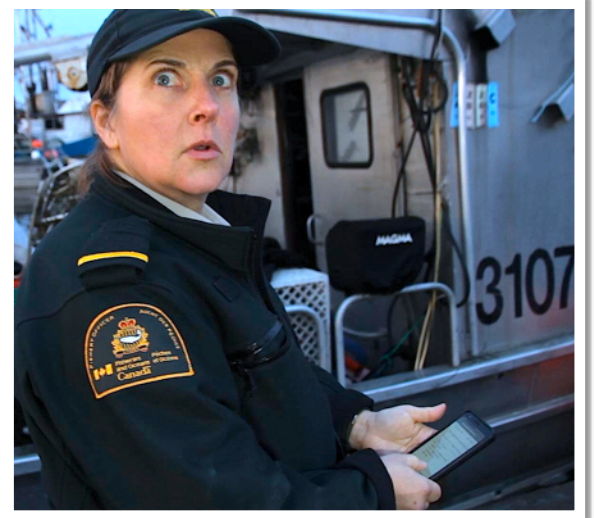
I see from Mike’s submission that PUHA is collaborating and assisting to draft a Best Practices Manual that ultimately supports a dedicated Dive Safety Officer, with Fish Safe, to facilitate and train crews in the Best Practices.

We all know that scuba diving for seafood in British Columbia can indeed be considered a hazardous occupation, presenting a unique set of challenges and risks and that employers must prioritize the safety and training of workers. Proper training programs, safety protocols, and ongoing supervision are essential to ensure that employees are prepared to work in a hazardous environment safely. It’s crucial to comply with legal requirements, invest in safety measures, and foster a culture of safety within an organization to protect workers.



One of the fundamental aspects of WorkSafeBC's regulations is the emphasis on hazard identification and control. Employers are mandated to assess their workplaces for potential hazards and take proactive measures to eliminate or mitigate these risks. Whether it's the use of personal protective equipment (PPE) or implementing engineering controls, the regulations (WCB Part 24) provide a structured approach to safeguarding workers from harm. I see these regulations are currently being rewritten, that's a good thing because some of them make absolutely no sense. In fact, some of the current regulations foster more of a hazardous workplace than a safer one.

Developing training objectives is an essential step in creating effective training programs. Training objectives define what learners should achieve by the end of the training. They provide a clear focus and help trainers and learners understand the purpose of the training. Consistency in safety communication is essential for ensuring that all employees receive the same



information regarding safety protocols and procedures.



Safety videos provide a standardized platform for the dissemination of crucial safety information, eliminating the risk of variations in the way information is presented or interpreted. Safety videos serve as a reliable tool to demonstrating commitment to adhering to industry standards.

Response Productions Inc is suggesting the creation and implementation of a 20-minute safety video to comprehensively address key safety protocols, guidelines, and best practices within the scuba dive fisheries in BC. Response Productions Inc has worked with all dive fisheries in BC over the past 25 years on a variety of projects. Most recently is a recruitment video that can be found on the PUHA website homepage www.puha.org.

Companion lesson plans would be developed that play a key role in maximizing the effectiveness of a training video by providing structure, promoting engagement, and facilitating learning outcomes. By incorporating essential components such as clear learning objectives, pre-viewing and post-viewing activities, and assessments, trainers can optimize the educational value of a training video and create meaningful learning experiences for learners.

This initiative would essentially be a Part Two of the recruitment video. Kim, Heather and Barbara at Divesafe were very helpful in drafting the objectives for the PUHA Recruitment page and use it on their website as an overview of what a Seafood harvesting career looks like <https://www.divesafe.com/commercial-scuba-diver/> (go to bottom of page) This program would ideally be built into Divesafe's Occupational Scuba training curriculum and delivered prior to participants entering the industry. It could also be delivered dockside, in-class or be available online through PUHA's Safety/Recruitment page on the website. It may also serve as a good refresher to the existing fleet the importance of dive safety protocols and procedures.

To mitigate dangers, employers must prioritize the safety and training of their workers. Proper training programs, safety protocols, and ongoing supervision are essential to ensure that all employees are prepared to work in a hazardous environment safely. It's crucial to comply with legal requirements, invest in safety measures, and foster a culture of safety within an organization.

Should you have any question or comments please send to info@puha.org