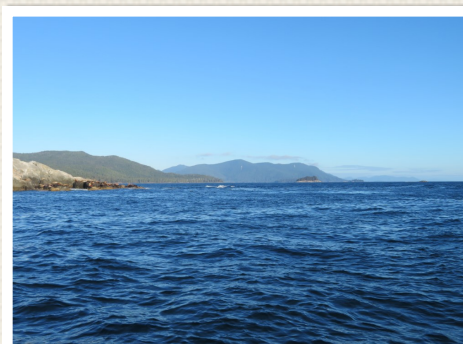




PUHA NEWSLETTER



Presidents Report Mike Featherstone

Each day on the fishing grounds our divers and crews face dangers and challenges which can result in death. In 2018, 17 lives have been lost in the fishing industry in Canada. On October 16th, tragedy struck Connor Brown, while diving for red sea

urchins near Oswald Bay in the north coast. Our thoughts and condolences go out to the family, friends and associates of Connor. At this time, the accident is under investigation and the cause of his death is not known. This accident not only

reminds us of the dangers of sea urchin diving but also of the preparations, training and certifications required to harvest sea urchins. You can read a review of the regulations and training opportunities following in this newsletter.



PRESIDENTS REPORT



MARKETING REPORT



D&D PACIFIC REPORT



Presidents Report / Continued



Our new season started in early August and the market and quality has been just ok. The landings for reds were very limited in August but picked up in September, while the green landings were good in August and September but died in October. The US market has been flooded with cheap Mexican product, product from Peru and Chile have influenced the Asian market and since mid September Russian product has flooded Japan which virtually stopped the green fishing and also slowed the reds.

With all these headwinds the demand is not as strong as last year. Nevertheless, the prices have held up and the quality seems a little better. In October many vessels switched from urchins to cucumbers and the accident in mid October virtually stopped the north coast red fishery. The weather also changed for the worse in mid October.

Currently, many boats and crews are reviewing the regulations and making sure all certifications are up to date. In this regard PUHA has organized 3 training sessions. November 3rd at Fish Safe in Richmond, November 10th at Dive Safe in Campbell River and November 24th in Prince Rupert. Please contact PUHA info@puha.org or Dive Safe info@divesafe.com to get more information on how to register for the Dive Accident Management and Oxygen Therapy training sessions.

The Articles for the PUHA Incorporation under the new Society Act have been filed and registered. PUHA also has new logo wear as motioned and passed at the AGM.

Following in this newsletter, Geoff has provided updates on the research, marketing and marine conservation initiatives, while Darin has summarized the fishing activities to date.





Marketing Report / Geoff Krause

This is going to be more than just comments on the marketing program- I have also been involved with the North Shelf Bio-Region (NSB) MPA process and the new survey programs we are now solely responsible for, so it will be a mix of all three with an emphasis on the surveys.

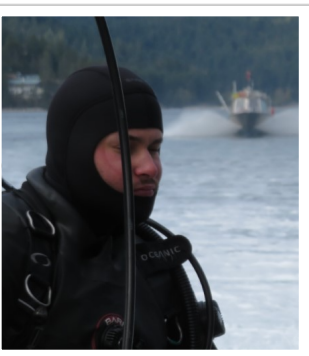
Starting with the NSB stuff, we provided comments to the board back in July that hopefully gave them some different perspectives to think about when they get to the point of laying out their boundaries. These perspectives reflect views from commercial divers and other fishers who see their future hinging at least in part on what they come up with. The Board is getting close to this point and a meeting of all the representatives is planned for early December where they will present their draft plan. It is a bit tense as they have been working on it for a few months now all by themselves and we have no idea where they are going on it. Given the tenor of the preceding meetings though there is room for hope and maybe even optimism.

Moving on to the surveys we completed, I got a call around mid-August that the planned RSU survey in Carpenter Bay was in jeopardy because DFO changed its survey policy and was now leaving it all up to the industry. They decided mere days before the trigger was being pulled that they were no longer going to participate. We managed to recover after that and get myself as the biologist, the gear, the boats and crews (Kevin Heard, Paul Derail and Darl Whayle on the FV Rave On and Dan McNeill, Ben Pennaand Juasaljnus Yakgujanaas (JJ) on the Haida Guardian) over to Carpenter Bay.



It was pretty rushed and there was no time to get much advice on what to do, but Dan Leus had provided the necessary literature and software and we managed to get the thing completed. The survey plan was based on previous surveys up there and we used all the common sense we could muster between us to pull it off. We had a nice weather window come our way and we only had the one blow day once we were there. We caught a bit of a break at the end and managed to beat an incoming front running back to Rupert.

We completed 43 transects over 4 days using the RSU Broad Brush Survey Protocols, covering depths from 50' to maybe 3-4'. These were all the transects specified on the chart supplied by Dan as the ones we should be focusing on. Others towards the back of the bay and along the inside north shore were not really urchin ground so were given a pass - a couple of transects on each side were however surveyed without any urchins being observed. We were kind of faking it with the habitat data sheet on this trip, but we had been advised by Dan Leus that it was not a priority so did not worry about it much. There were a few little glitches at the beginning, but we got them sorted out pretty quickly and collected many pages of good data.



As a general “off the top of my head” recollection, there were lots of small urchins just about everywhere there was good ground and a reasonable number of legals in select areas. The lads were saying there were few to no starfish around so the little guys basically had the run of the place with predictable results on the numbers. Some of the transects were taking 2-3 hours to complete, one on the first day was closer to 4 hours, but we figured a few things out that night and keeping them at least marginally shorter afterwards. Still- the numbers of sub-legals made it a challenge. It will be interesting to see how many of these mature to actually recruit into the fishery and if there are further impacts on the habitat (i.e. barrens transition) if numbers keep rising.

Moving on to the Campbell River Survey: the A-Tlegay really wanted DFO to do a survey in Discovery Pass in front of Campbell River before it was opened for urchin fishing. Their issue is that all the (bull) kelp is disappearing, possibly because the area is overrun with greens. PUHA voluntarily stopped fishing there about 20 years at the request of the sport diving industry but the urchins have now predictably overrun the area and the tourists are witnessing the depleted diversity and abundance of stuff they want to see. From a biology perspective, the situation provided an ideal opportunity to get some baseline data on both un-fished RSU and GSU which is not something we see that much anymore, at least not anywhere quite as handy as the Campbell River waterfront



Marketing Report /Continued

Two vessels were involved: Chris Grant on Silver Tide and one of Rafi's boats, the Reef Raff. Wes Sampson, Grant Knoppers, Luke Murray and Mitch Boyd were the industry divers while a couple of young, and capable divers, Jordan and Zach Everson came over from the A-Tlegay fisheries and participated. We completed 19 transects over 2 days, moving from 30' to zero (-ish) with depths corrected for tides. As far as general results, greens outnumbered reds by a long shot and the divers felt they even seemed to be pushing the reds out of a lot of spots. We did not get a good or definitive read on quality but the guys were saying they were pretty good, at least in areas where there was some feed for them. There were- unsurprisingly - lots of little guys- but it seemed the area could support a lot more catch than the 12K lbs. assigned to it.

At any rate, both species were measured although we used the GSU survey protocol because of the predominance of greens in the area. We focused our efforts on ground thought reasonably appropriate for urchins, not steep, not muddy, not infested with underwater hazards to divers (lines and debris from industrial operations), based on local knowledge of fishermen and shoreline as depicted on charts. We could have pushed a bit further south on the west side – south of Hidden Harbour (is it called? behind the breakwater) but I was lead to believe that it was until recently the southerly mark of the closed area so areas south of it already had data on them. We might have also done a few more to the north but the currents on the east side to the north of where we reached were reportedly a constraint as well (again according to the guys with local knowledge). All in all I think we covered everything else fairly reasonably.

I'll give myself a little plug here - one advantage of having a biologist staying on board, as opposed to being part of the dive team, is that the data can be keypunched and ready for distribution much sooner than if it is a separate undertaking after the survey is complete. It worked out OK with the Carpenter Bay survey, even though the data entry protocol was not provided until about a month later and there were some problems cropping up with the Access database data entry app, but it was more or less sorted out. The RSU and GSU database data entry apps are different from each other and the GSU app was not provided until after the survey was complete so it required some additional time afterwards. However, I now have copies of both apps and am sure I can operate much more efficiently as the survey progresses.

In both cases, the data was keypunched and passed back to DFO for analysis and processing. There really was not a lot of point in me doing my own analysis, which by the by I am quite capable of, because I am not sure of DFO's summary preferences and because it only becomes really interesting when it is part of a time series so trends can be discerned. This of course requires there be at least 2 surveys at different in the area. Dan has all that data, probably for both areas, but I do not, at least not yet. Dan figures it will be some time before he has time to complete the analysis and reporting, maybe upwards of a couple of years, which is something that I find a tad sad but it is not my call.



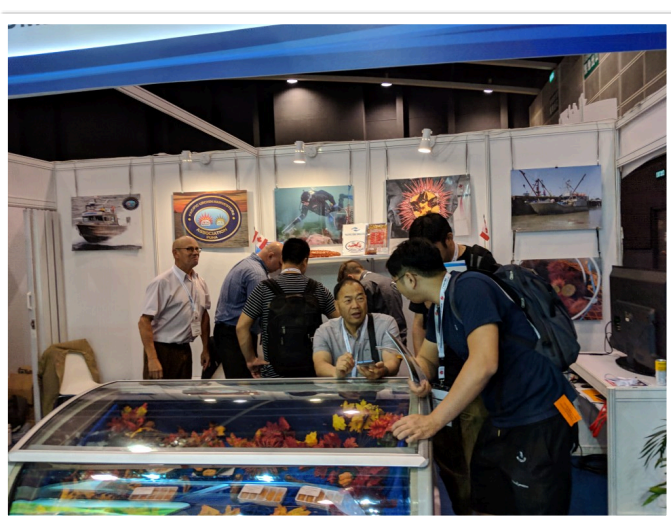
Moving on to marketing, we are still waiting word on how our proposal is faring in the approval process. I don't believe this is necessarily bad news, apparently everyone is in the same boat, but it is kind of a pain. Our new proposal includes a couple of new target countries, specifically Singapore, Vietnam and Malaysia and interestingly, the Comprehensive Trans-Pacific Trade Agreement which includes them and us has just been ratified by the minimum 6 nations required to activate it and is expected to come into effect January 1, 2019. This timing may be very good.



Marketing Report /Continued

Our proposal was submitted back in early April so we have been operating since then on spec with the assumed hope that it will work out OK. In the meantime we have exhibited at the, as reported in the last newsletter, Seafood Expo Global in Brussels, and since then at Seafood Expo Asia and now we are leaving Nov 4 for the China show. We are holding the expenses for all those who contributed in anticipation of getting approved and expect to use them on an upcoming claim to the program. Still, as mentioned, at this point it is just on spec.

With regard to the Seafood Expo Asia, 7 representatives of PUHA and the PSCHA were joined by 5 representatives of BC processors. The draft report is done but I am waiting for the approval to come through before finalizing.. At any rate, over the 3 days of the show, we catalogued contact information from 83 visitors who achieved an average qualification score of 5.35. This show remains one of our most productive based on these metrics. Again we kept things short and to the point for the same reason- approval- but we were satisfied with how things went, especially given the volatile trade environment we find ourselves in. The still evolving trade dispute between the US and just about everyone else but most particularly China, is unsettling to many businesses and a lot of trade around the world so everyone is kind of focused on what various outcomes might mean to them.



Mike Featherstone, Dave McRae, Pat Fantillo, Paddy Wong and Geoff Krause are away to China shortly to represent PUHA and the PSCHA at the China Fisheries Seafood Expo in Qingdao. This is likely going to be a very interesting trip, for the above mentioned reason if nothing else, and we are again hoping for some insightful discussions on new and growing opportunities in China and other parts of Asia as a result.



D&D Pacific Report

RED & GREEN SEA URCHIN FISHERY SEASON UPDATES

North Coast Fleet

No activities in August, and fishing did not start until the 6th of September in Bonilla. With enough boats in the fleet, and buyers sharing a packer, daily trips into port eliminated multiple day loads of multiple packers. Good for the product, good for the fishermen.

With the start of the Sea Cucumber fishery in October, the Red fleet shrinks dramatically but we managed to land over 500k in October. Down 100k approximately compared to last season. Nineteen vessels in the north coast have been active to date.

Water temperatures in the north coast around Area 4 & 5 have reports off of Stephens Island of 14 celsius at 100 feet. And Tree Knob showed temperatures of 16 celsius right to the bottom.

South Coast Fleet

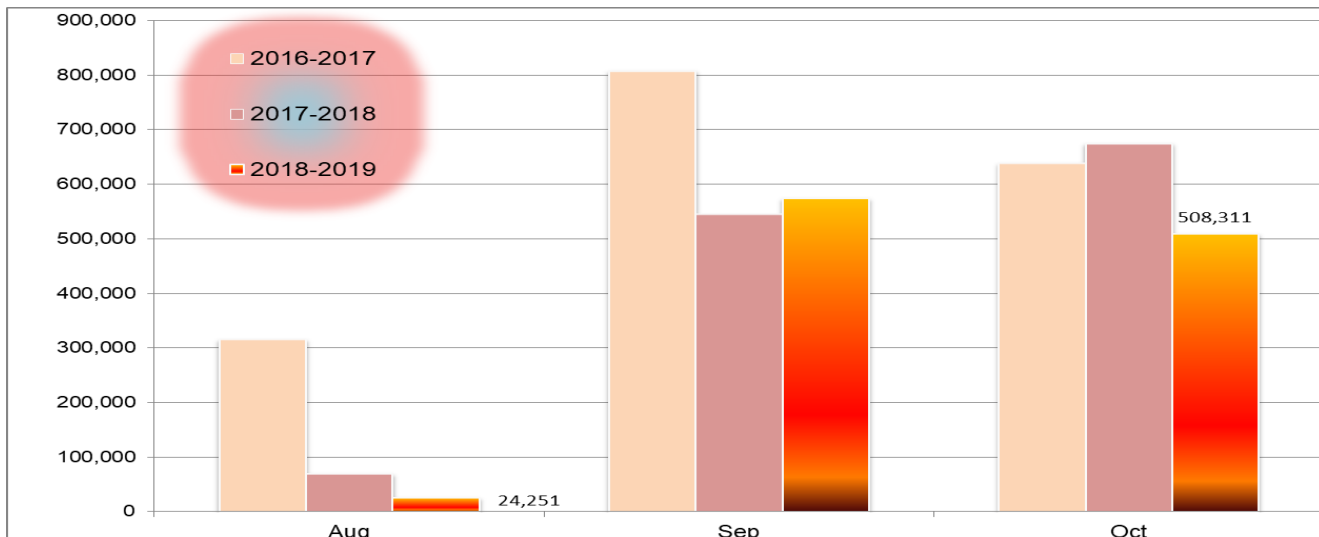
11 South Coast vessels have been active to date. Vessels were active in QMAs around Sidney, Victoria, and Sooke in August, and attempted the QMAs around Campbell River in September, but quality was poor.

The Survey in Discovery Pass was completed in September, but the area has yet to open as the process within DFO to open the QMA is stalled. As a result, the fleet had to move north to Port McNeill QMAs (excluding 12K Port McNeill) to continue fishing.

With the start of the Sea Cucumber fishery in October, the Red fleet shrinks dramatically, and as a result minor landings occurred. The fleet is active again in the Campbell River and Port McNeill QMAs.

12K Port McNeill is scheduled to open as planned in December. D&D anticipates a request to open 12K sometime in the first two-weeks of December.

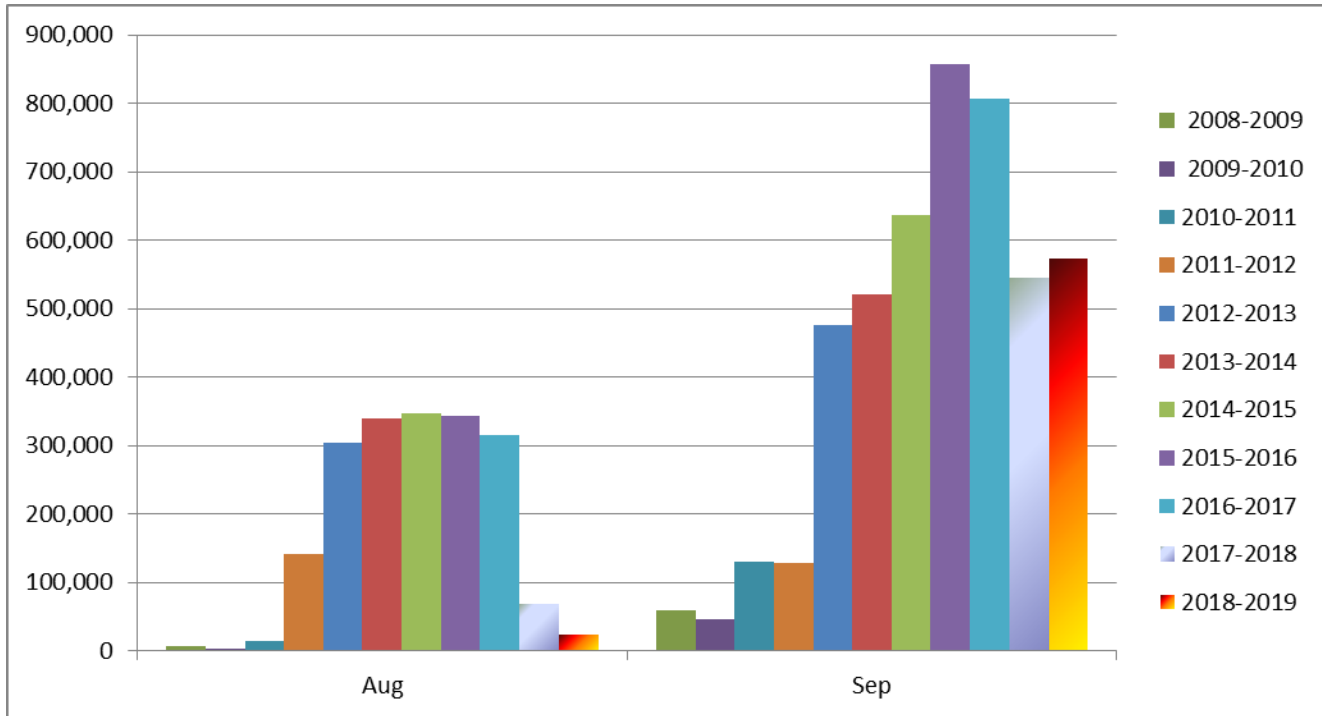
Figure 1 – RSU Comparison by Month - 3-Year Trend





D&D Pacific Report/Continued

Figure 2 – RSU Two-Month Harvest Comparison – 11-Year Trend



2018-19 GSU FISHERY

The 2018-19 fishing season started off with multiple vessels active. Not as good as the 2016-17 season but maintained high harvest levels. The Campbell River QMAs were fished first as the Victoria area QMAs seemed to be not ready (quality) as in past seasons.

The Survey in Discovery Pass was completed in September, but the area has yet to open as the process within DFO to open the QMA is stalled.

Nine Vessels have been active to date. Some vessels with multiple tabs have already finished.

The market seemed to be soft during October and currently minimal activity in Port McNeill with four vessels starting to land product again after the start of the Sea Cucumber fishery.

Five buyers have been active to date in the GSU fishery with one buyer dominating the landings.



D&D Pacific Report/Continued

Figure 4 – GSU Landings by Month – 3-Season Trend

