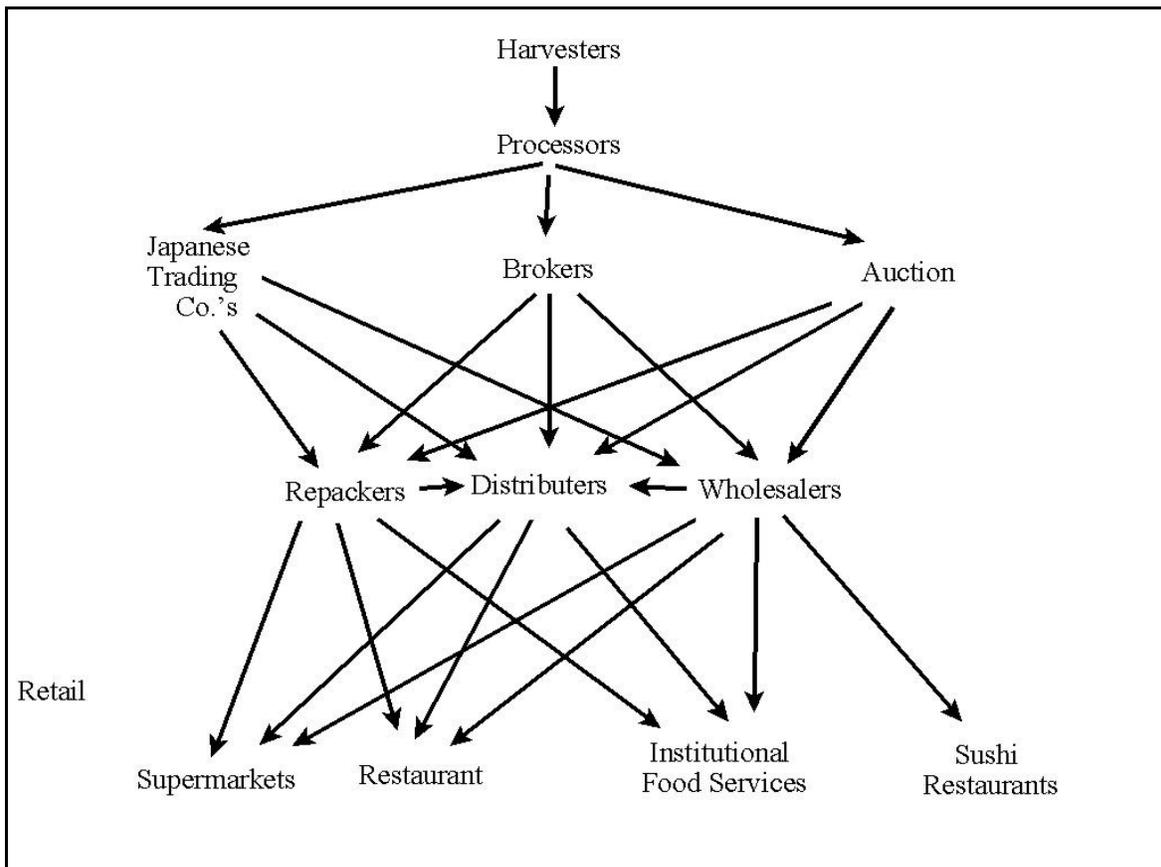


## Appendix II: BC Sea Urchin Processor Survey Results





This is a schematic of the market structure for BC sea urchin products in Japan which shows the possible movement of product from the fishermen, through Canadian processors and into the Japanese market. There are a whole host of optional routes to the consumer once the products have reached the Japanese market but because Japan, like many if not most other countries, has been traditionally known to use obfuscation and other methods to hide the structure and performance of their markets as a means to limit market penetration by foreign companies, information on particular issues that might be of interest on the Japanese seafood market is limited. There is, at present, little information available to BC urchin producers at present on the players at each level, the product mix and the respective prices, the proportions following the different pathways to the consumer and/or the margins built in at each level. The mechanisms currently available to fishermen to get feedback from the various users of their product, including Japanese buyers, re-processors and/or consumers, are limited.

The basic tenet of effective marketing is figuring out exactly what the customer wants, supplying it to them and letting them know that you are supplying it. We are unfortunately stuck at the first stage. BC sea urchin products are sold to a variety of users, each with their particular preferences on characteristics including grade, price, packaging, etc. This information is out there and could be used by all the way back by fishermen to plan and coordinate their harvests to the needs of the markets, for example by fishing historically lower grade grounds for products destined for bulk markets while saving the hi-grade areas and production so it can be tailor- fed into the market on a schedule based on projected demand and supplies from other areas to maximize price. At this point, however, such information is not circulated amongst Canadian industry and harvest returns essentially remain a crap shoot. This means that only average prices and average values pass through the supply chain to provide average margins and benefits for all participants and that the utilization efficiencies of the resources involved, including natural, capital and labour resources, are sub-optimal.

This runs completely counter to the prevailing pursuit of excellence advocated and adopted by national, international and industry authorities as being key to successful and sustainable (environmentally and economically) business practices in the 21<sup>st</sup> Century. This is not a zero sum game- optimizing the returns from the fishery, if only by reducing waste through tailored production, will benefit all levels, harvesters, processors, Japanese enterprise players as well as the final consumers.

## **Summary Findings from Interviews of Canadian Processors**

**1. Product Quality: One of the biggest variables facing the industry is getting better quality and recoveries.**

**a. If you can get better quality and recovery, can you sell more premium grade product, improve earnings and pay higher prices? Yes (V)**

**b. What are your ideas to reach this goal? For the harvesters? Unloaders? Processors?**

Pay on Value- A number of companies buy on value and accept deliveries from only a few select boats and so maintain control over volume and product quality. (I)

The harvesters and timing the harvest for the optimum season when recoveries are maximum. for each area (V).

**c. Is this the single most important factor in increasing the value of the fishery?**

Recovery: work on water loss.

Need to get feedback info from market (to processors and fishermen) on what is and is not working (V).

**d. If not which other factor is more important?**

**2. Value Chain: The value chain encompasses all the aspects of the fishery from the primary harvester to the end user either in Japan or in the domestic sushi bar. The poultry industry was able to drastically improve profits by improving the value chain. They worked with consumers to identify needs and followed it back to the primary producer. For example, a certain size bird with specific characteristics met the needs of the processor based on the end user needs. With the standardization of primary product it improved yields and applications. Further the processors adapted package sizes and added speciality cuts and packs.**

**a. Are there any examples you can think of where a similar situation could work in our industry?**

**b. What are the costs in our value chain at:**

- i. 1<sup>o</sup> harvest:** \$ 0.60 - 0.80 (I) (5% recovery to break even)
- ii. Packer:** \$ 0.15 (I)
- iii. Unloading:** \$ 0.04 - 0.045 (I)
- iv. Trucking:** \$0.10.- 0.12 based on 30 -33,000 lbs/truck (I)
- v. Processing:** cracking \$0.35 (I)  
Spoonng \$ 0.25 (I)
- vi. Packaging:** Tray \$0.50  
Bulk \$ 0.45  
plus material costs: eg. trays and bulk trays cost up to \$ 0.40 each, x 42/carton, + plastic liner, ice packs (3 @ \$0.25), carton etc. (I)
- vii. WCB:** Varies but 5.01% on plant payroll and 6.115% on harvest wages (I)
- viii. Shipping:** Freight- \$3.50 /kg- in Japan is very expensive, particularly if winds delay flights as all overtime charges etc are passed along. (I)
- ix. Tariffs:** Tariff rate is 7%. The Custom's inspection fee is ¥11,000 for any size shipment but warehouse fees, brokers fees, consumption tax, handling fees etc crank these charges up to about ¥ 26,000. If arrival times are delayed additional overtime wages of about ¥5,000 will also be added on. (II)  
Customs clearance- ¥ 30,000/shipment no matter what size (I)  
~ 24% of the transaction revenues are required to cover off the tariffs, auction charges, consumption taxes etc. (I)  
GSU are shipped live and no duties are applied so smaller shipments make sense. (II)  
tariff = 7%; consumption taxes = ~5%; there ae also charges for trucking, handling (warehousing?), bank charge etc (III)
- x. Auction:** Tsukiji cost is 5.5% of the auction price. (II)
- xi. Others**

Bulk pack cartons have 5-6 kg net weight while with the styrofoam and other packing materials brings the gross up to about 10 kg. (IV)

Note: There is a simplified tariff system for low-value imported freight valued at less than 100,000 yen, such as small packages for personal imports, simplifies determination of tariff rates. This system also eliminates the extra time necessary to classify the product and its precise value, and thereby minimizes customs brokers' handling charges. Importers can choose either the normal rate or the simple tariff, which could be higher or lower (Anon 2001b).

**c. Considering these costs, do you see any potential opportunities for savings? ...besides simple cost cutting?**

Diversification by processors is a stabilizing factor. It allows spreading of overhead and other fixed costs and extends the operating seasons making them less dependent on the urchin markets and more capable of handling periodic price lows. (II)

**3. Market Aspects: Books have been written on marketing and consultants make millions advising clients on all aspects of marketing. Underlying themes seem to be consistency, reliability, quality and ...**

Markets for uni and pork are fundamentally different because uni is eaten in significant quantities only in Japan. (II)

The Japanese uni market is declining and the appropriate strategy must focus on increasing market share (Canadian Embassy Staff).

**a. When you look at our industry what do you think of our current marketing strategy? ...your own company's strategy? Other companies' strategies?**

There is no collective or regional strategy and everybody is basically on their own in BC. (I, III)

A couple of companies maintain that it is important to provide buyers with no more than 90% of what they ask for to keep them a bit hungry. (I, III) and to cater to markets outside of Japan. (III)

Some companies claim to always fully sell out because they have established a reputation for grading honestly and generally producing high quality product. This has a marketing payoff but they still consider themselves somewhat vulnerable to being identified as a BC producer because of sub-par grading and processing by others. (I)

A number of companies have a stated floor price below which it will not sell. These account for all production costs and set their floor price in that light. (IV). Frozen production is difficult because the costs of production are inherently higher (IV) even as the bid prices are often substantially lower (I). Many companies intend to increase their production proportion of

premium product to, say, 40-50% from the current 30%. Some companies report that approximately 60% of their production is trays, 20% bulk and 20% comprises different packaging to other markets.

It is much better to sell at a set price, as opposed to on consignment and some companies will not send out product unless a base price at the very least has been agreed to. (IV) In these cases the invoices from some processors to their Japanese buyers include a base price of say \$5.00/tray which is the low price commitment for the product. The Japanese company can then sell it privately or through Tsukiji at their own discretion. If the product sells for more, the invoice is topped off with the additional revenues.(III)

Some companies are reportedly selling lots of product on consignment and therefore have no control over what prices will be paid. Re-packers are irresponsible because they are deliberately auctioning poor quality product. (This is complemented by results obtained for Question 3-j).

**b. What is the relationship with your best clients (customers)? Level of trust? Long term relationship (or time of)?**

Very good- 10 + years. (I)

Some of the industry's customer relationships have lasted for 20 - 25 years. (IV)

Some Japanese trading companies are changing their approach and replacing the buyers working each market on an annual basis to prevent the development of personal relationships between individual buyers and suppliers. (IV) This suggests that the hard-ball approach is being further emphasized by these Japanese companies and that the basis of the relationship is moving further towards a strictly dollars and cents valuation and trust is a declining factor.

**c. Do you supply different products to different clients?**

Companies with open, trusting relationships with their Japanese buyers often develop a Joint Strategy with their Japanese primary on what grades, how much should go to different customers in Japan. A number of these trading companies sell direct to retail with very little to other product going to wholesalers, re-processors etc.(I) although most BC processors have only limited amounts of information available to them on the particulars of their customers and delivery profiles for their product in Japan.

There are only 3-4 types of customers: supermarkets, (sushi) restaurants, family restaurant and re-processors. (II)

Osaka has a few urchins and are less discriminating as to particular quality aspects. (II)

Yes- bulk and trays with more packing anticipated for Canadian firms (V).

**d. What sort of feed back do you receive from your clients?**

Some companies get lots of market analysis and projections (I) while others do not. Comments regarding quality are rare except for the lower grade categories when dissatisfaction generally focuses on a need for a lower price to cover off a value decrease.

When times are tough, consumers will pick the brand they know. (I)

“Value for money” is the paramount criterion for customer satisfaction (I), at least at the consumer level, and Japanese consumers are well renowned for their willingness to pay extra for higher quality product if it is perceived as a superior value. Other “intermediate” customers include other considerations based on for example, ease of re-packing, high-grading potential, contribution to profitability etc.

Many processors maintain that the licence holders get all the money from the fishery and everyone else must pay more to cover off these costs. Buyers are losing interest in the BC uni fishery because the prices are too high. Processors have been using this line for a number of years as an excuse for not lowering prices. (II)

The changing currency markets is increasing the number of calls for price reductions- all the urchin trades are in US \$ but the market sells on quality and price. (II)

Global situation and weather (V)

**e. What level of interest and how much knowledge do your clients have of our BC industry? What sort of knowledge?**

Most companies with a long term presence in the BC market are very interested in BC industry (I, III) but also have many other global interests which may well end up as competitive sources for the same products.

Everybody in the business knows everybody else over here and over there. (II)

Weather (V)

**f. Do your clients feel our Industry is responding to their needs? What are their needs?**

Pretty much (I)

There must be staged movement of product from the grounds to the processor and then on to Japan. (I)

Suggest a smaller size for Canada. Changes in regulations have allowed this as a new standard for the last couple of years. (II)

No, their most regularly claimed need is for a price reduction. Japan is now focussing almost solely on price - contrary to the search for value proclaimed as the new grail for ensuring sales in

Japan by many other sources. Even 'A' grade customers are complaining about the high costs of the product and prices have, as a consequence, been declining bit by bit over the past few years. (III)

Many of the re-packers in Japan are pressing for lower prices so they can maintain their own margins and survive in the face of price concessions demanded by retailers. (III)

**g. What can we do better to meet their needs?**

**h. Do you get many enquires from outside your current client base? From outside of Japan?**

**i. Where do you see as our greatest potential for growth?**

Taiwan and Hong Kong are steady. Hong Kong has more potential because of increased shipments to Japan.(I) and China

Some companies move poorer grade products to alternative markets to escape the low Japan prices for these (IV)

US has a large Japanese population which want and are willing to pay for high grade product (V)

**j. A few years ago some processors competed on Tsukiji by supplying a top quality tray and the results seemed to boost the value of Canadian product in the eyes of Japan. Is it worthwhile to re start this program and would it improve the reputation of the Canadian product?**

It may make sense to get all companies to submit a portion of their product to Tzukiji to get a transparent (this is generally heavily qualified) idea of how the assigned quality rates in terms of the actual market. (I). On the other hand, Tsukiji is a community of sorts, a community of some 40,000 people who earn their living solely through the seafood sales, and that any and all product diverted there supports that community. Given the egalitarian nature of Japanese society and their willingness to spread the wealth, one must wonder whether products are directed through that market out of a sense of obligation to their historical roots in which case the contribution may be extracted at the expense of the exporting company, or whether a transparent market price is obtained as claimed by the proponents. A number of exporters here claim that the reputed transparency is a joke (III), that there is no accountability in Tsukiji and that it would, in any case, be very difficult to enforce. BC does not have to sell its products at scandalously low prices. (IV) and if we get beaten up on the price for 'A' grade product in Japan, it will put further downwards pressure on contract sales prices, particularly if the auction price and the trail grade are established as 'normal'(IV). In short, prices are inconsistent and it is a risky strategy (V).

At any rate, one processor cannot do it alone- last time it was tried the company got screwed by a competitor from BC taking advantage of the initiative in the Japanese market which did not live up to the required standard which was the key component. (I)

**k. What are the best ways to reach the Japanese consumer with our message? Video? Trade shows? Branding?**

Retail customers, such as supermarkets, ID Canadian product as such while others, such as sushi restaurants, do not. It may be possible to do in the latter case but it will require some imagination. (II) At any rate, the customer is “King” in Japan and any effective marketing buzz must start with the consumers to increase demand and prices. The primary trading companies have no interest in promoting quality in Japan (because of the structure of the market- they have their luxury market and need the broader market to unload less-than-perfect product without letting broader expectations of consumers get too high).

The lack of interest of many of the Japanese majors in building the market for BC urchin products is underscored by the lack of assistance or effort by the Japanese side to control the market or to stabilize prices. They will not indicate any limits for production or acknowledge that producers should hold off on production until prices increase even when they know the market is soft but will cancel orders with only a moments notice and no warning. (III)

The primary Japanese clients sell primarily downstream but Canadian processors in most cases have no contact with Japanese retailers and most do not feel we are reaching the consumer level. A company such as Ito Yokado, a significant Tokyo area supermarket chain with a history of preferentially selling Canadian product ( & which also owns 711 Japan- the largest convenience store chain in the country) might make a good promotional partner. (III) Ito Yokado is a very good customer of a number of BC companies and some are listed in the company’s literature but there are also rumours about some primary Japanese trading companies supplying diverting product from other less expensive sources and delivering it as part of the BC product mix to the company.(IV). The new and evolving traceability requirements will limit or even eliminate this sort of activity in the near future.

We need to find out the best way to get the information in front of the consumer. (IV)

It may be possible to adopt the use of on-table “promo tents”, coasters etc to raise the profile of BC seafood products in Japan bars etc- some fun stuff? (I) Video and stickers may not be useful and the sales promotion effort may require involvement of government or other ‘wider’ interest organisation for larger financing. (II)

A 5 minute video by Kiku is very good but comprises only the harvesting sequence at this point. This will be expanded to include the processing, transport and retailing points in the future. (IV) It is interesting to remember that country music is big in Japan.(II) and that Canada in general, and BC in particular, might be able to play up this up a bit.

**l. What is the message we need to get across?**

Qualities to push include superior taste, clean growing waters, sustainable fishery management, high sanitation standards for processing operations, HACCP approved plans.(I) Marketing must strive to highlight the value of the BC product as a completely modern fisheries product, in terms of product quality and the expenditures made to ensure only the product is harvested sustainably,

that you get what you pay for and that the prices to the Canadian industry must see an increase or the industry will enter a death spiral. (IV)

Clean water, hygienic processing conditions, sustainable and responsible management are all Canadian values and should be used to promote Canadian product at the consumer level. (IV) Canadian adherence to these is well established in the Japanese consumer's mind (II) and will be fairly easy to validate and/or reinforce as part of an effort to justify the higher value of the Canadian production. One comment obtained from a Japanese buyer was that we must **get the quality and earn the price**. Japan needs Canadian product because we are very conscious of the hygienic issues and our product tastes very good when it is properly addressed. (II)

**m. What is your understanding of current prices?**

B2 grade bulk from Canada is worth about \$35/carton right now (vs \$40- 45 mentioned by others) (II)

Prices for Chilean products are about \$ 40 for "A", \$30 for B, \$20 for C. (II)

Chinese prices are more than Chilean and quite close to Canadian. (II)

The US has high prices but very high quality. All Californian production is trays with no bulk production on the export side. (II)

Canadian: 'A' grade bulk should be about \$60/ carton but there is no 'A' grade bulk production at this time. (II). Average price about \$55/kg and set to increase by \$2.00 in December (V).

**4. Distribution and Consumption: Where the product ends up and the final end user requirements are important not only to marketing but also to processing and harvesting.**

**a. What are the various types of sales (trading companies, wholesaler, distributors, supermarkets, restaurant chains), how would you characterize your sales ratio? How do you characterize the price ratios?**

There are only about 5 major trading companies bringing seafood into Japan. These are mostly very large companies and sea urchin represents only a small portion of their activities. (I) There are 4 - 5 main traders: Ocean Traders, Nishin, Maruke (Global Eight) and Takane.(III) Global Eight is the importing arm for Maruke which exclusively re-packs uni. They drive tough bargains and have been known to squeeze so tightly that long-term Canadian suppliers bail. Takame is likewise very big on supplying its own re-processing operations. Marine Foods is another very large sea urchin purchaser.(I)

There are also a number of smaller companies which are said to compete only on price. (III) (although the small size of such firms suggest that the company's business contacts will be very

personal, perhaps providing some additional leverage in maintaining the relationships on both sides, and that the personal attention to each client might provide a competitive advantage in terms of service).

There are a limited number of buyers in Japan but there are quite a few 'small outfits' which need to be identified and contacted. (IV)

**b. How many various clients would you sell to? At what levels?**

2- trading companies.

**c. In geoduck there is a 2 tier system where only tier 1 gets the product direct while other customers are supplied through tier 1, is there a comparable system in urchins?**

Most Canadian processors supply many clients through their primary buyer and most find it is necessary to discriminate on what goes to whom and to demonstrate loyalty to the largest and most valuable customers. The exclusive relationship traditionally goes both ways and all the seafood products supplied from Canada to that trader go through the prime supplier (I) In at least one case the primary supplier is completely up front with their primary buyer but know all of their end buyers through the primary buyer (I)

Big name supermarket companies are drawing competitive bids from a variety of suppliers and prices are on a downward spiral in the race to increase the volumes, driving discounts and squeezing profits from suppliers. They also have more "relaxed" relations with established business partners and are more apt to abandon their partners on a price : value basis. (II)

Nishin has few strong relationships and is constantly on the lookout for cheaper source. They are apparently very willing to abandon established suppliers on short notice. (II)

Traditionally, established trading relationships set distribution patterns and sidestepping partners to get at a new source or client will cause rupture of old relationships. (II) These exclusive distribution networks are quickly breaking down however and a number of companies are trying to accommodate all comers. (IV) (Also see Question 3-b)

**d. Do the biggest players distribute nationally?**

Yes, companies like Ocean Trader distribute all over Japan. (I)

**e. How much market share do the largest players have?, how many are there?**

**f. What degree of re-grading and repacking occurs in Japan?**

What ever they can- they too are trying to keep their plants busy and financially solvent.

Even small trays get re-packed. For example, 48 tray cartons must be broken down so each store gets 4-5 trays. They do not have extensive inventory areas as do stores in Canada. (II)

Virtually all trays are re-packed so the grading can be reconciled with the Japanese system. (II)

## **5. Demand trends: Identifying what the consumers need could help the industry meet those demands.**

The market does not search out product any longer and aggressive marketing is required. (IV)

### **a. Is there more demand for bulk or tray?**

Trays predominate trade (II) and bulk packs are declining in importance. Re-packers price margins are no more than 20- 25% while those of retailers are often in excess of 50%. Price competition from low cost suppliers and intensifying squeezing from retailers is increasingly causing problems, bankruptcies and generally driving operations offshore where wages are lower. (II)

Both- but the most volumes goes in bulk allowing the development and adoption of a month-long shipping schedule in advance (V).

### **b. How many different pack styles do you ship and what is the target market?**

BC companies generally pack trays between 30g to 400 g depending upon the market. Many consumers want no more than 30 g when they pick up for dinner at home while sushi chefs do not display trays so they can be larger. (II) Some companies produce mainly 60 and 80 gram trays which are marketed directly to supermarkets. (I) but the sizes also include 40, 50, 60, 70, 80, 90, 95, 100, 120, 200 and 280 g trays as well as bulk sizes. (IV) Korea has different packaging requirements, and are unique as are many other Asian countries. The same holds with the US market. Packaging is always important.(IV)

5 styles of tray: wooden, plastic and bulk- different sizes. (V).

### **c. What are the factors which effect demand and does this change during the year?**

Demand and prices seem to increase at the end of the year and Christmas and during festivals (V).

There has been no jump in the prices for trays around Christmas for the last few years- mainly because of abundant supplies from Chile and Russia. (III)

**d. Is there different demands for reds and greens? Are there different clients for red and greens?**

Processing 1,000 lbs of greens is like processing 5,000 lbs of reds but shipping live is a piece of cake. (I)

Saito is a green urchin processor. (III)

**e. What breakdown do you estimate goes domestic, Japan, other markets?**

Sales ratios directed towards Japan range from about 70%.(III) to 80% (IV). Some companies report that about 20% of their product goes to Asia, primarily Hong Kong or Taiwan, as well as to the US and some to the EU. In many cases the amounts remain unclear even to the processor because their primary customers, whether in Asia or the US hang on to that particular information (IV), underscoring the benefit of finding customers directly. Other companies report they used to do well in the US market but domestic competition is winning more market share. (III) Hawaii was identified as one hot spot in the past when Japanese tourists travelled more extensively to Hawaii and helped build a local market for uni. The economic downturn in Japan and international uncertainties have seen this travel curtailed dramatically. (III)

The local market is not interested in buying the 'A' grade material. (III) The number of Japanese restaurants in Vancouver peaked about 4-5 years ago and local demand limits are holding back growth. The focus in the local scene also moved to price and stayed there with a downwards spiral continuing. (III)

90% japan, 10% US (V)

**f. What are the significant trade patterns between different levels?**

**g. Is freezing product beneficial for the industry?**

Freezing cartons generally reduces the value by 50 - 75% (i.e. from \$40 to \$15 per carton). (I)

The market for frozen product is generally restricted to the Christmas period. (I)

Maintaining a temperature of -60° C eliminates problems with oil migration. (I)

**h. What are the implications of new traceability requirements?**

Tracing does not need to start in the grounds because it is easy to tell freshness. (I)

Traceability has changed the Japanese practice of labelling uni from live GSU from Canada processed in Japan as a Japanese product. It must now be identified as a Canadian product. (II)

## 6. Processing:

### a. What grading standards are used by BC processors?

Some BC processing companies use a derivative of the Japanese grading system for their operations. This grading system is based on two major divisions, A & B, which are then further subdivided according to their colour, Red(dish) or Yellow, and hue (New, Dark and Dark- Dark). This produces a grading system with 12 categories as follows:

A		B	
NR	NY	NR	NY
DR	DY	DR	DY
DDR	DDY	DDR	DDY

Males and females can be differentiated by the size of the grains and texture. Females are more yellow and have a higher water content than the males. The male uni is generally reddish with smaller grain, has a lower water content and is often preferred because it has a longer shelf life. (I)

uni with a dry look and rough surface have good quality indicators but extra large granules may indicate an older animal. (IV)

50,000 lbs in 3 totes sitting out in the rain for a day or two totally FUBAR's the quality of the product and if allowed onto the market- the reputation of BC as a producer of sea urchin products.(I)

Some companies use derivatives of this system which break out 7 grades: A and B never go bulk and there are 5 grades of bulk material. They do not usually get any comments on the products or the grading except perhaps for some complaints at the lower dark end of the quality scale. (III)

Reddish roe are still yellow. (III)

### b. Is there consistency between the different processors in terms of grading and quality?

No- there are no grading standards applied by all companies producing sea urchin products in the BC industry. (I) Some companies have 2 grades, some have 3, 6 or 8. The Japanese market realizes this and various buyers use it against us. (I)

Canada will never achieve a reputation for the "highest quality standard(s)" because far too much production is inconsistently graded. (I) Some processors just are not capable of adapting to complex grading systems and even as the Japanese are 'appalled', they are more than willing to take advantage and squeeze for lower prices. (I)

At least one company is processing large amounts of product at this point and there is some concern that proper spending and processing controls are not in place. Maruke and Cancer are

different packers which may be apparently using the situation at this company against the whole industry in BC to leverage lower prices. (IV).

No, each company has its own grading associated with its own brand (V).

**c. What sort of ideas can be implemented to improve the overall processing? Would a quality assurance program work? How about a standardized grading?**

An industry-wide standardized grading system is not workable politically because some companies are apparently pursuing a different strategy based on lower costs, value and margins but are accumulating profit for their bottom line by pushing volume. (I) These companies are processing product as simply and cheaply as possible. In these cases the costs are minimized but the grading procedures are too simple to dependably and fully separate the higher and lower grades and thereby extract higher value from the resource. Buyers in Japan pay sub-premium prices because they have to cover off an often unknown amount of sub-grade (waste) material as they re-pack and re-grade all the product. (I)

The lower margins for these processors are at least partly compensated by the higher volumes but this competes directly with other low cost producers (Chile and Russia) on their terms in what will eventually prove to be a losing battle. It is also damaging the BC industry as a whole and limiting any potential premium which might be available if Japanese had a better opinion of the BC production. (I)

Consistency is key and some companies have well established grade and QAP reputations. (I)

The best strategy focusses on high grade production. Uneven grading reduces prices because buyers must cover costs of wastage. (I) PUHA endorsement for a consistent grading scheme is possible as a branding tool but there must also be some means to guarantee and enforce compliance. (I) 3 grades might be OK but price still is the key. The fewer the grades used in the pack, the greater the slack between grades and the lower the price as wastage and sub-par quality must be included. (II) Extra grades seem to be generally used as a tool by Japanese to ratchet down prices. Using just 3 grades (bulk?) is easier on labour and makes the consumer happy. More grades increases the labour requirements and therefore a number of related costs. (IV)

An industry endorsed Quality Assurance Program (QAP) with compliance guarantees might be effective as a branding tool. Some BC companies tried something similar but failed in part because of a change in Japanese culture brought on by the declining economic climate in that country. (III)

The PUHA endorsed QAP would make a good marketing tool but it must be tailored so it does not create excessive amounts of extra (paper) work for the processors. (IV)

A standardized grading system would be a very good thing but it must be a consensus system with agreed to compliance mechanisms to avoid disunity on the project which will lead to increased vulnerability to divide and conquer. (IV)

Standardized grading will not work (V).

**d. What sort of feed back do you get on grading of Canadian product?**

Most comments are “bad” and “not good” generally although some companies are very good. There is some indication that this may be a negotiating position. Others acknowledge that Japan needs Canadian product because we are very conscious of the hygienic issues and our product tastes very good when it is properly addressed.

Japanese buyers are constantly pressing for additional lower graduations so they can obtain the product at lower cost which they then use to squeeze prices on higher grades as more product is pushed into that category even as the pressure the prices for the higher grades directly.(III)

**e. What are the standard processing stages? Times and salinities? Who controls/adjusts the process?**

Historical profiles are used to project demand, sales and production- for bulk anyways. (III)

Some companies use only a single recipe for their brine and do not change it from batch to batch but in most companies they do. In these cases there are generally key people who know the recipes and the criteria for changing the brine solutions , sometimes daily or sometimes just because changing area calls for a change in recipes. For example, the North Coast and the South Coast are not the same. (I) and adjustments are required because the overall goal is to minimize the use of alum. Fresher product requires less alum and too much alum produces a metallic taste. (IV) There are only a few key personnel at each company capable of carrying this out which may again present a certain vulnerability for the individual company if not the BC industry as a whole. (III)

We did not obtain a estimate of capacity per day for a number of processors. It should be broken down into cracking and spooning, packing all tray and all bulk to mark the production extremes remembering that production is generally dependent on a number of factors, some of which are not controllable so stored product can be packed and graded 2-3 days after spooning/preliminary cleaning.

3.2 % - 4.0 % is the range of alum concentrations used for good to not so fresh product. The brine should never extend up to 5%. (III) (It might be interesting to check into the effects of using the alum on the pH of the solution.)

The ideal round capacity ranges from about 5,000 -30,000 pounds per day depending upon the plant being looked at. Production adjustments up to about two time the minimum for each plant can be accommodated by simply by changing the length of the shift(s) while increases above this might involve splitting the production by function. Each plant can crack and spoon upwards of 3-5 times their base production because the rate limiting steps are the packing and grading. Excess product can be kept in the cooler for no more than 3 days prior to final packing. Receiving more than can be immediately used is common but is generally followed by a couple of days with no deliveries. Plants can also increase bulk proportion to increase throughput when the excess deliveries extend more than a couple of days.(III)

**f. Regarding the local market alum is not permitted, how can we remedy this problem?**

Someone in Japan has tried HCl as a substitute for alum ( $KAlSO_4$ ). The main function for the alum appears to be the reduction of the water content of the roe but alum provides anti-bacterial protection as much as it removes water.(II) Care in its use is required as drawing out too much water leaves it tasting bitter. Changing the ionic strength of the solution would help migrate water out of the uni but getting some scientific numbers on the onset of the bitterness and/or for the optimum quality criteria would be of some assistance.(I).

The challenge would seem to be to find a substitute chemical (V) or get the alum approved.

Holland Inc. of Boston is a large manufacturer of food grade alum (III)

Japanese processors use something in addition to high alum to obtain a much better quality product than Canadians get using the same substrate.(III)

It just seems odd that it can be used in so many food and beverage products, including wine and drinking water, without any problems that it would be an issue for a seafood production process that is so widespread around the world.

**7. Is there anything you can suggest to advance and improve our industry?**

Incentives to innovate and do a better job are just not there anymore as they used to be some time ago.(III)

**a. What else can we do to improve the reputation of our industry?**

Improve training. There are a number of critical processing skills - particularly packing and grading- which are in somewhat short supply and considerable training will be required to maintain much less improve the skill levels in the industry over the next decade or so. The skills shortage is an issue now and is expected to grow. (I)

**b. What are the greatest factor outside of our control?**

Providing financial support to build supply to excess and then squeezing suppliers to obtain lower prices is a common Japanese tactic. They seem to want to build in dependance on their market and then play it out using hard ball tactics. (III)

**c. Last comments on what would contribute to increasing the value of our fishery?**

BC processors have used the Japanese grading system to compete directly with the Japanese and have won. (I)

The value chain partners must control the incoming products. When there is a disconnect between the market and appropriate volume, processed product can sit in the coolers for excessive periods of up to a week to 10 days prior to shipping to Japan. When this occurs and product is actually shipped, the quality, and consequently the reputation of the producer, takes a major hit, particularly if rancidity or bacterial contamination set in before the product is moved along to the final use or is somehow further delayed once in Japan. (I)

Japan only auctions seafood for 5 days each week. There is no market every other Wednesday so it makes no sense to ship product on Friday or Saturday or every second Tuesday. (I)

With regard to new product development initiatives- it must be remembered that uni is still a novel product in the minds of many consumers and any bad experience will be very quickly publicised with likely disastrous results on continuing efforts. (IV)

Similarly, we must also get the processors (and harvesters?) working together so a united BC industry front can form. There must be at least some line of contact available between them to the various players so they can be forewarned of upcoming concerns, problems etc (IV)

There appears to be some personnel poaching going on. (IV)