



Second Session, 38th Parliament

REPORT OF PROCEEDINGS
(HANSARD)

SPECIAL COMMITTEE ON
SUSTAINABLE AQUACULTURE

Port Hardy

Wednesday, June 28, 2006

Issue No. 19

ROBIN AUSTIN, MLA, CHAIR

ISSN 1718-1054

**SPECIAL COMMITTEE ON
SUSTAINABLE AQUACULTURE**

Port Hardy
Wednesday, June 28, 2006

Chair: * Robin Austin (Skeena NDP)

Deputy Chair: Ron Cantelon (Nanaimo-Parksville L)

Members: Gordon Hogg (Surrey-White Rock L)
* Daniel Jarvis (North Vancouver-Seymour L)
* John Yap (Richmond-Steveston L)
* Gary Coons (North Coast NDP)
Scott Fraser (Alberni-Qualicum NDP)
* Gregor Robertson (Vancouver-Fairview NDP)
* Shane Simpson (Vancouver-Hastings NDP)
* Claire Trevena (North Island NDP)

**denotes member present*

Clerk: Craig James

Committee Staff: Brant Felker (Committee Research Analyst)

Witnesses: Dave Adams
Barney Bjermeland (Keltic Seafoods Ltd.)
Letsie Blackmore (Alpha Processing)
Hank Bood (Mayor, District of Port Hardy)
Aaron Brotchie (Cards Aquaculture Products Ltd.)
Leanne Brunt
Chief Bob Chamberlin
Bruce Dirom (Hardy Buoys Smoked Fish Inc.)
Scott Gibson
Mike Haffenden
Rick Harwood (Hardy Bay Diving and Marine Salvage Co. Ltd.)
Lionel Hole
Dave Jacobson
Laurie Jensen (AKVAsmart Canada Inc.)
Gunnar Kufaas
Riccardo Marrara (Blue Bytes Computer Services)
Kathy Poslowsky
Howard Rees
Linda Sams (CEO, Centre for Aquatic Health Sciences)
Barb Walker
Alvin Walkus
James Walkus (James Walkus Fishing Co. Ltd.)
Marty Whitehead (President, Port Hardy Chamber of Commerce)
Rupert Wilson

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MINUTES

SPECIAL COMMITTEE ON SUSTAINABLE AQUACULTURE



Wednesday, June 28, 2006
2 p.m.
Island Copper Room, Port Hardy Civic Centre
7450 Columbia Street, Port Hardy

Present: Robin Austin, MLA (Chair); Gary Coons, MLA; Daniel Jarvis, MLA; Gregor Robertson, MLA; Shane Simpson, MLA; Claire Trevena, MLA; John Yap, MLA

Unavoidably Absent: Gordon Hogg, MLA; Ron Cantelon, MLA (Deputy Chair); Scott Fraser, MLA

Others Present: Brant Felker, Committee Research Analyst

1. The Chair called the committee to order at 2:02 p.m.
2. Opening statement by the Chair, Robin Austin, MLA
3. The following witnesses appeared before the Committee and answered questions:

- | | |
|---------------------------------------|-------------------|
| 1) Alpha Processing | Letsie Blackmore |
| 2) Gunnar Kufaas | |
| 3) AKVAsmart | Laurie Jensen |
| 4) Centre for Aquatic Health Sciences | Linda Sams |
| 5) Dave Adams | |
| 6) Hardy Bay Diving | Rick Harwood |
| 7) District of Port Hardy | Mayor Hank Bood |
| 8) James Walkus Fishing Company | James Walkus |
| 9) Blue Bytes Computer Services | Riccardo Marrara |
| 10) Rupert Wilson | |
| 11) Lionel Hole | |
| 12) Kathy Poslowsky | |
| 13) Dave Jacobson | |
| 14) Barb Walker, Leanne Brunt | |
| 15) Chief Bob Chamberlin | |
| 16) Scott Gibson | |
| 17) Hardy Buoys | Bruce Dirom |
| 18) Port Hardy Chamber of Commerce | Marty Whitehead |
| 19) Cards Aquaculture | Aaron Brotchie |
| 20) Keltic Seafoods | Barney Bjermeland |
| 21) Howard Rees | |
| 22) Alvin Walkus | |
| 23) Mike Haffenden | |

4. The Committee adjourned to the call of the Chair at 6:25 p.m.

Robin Austin, MLA
Chair

Craig James
Clerk Assistant and
Clerk of Committees

WEDNESDAY, JUNE 28, 2006

The committee met at 2:02 p.m.

[R. Austin in the chair.]

R. Austin (Chair): Good afternoon. My name is Robin Austin. I'm Chair of the Special Committee on Sustainable Aquaculture. I would like to take this opportunity to welcome you to the aquaculture committee's public hearings here in Port Hardy. It is a real pleasure for us to be in your community and to hear directly from you about this important topic.

For your information, today's meeting is a public meeting which will be recorded and transcribed by Hansard Services. A copy of this transcript, along with the minutes of the meeting, will be printed and will be made available on the committee's website at www.leg.bc.ca/cmt/aquaculture.

In addition to the meeting transcript, a live audio webcast of this meeting is also produced and available on the committee's website to enable interested listeners to hear the proceedings as they occur. An archived copy of the audio broadcast will also be retained on the committee's website.

Let me also, for the benefit of the presenters, read out the mandate that this committee has. The Special Committee on Sustainable Aquaculture was reissued the following terms of reference by the Legislative Assembly on February 20, 2006. The committee will be empowered to examine, inquire into and make recommendations with respect to sustainable aquaculture in British Columbia and in particular, without limiting the generality of the foregoing, to consider the economic and environmental impacts of the aquaculture industry in B.C.; the economic impact of aquaculture on B.C.'s coastal and isolated communities; and sustainable options for aquaculture in B.C. that balance economic goals with environmental imperatives, focusing on the interaction between aquaculture, wild fish and the marine environment; as well as B.C.'s regulatory regime as it compares to other jurisdictions. The committee is to report to the House no later than May 31, 2007.

Today we have a number of people working with us. On my right are Adam Wang and Wendy Collisson from Hansard Services. They record what is being said and, as I've already mentioned, make sure that it is onto the Internet. We also have staff here from the Office of the Clerk of Committees. Directly to my right is Craig James, our Committee Clerk. Our researcher is Brant Felker, at the front of the room there.

I would now like to invite the members of the committee to introduce themselves, starting on my right.

J. Yap: Good afternoon. I'm John Yap from Richmond-Steveston.

D. Jarvis: Good afternoon. Daniel Jarvis from North Vancouver-Seymour.

C. Trevena: Claire Trevena, proud to represent North Island.

G. Robertson: Hi. Gregor Robertson, Vancouver-Fairview.

G. Coons: Good day. Gary Coons, North Coast.

S. Simpson: Shane Simpson, Vancouver-Hastings.

R. Austin (Chair): Thank you, members. Now I would like to encourage presenters to throw as much light as they can on the mandate of this committee to help us in our work. I would like to ask the first presenter today to come up to the witness table. Could Letsie Blackmore please come up.

[1405]

Presentations

L. Blackmore: Mr. Chairman, members of the committee, I would like to welcome you to the beautiful town of Port Hardy. My name is Letsie Blackmore, and I am plant manager at Alpha Processing, a division of Pan Fish Canada. We process farmed Atlantic salmon and welcome any opportunity to process wild salmon as well.

Thank you for this opportunity to address the committee concerning a very important industry to the town of Port Hardy and many other coastal communities.

The controversy and uncertainty of the aquaculture industry in B.C. gives me cold shivers and stirs up feelings that I try to forget every single day. I grew up in a small coastal community on the east coast of Canada. At that time most all the coastal communities in that province relied on the northern cod fishery for survival. It was a beautiful place to live and raise children, just like Port Hardy. The economy in that town was very strong. Old and new businesses flourished and prospered.

In 1992 the Minister of Fisheries and Oceans put a two-year moratorium on the northern cod fishery. Today, 14 years later, the moratorium still continues. Some 19,000 jobs were lost that were directly involved in the fishery and another 20,000 jobs lost due to the economic backlash.

To say devastation in the coastal communities of that province was the result of the moratorium is very much an understatement. The effects are unbearable, unthinkable and, surely, unreal to anyone who has never experienced the pain and anguish of watching helplessly as your community and your loved ones diminish.

Being one of the thousands who was forced to leave my beautiful province and loved ones behind in hopes of a better life for me and my children, I live with that pain and anguish every day. I cope with it by comparing the life we have now to the life most young families have that chose to stay and suffer through it. There is no comparison. There is no life, only the instinct to survive.

I wouldn't change the decision I made to leave my hometown ten years ago, and this is because of the aquaculture industry.

I moved to Port Hardy in 1996. Immediately I was hooked. It reminded me of the town I grew up in — the smell of the salt water and being so close to the ocean,

where I loved to fish in my spare time. I felt close to home.

I started working at Alpha Processing in 1997. I was proud to get up every morning and go to a job that paid a wage that enabled me and many others to comfortably provide for our children. At that time the employee list was approximately 35 people. Today Alpha Processing has an employee list of 103 people — 59 percent women, 41 percent men. Many of these women are single parents. They take great pride in their job, as it allows them to provide a great life for their children without having to be dependent or subsidized by the government. Without these jobs they would merely be surviving on social assistance.

The percentage of male employees at Alpha Processing that bring home the main income to their household would be 100 percent. Their wives either stay at home with the kids or some may have a job at a local store that pays minimum wage. They need their job at Alpha Processing to provide for their families.

Alpha Processing also has a great relationship with the first nations bands in the Port Hardy area. First nations employees make up 25 percent of Alpha's workforce. The harvest boats and harvest team also consist of many first nation individuals. They are happy to be working with Pan Fish. They make a good wage to support their families as well.

Wages at Alpha range from a probationary wage of \$13.52 to \$20.91 an hour. A monthly production bonus is paid to employees in addition to their regular wages. This production bonus ranges from an extra \$1 to \$1.70 per hour more, depending on the volumes produced in that month.

Alpha Processing also offers a full medical and dental benefits package to the employees. Sixty percent of this cost is paid by Pan Fish.

It's not all about the fish. Pan Fish cares about its employees. We offer many services that we believe may make their job easier and more ergonomic. We have a physiotherapist that comes to the plant once a week and a massage therapist that comes every two weeks. Any employee with sore shoulders, back or any complaints can book an appointment and receive treatment, advice and recommendations from these individuals.

[1410]

Alpha Processing is currently going through its final phase of a restocking plan that was implemented in 2003-2004. This has resulted in a period of downtime at Alpha Processing. This is temporary and is a direct result of the downsize in production to deal with issues that have previously caused problems.

These problems have now been dealt with, and production levels are being increased and returned to previous levels, which will ensure continuous year-round production. When Alpha reopens, no further shutdowns are anticipated. The flow of fish from the sea sites to the processing plant will be stable.

During the period of reduced production Pan Fish Canada was financially supported by Pan Fish ASA. From 2001 to 2005 Pan Fish Canada received \$131 million in financial support from Pan Fish ASA. The alter-

native to this was to close Pan Fish Canada and leave hundreds of employees out of work. This was a great expense to Pan Fish ASA but one they felt was worth the large investment.

Some people say the Norwegian investors take all the profits back to Norway. That is total nonsense. They are committed to Canada, to British Columbia and its employees.

When Alpha Processing was rebuilt after the fire in 2003, one of the factors that played a large role in the decision of the rebuild was that Alpha Processing is to be utilized to its greatest capacity. We feel very confident that the restocking plan that was implemented in '03-04 was a positive decision. Going forward, Alpha Processing will see volumes higher than it has ever processed, providing full-time, year-round employment for the employees like we have in the past.

Alpha Processing plays a large role in the economy of Port Hardy. The annual payroll for 2005 from Alpha Processing that went into the Port Hardy economy was \$3.9 million. In addition to the payroll dollars that are distributed into the economy from Alpha, Pan Fish also does business with 91 percent of the businesses in Port Hardy.

We strive to support local businesses where supply allows. In 2005 almost \$453,000 was spent just by Alpha Processing at local businesses in Port Hardy alone. These business owners know just how important aquaculture is to their business, and they would be the first to tell you so.

Total payables from Alpha Processing for 2005 were \$3.5 million. As I just said, almost \$453,000 got spent in Port Hardy. Just on the north Island, \$1.25 million; on Vancouver Island, \$1.4 million, almost \$1.5 million; and in all of B.C., \$2.9 million of that was spent, which means 84 percent was spent in the province of B.C.

Alpha Processing, Pan Fish Canada, is a large contributor and supporter of local charities, sports teams, non-profit organizations, community events. The list goes on and on. We support and contribute to a drugs and addiction program. With the financial support of companies like Pan Fish, they have been able to distribute a drugs and addictions facts magazine to all high school students on Vancouver Island and the Sunshine Coast.

Yesterday Alpha Processing completed a program in the elementary schools. We provided a complete lunch for over 500 elementary students in the district of Port Hardy. This program was fully funded by Pan Fish Canada, and we were very happy to provide these lunches for the children.

Aquaculture is a sustainable industry, an industry that has grown and developed tremendously in all aspects of the process over the years. The industry will never settle for "good enough." This industry will continue to strive for perfection in the fish, in the environment and in its employees.

As manager of a processing plant, I ask you to please make your decision based on the facts concerning the future of aquaculture. Let those 4,000-plus jobs remain for the people in this province. Let those people continue to provide healthy, happy lives for their families.

As a citizen of Port Hardy and a mother of children growing up in this beautiful town, I plead to you. Our children and grandchildren are our future. Let that future be in their hometown and in aquaculture, if they so choose that way of life. Thank you.

R. Austin (Chair): Thank you, Letsie. Now members will come forward and ask questions.

D. Jarvis: Thank you for your presentation, Letsie. How much of your production is farmed versus wild, if there is any difference?

L. Blackmore: Since our new plant has been rebuilt, everything that we've processed has been farmed.

D. Jarvis: Are you able to adapt to any wild processing now?

[1415]

L. Blackmore: Yes, I've actually been in contact recently with two different companies to process some sockeye salmon when the season comes around.

D. Jarvis: The wild is just processing, ostensibly, seasonally. It's seasonal?

L. Blackmore: Yes.

D. Jarvis: Thank you. That's all I want to know at this point.

C. Trevena: Thank you, Letsie, and thank you very much for the tour this morning. It was very interesting. I just wanted to pick up on a couple of things that we were talking about on the tour.

When you reopen you're going to be expanding, having six gutting machines. Is that correct?

L. Blackmore: No. When we reopen we will be just as you saw us this morning. We do have room there right now to introduce two more gutting machines, if the volumes increase, where we need them.

C. Trevena: Do you think that the volumes will be increasing? Working with Pan Fish, you know the amount of fish that's going into the farms, so you can pretty well predict where the volumes are going to increase. Is this something that you're looking at?

L. Blackmore: Yes, we're hoping to see increased volumes.

C. Trevena: We also looked at the big empty space where you said it could be used for more machinery, so more work there. We're talking about how many shifts you could have. I just wondered how that would work. Again, where is the fish going to come from? Is this just the Pan Fish farms, or is it going to be bringing in the ones that are presently at Marine Harvest and so on?

L. Blackmore: That's still a tough decision. As I told you this morning, there's so much uncertainty yet as to how that will all pan out, whether they come from there or whether we continue to increase our own stocks for future higher volumes.

J. Yap: Thank you for your presentation, Letsie.

You mentioned in your presentation that you believe aquaculture is a sustainable industry, that industry will continue to strive for perfection, that industry will never settle for "good enough" in the environment, and about your personal journey here, and how you were hooked on the environment here. How do you respond — and I'm interested in your personal feelings — to those who passionately express concerns about the environment, just as you've expressed your passion for the environment?

L. Blackmore: I think those that do, and do it in a negative way towards aquaculture, are probably just not informed enough about what we do and how we do it and how well we do cherish the environment that our fish are living and growing in. I think there needs to be more education, and those people need to be willing to listen, willing to learn. A lot of them are not willing to listen and not willing to learn. I think they need to come into it with an open mind and maybe learn some more about it.

S. Simpson: Thank you for the presentation and for the tour earlier today.

I think you told us today that when the plant is operating sort of in full operation with the capacity now at 20,000 tonnes a year, something in that range is what you would expect to be processing. How much waste comes out of the processing? What would you expect in terms of tonnage of waste to come out of that?

L. Blackmore: There's probably about 10 percent waste to come from that.

S. Simpson: The reason I ask that is because when we were in Port McNeill, some folks from Sea Soil came and talked to us. They talked to us about...

L. Blackmore: Yes. I was there last night, actually.

S. Simpson: Oh, you were there. They talked to us about the product and what they produce. They produce a product from a combination of fish waste — I believe, from Englewood is where they get their waste primarily — and from wood products. They talked about getting 7,000 to 8,000 tonnes of fish waste as the component. I believe the Englewood folks produce about 23,000 to 24,000 tonnes of fish. I'm trying to figure out what the percentage of waste is to that. Would yours be, do you think, a little bit less than theirs, then, in terms of waste?

L. Blackmore: No. It would probably be close to the same.

S. Simpson: Comparable. What's that mostly comprised of — heads, tails, all of that stuff? Where does that waste come from?

L. Blackmore: It's just really the guts of the fish.

S. Simpson: Okay. Great. Thank you. [1420]

G. Robertson: Thank you, and thanks for your tour. It's a very impressive plant.

L. Blackmore: Yes, it is. We're very proud of it.

G. Robertson: A great asset for this community. I'm curious. On the plant side of this, your capacity is all on handling salmon, whether it's farmed or wild. Have you in the past or do you have the potential to handle shrimp or prawns or other fish?

L. Blackmore: No.

G. Robertson: Is that in the cards at this point?

L. Blackmore: As we are set up right now, no.

G. Robertson: Okay. Are those processed elsewhere in town? Is there a plant that handles all other seafood?

L. Blackmore: I think it just mainly gets off-loaded in town, maybe at Keltic Seafoods.

G. Robertson: Okay. Our understanding this morning was that the downtime the plant has had over these recent years has been related to a wide variation in the number of fish coming off the farms and to disease challenges. How does the company deal with the potential for that, the risk of that, going forward? IHN or various other challenges like that at the farm level can really dramatically impact how busy the plant is.

L. Blackmore: So what's the question? How...?

G. Robertson: Is it built in, going forward, that there's a certain amount of downtime that's anticipated?

L. Blackmore: No. Going forward we hope never to see downtime again at Alpha.

G. Robertson: Is that because the disease problems to date are...?

L. Blackmore: Yes, they are. They've been dealt with, and we don't anticipate having to deal with that again.

G. Robertson: Okay. Thank you.

R. Austin (Chair): Dan's got a question for you.

D. Jarvis: I've got a couple of small questions, if you wouldn't mind, and I don't know if you can an-

swer them or not. In your total processing of last year, can you tell me how much was wild and how much was farmed?

L. Blackmore: One hundred percent was farmed.

D. Jarvis: One hundred percent. Before, when you said that you're capable of doing wild processing and that it was seasonal, when was the last time that you...?

L. Blackmore: The last time we would have processed wild salmon would have been before the fire at Alpha, so it would have been before.... It would probably have been in 2001, 2002, maybe. Since we've been in the new building, we haven't processed....

D. Jarvis: I didn't understand. I didn't realize that your place had burned down.

L. Blackmore: Oh, yes.

D. Jarvis: Another thing. Of your employees, do you have any idea how many are first-time jobs versus those that come from other occupations? That's not easy, I guess.

L. Blackmore: No. I don't have data, but there are people there who have done many different jobs before, and there are people there that, maybe, this is their first job.

D. Jarvis: All right. Thank you.

R. Austin (Chair): Gary has a question for you.

G. Coons: Thank you, Letsie. I missed the tour. We were at the other one.

L. Blackmore: You'll have to come back.

G. Coons: I'll have to come back on the ferry some day, yes.

I was just wondering. In the plant do you do just whole fish, or do you do any fillets or any type of value-added...?

L. Blackmore: No, we just process whole fish.

G. Coons: And is that in the works at all, to do any...?

L. Blackmore: We have in the past. We may even look at it again. When our volumes get at peak levels and the market is requesting more fillets, we may look at it again.

G. Coons: Okay. Thank you.

R. Austin (Chair): Great. Thank you very much for your presentation.

I'd now like to call Gunnar Kufaa up to the witness table, please.

G. Kufaa: Thank you, Mr. Chairman and committee members. My name is Gunnar Kufaa, and I came out from Norway as a young fellow. As your mandate also seemed to call for things that happened in other jurisdictions in regard to fish farms.... So I'm understanding paragraph 4 — right? — "other jurisdictions," you say.

[1425]

I've lived for 52 years in Canada. I've been employed in some logging, fishing, mining — 41 years on the north Island. I live in Coal Harbour, which is 13 kilometres here from Quatsino Sound. I have seen and heard a lot of controversy over fish farming. I thought that using some comparison might be helpful — for the committee to have what happens in other places.

I steadily read and follow and also speak the Norwegian language, and I had a very large family there and relatives. They're involved in fishing and probably farm fishing, maybe some oil or whatnot. I'm in constant touch with those people — almost from week to week, I would say, besides an odd visit over there, and they come here, vice versa.

Norway has been in the business of fish farming for approximately 35 years longer than we have on this coast. They have gone through a lot of pros and cons and trials. I think that we, perhaps, have lots to learn from those things, from experiences. We are new in Canada compared to those things, and what's better than to listen to people with experiences? That's my thought.

Despite the setbacks, Norway seemed to continually look for reasons to solve problems instead of any denials and asking for more studies and whatnot to prolong the problem. They have problems yet. They've been in 35 years before us — and how long you add this up. It's quite some time, and there are still problems. They will be rectified, and they're also serious enough.... The problems we talk about here amongst ourselves....

I did look up some past printouts from the Norwegian newspaper and press here. Maybe there are some older, but they only date back to 2002. It says here in an article: "Norway demands...." No. The first one I bring out here, I would say.... We are not the only ones who have problems and have to fix them. It says: "September 27, 2002. The Norwegian fishery department says" — they released this — "the increased plague of this parasite on the coastline stems from their fish farms." "Norway reports sea lice rampant on wild fish population" was the headline. "The Norwegian fishery department believes the increased plague of this parasite on the coastline stems from their farm fish industry."

Salmon lice are one of the largest problems facing the aquaculture industry. Every year large amounts of money are spent trying to combat this. The most seriously attacked fish are plagued with malnutrition and such infections as fungus and bacteria, which eventually kill the fish. Sea lice are common in the sea, but as salmon enter fresh water, the lice fall off at that time, they report. This is from Norway — a translation.

[1430]

The second one is dated December 1, 2002. "Norway demands removal of fish farms from fjords and

river mouths in order to protect their wild Atlantic salmon." Now, 12 so-called large organizations are demanding the Storting, as they call it — the Norwegian parliament or Norwegian government — to order the removal of 50 fish farms and six processing plants away from important fjords frequented with wild salmon.

They say they are frequented by the wild salmon. Norway only has two species of salmon. They have the wild Atlantics and sea trout — what we normally call steelhead.

There is a difference between the wild salmon and their farmed salmon. They culture salmon in cages, they claim. Also, as we have and everyone has, in the beginning — and I don't know how lately — they had escapements of fish — huge escapements at times. They have also been trying to go to the rivers, the same as they do here. Any fish wants to go to the river to spawn.

In Norway they created a problem in that they have both Atlantic salmon; there is a wild type, and there is the farmed one. The only difference is that the wild Atlantic salmon start a spawning cycle in the middle of May, and they head for the rivers. The farmed type of salmon go in the rivers approximately two months later, they guess, than the wild ones.

Atlantic salmon are furious feeders. That's why they race up here. They feed like you'd never know. They don't die in the rivers like our salmon here do after they spawn. After they spawn, they just get hungrier, and they eat more. They gain their strength back before they go to the ocean. They're eating fingerlings from the other ones. That disturbs the rates. That causes a problem for fish that they're dealing with.

Besides that, they have been combating and working with it. We will also have to do that here — combating the sea lice problems. We are doing it here. Many of their rivers and lakes had to be disinfected over the years that had been contaminated with bacteria, they claim, probably more or less from salmon.

That started in Norway in 1975 as they were starting their production, and it's still happening today. Since that time they have treated about 12 rivers and watersheds. They had to poison the complete rivers, kill everything in the river and start to replant and bring it up to new again. One river being treated this spring has the disease.

[1435]

What I also see in the industry, I don't want to see happen here. They have made all the recreational fishermen.... They have the same boats as we do here. We have our rods and outboard gear and whatnot. They all have to go through a disinfection process before they put a line in the water anywhere. They have people stationed at shredders, spray and whatnot. If they have no more need of a boat, they've got to go through something that looks like a car wash and disinfect everything in order to kill disease. Be definite we're all going to see that happen to us — the cost of it, and everything else.

Norway. They have a big concern over there. There are only two salmon species in Norway. That brings us

to think what we compare here. We have got to watch things. We have our coho — that's one — sockeye, pinks and chinooks, what you call springs, or whatever, silver or kings or whatnot you use. If you don't care about those things and aren't cautious, that leads me to think: are we heading toward another buffalo hunt?

My thoughts on the whole deal. You're going to have to move forward fast. We haven't got much time for too many studies, and studies to study the studies. You have to find solutions that are workable. I trust the committee. I have faith in the committee doing their job.

That's enough of that one. I've got to tell you that I'm really impressed, have always been impressed, with our neighbours north of us in Alaska. They have the experience, probably very long ago, and they have made some really stringent laws to protect their resources. One thing that I like, and always liked, and I'd like the committee to maybe give it a thought: they have something there.... If something should happen — their farm fish doesn't work, or the wild fish becomes unsustainable — they have something they call wild ranching of salmon. I like that.

They use the whole ocean instead of a net pen. The whole ocean becomes their pen. They raise the fingerlings on shore to a certain size. They release them. They go wild, like animals in a pasture. They come back in the fall. They feed themselves. They grow up to a good size. They come back to different fjords and inlets. Sometimes they go away; we don't know where they go. They come back. Maybe sometimes they bring a friend from Russia. We get a bonus. They do a tremendous business on it. They're thriving on it.

Keep that in mind. You should all keep that in mind if something happens to our industry here.

I live in a place like Coal Harbour, Quatsino Sound. That's a long inlet here right across from us. We had a real thriving wild fishing industry, and you know it's gone now. I don't have to go along with this. But I certainly would like to see a situation like this, like Alaska — where the fish would come back in and bring up a thriving community again.

[1440]

There are people in the outlying areas, more so with small places — Quatsino, Coal Harbour, Winter Harbour.... The people had to leave. They couldn't make a living anymore. The young people couldn't afford to stay there. The young people who grew up in the past were able to get a job in the summertime — maybe not all. They worked as deckhands on boats. Some had one or two deckhands. There were jobs. Unfortunately, those have disappeared. I'm not going to go into that. We all know what's happening here.

I'm not to go on any longer. I think you've got pretty well.... This is my message. It's just following up on my own what I see. I've been interested in comparing notes and comparisons and whatnot. I do have compassion for people that work in the fishing plants here in Port Hardy, whether that be wild fish or farm fish. I was also reading on the Internet from Norway that what we are anticipating is some more automation

in the fish plants with robots. In one way I hope it doesn't happen. People need the work. If that happened, we are in a tough spot.

Thank you, members. This will conclude my presentation.

R. Austin (Chair): Thank you, Gunnar.
Do members have any questions?

J. Yap: Thank you, Mr. Kufaas, for your presentation. What we've heard in our travels is that there really is.... You mentioned many studies. Part of the challenge is that we've heard that there are.... You know, you have one study and there'll be another study, and they kind of contradict each other. We're told that there are gaps in the science, so it seems to be inconclusive.

You mentioned that you've done some reading of the Norwegian studies. I'm wondering: are those available, so that we might be able to receive those studies?

G. Kufaas: I don't know if I'd call them studies. Those are mainly news reports coming out. I'm not going into any science and studying that. It's just common knowledge. We are asked questions, and we get answers by reading and just following.... I could provide those printouts. I'm not prepared. I don't have them with me now.

J. Yap: Based on those news reports from Norway, are you aware of studies that point in some direction or another, which we could get hold of and add to our knowledge?

G. Kufaas: As I say, yes, I probably have some newspaper cuttings and whatnot, or I could be in touch with Norway, and certainly, some people there in industry would probably be glad to provide that. I'm just an academic, you know — forms or those things.

J. Yap: Thank you. On the matter of the Alaskan practices, our understanding is that while officially there is a rule against fish farms in Alaska, we understand that, in fact, there are fish farms in Alaska, which you hinted at, where they raise the fish to a certain size and then let them go.

G. Kufaas: Fish ranching, they call it.

J. Yap: They call it ocean ranching or fish ranching. We've heard that.

In terms of getting the fish to the point where they can be released.... Those are fish farms, though. Would you not agree? We understand there are many of those, raising the fish to a certain size.

[1445]

G. Kufaas: Definitely. All smolts there are raised before they're released — the same as they are in farms here. The farms here, I shouldn't go into it.... I don't really call them farms. I call them feedlots. Being a farmer rather than a fisherman, I would hesitate to call this fish farming. I call them feedlots. You take a smolt.

Where I live they raise the smolt to a certain size before they can put them in a pen — I don't know, roughly, a few inches long — and then they're fed, the same as the feedlots for the cows and pigs. We see truckload after truckload with feed, and thousands of tons go past Coal Harbour. This is what I know.

I'm learning my information from the observation of what I see. But far and away, I'm no learned scientist or anything.

J. Yap: Thank you.

R. Austin (Chair): Thanks very much for your presentation.

I'd like to now call Laurie Jensen up to the witness table.

L. Jensen: Hon. first nations, ladies and gentlemen, members of the committee, my name is Laurie Jensen, and I'm the general manager of Canada for a multinational aquaculture technology company, AKVAsmart Canada.

I started my career in this industry in 1986 in Campbell River. I was a single mother of two and desperate for work. I started out in the scuba diving industry, filling scuba tanks for the fish farmers. My scuba diving training partner was a fish farmer named Kjell Olsen. He and his girlfriend Oonie became my friends, and I met other fish farmers, including the Norwegians.

I found work for a supply company from Sechelt and coordinated supplies coming to Campbell River. We all know the history of Sechelt, but you could say that when the farmers got a cold, the suppliers got the flu, and a lot of them went down as well.

The industry, though, was new and exciting, and I like to look at challenges as opportunities. Also, my mother was born in Powell River, and my father was born in Norway. And I grew up on a farm, so fish farming seemed like a natural fit for me.

Throughout my career I've worked for multinational companies: Campbell River Netloft, Moore-Clark and now AKVAsmart. I've been to Norway 14 times, visiting research facilities, farmsites, trade shows and conferences, and I continually find opportunities to learn.

Stephen R. Covey, in his book *The 8th Habit* on global seismic shifts, said: "New technologies are transforming most local, regional and national markets into global markets without borders." We know Canada is a player in the world economy. We all know that. But if you look at aquaculture here, we have global markets and companies and strategic shareholders who watch us and evaluate what we're doing. They don't find harassing fish farmers amusing, and they question our government's ability to do business on a global level. This Farmed and Dangerous campaign affects the global reputation — and I'm sure that was the intention — and makes Canada look silly, especially when the world needs healthy omega 3s more than ever. We have the opportunity to learn from other countries, so let's just get on with it.

I would like to address three main areas. One is the multinational commitment to the Canadian industry that was brought up by Gregor in the Campbell River meeting. Also, technological advancements in the sup-

ply industry. Sometimes in some of these meetings we seem to think we live in the Dark Ages here. Also, there's a question that John Yap brought up a lot with solutions to making the industry better.

I'll start with the multinational commitment. AKVAsmart is a technology company with activities in the fish farming industry since 1980. They started in Norway. We invest heavily in R and D and are an active partner and owner in Norway's only commercial-scale research salmon farm, the Centre for Aquaculture Competence. AKVAsmart has offices in Norway, Chile, the United Kingdom, Canada and Turkey and has distributors in Australasia, Greece, Spain, France and Sweden. We have a lot of expertise out there.

[1450]

AKVAsmart has been in the Canadian industry since the early '80s under a variety of names, and the company continues to grow through mergers and acquisitions in order to strengthen its position and survive in the future global market. I'm not sure how long we have to be in Canada before we're committed, but I think that shows a pretty good track record.

AKVAsmart is committed to maintaining a presence and to supporting the Canadian fish-farming industry. We believe strongly in the future and the potential of the North American industry. We have maintained an office in Campbell River during the slowdown this last few years and plan on continuing our presence there.

Technological advancement. "We make your fish talk" is AKVAsmart's slogan and vision. But what do we really mean by this? In brief, it means that our highly advanced sensors and computer systems help the fish farmer to more easily understand the behaviour of fish by putting together as complete a picture as possible of what is happening in the cage and around in the environment. This enables them to monitor and minimize any environmental impacts that may result from feeding the fish. It also provides important data for fulfilling documentation requirements.

This research is continually being expanded and improved upon. My vision of the future of fish farming is one of highly advanced monitoring and control systems.

We carry two main product lines: information technology and feed process technology. In 2005, last year, AKVAsmart introduced a major technological breakthrough, a product called FishTalk. During AquaNor 2005, the world's largest aquaculture show, AKVAsmart ASA was awarded the Nor-Fishing Foundation's Innovation Prize for development.

This is the path of the future of fish farming. This concept will achieve intelligent integration by storing all information gathered at the farm level, from feeding and environmental sensors to veterinarian reports, in one common system. I've listed them there for you, and I'm not going to go through them. Reporting, production control — there's a whole list there. This is a huge platform, and it will help the industry become the leading edge in food production by providing them with data for analysis and improvement.

AKVAsmart and other companies offer a wide variety of technological solutions that are crucial for

achieving efficient and profitable fish-farming operations. We have feed barges, and we have multi-line, centralized feed systems that provide powerful, flexible and reliable feeding performance. And it's certified for gentle feed handling and minimizing breakage. This is very important, as it minimizes dust and waste in and around the cages. Also, amounts fed and information about feed supplies and feedstock is available through its software operating system, and it all connects to FishTalk.

Our AKVA sensor systems include acoustic Doppler, infrared pellet sensors and a wide range of underwater camera and environmental monitoring systems. The sensors and the cameras are used to control or monitor the pellet amount in the water. That way, you save on feed wastage and environmental buildup.

This is how we say that you can make the fish talk — by detecting the stop signals when fish are not hungry anymore. It actually gives the farmers better profitability, because they've reduced FCRs or feed conversion ratios and have faster growth.

We've just introduced a new addition: the SmartEye camera. With this you can actually see the fish in the cage from the control room or from all places in the world via Internet.

This equipment overview of the data systems and technologies that are being developed today for the aquaculture industry is just to give you an idea of how advanced we are becoming. This is no small deal, and it's an important development in the sophistication and commitment of the industry.

Here the farmer can get an overview of the environment and all the activities on site. This information is important not only for internal efficiency but also to fulfil the customers' demands for traceability and proven animal welfare.

Everybody wants traceability, and these data systems enable the farmer to produce a CV that shows the history of the fish from egg to table and that also fulfils the authorities' requirements for documentation on environmental and sustainable production. With proper record-keeping, it also proves that equipment fulfils the regulations for maintenance and avoids damage and escapes.

[1455]

You know, I support this industry. It gave me a job. It gave me an opportunity to send my children to university. There's lots of talk about what we can do. One thing that I personally see as the biggest is some support, maybe — support from all levels of government for working together to provide a horizontal, streamlined process that allows us to be profitable, sustainable, flexible and fair.

We want you to support our right to free political choice and stop using us as political pawns. We have members of all political parties in our industry, and we need to be allowed to work with all forms of governing parties without being used for political opposition and for grandstanding.

Support our developments and accomplishments and assist us with R and D. This industry has come a long way, baby, and that needs to be acknowledged as

well. We've developed codes of practice, met ISO standards and invested heavily in R and D on our own initiatives.

Be wary of the celebrity scientists and listen to the certified researchers that are looking for solutions, not just creating more problems. And last but not least: support the workers on the B.C. coast and don't buy into the heavily American-funded campaign to rid our province of the fish-farming industry.

Our workers, too, love our pristine coastline and beautiful islands, and we want to live and work amongst them and feed and raise our children in a sustainable manner. We don't all inherit the luxury of environmental funding or wealthy parents to enable the "not in my back yard" mentality. This is our home and our province too. We want to live, work and enjoy this area for generations to come.

D. Jarvis: Thank you for your report. What do you mean by environmental buildup?

L. Jensen: You all know about environmental buildup. What farmers need to do is to monitor everything that goes into the pen so that it keeps the fish healthy. One of the most expensive components of fish farming is feed, and they don't want to waste it. By watching how they feed and when they feed, they can control what goes in and, invariably, what goes out.

D. Jarvis: Can the SmartEye cameras see if there are any sea lice building up in there?

L. Jensen: You could probably zoom in. Yep.

D. Jarvis: Does it work? Is it in use?

L. Jensen: It's a new product line that's just come out. It's used quite a bit in Norway. I think Scotland is using it as well. I don't think they use it for sea lice. They use it mostly for feed and pellet monitoring and also for surveillance. But you know what? We could try that.

D. Jarvis: Well, it's a good idea for you to do it — isn't it?

S. Simpson: Thank you for your presentation.

On the issue of feed. Your company does a lot of work around assisting the industry in trying to manage what is the biggest cost item, largely: feed for the farms. If we looked at what might be a standard-sized farm of maybe ten pens with 50,000 or so fish in each pen — that might be an average-sized farm; half a million fish over ten pens or something — how much feed would a farm like that use in a day?

L. Jensen: I can't answer that one. That would have to be up to the individual farm. That would depend on what size they want to grow the fish, what size the fish were when they went into the pens. There are a lot of variables, but if you look at the feed-conversion ratio and calculate the number of fish versus how big they

want to grow them, then you could probably figure that out.

S. Simpson: Just even in broad terms. I understand that every farm.... Is it a couple of tonnes a pen or a day or what? I'm just trying to get an idea of the scope of what we're talking about here.

L. Jensen: I can't answer that because I'm not in the production side, but I think there are some speakers coming down the line here today who could answer that one.

S. Simpson: We'll try it with somebody else.

G. Coons: I'm just wondering. When you look at technological advancements, what types of advancements are there for looking at, say, waste at the bottom of the pens? How is that being done these days?

L. Jensen: Actually, you could use the camera systems as well. You can look all around. They have a certain depth. But there are a lot of companies that are actually looking at waste management issues.

That's not something we do. We provide data systems, and we provide feeding technology. The monitoring systems that we have are oxygen sensors, temperature sensors, current sensors — that type of stuff.

[1500]

G. Coons: Are you involved at all with any hydroacoustics or other techniques to deal with that?

L. Jensen: No, we're not.

G. Coons: Okay. Because that was back before the waste management regulations came in. The scientific advisory group, a group of independent scientists that were advising about the regulations, suggested that Norwegians use hydroacoustics and other more advanced techniques for actually looking at the waste control at the bottom of the pens. They actually indicated that the video monitoring isn't appropriate and that other techniques should be looked at.

I'm just wondering if there's anything like that coming towards....

L. Jensen: It wasn't designed for that. It's designed to watch the feed pellets and to monitor what the fish are eating and how much feed goes into the pen. There is some acoustic. It's infrared sensors, where you set certain parameters and anything that goes below there automatically stops off the feeding.

In terms of actually looking at waste management, I'm sure there is some in Norway, but in my particular company we don't deal with those.

G. Coons: One last question or comment. As you're well aware, we've been meeting and dealing with first nations issues — especially on the north coast and in the Skeena watershed — and concerns on our travels to

Sointula and Alert Bay. Up and down the coast there are first nations issues that we're obviously running into.

It needs to also come to some sort of solution with the industry. I notice in your solutions.... I'm wondering: in "support from all levels of government," are you including first nations governments in that?

L. Jensen: Yes, I am. They are a government.

G. Coons: Yes. Okay.

L. Jensen: I'd also like to point out one other thing. With some of the environmental groups and anti-fish farm activists.... I hear a lot from them. They speak a lot, but they don't stick around to hear our side of the story, and they don't stick around for dialogue. So another thing that I'd like to put on the record is, maybe, encouragement of some dialogue that's happening in other countries. But both parties have got to be sitting at the table before you can have a dialogue.

G. Coons: One other comment, on your "beware of the celebrity scientist and the certified researchers." That's our dilemma right now, and how we're hearing it is.... We're, I guess, going to be looking at the peer-reviewed science that is in your respectable journals, etc., etc. Is that what you're talking about when you say certified research? Is it peer-reviewed science?

L. Jensen: Yes, that's correct. There are some researchers that are self-proclaimed researchers. You might want to check credibility as well.

G. Coons: Thank you.

J. Yap: Thank you, Laurie, for your presentation. I read the brochure you attached on your company, and I think I know the answer to this, but I'll ask you anyway. Your company, you said, invests heavily in research and development, and the focus of your company is mainly in feed and monitoring and that type of technology.

L. Jensen: Yes. Feed management, feeding systems and information technology.

J. Yap: My main question was with the investment in R and D, if any of it might have touched upon the viability of some kind of closed containment system. As you may know, we've received presentations from people suggesting, in an offhand way, that it might be the way to go, suggesting that might be the future. Maybe just from your knowledge from being in the industry all these years.... What is your opinion of the possibility that closed containment might be one solution?

L. Jensen: We see a fair amount of land-based facilities in places like Turkey and Spain, but those are mostly freshwater fishes. No one — not our company and not any that I know of — actually sees the validity in the close containment.

That's interesting, because I'd like to point out something. People talk about feedlots. You know, the fish are in their natural environment right now. They're swimming around. They're in a cage. They're almost like free range. They're not running wild, but they're penned in. They're not feedlots. A feedlot is putting them on land in a big container where they can't see the water.

I think you've got to put it in perspective and think about the fish as well as just the economics.

J. Yap: In the 14 trips to Norway that you made.... There are no closed containment operations in Norway for aquaculture for Atlantic salmon?

[1505]

L. Jensen: Not that I've seen. It's interesting. I've been to Norway a lot, and fish farming is not an issue. People are proud to be fish farmers. Honestly, I eat more farmed salmon in Norway than I eat anywhere else. It's a non-issue. People are supportive; they work together. They're trying to make the industry better. They're not all back-stabbing and working against each other. It's a good industry, and it's a good, viable industry.

G. Robertson: Thanks for your presentation. A couple of questions. Firstly, does any of your technology have relevance around escapes and keeping track of escapes from farms and being able to determine how many fish, based on size, are leaking out? Is any of your technology oriented that way?

L. Jensen: Leaking — it sounds like fat. The new SmartEye camera is quite amazing, actually. It's a pan-and-tilt, 360 degrees. They can use that to inspect the nets and to look around — up, down, everywhere — so that could be used as a type of underwater surveillance camera.

Also, you know, once all the information is recorded, it can automatically come up on your databases, like: "Change net now." There are lots of ways. They are doing that to secure the pens and the nets. Some of these systems could be used, but again, I'm mostly in delivering the feed, not so much in monitoring the status of the fish, personally.

G. Robertson: Okay. The second question is on a completely different topic. I was just a little taken aback on your last point around support and the "not in my back yard" mentality. Gary's point around all the first nations we have been meeting with that have come to these hearings.... We've been in their territories. It is their back yard, and they have voiced very clear concerns about the impacts of the farms on their ability to carry on their way of life.

I'm curious. It sounds, from your point here, that you attribute all of the criticism to people who aren't here, people who live far away, people who live in urban centres or environmentalists. But we've seen different sides of this, not only from first nations but from commercial fishers, too, who feel that impact here.

So I'm curious how you acknowledge that or what you offer up as a solution around a balance there.

L. Jensen: Well, as you're aware, there are first nations that are in support of salmon farming. And we also find that some of the first nations that are against it actually don't have a whole lot of information. They get things from the media, they get things from opposition groups, and I don't think they really have an accurate understanding of what's going on in the area.

As far as I'm concerned, I'm a resident of this B.C., too, and my voice counts as well. Some of the Island groups.... You know, we all live here, and we all have to live together. I think it's sustainable, and working together is going to make it work.

G. Robertson: Just one point of clarification. We've heard the term "feedlot" thrown around a lot. I would imagine that most people in this room eat beef that comes from feedlots, so it's easy to slag on the word "feedlot," but the reality is that it's how a lot of people in North America get their protein right now.

In terms of my definition, as a farmer, historically feedlots were all to do with density and how much space the animals had to move around. There is accuracy to using the term "feedlot" when it's a densely populated pen, as a feedlot on land would be. So there is a distinction there, and for most people feedlot is just fine. Calling a spade a spade, I think, is appropriate on this too. Thank you.

G. Coons: Yes. Just one more question. You mentioned that we have developed codes of practices, and again, I believe that one reason we're here is the *Salmon Aquaculture Review*. One of the recommendations said that there should be a comprehensive code of practice with input from all key interests. Apparently, that wasn't done.

[1510]

The code of practice was developed by the fish-farming industry without input from key stakeholders, whether they were the environmental groups, first nations or communities. I think that's what we're calling for when we look at all levels of government and communities involved, perhaps.

Do you have any comment on that? Perhaps that should be a starting point.

L. Jensen: Honestly, I think that's just stall tactics from the opposition.

Yeah, I think codes of practices are in process, and they should continue to be worked on. But to halt an industry because somebody is offended by or doesn't feel that a particular sentence reads right is, I think, a little unfortunate. I'm not the person to be talking to about codes of practice. I think you should talk to the B.C. Salmon Farmers about that.

G. Coons: Okay. Thank you.

R. Austin (Chair): Thank you very much for your presentation.

L. Jensen: Thanks.

R. Austin (Chair): I would now like to call Linda Sams up to the witness table.

L. Sams: Well, Mr. Chairman and committee members, thanks for inviting me to speak today. My name is Linda Sams, and I'm a biologist by training. I've lived and worked on Vancouver Island for the past 16 years. Prior to that, I grew up on a farm in the Fraser Valley. I'm a mother of two school-aged children, and I make my home in Campbell River, where I'm currently employed as the CEO of the Centre for Aquatic Health Sciences.

I have worked for over 20 years in the salmon-farming industry, much of that time spent in small coastal communities. During my career in salmon farming I have seen much advancement in technology, management practices and collaborative approaches, but like all long-term commitments, there is still more to do.

My area of focus throughout my career has been fish health, environmental management and communications. My communication work mostly took the form of community outreach, including many first nations communities. I have always promoted a collaborative, open-minded approach to finding solutions to the issues and concerns presented to the salmon-farming industry, and I am pleased to bring those principles to my new position.

Science and research can play an important role in finding solutions but only if relevant and responsive to local issues and needs. Today I'm going to take the opportunity to respectfully correct a few statements that have been made during the past hearings, but mostly I'm going to talk about opportunities, recommendations and leadership. I am hopeful that some of the information I'm sharing with you will aid in your deliberations.

First, I would like to correct some comments I've heard in the past discussions concerning closed containment research. I was project leader for one of the largest commercial closed containment trials in the world. That trial ran from 2001 to 2003 at Cusheon Cove on Saltspring Island. It was completely paid for by industry and yielded some very important information. That report can be found at a link I have provided to you in my handout, which I have here and which I will hand out.

The fact is that industry has participated in containment research in the past and did contribute to the knowledge base around that technology. I am not here to discuss the closed containment debate with you today, but I did want to state for the record that industry has, in fact, willingly participated in that research. That should serve to clarify industry's willingness to experiment with new technology and lend them some authority on the topic.

The other point of clarification I had was around the international experience with salmon farming. Before I go on with this.... I prepared sentences around this. It's very timely, because we had the gentleman talking earlier about Norwegian information. I think it was John, or maybe it was you, Daniel. Somebody had

mentioned the difficulty in finding reports or information that can substantiate some of this information that we're hearing. But I think we can all learn from the international experience.

[1515]

As I was saying, around the international experience with salmon farming and the state of international research on the sustainability of salmon farming and its impact on local economies and the environment, I understand there has been some potentially inaccurate and outdated information presented about other salmon-farming countries, particularly Norway.

I have visited both Norway and Scotland in the past two years. In fact, I've been to Norway four times since 2001. During those visits I've met with technical people and scientists and toured many farms, research facilities and communities. The absolute largest impact on me during these visits was how much progress had been made on a wide range of issues through collaboration, not confrontation. How the environmental groups Bellona and WWF — World Wildlife Fund Norway — worked with the salmon-farming industry are really two great examples of how that can be achieved.

There are many credible scientists and research institutions internationally that are looking at many of the same sustainability issues that your committee is considering. I would be pleased to offer you any assistance I can in connecting with these scientists and learning from their experience. I included a couple names in my presentation that may be useful: one from Norway, working on a large multiregion sea lice project, and another from Scotland — Bengt Finstad, who is the project coordinator for the Hardanger Fjord project, and Trevor Hastings, who's the director of Fisheries Research Services in Aberdeen.

I'm sure you'll get the story. It won't be all roses. There will be problems, but there will also be solutions, and they'll be management approaches.

I would like to recommend that the committee take advantage of our local research connections with the international research community. I am pleased to bring to the attention of the committee the positive trend towards building scientific research capacity locally on Vancouver Island.

I know you've heard from the Centre for Shellfish Research located at Malaspina University College, and I understand you will also be having a presentation made to you by Dr. Steve Cross about his internationally linked sea lab project. We also have our local North Island College that services communities all the way to the central coast, with one of their focuses being first nations education. I have also included this information in your package.

I am pleased to add that we have the newly developed Centre for Aquatic Health Sciences, located in Campbell River, which is working cooperatively with all these institutions, as well as the larger academic institutions and international research facilities.

The centre is not focusing on the fish-farming industry but rather has a mandate to work with all sectors to support the social, economic and environmental

sustainability of B.C.'s aquatic-based resource industries. But maybe even more importantly, we are working to increase research and service capacity in rural and coastal communities. We are new, but we are committed to living up to our mandate.

For the record, there is much to be learned from the international experience with salmon farming, and aquaculture in general. Recently I hosted a visit from Maori representatives and scientists from New Zealand. They wanted to visit the Kitasoo Xaixais First Nations and learn from their experiences with salmon farming, and they wanted to build an international network on the subject of aquaculture. They're investigating for themselves whether they want to enter into this industry.

However, as an applied local research centre, our first commitment should be to our local communities, our local industries and environment. Our environment is unique, and all of our different relationships to it are unique as well. We should learn from the international experience and research, but we need to apply it here and find local solutions for local issues.

In summary, what I'm asking for is leadership — leadership through your upcoming recommendations that will support initiatives that are neither political nor partisan; recommendations that will promote collaboration and cooperation to support healthy economies, environments and communities; and, last but not least, recommendations that are thoughtful and well supported by a variety of information sources.

I have witnessed first hand how important this industry can be to the lives of many families and how important it can be to communities like Port Hardy. I have been touched by the sincerity of emotion from all sides of the debate. In that light, I ask you to take this responsibility very, very seriously. The issue is complex, as it is political, and your challenge will be to educate yourselves to a point where you can provide the public with a balanced perspective of the issue.

In closing, I have some recommendations of my own for the committee. I'm going to ask for them politely.

[1520]

Please educate yourselves on the closed containment work done to date and seek feasibility input from the industry. Please seek out a balanced international perspective, and do not feel compelled to reinvent the wheel. Please put all this debate in context, and develop practical, information-based recommendations which will result in local solutions.

Lastly, please inform yourselves on the local research, educational and scientific capacity available on Vancouver Island that can facilitate your information-gathering internationally and could provide a platform for collaborative solutions.

Thank you for listening.

R. Austin (Chair): Thank you, Linda. Shane has a question for you.

S. Simpson: Thank you for the presentation. I've got a couple of questions. The first one is around the

science issue. We've been told at different times.... As you'll know, there's lots of science out there, and some of it covers a whole range of points of view. We've been told that we should focus our attention around the science that has been properly peer-reviewed, as some kind of a standard to set for the science we're looking at.

We have been provided with some publications and some analyses that have been done that have been peer reviewed — mostly, at this point, from those who have criticism of the industry. What I would ask of your centre and the work that you've done.... This is work that mostly deals with the local context. It talks internationally, but it deals with the local context because there are unique things about British Columbia, certainly.

Any support or assistance you could give us in providing us with information about peer-reviewed science that is supportive.... I'm not asking you to take a position, but we're just trying to find some balance in terms of the body of science here that we can get. Any advice you could give us around peer-reviewed science that's out there saying that some of the problems that have been identified by those who are critical maybe aren't as extreme as has been suggested or that there are other issues here or that some of those assumptions are incorrect for scientific reasons....

L. Sams: Yeah. I can understand that's a tremendous challenge for your committee, and yes, I would be happy to assist in any way I can.

Just a couple of points on that though. I think it's difficult for us because sometimes the people that do the science may have a position. But science should stand on its own legs and just be non-partisan or should stand on its own merit. That's where you have debate that happens amongst scientists, because again, humans are the ones that perform the science. Everybody has a different way of approaching it and interpreting it. That'll be your challenge, for sure.

The nature of science, also, that makes it so difficult for us to be able to make decisions — leadership decisions or decisions that take into account not only the environment but the economy and social needs — is the fact that science is, by nature, meant to open more questions. When you do scientific studies, they produce more questions. It should be a continually questioning process. You're not actually getting conclusions or solutions right away from scientific study as a rule.

That's just the nature of science, which makes your job all the more difficult. Anybody in your position would be faced with that, but that's what you have to work with. I'd be happy to help you in any way I could.

S. Simpson: I appreciate that. Certainly, any bibliography or list of those things that have been published.... I mean, it was Fisheries and Oceans, and we met with DFO officials and talked to them about their science out of Nanaimo. They were the ones who talked to us about peer review as well. We know we have some of that around the issues of lice, for example.

Yet there are very different views about the impacts of lice. We're trying to find that peer-reviewed science on the other side of that debate, so any help that you could provide with that.... What we don't want to do is just be taking one side of this debate, by any means, yet we want to be careful to not pick up all the science that's out there, because some of it is, you know.... It needs to have been scrutinized by others — other than us, people who have that ability. So any support would be good.

[1525]

The other question is just a quick question around closed containment issues. You talked about the work that you had done previously in relation to closed containment. We know that there are folks in Campbell River — the Agrimarine folks, other folks — who are looking at closed containment questions and floating closed containment and other models. There are a few of them out there now.

I would ask your opinion. Do you believe, based on what you know from your previous work and on where things are at now, that we need to do more work and analysis around the question of closed containment — both its economic viability and whether it begins to address some of those environmental or habitat issues that first brought it on to the agenda?

L. Sams: People who know me probably get tired of hearing me say this. I say there's no bad technology. Closed containment — as we talked about science, we answered some questions and then we just brought a whole more bunch of questions to the forefront.

What I would like to point out is that closed containment is probably only one way to mitigate some of the impacts that we want to mitigate. I've said many times that I can understand why people embrace that concept, because it is quite easy to understand. I don't say that in any sort of disparaging way. It's just a good visual. It's a barrier between the wild fish and the farm fish. It means that farmers can keep their jobs and the wild fish are protected.

I think that's really the kernel of what's valuable about closed containment. We want to keep the jobs, and we want to make sure the wild salmon are protected, and we want to grow a nice, safe product. I think that is really what closed containment is about.

If you use vaccines in order to prevent disease, which is now a very effective way to make sure that we never have any disease issues in our sites.... In Norway now, disease treatment with antibiotics is basically unheard of. That is an issue that has been basically eliminated. I can tell you that our industry here in B.C. is fast moving in that direction. It's because of effective vaccines. As you can see, there would be no need for a barrier method on that one issue in some place like Norway right now.

I think there are always additional questions that could be answered, additional research around that. If the motivation is to satisfy a public need to see that looked at again, and the economy looked at, I can tell you that our trial — and we didn't recover the waste on

the piece we did, and it was a hard job as it was — was a good trial. We learned a lot, and we added a lot of information. At the end of the day, it was still almost a 29-percent higher cost of production with that trial than with a conventional system.

Since that time there have been some technological advances. Some of the things that I would like to see if we were to look at it again is the fish welfare question. Gregor, you were saying about the feed lots. Well, fish in closed containment are at about a three to three and a half times higher density than fish in net pens. So there is a fish welfare issue and a fish behaviour issue that hasn't been looked at, and that sort of thing.

Closed containment may be viable in certain areas or useful for certain species. So I would never say that it's a poor idea to test technology again. I just don't think we should ignore all the other technological advances and other mitigating strategies we have for the impacts. That's really the key message that I try to get out all the time.

C. Trevena: Thanks, Linda.

You mentioned going to Norway and seeing the positive experiences of what's been happening in the industry in Norway, as well as the positive experiences of the ENGOs working with the industry to move it forward so all sides can accommodate one another and be happy.

I just wanted to know. Here we've just got the CAAR-Marine Harvest working agreement. We're trying to start working things out. What did you see in Norway that the ENGOs and the industry were doing that maybe we could see working here as an alternative.

L. Sams: What I saw — with the short experience I had in speaking with people — that did have a large impact on me was the level of knowledge of the ENGOs that we were dealing with. The people who the industry was working with in the ENGO community were very knowledgeable about industry practices, advancements or issues — right? I'm not landing on either side of the fence there. They had informed themselves, so they really were talking at the same technical level and talking apples to apples. That was one piece.

[1530]

They struck me as being slightly more moderate. The fish-farming industry seemed to be more mainstream and more acceptable — just part of the landscape, another industry that was there. It wasn't that the industry had to go away. It was just: "We want to work on these issues to improve it." It wasn't all or nothing. It wasn't, "Closed containment or gone," or it wasn't: "Gone." It was: "This is the issue. How do we work together to find a solution?"

I think those were a couple of the really main ways it was working. That could be due to the actual maturity of the industry there. It could be a lot of other factors involved. I was really quite impressed by that sort of approach — and one thing, too. Industry was really — what's the right word: complimented, rewarded or acknowledged? — acknowledged, I think, for actually making improvements.

C. Trevena: The other thing you mentioned in answering Shane's question is closed containment and ways to mitigate problems. You mentioned vaccines. I don't know whether you're the right person to ask or you can direct us to the right person, but you say that the use of vaccines is improving the health of farmed fish in B.C.

I wondered whether, through your centre or through industry, those figures are available about how much the vaccines are working, not working, where they're working, what diseases they are being used for and their impact.

L. Sams: We have one veterinarian on staff. We also have a PhD researcher who is doing work on vaccines. I'm sure they could give you a more comprehensive answer than I could. I know that we may not be able to speak for the whole industry on a total, percentage-wise, but in consultation with the industry vets, I'm sure they could come up with a good answer for you on that.

C. Trevena: Thank you.

J. Yap: Thanks for your presentation. One of the challenges for us and for others who are trying to come to grips with the science is to find a way to discern between conflicting studies or reports of scientific work done.

I'd be interested in your view and in, perhaps, the accepted scientific view of what peer review means. We take that as a given that if some study, some work is peer review.... What does that mean? What is the import of it, and what is the standard?

L. Sams: That's a difficult question. I don't know if I actually am the best-qualified person to answer that. You'd probably want somebody in a truly academic situation to answer that most fully. What I can say to you is that I can understand the need to have some sort of terms of reference to make your situation work. The sheer volume of information must be just overwhelming.

I would caution against sticking to a really strict definition of peer review. I understand that means that a paper published in a major journal goes to credible, academically qualified reviewers. I know there's a whole process in place for that if you're going to get published in an academic journal, but there's local knowledge that is important. There's local first nations knowledge that's important. There's scientific work done by government bodies that adds to the information base.

For heaven's sakes, the salmon farmers are out there. They have scientists, biologists, veterinarians on the water and in the middle of the operations all the time, 24-7. Their information must be useful too.

I think what is key is to get a group of people together that are willing to be open-minded, willing to recognize that a scientific debate will always raise more questions, but they're willing to bring information to the table in a fairly non-partisan way.

It's going to be difficult because of just the nature of what you're trying to examine. My best advice is to try to get the most moderate group of scientists represent-

ing all the sectors around the table that you can. That's the best advice I can give you, because I sure wouldn't want your task.

R. Austin (Chair): Thank you very much for your presentation. Sorry, Linda — one second. I didn't recognize that Dan has a question for you.

[1535]

D. Jarvis: I wanted to ask you a question. I don't know if I misinterpreted you or what it was. You said closed containment is one way to mitigate the problem and to protect, ostensibly, the wild fisheries. Am I simplifying the statement by saying that closed containment, you feel, will save the wild...?

L. Sams: Yes, you are simplifying my response. I don't know if I said it was going to solve the problems. It's one way to mitigate the impacts. All industries have impacts. It's one technology and one way.

A closed contained system could perhaps mitigate against benthic impacts, but the only escape incident the company that ran the closed containment trial had in 2002, I think, was actually from the closed containment bag.

Obviously, you cannot rely on one technology to mitigate impacts. I think you have to use a range of technologies. You have to use new information as it comes forward, and you have to use good ground-truthing of your impacts after whatever technology you're using. It's a very complex question.

D. Jarvis: As a biologist, can you perhaps simplify the statement as to what is not protecting the wild...? What factor is it? Is it sea lice, or is it overfishing — predation?

L. Sams: You're asking what we are...?

D. Jarvis: I'm asking you for all the answers is what I'm doing.

L. Sams: Well, if you want to step outside, we have eight hours. I guess we can talk about it.

What I see is that we are an industry operating in the marine environment — right? When I say we, I'm not even with the salmon farming company anymore. Salmon farmers are operating in the marine environment. Obviously, with any industry you're going to have impacts.

I grew up on a farm in the Fraser Valley. There are impacts from terrestrial farming. There are impacts from all the people that commute from the suburbs, from Aldergrove to Vancouver, every day to go to work. There are impacts all around us. Mining, forestry, tourism — you name it. They all have impacts. So we all have an obligation — as an industry operating in B.C. for the benefit of our future generations in respect to the territories in which we operate, in respect to the environment — to mitigate our impacts and make as small a footprint as possible.

There are various technologies you can employ to do that. Closed containment is one that has been put forward as a way to create a barrier between the farm

fish and the wild fish in hopes of eliminating any interactions. That would decrease the risk of any impact on wild fish — that would be the theory — or impacts on the bottom.

Then what are the impacts on the sustainability of the industry? What are the impacts on the fish welfare? What are the impacts on the fish behaviour? There are impacts on both sides of the scale. As with any kind of easy solution, once you peel back the onion layer, there's a lot of complexity there. So my answer to you would be no, there is no simple answer.

D. Jarvis: I would assume, for example, here on Vancouver Island.... I'm not too familiar with Vancouver Island, but I do know that the steelhead world is diminishing rapidly. The Keogh, the Oyster and the Stamp are dead now, as far as steelhead go. The only other place where there is good steelhead is being supported by hatchery fish. There's something out there that's killing the fish — salmon and steelhead and all.

L. Sams: Do you fish steelhead?

D. Jarvis: Not anymore.

L. Sams: But you did — right?

D. Jarvis: Yes.

L. Sams: So you were an impact.

D. Jarvis: There's such a thing as catch-and-release too, you know. However, I was never that smart.

I'm talking about it as a food substance too. We can't catch salmon and release them either. This is an industry out there. It's survival for certain people in our province. That's the substance of their food line.

[1540]

I don't know where we can go to get the correct answers. I'm fairly convinced that sea lice is not the big question as to why we're losing our fisheries. There's got to be many other things that are impacting on it. Where do we go to find that?

L. Sams: I know, and that is your....

D. Jarvis: Back to government, and get more money, and do independent studies — if we can find any independent people.

L. Sams: Yeah, that is difficult. I don't disagree that you have an immense challenge and responsibility laid at your table here. All I can ask is that.... You're only human beings. You're only going to be able to get as much information as you can get. I think it probably behooves us all, on all sides of the debate, to try to provide the most credible, accurate information we can to you all, because you've been charged with this responsibility.

The whole industry is looking to you for making decisions about their future livelihood. The scientific community is looking to you for direction on where to

go, perhaps, next. The environmental community and first nations are looking to you to make wise decisions about the environmental sustainability of their fisheries. So you have a huge responsibility.

I guess I came here today to add the little bit I could. I was thoughtful in what I presented. I was careful in what names I gave you; I was careful in what facts I gave you. That would be the challenge I'd put forward to anyone else who comes here and presents: to try and aid you in this difficult process you have.

D. Jarvis: Thank you.

R. Austin (Chair): Thank you very much.

I would now like to ask Dave Adams to come up to the witness table.

D. Adams: Good afternoon, and welcome to Port Hardy. My name is Dave Adams. I'm a husband, father, resident of Port Hardy and the area manager for Pan Fish in the Port Hardy area. I'm 37 years old. I've lived on Vancouver Island my whole life, and I've been employed in the aquaculture industry for 18 years. I'm a little nervous, obviously.

I could sit here and talk to you about misinformation and the rhetoric from the anti-salmon farming groups used to scare the general public — for example, high levels of PCBs found in farmed salmon. Actually, a study in the year 2000 found that B.C. farmed salmon averaged 32 parts per billion. Wild B.C. and Atlantic chinook averaged 10.25 parts per billion. The CFIA and the FDA safety guideline for PCBs is 2,000 parts per billion, which means B.C. farmed salmon were only 1.6 percent of the CFIA and the FDA limit.

More recently, in January of 2006 Pan Fish tested Harbourside's fish and found a total PCB range from 6.75 to 7.5 parts per billion. That's lower than the wild B.C. and Alaskan chinook and only 0.33 to 0.375 of the CFIA and FDA allowable limits.

I could also talk about the use of antibiotics in farmed salmon. All antibiotics used in salmon destined for human consumption are administered through feed. Currently less than 2 percent of feed used for growing Atlantic salmon in B.C. contains medication — I believe there was a question earlier about that — 2 percent, so that's about seven days a year. My daughter takes more antibiotics than that. In the poultry, beef and pork industries, it's over 50 percent.

Lastly, I've read propaganda stating it takes over three tonnes of wild fish to produce one tonne of farmed salmon when really, with a 1.15-to-1 feed conversion ratio, which is achievable in the industry, it takes 1.14 kilograms of wild-caught fish to produce one kilogram of farmed salmon.

[1545]

Fisheries biologists in both Canada and the U.S. have shown that it takes a wild salmon typically five to 15 kilograms of wild fish to grow one kilogram because it needs to expend the energy to find and catch its prey.

But that's not why I'm here. I'm here today to inform you of what aquaculture means to me, my family,

my employees and my community. I'll leave the science up to the scientists.

For my family and me, aquaculture is everything. It's not a job; it's a way of life. As previously stated, I've worked in the aquaculture industry for 18 years, and in that time I have never been on EI, and I've never been unemployed — not once. My wife has worked in the processing plant here in town for eight years. For the past year my son has worked on the fish farm. Even my brother, who lives down-Island, works for a net manufacturing company that makes nets for fish farms. As you can see, aquaculture means a lot to my family, to say the least.

As for our employees: on the production side, which includes the rearing of salmon but excludes the processing plant, Pan Fish employs 152 full-time, year-round employees. When I say year-round, I mean 24 hours a day, seven days a week, 365 days a year. We don't take holidays. We don't take Christmas off. No Yom Kippur. Fish have to be fed — right? I mean, it's part of our job. This does not include the 103 employees that work at the processing facility here in Port Hardy. If we were to add those together, those are 255 direct jobs in mostly small, coastal communities.

Jobs are not easy to find around here. It's commonly stated that for every one resource job, there's one spinoff job in the community, which would mean there are 510 jobs that rely on Pan Fish directly or indirectly for their source of income. This would include business people, clerks, teachers, government employees, doctors, nurses — you name it.

Put that in a kind of communal setting. If all these people had a spouse and only one child, that would become 1,530 people who need Pan Fish for their livelihood. These are people in small communities. It probably would not be a small community if it was not for aquaculture. They'd be out digging oil sands or some other beautiful place. And 1,530 people would be a community just under half the size of Port Hardy.

A couple of months ago, actually, an employee came up to me. He's been working with me for about seven years. He thanked me for all of what Pan Fish had done for him. If not for Pan Fish, his life would not have turned out as it is. He said that without the stable job he would not have been able to buy a house or start a family. Last week he had his second child, a beautiful baby girl. This is just one of my employees. Obviously, there are 151 more with similar stories.

Most of my employees are not here for the paycheque, as is often found in other industries. They're here because they love the outdoors and the ocean. It's a hard job. They're away from their families. They can probably work in a plant somewhere pushing a button a lot easier. But they're here because they enjoy the outdoors, they enjoy the ocean, and they enjoy the community.

Many of them are average fishermen. Some work for fishing charter companies on their days off. A couple work for local tourist companies for kayaking, sightseeing, whale and bear watching. One even writes an outdoor column for a local newspaper.

These are your real environmentalists. These are the people who care about the community. They care

about what they're doing and where they want to be. As stated before, they're not sitting in Vancouver, driving around in their SUVs.

Pan Fish's total production payroll for 2005 was \$7,255,720. That's an average of \$47,735 per employee, not including the processing plant. This money, after taxes, goes directly into our local economy.

[1550]

The average age of our site employees is approximately 30 years old. This age group is a driving force for local economies. They're the ones getting married. They're the ones buying their first house. They're the ones selling their old Trans Am and buying the minivan. They are a vibrant and energetic sector of the small communities. They're involved in community clubs, sports, charities, youth programs — just to name a few.

Again, that was \$7,255,720 in direct payroll, excluding the processing plant here in Port Hardy.

This next figure shocked me. Pan Fish's total payables for 2005 were \$28.75 million. Again, this is not including the processing plant. That's \$28.75 million spent on operating in 2005. The largest portion went to purchasing feed, which is approximately \$14.25 million, and the majority of the remaining \$14.5 million went to your local merchants for equipment, parts, fuels, maintenance, lodging, food, etc. That's a lot of money being injected into these coastal communities.

If we were to add Pan Fish's production payroll and payables — excluding the \$14.25 million that we spend on feed and, again, the processing plant — it would give us a total of \$21,755,720 directly paid to our employees and suppliers. They're big numbers, but these numbers actually represent people; they're not just numbers.

Every dollar we spend is a dollar in someone else's pocket. For example, assuming an average wage of \$40,000 per year per employee and supplier, that \$21.755 million would employ 544 people — mostly in your coastal communities. We must remember that these numbers are just from one aquaculture company out of many, many aquaculture companies here in B.C., and not the biggest one either. These are just our numbers for Pan Fish.

Aquaculture is an environmentally sustainable industry. We introduce, grow and harvest fish for an ever-growing consumer wanting a healthy, affordable source of protein. Without aquaculture, I guess we'll have to kill more wild fish to fill that growing consumer. This makes no sense to me. If you want to save the wild salmon, I say, farm more.

I personally have no problem with the commercial fishing industry at all, but I do know they can't keep up with the demand for salmon. When making your decision, please think about the families whose livelihood is in the balance. I also hope that you will base your decisions on facts and science, not misinformation and scare tactics.

Again, my name is Dave Adams. I'm a husband, a father, a resident of Port Hardy and damned proud to be a fish farmer. Thank you for your time.

R. Austin (Chair): Thank you, Dave, for your presentation.

S. Simpson: A quick question. I'd asked Ms. Jensen earlier, I think, about the feed question, and she said that there were other people coming who might answer it better. You might be just the guy to do this, considering your job.

It is a big number. You're saying that about 50 percent of Pan Fish's expenditure goes into feed.

D. Adams: Correct.

S. Simpson: If you have a farm.... I guess my numbers would be reasonable: 50,000, 60,000 fish a pen, maybe ten pens in a farm.

D. Adams: Quite a lot lower, but yeah. You're coming up to about 500,000 pieces is what you're saying.

S. Simpson: Roughly about 500,000, generally.

D. Adams: Approximately, yes.

S. Simpson: How much feed do you use in a day — tonnage?

D. Adams: It could range from five kilos and higher. You haven't stated a size. You haven't stated anything relevant. You're saying that you have 500,000 fish in the water. They could be this big; they could be that big. There is no answer to your question.

S. Simpson: I mean, you must budget. You must budget how much feed you're going to put into a farm in a month. You've got a budget. You know: "We're going to buy X tonnage." Is it a couple of tonnes a day?

[1555]

D. Adams: It depends on size. Your maximum for what you're saying right now.... If you're feeding a 0.5 percent body weight and you have a five-kilogram fish — which are the biggest ones we're going to have — and you have 500,000, do the math. It's about ten tonnes.

S. Simpson: Ten tonnes. That would be for the whole of the 500,000 fish?

D. Adams: Correct.

S. Simpson: But ten tonnes maybe.

D. Adams: Approximately. But again, you're converting at 1.15 to 1.

S. Simpson: Right. One other quick question, on the question of sea lice. That discussion is always on the table with us, of course.

D. Adams: And we still don't know why.

S. Simpson: I'm sure that in your farms you monitor for lice on a fairly regular basis. I know that's a....

D. Adams: It's the regulations.

S. Simpson: That's right. It's common practice.

D. Adams: Twice a month right now.

S. Simpson: What are you finding? I mean considering....

D. Adams: I haven't treated for sea lice this year at all.

S. Simpson: So you've had...

D. Adams: None.

S. Simpson: ...very little or none?

D. Adams: Very little, yes. I have not treated this year at all.

S. Simpson: Yeah. I think we observed others who were saying, you know, 0.3, 0.4 — something like that.

D. Adams: Correct.

S. Simpson: Would that be a reasonable number?

D. Adams: Yes. It's even site-dependent. It's all different.

S. Simpson: Thank you.

R. Austin (Chair): Thank you very much for your presentation.

D. Adams: Thank you.

R. Austin (Chair): I'd like to call Rick Harwood up to the witness table.

R. Harwood: Good afternoon, ladies and gentlemen and distinguished guests. My name is Richard Harwood. I am the owner-operator of a commercial dive company based here in Port Hardy. I started diving when I was 15, and I obtained my commercial diving certification when I was 25.

I moved to Port Hardy in 1994 and found employment at what was then Omega Salmon Group; now they're known as Pan Fish Canada. I was a general labourer at their Hardy Bay farm site. Back then, fish farmers who held a sport diving certification would dive their own farmsites.

In June of 1996 Omega Salmon Group started inquiring about the idea of using commercial contract divers because of a new regulation being introduced by Workers Compensation Board with regard to any diving being performed in a working environment. I saw this as an opportunity to start my own business. I approached Omega with a business plan, and after a few negotiations, a contract was eventually agreed upon.

In the beginning there was myself and two other divers. We had at that time seven or eight small sites to

maintain. Presently my company employs one part-time and four full-time divers. We have two more divers enrolled at North Island College completing their five-week commercial diving course.

We are presently maintaining six sites, where we are diving a minimum of two times per week. On average we spend approximately ten minutes in each pen. While we are in the pens, we are not only removing morbid fish but are also inspecting the netting and rigging lines used to secure the pens.

We are the front lines for Pan Fish, by which I mean we are their eyes in the water. We monitor the fish behaviour such as schooling, depth of fish, density, abnormal behaviours as well as general maintenance of the pens and any growth on the netting.

DFO requires that we submit a detailed net inspection every 60 days listing any repairs that are made. Normally, we do this type of inspection every 30 days, effectively doubling our obligation to them. When we are not diving in the grow nets, we are diving in the pred nets inspecting weights and the overall condition of the net.

If we find any problems we repair them immediately. It might be a small piece of wood that gets tangled in the netting and needs to be removed, or lines that are looking worn and need to be replaced, or any number of things that can adversely affect the integrity of the nets.

[1600]

I have seen many improvements in fish-farming practices throughout the years. Some of these are: increased thickness of building materials used to make both pen nets and pred nets, resulting in creating stronger nets; adding additional rib lines in both pen nets and pred nets that we then use to secure weights to, resulting in eliminating billowing in the pens; adding additional netting on both pen nets and pred nets to use as chafe-guarding, which effectively prevents premature wear on original netting.

Also, the design and construction of heavy-duty steel catamaran pen systems built to handle the harsh weather conditions here on the north coast; the use of state-of-the-art computer feed systems and underwater cameras used to maximize feeding cycles and eliminate wasted feed; and finally, the use of separate dive gear at all sites and strict disinfection protocols to reduce the risk of disease transfer.

As you can see, with each generation of fish that's produced, new ideas and technologies are being brought forward and implemented to further improve the way fish farming is done. I have several family members who own businesses in Port Hardy, as well as family and friends who work at the Alpha Processing plant.

As a member of this community I know first hand how aquaculture has benefited economically not only Port Hardy but the surrounding towns of Port McNeill, Port Alice and Coal Harbour as well. I care deeply not only for my community and the people who live and work in it but for the surrounding communities and people as well.

I am a member of the local volunteer fire department as well as a part-time ambulance attendant with

the B.C. Ambulance Service. We're all affected by what happens to the environment and ecosystem, and that is why I'm here today: to shed some light on what is involved in the day-to-day operations concerning commercial farm diving as well as the steps and measures that Pan Fish Canada Ltd. has taken and is continuing to take to produce fresh, quality, farmed salmon in an environmentally friendly manner.

Ladies and gentlemen, distinguished guests, I would like to thank you for this opportunity to talk in front of you today about these important issues, and I welcome any questions that you have for me now.

C. Trevena: Thank you very much. You talked about pred nets. Do you mean predator nets?

R. Harwood: I can actually clarify that. What a pred net is, is a secondary net that goes completely around a pen system, which on average has six grow nets inside of it. It completely surrounds all side and has a bottom. On average, there's a five-to-eight-foot gap between all sides on the nets and about 20 to 40 feet on the bottom.

I just want to make this clear: that pred nets are a non-lethal means of handling seals and sea lions. They're used simply as a deterrent. In my experience, when seals or sea lions encroach upon a farmsite, they generally hang around for two or three days, get frustrated and move on just to simply find an easier meal.

C. Trevena: As divers, you and your team are going down into the main pens, so it's your job to check, pick up the dead fish there to get them out before the predators would come around, sniff them and try to get through.

R. Harwood: Absolutely. And like I say, we're diving these pens a minimum of two days a week. Some are even three or four.

C. Trevena: Why the difference in numbers of days?

R. Harwood: It's just to do with visibility and feeding behaviours. You know, if the visibility is a little harder to see, we like to frequent the farm a little more.

G. Robertson: Thanks, Rick, for your presentation. I have a question around your mention of inspecting growth on the nets. I'm curious: do you play a role in maintaining the nets or deciding when nets get pulled for cleaning?

R. Harwood: Basically, what we do with regard to the grow nets.... Exactly. We're visually inspecting the nets, making any repairs, if there are any. Generally, repairs are on the sides of the chafe-guards or wear panels. If we see a significant amount of growth, we recommend to, say, Dave Adams that the nets be changed out. They have a barge to handle that kind of situation.

G. Robertson: I'm not totally clear on how the change-out works. Are all the nets that are used, that

you look at, painted with antifouling paint? Is that the standard that you work with?

R. Harwood: That's correct.

G. Robertson: And at a certain point, there isn't enough there. The growth starts happening, and they've got to be pulled.

R. Harwood: Yes, that's correct.

G. Robertson: Does that happen during a growth cycle?

R. Harwood: Actually, they'll change the nets at least twice through a growth cycle, from an entry-level net to the actual harvesting net. What we'll do is pull the corners away from one side of the net, drop the new net down and actually pull it underneath, completely encasing the old net, and then simply just pull that net out and the new fish fall in.

G. Robertson: Okay. My familiarity with antifouling paint is only with boats and different types, some that sloughed more and some that were more of a hard finish. With these nets, how is it released off the net? Does it slough off if you bump into the net, or is it stuck right on there?

[1605]

R. Harwood: Boy, that's a really good question. You know, I've never actually stared at a net and wondered how this antifouling is being activated. That would be a question for someone else, like maybe Dave Adams.

G. Robertson: Okay. Thanks, Rick.

R. Harwood: Oh, you're welcome.

D. Jarvis: Thank you, Rick. How many farms do you look after — one, two or...?

R. Harwood: Presently we're doing the north coast, which is six sites. We're gearing up for the seventh site at Marsh Bay.

D. Jarvis: I guess you've been doing it since '96?

R. Harwood: That's correct.

D. Jarvis: What about escapements? Do you see a lot of escapements, or are they diminishing or...?

R. Harwood: As I said, every generation they're coming up with better ideas. We, as divers, are making recommendations where we see troublesome spots in the pens, where maybe we should put some chafe-guarding in to avoid having holes in the original netting. We just don't see that. Most of the nets that Pan Fish is using up north are not even two generations old, so they're very structurally sound.

D. Jarvis: Okay. Cleaning the net of growth. What kind of growth is on it?

R. Harwood: Generally, barnacles and mussels.

D. Jarvis: Mussels. First of all, is there any retardant on the nets?

R. Harwood: Like an antifouling?

D. Jarvis: Yeah. No. Well, you know, anti-growth, retardant for.... I don't know if there's such a thing for barnacles, mussels and that sort of stuff.

R. Harwood: Basically, that's what Gregor was talking about: the use of antifouling.

D. Jarvis: When we were over in the Broughton a couple of days ago — I guess time goes fast when you're having fun — we were shown areas where there was a great diminishment of the clam beds because of materials coming from fish farms that were maybe a mile or a mile and a half away. The stuff was killing the clam beds. There were little things like worms and everything all through it when they dug out a sample of it. There was a black sludge down below it as well. They said it all came from the material that was, theoretically, dispersing through the waters — from the feces from the fish.

R. Harwood: I wouldn't know that, and you just said that was theoretical. I wouldn't know. Sorry.

D. Jarvis: There was a question that there was a slime, or almost like a lettuce seaweed, growing on the rocks on the bases of some of the rock beaches along there, that was caused from it. I was told that it came from the fish farms. I would assume — now I guess I'm going to have to ask a scientist somewhere down the line — that if something is coming from the fish farms and growing on the rocks where the clam beds are, then at the same time that same material would propagate on the nets.

R. Harwood: That's really interesting. I also continue to sport dive, as well, and from what you're talking about, if you're talking about some form of a green algae or anything, that's all over the coast. I mean, that's in our water. I really wouldn't know what else you're talking about.

D. Jarvis: All right. Thanks very much.

R. Harwood: You're welcome.

J. Yap: Just a couple of questions, just so I'm clear. Technically, when you say you do these dives, do you dive into the pens and do the inspection with the thousands of fish all around you, and you go down and inspect the nets? Is that how you do it?

R. Harwood: Yeah. For someone who doesn't dive in the pens, they have this misconception that the fish

are basically swimming into you, and that's not the case. What happens when you jump into the pens is that the fish just move out of your way. When you jump into a corner of a pen, basically, the fish are moving into the other three corners. You have an entire panel in front of you that you're able to visually inspect.

J. Yap: That's how you inspect. You go down to the bottom, and if you see any dead fish, you retrieve them.

R. Harwood: Exactly.

J. Yap: Do you also dive outside to inspect the predator nets?

[1610]

R. Harwood: Yes, we do.

J. Yap: You do. Are you on call on an ongoing basis, like 24 hours?

R. Harwood: Right now we're seven days a week. We're on the water every day, weather permitting.

J. Yap: Would it be the case that if there was a need, you could be called up to do a dive on a moment's notice?

R. Harwood: Absolutely. No site is more than 40 minutes away.

J. Yap: In your dives, and I assume you do a lot of diving, have you come across artifacts or sea life that might have some odd aberration? What I mean by that is that in our recent travels to different communities, some members of the community who had come to present made statements about, "Oh, near fish farms we're finding these fish that have things on them," or some scars, or something like that — growths on eyes.

In your many years of diving, have you come across anything like that?

R. Harwood: I've never seen anything like that. We dive underneath these sites at least once a month. There's lots of marine life down there. Greenling, cod, rattfish, dogfish.... You name it; they're down there. I've never, ever seen anything quite like what you're describing.

J. Yap: Thank you.

G. Robertson: Just a follow-up on the nets. You talk about a chafing or anti-chafing panel or something.... Do the fish actually bump into the nets? Is that what causes the chafing?

R. Harwood: No, usually what it is, is tidal drag. The nets are sitting inside a floating pen. The tide goes

one way, and the chafe-guarding rubs against the floating billets. Then it goes the other way, and it'll rub against the floating billets on that side. So we have installed chafe-guarding. When we notice that chafe-guarding is starting to get worn, it gets replaced or repaired.

G. Robertson: So the wear and tear is all friction between the gear.

R. Harwood: Just basically on the chafe-guarding — nothing on the original netting. That's the whole point of putting that on there.

G. Robertson: Do the fish spend much time right against the...? Poking their head out, looking out?

R. Harwood: Nope. Fish school in a circle.

G. Robertson: They don't mess with the nets.

R. Harwood: No. You know what? They're not even near the bottom of the pens. The general public doesn't realize what the fish do in the pens. Being a diver, I have a unique perspective. They just school in a circle. That's all they do all day. They stay away from the corners. They're not on the bottom. They're just happy to be alive.

G. Robertson: Do you see anything interesting — unusual or crazy behaviour? I mean, is there a variety, or it always just around and around?

R. Harwood: On occasion throughout the years, I've been in a pen where, say, a group of fish has been spooked. Generally, a sea lion or a seal has gone by. That's pretty interesting, because they don't school anymore. They kind of do their own thing. It's a fight-or-flight situation.

G. Robertson: Thanks.

R. Austin (Chair): Thank you very much, Rick, for your presentation.

I would now like to call Mayor Bood up to the witness table, please.

H. Bood: Good afternoon, everyone. My name is Hank Bood, and I'm the mayor of Port Hardy.

I am pleased to be able to address your committee this afternoon. The part of your mandate I would like to address today is the economic and social impact of aquaculture on B.C.'s coastal communities, particularly Port Hardy.

For background information, I would like to give you a little history of the area. As has been the case for most coastal communities, north Island has taken a proverbial kicking in the last decade. Our major employer, BHP Island Copper mine, closed with a loss of over 700 jobs. Production at the Port Alice pulp mill at

best limped along, while commercial salmon and logging industries both suffered huge job losses.

[1615]

The end result for Port Hardy was a decline in population from a high of 5,600 in the late 1980s to 4,574 in 2001. The consequences of the drop in population are: the school district's enrolment has dropped from 3,000 to 1,800, resulting in less-than-adequate funding and curriculum; operating and maintaining a recreational facility such as a pool, arena, curling rink and local golf course has become problematic; the services we had come to take for granted — such as federal and provincial resource offices, several hospital services, some types of dental services — diminished, necessitating an out-of-town trip; and many types of retail businesses were lost due to the declining population. In short, the socioeconomic fabric of our town was unravelling.

Fortunately for Port Hardy, the economic picture was not all bleak. Early on, town leaders embraced an up-and-coming industry — aquaculture, and in particular, fish farming. The full impact of the devastation of our resource-based industries was somewhat mitigated by the rise in finfish aquaculture in the area. For this presentation, I have asked our finance department to prepare a basic measure of economic impact of this industry on the district of Port Hardy.

Attached are the yearly tax and utility billings for three Port Hardy companies: Pan Fish, Cards Aqua and Keltic Seafoods. Two of these companies are totally dependent on farm fish, and the other one processes farm salmon as well as other species. Also included are the estimated tax and utility levies paid by Pan Fish employees on their residences. You'll find that on the last page of the handout I gave you.

Not included in the data are the ten other businesses, listed at the bottom of your fact sheet, that do a substantial amount of fish farm business. There are dozens of others also not listed who every day are impacted positively by the aquaculture industry.

The results of these calculations are an eye-opener. These three companies, in addition to the employees mentioned, contribute 20 percent of our property taxes, as well as 10 percent of our utilities levy. The point I am trying to make here is a simple one: fish farming is a substantial component of our local economy. Your tour of the north Island area has, I'm sure, made you abundantly aware of the spectacular wild beauty that draws tens of thousands of visitors from around the world. Yet we log, we eat commercial fish, we farm fish, and we mine.

In closing, I would like to say that, well done, there is room for all of these industries. I trust your committee will make recommendations that will enable our aquaculture industry and allow them to continue to contribute to a more economically diverse north Island.

Thank you.

R. Austin (Chair): Thank you, Your Worship.

Do members have any questions? Claire has a question.

C. Trevena: Hello. Thank you very much. It's a pleasure to be here. I'm glad we were able to come.

I had a question. I know that there are a number of mayors going to Norway to learn more about the industry. I wondered: are you going to be part of that trip?

H. Bood: Yes, I am.

C. Trevena: What is it you're hoping to find out, and who is organizing the trip?

H. Bood: Well, it's a little bit like the fact-finding trip that I'm going on in a week to the Gulf of Mexico, where we're going to be looking at some oil and gas equipment. We're looking to find facts about the farm fish industry from a country that does it well and has done it for a longer time than we have.

The other thing that Norway has done, of course... Their farmed fish industry is sort of combined with the oil and gas industry. That is a possibility at some time for the north coast area here, so it would be interesting to see how those two industries mesh.

C. Trevena: Who's organizing the trip? Is it Pan Fish or salmon farmers?

H. Bood: I think we're going on behalf of the province, and I believe the economic development officer of Campbell River — I can't remember his name offhand right now — is doing the organizing. The province is paying for it.

C. Trevena: Right. The province is paying for it. Okay. Thank you very much.

D. Jarvis: Just a brief question. I'm curious about your little trip to Norway. Have you made any inquiries as to how their oil and gas there affect their farm fishing, or are you going to find that out?

[1620]

H. Bood: I suspect I'm going to find that out. I suspect, also, that their history in the farmed fish industry is years longer, maybe decades longer, than ours. We don't have, at the present moment, an oil and gas industry off our coast. I think that's the reason the province has picked that area — because of their history in the business.

D. Jarvis: If we got rid of all the farm fishing areas in this area here and the processing, your taxes would drop — what is it? — 20 percent or....

H. Bood: Yeah, that would be our property taxes. I tried to be conservative here. I didn't want to put something out that wasn't easily substantiated, so we took only three companies, and we only took the employees of one company and did the estimate on that basis.

We don't have the resources or the time to do a socioeconomic study for the north Island, but I'm sure if one was done, we'd probably find that the economic

impact was even higher — that the property taxes paid and the utilities paid would be higher than that.

D. Jarvis: So you're expecting oil and gas to expand your tax base, eh?

H. Bood: Well, I don't think in my lifetime, from the sounds of things.

D. Jarvis: Well, you never know. Or mine, either. Okay, thank you very much, sir.

H. Bood: You're welcome.

R. Austin (Chair): Great. Thank you very much for your presentation.

I would now like to call James Walkus up to the witness table.

J. Walkus: Thank you for the invitation. I'm James Walkus. I'm first nation and a commercial fisherman. I've commercial-fished for 51 years now, going on 52 years.

I am probably the biggest individual salmon and herring fisherman on the B.C. coast. I have eight seiners and three gill-netters left. At one time I owned 22 seiners, and I still have a bunch of herring seine licences and a bunch of herring gill-net licences.

We've seen the wild salmon stocks go down, go up. And the supply and demand — we commercial fishermen could never meet the supply and demand, so I fully support the farm fish. In hauling farm fish, I employ 20 pretty well daily.

But I still believe that for the farm operation, it should be done properly. The first nations should be advised of what's happening. They should get a report of any incident — the biological aspects of it. Then there won't be any rumours going around. We don't need legal actions taken from either side. It should be used for the community.

[1625]

I heard a comment earlier too. Where is some of steelhead? Where have they gone? Years ago we were paid a bounty on harbour seals — \$5 a nose for harbour seals. Now there are more seals around than sea lions, and nothing has been done about it.

I don't really have much more to say. I've heard so many good comments about it. We're looking for jobs for our community, and I'm pleased to say that from my village we have approximately 24 working at Pan Fish. Hopefully, there will be more. So my support is with them. Thank you.

D. Jarvis: You're a seiner, and the seine industry has pretty well gone drastically downhill. Do you have any ideas as to what was the cause? It's been thrown at me the last week that it is the fish farms that are creating the problems with regards to the herring. It's the herring industry — I didn't classify that at the start, and I should have — that has ostensibly collapsed. I'm wondering if you have any suggestions as to what caused that.

J. Walkus: Well, the herring had collapsed before the '70s, and it came back very strong. I wouldn't say the herring has collapsed, but it has gone down — probably overfishing and an abundance of predators.

As far salmon seining, they predict 17 million sock-eye this year. That's a big year. But with politics involved, it has just given us commercial fishermen a rough time.

D. Jarvis: Okay, sir. Thank you very much. Good luck this year.

G. Coons: Thank you, James. That's good information about your fishing company. I'm just wondering what first nation you represent. Where are you from?

J. Walkus: I'm from just the north end of the Gwa'Sala'-Nakwaxda'xw reserve right here in Hardy.

G. Coons: Okay. Just one last thing. One reason we're here and trying to listen.... And you mentioned that it needs to be done properly. When we look at public confidence.... One reason we're here is trying to make the industry sustainable in working with the wild stocks and the marine environment and coming to some recommendations on how we can keep it going, keep the jobs and keep the communities thriving. Do you have any recommendations for us?

J. Walkus: Well, I would suggest that the higher-ups from the company should come to the reserve and consult with them and let them know what's going on and if there's any hindrance to the area. There should be nothing to hide. They should be transparent with what's going on, what's happening.

G. Coons: Thank you very much.

[1630]

G. Robertson: Thank you, James, for your words. I have a question on your business and your activity. How much is still in commercial fishing versus working within the aquaculture industry?

J. Walkus: I have, off and on, three boats working for aquaculture, three gill-netters continuing to fish wild stock and five seiners for wild salmon.

G. Robertson: So your boats are still working every opening, and you still have people working every year in the wild fishery too?

J. Walkus: You bet.

G. Robertson: Is that still the majority of your business, or does the aquaculture supplement that?

J. Walkus: It's still the majority of my business, yes.

G. Robertson: How are the prospects? How does it feel looking forward on the wild side?

J. Walkus: Well, this year sounds a little better than the last couple of years, so hopefully it's on an upward swing.

G. Robertson: From your village, are there other people still commercial fishing on the coast?

J. Walkus: Yes.

G. Robertson: Has there been a big decline in the number of people relying on that?

J. Walkus: Yes, there has.

G. Robertson: Is it still the major employer there with your people?

J. Walkus: Well, not really. The last few years there's been a real letdown. I think the majority of our employment is at Pan Fish.

G. Robertson: Some of the first nations we have had meetings with, the villages are quite split. How is that in your village? Is there support on both sides — people that are not happy with aquaculture and people that are?

J. Walkus: Yes, there is. There is a division there.

G. Robertson: Does that get worked out, or is it a constant battle between people?

J. Walkus: We haven't consulted or met with them for a while now, so I don't know what the latest reaction would be on that.

J. Yap: I appreciate you coming to present here, because we know that it's now the busy time for commercial fishermen. I appreciate you coming to meet with us.

I just want to be clear here. I don't want to put words in your mouth, but I think I heard you say that if we can do aquaculture right, you believe that it's a good thing and that — I assume, given your long history in commercial fishing — the two can coexist. Is that correct?

J. Walkus: That's my belief, yes.

J. Yap: It sounds like you're an example of an individual, an entrepreneur, who's participating in both industries.

J. Walkus: Right.

R. Austin (Chair): Thank you very much for your presentation.

I would now ask Riccardo Marrara to come to the witness table, please.

R. Marrara: I'm going to do a short presentation here. It's more about farming in general. I'm going to

split it into three parts. There will be: what is farming in general? Then: why we need them. Then we'll get to the conclusions. I don't have any brilliant ideas on how to solve anything, and I hope that's okay.

R. Austin (Chair): No, it's not.

S. Simpson: Definitely not okay.

R. Marrara: We've had farming, all sorts and kinds, for thousands of years. This is all obvious stuff. We've heard this a thousand times. I think we'll have to hear it again tonight. For thousands of years we've had animal husbandry, right away, and then crops and orchards and so on.

[1635]

Everybody had their own little back yard, growing potatoes and vegetables, and had two cows, three sheep and so on. Then we move up to younger history where everything is getting more centralized, because everybody's moving into cities.

Living in a city, you can't really run your own cattle and so on. You have a job. This is all society. Of course, by mass-producing cattle, milk, wool, etc., there will be environmental issues. We're all aware of that. We've been aware of that, probably, ever since industrialization.

That's where the government kicks in. That's why everybody appreciates the job that the government does. We want to make sure that we take care of the land not just because we like it but also because we want to reuse it and make it renewable.

We go from the past, which is small family farms with no regulations, to the present with mass-producing farms with regulations and restrictions set by the government. Why do we need farms? We need them to feed ourselves and our children, for affordable food and for comfort. We don't need to go hunting and fishing every day. We don't have to gut any fish. We don't have to slaughter any sheep. We don't have to harvest any crops.

What we can conclude from that is: if we didn't have any farms, which include fish farming or any kind of aquaculture.... Since we can't get our food ourselves even in Port Hardy — even though we're in the middle of everywhere, we can't.... We need to be able to earn our money and afford a car and a TV and a radio so we can listen to you. It's impossible.

Second, we need the cattle farms and the fish farms to sustain our wild stocks. We don't want any overfishing. We don't want to extinguish any fish. We don't want to extinguish any kind of species. We don't want to extinguish deer. This is all a necessity.

Also, this is why we have you guys here. You regulate and restrict everything. You make sure that you put your seal of quality on all the products. That's why we still eat chips and other foods that we can buy out of the store, even though they're totally strange. We eat them because we trust you. We know that you've done your job by measuring any kind of chemicals that are in there. You've been doing that for years.

Fish farming is quite a new industry overall and especially in Canada. It's an industry that was established with all the other regulations and restrictions already in place. You didn't have to go through such a steep learning curve, because you could learn from any kind of animal farms, and you could learn from different countries. Of course, you keep improving that every single year. We also have other organizations making sure that if you don't do your job the way the people want you to, they step on your toes.

This is a support towards fish farming. People who don't support fish farming probably just don't want it outside their house, but it's a necessity to keep a sustainable wild nature, which we do love and appreciate here in B.C. That's it for me.

R. Austin (Chair): Thank you very much, Riccardo, for your presentation.

The committee will now recess just for ten minutes to have a refreshment and a washroom break. We'll come back in ten minutes' time.

The committee recessed from 4:40 p.m. to 4:50 p.m.

[R. Austin in the chair.]

R. Austin (Chair): Okay, I'd like to call the meeting back to order, please. If everyone would like to find their seats.

We now have a period that we have called open mike to enable people to come and make short statements to the committee to express their opinions. I do ask that people limit their comments in this period because, obviously, we want to try and hear from as many people as possible. We are not looking for and, indeed, we do not want full 20-minute presentations, or anything like that. If people could limit themselves to a few minutes, that would be appreciated. That would, again, enable as many people as possible to express their opinions.

At this point I'd like to invite Rupert Wilson up to the witness table. If Rupert is here...? Okay, you're going to get him. That's great. Thank you.

R. Wilson: My name is Rupert Wilson. I'm one of the councillors of the Kwakiutl band. This is my territory. This is considered a Douglas treaty area. My fishing rights are protected, and everybody in the north Island has to know that. I don't want anybody breaching my fishing rights. My fishing rights come first. It doesn't say 50 percent or anything like that. To me, it's 100 percent. I had to come up.

We made an agreement with Omega a few years back, an agreement that was signed verbally, that we were supposed to make 40,000 a month. I told them that we didn't like fish farms and the only way you could come into our territory was you had to pay us royalties for using it. It wasn't a joint venture. So they agreed with that. The agreement was added up, and it came to 40,000 a month.

By the time I came back from Alaska — I was watching the sea ranching up there, which is a good

thing for us — we only had \$90,000 that came into our account after looking into our audit and I was wondering what happened. So we got ripped off by the fish farm. I personally don't like it. I never did like it, but because they were willing to pay to use my territory, that was okay.

There are a lot of other things in the north Island that are bothering our people. Our jobs have been taken away, logging and fishing. My father used to be a trapper. He put food on the table to feed 12 of us. When they mentioned mink farms, there was no more money made in trapping. When fish farms were mentioned, I told my wife: "That's it for me." I knew it was coming because fish farms took away my livelihood. The amount of money I used to make — it's gone.

[1655]

There are ghost towns up and down the coast. People are starving; people are on welfare. These guys are bragging about their whole family working in all the different industries in the north Island. How about my people? I hate that. I have to fight for my rights. The treaty comes first. I have to be protected, no matter what anybody says behind me. My job has been taken away. We started off the whole logging industry at one time. We were the main loggers in the north Island. Everybody was living in bunkhouses. Now we've got this fish farm coming here. Yeah, there are three or four jobs for the other reserve. Where's ours? None.

Up and down the coast, Prince Rupert right down to Vancouver, there are ghost towns. You had Utah Mines here for 25 years. It's gone. The people have got houses rotting. They can't get their money back.

What's going to happen to this fish farm? There's a thing that you've got to remember: mad cow disease. If that happens in your territory, you kill them all off; the same with the chickens. How about this fish farming? I know they killed off a bunch of the fish on the west coast of Vancouver Island because there was something in them that wasn't good.

I was a commercial clam digger for years and years, and I bought and sold clams for four years for Ocean Fish in Vancouver. I used to deliver 45,000 pounds a week, and that created 45 jobs for the two reserves here. That was from kids up to 60-year-olds working for me. I can't do that anymore. I tried to go back about five years ago. There are no clams out there. My job was taken away, two different ways — as a salmon fisherman.... The fisheries are playing games; the government is playing games with me. I don't like that.

There are a lot of fish out there. There's more than enough to feed everybody up and down this coast. I agreed with one guy who was saying that the sea ranching is a good thing. I went up to Alaska, and I saw it. I'm saying that I got kicked out of my own country. I had to go to Alaska and make my money, which I did. I've seen how they do it. The sea ranching — a simple way of producing fish. You could produce fish all year long if you know how to do it.

Fish farms. What do we know is inside those things? I'll just give you an example. They introduced Manila clams on the west coast of Vancouver Island.

They were from Japan. Manila clams spread right up to Alaska. How far does this stuff come from an official farm site here? The chemicals over there were floating out and around the ocean.

Red tide comes in, spreads all over the coast. How do we know the fish farm is not harming me? There have been seven cancer deaths in 11 houses on my street alone to leukemias. A lot of these diseases are foreign to us. The only way we used to die was by pneumonia. That was it. Now we've got all this asthma and everything else.

I think it's from the ocean — we never used to get sick — because we still do go down. We still challenge the fisheries that they're not going to stop us from going down to our beaches to collect our seafood. Nobody will. Nobody up there will stop me. But I know I have the right to stop the fish farm if I want to. I could put an injunction on there tomorrow for breaching my contract.

We were here first. There was one guy up here that was here earlier. He says that he's got 24 jobs, but he's from another reserve up the coast. I'm the Kwakiutl in the Douglas treaty area that is absolutely, 100 percent mine as a Kwakiutl.

[1700]

Smallpox. We almost got wiped out by it. There were 3,500 of us before the treaty. By the time of the treaty there were 165. You've got to think about me, and I've got to think about my grandkids. I've got to think about them first. I should have a future on my own land, no matter what anybody says, no matter what you say.

It makes me angry if I have to come and talk this way — I shouldn't be — because we never got properly consulted. It's happening every day. Our people are never properly consulted — never. I'm angry. I have a reason to be, because I'm looking forward to a better future. If we sat down together and talked face to face to see where we're coming from, that would be fine. Being transparent — I believe in that. Maybe there's a middle ground. I don't know, but right now I don't think there is. You can't force anything or impose anything on me.

There were 75 people living on my reserve about 40 years ago, and 40 of us were logging and fishing all year long non-stop — 12 months a year. We always found something to do: clam digging, construction. You name it. We never stopped. Nobody was on welfare.

Now you've got people sitting here: "Oh yeah, I got my kids working here and there, all over the darn place." Where are the jobs for us — tourism and everything else? We're left out of it. It's happening in every town. You walk into the stores, the businesses. Is there anybody like me in there, working in those places?

You've talked about waste. How about the waste underneath the pens? You never asked that question. Where do they dump the stuff? They dump it on the landfill. You can smell it. Where does that landfill go? It's going to eventually go into the ocean. I know where they're dumping it. It's going to end up in the ocean. It's like the Great Lakes. What they dumped in the Great Lakes 50 to 100 years ago is seeping into the lakes.

There are a lot of things about the.... You talk about nice-looking fish swimming in your pen there. How about the ones that you're processing? My wife worked for the fish plant at one time. There are all kinds of deformities: no heads, no eyes, no tails — all kinds of stuff. That's right. My wife's seen them.

See, the federal and provincial governments are the ones that authorize these companies to carry on to pollute my territory. They're responsible for it. If it's proven that they are harming my life and my kids, we're going to have to take them to court. It's going to cost money. It won't cost money if we put an injunction on Pan Fish tomorrow, so something has to be done. We don't want any more fish farms. My territory goes right down to Adams River. The Kwakiutl are the most written about people in North America. That's how big our territory is.

I'd gladly invite the guy, that first guy who talked here.... He's the guy who was saying the right thing — anybody else here, nah. I hope you guys are listening.

[1705]

Talking about money, how much we're making.... We're making a lot more than people working in fish farms altogether. For years and years we made a lot of money fishing, clam digging, on all our seafood. How can I trust myself to go down my beach anymore if I don't know if it's contaminated?

There was one thing in our clam samples that we took about seven years ago that was foreign. We took a bacterial test in our clams. We didn't know what it was. It was never seen in clams before. You've got to find that out.

You talk about local knowledge. We have it. The guy talked about it earlier. We could tell you. Listen to us for a change. We know what's going on. We know what's happening.

R. Austin (Chair): Thank you, Rupert. If it's okay with you, and in order to allow other people to speak, I would like you to....

R. Wilson: I was just kind of complaining again, earlier, when I looked at the list you had there. To me, it's stacked. I would not mind if you had more time to have more people to come and say what I'm saying.

We opposed the oil and gas. My friend and I came here and made our presentation. We opposed that ferrochromium plant. We stopped that because we had to. Now we're opposing this 100 percent.

R. Austin (Chair): Thank you for making your presentation.

I would now like to call up Lionel Hole. Is he here?

R. Wilson: Do you want to question me?

R. Austin (Chair): I don't think so. I think we understood what you had to say.

L. Hole: Hi. My name is Lionel Hole. I'm a local resident. Thank you for allowing me to speak here tonight.

I've lived here all my life. I live on Quatsino Sound, on the west coast of Vancouver Island. I'm in the forestry industry, mostly. I do some work for the fish farm industry. My views here are just personal views.

My job allows me to be on the water practically every day. I get to see it in and out, everything that happens on it. It's a great life. I wouldn't want it any other way.

As far as fish farming goes, and everything.... I was here before it was here on the inlet, and I watched it grow on the inlet, evolve and everything. So I got to see it first hand. I've also watched it on the news. I've listened to people talk about it — very knowledgeable people, commercial fishermen who have great knowledge of our area. Some have lived there longer than I have. Just great conversations with them.

I think some of the problems that we see with it are that it is a competition. I think that's where it should end. It shouldn't be a competition. They should all work together. There's not enough product to feed this Earth. We know that. We have to look at ways of making it better. I think we're on the right track.

I look at some of the arguments where everybody says it's detrimental to the environment. I've watched our inlet grow. It's more beautiful than I remember as a child — the beaches and everything. We see more things like pilchard that have actually come back to the inlet. Sea otters, which were at one time almost extinct, are everywhere now.

Salmon. Everybody is concerned about salmon, the wild stock. I am too, very much. It's beautiful to see them come back every summer, watch the fish jump — everything. Watch the sport fishery grow off that as well. It's there. It's growing. If we manage it correctly, properly — look after it; spend the time and the money on this — we will see it here forever.

It's the same thing we should do with fish farming as well. Correctly manage it. Watch it. Watch over it.

[1710]

It employs a lot of people. We all know that. That's a big topic for it as well. I can't speak too much to that. I have friends in both industries, so I'd like to kind of stay out of that. I just wanted to give you my view of what I see out there.

I see our inlet, which has five farms on it — operational and growing. It's beautiful. We have tourists on it, and it's awesome. You see more whales. I was probably about 20 when I saw my first humpback whale in the inlet. I always believed that things were getting worse. Nature is the first thing to head south on us. Well, we have more nature. Our beaches are more alive. We actually have help on our beaches.

We had a pulp mill on our inlet for years, which didn't have the controls that are there now. It's done its job. It's helping out. The mine had controls on it. Everything helps if you look after it. The forestry industry as well, in general — looking after the streams. If we keep following that path, we'll be able to support all these industries rather than keep fighting and pointing fingers and all this. Something that we should look at is more cooperation between groups. Go in that direction.

That way we will see more beautiful areas and not have these fights, I guess.

I can only go by my personal observations. My personal observation of what I see out there is great. I love my place. I love the inlet I'm in. I love the people I deal with, and I want to see it continue. That's my view on what I see out there.

R. Austin (Chair): Thank you, Lionel, for coming and presenting.

Is Kathy Poslowsky here? Kathy, would you like to come up to the witness table.

K. Poslowsky: Good afternoon. I am very new to the aquaculture industry. I had been in the logging resource sector for 20 years prior to joining Pan Fish Canada in 2004. I love the fact that I have the opportunity to stay on the north end of the Island, and this company has provided that for me.

In 2003 I worked for Weyerhaeuser as their accountant in the Port McNeill operations. At that time they were, for financial reasons and for fiscal responsibility, looking at centralization. I was given the opportunity to go and work in Vancouver in their head office. That wasn't a choice that I wanted for my family. I have a young son. I have a husband who's also in the logging industry. I wanted to raise my child here on the north end of the Island. I like the rural atmosphere. I want to have that option available to me. My employment with Pan Fish has given me that opportunity, and I appreciate that.

In comparing the two sectors and having been part of the management in logging, there were times that we were not good stewards. There were times that business overrode good actions for the environment. I have not been part of the aquaculture industry for a long time, but the sense I get from the people that I work with and for is that they truly want to be economically sustainable here. They want to be good stewards. They are trying to meet the commitments that are there. They want this industry to be part of the north Island. They are very committed, as Letsie has informed you, to the fact that they spend locally. I didn't necessarily always see that in the forest sector. We made business decisions, not necessarily decisions that supported the communities we were in. I don't see that with this company.

About six months ago we looked at, with our accounting system, putting in a new system for Pan Fish that would allow them to do more centralized accounting, if they chose that. I put that forward to them, because that was something I was very used to from my former employer, as a cost-saving measure.

[1715]

I was informed by my employer at that point in time that that wasn't what they wanted. They wanted to keep the jobs local, up here, and I respect them for that.

They are a good employer. They are an employer who cares about the community that they are in. They care about the employees who work for their company. I feel strongly that we need to look at this as a way of supporting the north end of the Island and the economic viability.

Many people have spoken to the fact that the previous resource sectors have had their ups and downs and are on more of a downswing right now. My husband works in logging. He has worked two and a half months so far this year. It is my income that sustains our family, and it is the aquaculture industry that is sustaining my family here on the north end of the Island, allowing me to have this choice to raise my family here. I sincerely appreciate that.

R. Austin (Chair): Thank you, Kathy.

I'd like to call Dave Jacobson. Is Dave Jacobson here?

D. Jacobson: I'd like to thank you. It's been kind of short notice for me to come here and attend this gathering.

I, too, would like to acknowledge our traditional territory. This is Kwakiutl territory that we are sitting on. I acknowledge that. I'd like to go a little further on and let it be known that I do not absolutely consider this, or even would like it to be considered, consultation or accommodation of any kind. I need to do that to protect my rights as a first nation in our traditional territories.

With all that being said, I'd like to talk about the fish farms to begin with. I have no idea why they came to B.C. and why they left Norway, but I've seen many, many stories about why they left and came here.

The policy regarding farming needs to be way more stringent than it is. When you're looking at economics, I think you overlook the absolutely crucial part: health reasons and safety. Health and safety have never been addressed. I, too, am quite aware of the pollutants that are coming from these fish farms and being dumped on our traditional territory, on our land.

I have to take this time to put the government on notice. I've been very active in a political circle for about eight years. I haven't had time to really address a community-based action against the government. However, I will be working on that, concentrating on it.

It's really nice to know that there's an economic base for fish farming, but one thing this industry, the government and the people who work for it haven't realized is: everybody who works for them comes and goes. They don't live here. This isn't their permanent home.

[1720]

This is our permanent home — the Kwakiutl people. We live here.

There are things that need to be addressed which are ignored, especially regarding our beaches. Our beaches have become extremely contaminated over the past 30 years. I can't even go down and dig clams for food. I've got to find an island that's safe. I never, ever dreamed I would have to do that in my life or for my grandchildren and great-grandchildren — whoever is coming along there. That has to change before you consider any more activity in our traditional territory.

As far as the salmon farming, when we did meet with them we did address the issue of land-based pens, and they agreed: "Yes, we will look into land-based pens for safety." They also said that we would be conducting future meetings after our contract is signed. Breach of contract with Omega.... I have all the files at

home. I carry a very good filing system, and I have compiled it all. I'm just waiting for our community to get together and sit down and have a good talk with them to deal with Omega — Pan Fish.

These things are going to come about, along with dealing with our territorial issues. We've been very silent on these issues. The communities in our neighbourhood aren't aware of these things. They're not aware of an awful lot of things that go on in our village and our beaches. The contamination is overwhelming. I want those issues addressed just the same way as when I attended the oil and gas industry hearings. The moratorium was going to be lifted.

I went to David Suzuki's opening there, and they did explain that if there's anybody who is going to have an impact in helping address the issue of oil and gas, it would be the first nations. We looked, and indeed we were able to find an opening and speak at one of those hearings. Hopefully, that had an impact on addressing that issue.

This fish farm issue is not only in our territory but in many of our neighbouring tribes, who are having the same problems not being addressed. It's only going to be a matter of time when we do address them, because we're so tied up fighting and fighting everything that comes along.

I have no problem with industry at all if it is done in a proper fashion — healthwise, safety. It's not my problem what the cost is. That's none of my business. That's up to the people who are running a business. If they can afford to do it safely, then they should be made to do it safely. Right now they're being done very unsafely and contaminating our beaches to the extent where we can't even eat our own food.

[1725]

I didn't get a chance to get any legal advice or opinions before I came here — it was very short notice — but I will be seeking legal advice when I return home on how to address our beach issues and the farming industry. I commend those people who work in it, but I still have to emphasize that my livelihood here is right in the place that you work, where we live.

That's about what I have to say, clearly based on my livelihood.

R. Austin (Chair): Thank you, Dave, for coming and sharing your views with us. Thanks very much.

D. Jacobson: Thank you very much.

R. Austin (Chair): The next two people who are coming up to the open-mike session — I just want to let everyone know — have actually met with the committee previously. I just want to make you aware. Please try and keep to this time schedule.

If Barb Walker and Leanne Brunt would like to come forward.

B. Walker: Good afternoon. We appreciate this opportunity. We will be keeping this very brief. We would like to go on the record tonight first off to cor-

rect some information that you got yesterday from Mr. Brian Gunn of the Wilderness Tourism Association, who — and I won't remember his exact words — said that Rivercorp Economic Development Corp. was not supportive of the Agrimarine closed containment project. I would like to tell you that that's incorrect.

I am a director on the board of Rivercorp. I don't know where Mr. Gunn got his information, but it was incorrect. I can tell you that issue has never been brought before the board. We can't support it or not support it when it hasn't even been brought to the board. That's just to clarify that.

One of the reasons we wanted to speak today is because we're really quite concerned about what happened on the north coast. We are, of course, referring to the resolution that was passed in Terrace that recommends the province refrain from issuing any further aquaculture licences until this committee completes its work. We feel this can only cause further uncertainty and hardship within the industry and, as usual, will have negative impacts on the working families.

We also felt that announcing that resolution both in Terrace and in Prince Rupert....

L. Brunt: Hazelton.

B. Walker: I'm sorry, Hazelton. From what we could see, that was pretty much political. It was political grandstanding. Again, we feel that this is the issue of our livelihood and shouldn't be just strictly political. That had a lot to do with us questioning whether or not we could expect fair treatment from this committee.

One of the reasons we found that notable and we jumped to the conclusion that it must have been political is because it was very notably absent yesterday at Port McNeill — you didn't find the need to make that announcement — and again here today at Port Hardy. That's why we reached that conclusion.

We're also quite concerned about the extension for the written submissions and the possibility of further community visits because we're wondering what happened to the level playing field that we all supposedly started on. All the stakeholders started out with the same information. The community visits, submissions and time lines for everything were in place. It makes us feel the work of this committee is almost like the never-ending story. That's not good for anybody. We need this committee to finish its work and make its recommendations.

We wanted to just come before you today to say that we really do have some concerns about why you would go forth with a resolution that, as far as we can see, will pretty much put a moratorium on the jobs until you're done. This really wasn't acceptable to us.

Thank you for allowing us to state our position.

[1730]

R. Austin (Chair): Thank you very much.

I now would like to call up to the witness table, please, Chief Bob Chamberlin, who has also addressed us before.

B. Chamberlin: [Kwak'wala spoken.]

My Indian name is [Kwak'wala spoken]. It means "one who will make things right." I received this name a very long time ago, and in today's capacity as the Chief of our first nation, it is a daunting task. I welcome the opportunity to speak to this commission again. I felt compelled to join in on this discussion today when I saw the list of speakers here.

In my attendance here, I've heard the discussions around the employment that comes as a result of this industry's activities. I can understand the need for employment in small communities. I represent a very small community. Everyone in this room can attest to the downturn in the commercial fishing industry. Everybody here can attest to the downturn in the mining industry. Everybody can attest to the downturn in the logging industry and the impacts that has on a resource-based community.

What I'm here to say is the benefits, the economic and employment opportunities that are enjoyed — and I say enjoyed — by municipalities or towns like Port Hardy, Port McNeill, Campbell River and wherever else there are jobs which are generated by this particular industry, are at the expense of our territory, plain and simple.

I think that in this room here today we can agree that there needs to be one law for all Canadians, and I think that it is understood by everybody in this room, also, what the Supreme Court of Canada represents within the constitutional context of Canada. With that in mind, aboriginal title is alive and well. Aboriginal rights are alive and well, as per Supreme Court of Canada rulings.

We talk about industry's activities within the traditional territories of a first nation. Let's talk about the Supreme Court of Canada rulings — namely, the Haida decision, the Taku Tlingit. This is the highest court of this country, and it's directing government and industry to consult and accommodate with first nations about activities within our traditional territories.

Simple. So let's hold Gordon Campbell accountable through his New Relationship and ask: "Where is it?" Where is this greater level of accommodation and consultation, based on the level of infringement on our title and rights?

As I mentioned before, every time one of our little salmon smolts dies, that is an infringement. Every time another clam beach is now no longer productive, it is an infringement. Every time we go to a clam beach and there are now black clams, that's an infringement. Every time there's another area in our territory where we are not able to gather our resources as we always have, that is an infringement.

I'm speaking directly to the components of this committee that are Liberal: bring this message to Gordon Campbell. We want that New Relationship at the table when we deal with ministries. I don't want those people in the bureaucratic system to look at me and say: "You know more about this than I do."

That's hiding, and all the while your leader — and I say your leader — talks about this New Relationship. It's not here. I think it's time that the government ad-

heres to the rulings of its own court system, the highest one in this country called Canada. Everybody in this room knows there's something going on in this province called the Treaty Commission or the treaty process.

I think it's time that the general public understands that the development of a treaty is not defining what the first nations people will get. Defining a treaty is defining what our first nations are willing to cede to the government of Canada. This is based in British common law, which gave birth to the Royal Proclamation, to the British North America Act and to the constitution that's supposed to be the foundation of this country as well as the Supreme Court of Canada.

[1735]

When is it actually going to happen? I fear that whenever there's a Supreme Court ruling, it gets lost. Why is it that a statutory decision-maker who is so far down the chain from the minister is able to interpret this? That is giving a lot of power to a very low-level bureaucrat to interpret how that Supreme Court ruling is going to be dealt with to our first nations. It's a travesty. You call this a democracy.

If you want to talk about a treaty in this province, then we need to talk about compensation for all the resources that have been extracted from our territories. As the Delgamuukw decision has arrived at it in the Supreme Court of Canada, aboriginal title has not been abolished. It is still alive. If that's the case, then all the trees, the rocks and everything else have been exploited to the benefit of every British Columbian at the expense of our first nations.

When you come into our communities, you see poverty. You see every negative aspect this society has to hold. We lead the race in every negative thing you could imagine: low education, low health, high death rates of small children — on and on and on. When the citizens want the first nations people to step up and be healthy, we cannot be healthy without access to our resources in a meaningful way. To have us forever set on the sidelines as industry comes in and enjoys the benefits of our resources....

Talk about environmental standards. Let's talk about first nations environmental standards. It was a pristine environment when everyone else arrived. It's a far cry from that today. I want this committee to hear very clearly that I want this industry called aquaculture to be 100-percent responsible for its activities. Not off-loading it. Not dumping it into the environment.

DFO talks about better-sited farms, and the government continually wants to look at the benthic area for contamination of environmental monitoring. Because they site them better, the crap gets flown farther away from the site, and they still want to look at the site.

If you consider even a two-kilometre circle — which is a very bare minimum for contamination from this industry — around the 27 farms in the Broughton Archipelago, you're going to talk about the entire area being compromised. When I hear about first nations that are being supportive of this industry, I wish we only had three fish farms to deal with in the

Broughton, as is the case up the coast a ways. We have nine times the number of farms, nine times the amount of feed going into the water, nine times the amount of SLICE.

I heard the second speaker today talk about what goes on in Norway: the fact that they're not letting this industry in an area where there is wild salmon. I think what we're experiencing is the new Viking plunder here in B.C. — this aquaculture industry.

I heard one of you ask: "Yeah, give me the name, and I'll try and find some of the papers that he was alluding to." The papers are well known, but they're dismissed by the provincial government.

In my trip to Oslo, I spoke with the director general, which is the equivalent of the DFO department — the equivalent they have in Norway. He had a lawyer and a marine biologist present. He almost laughed when I told him we were studying sea lice. They freely admitted that this industry in the open-net-cage system introduces large amounts of sea lice. Their way to deal with it is the introduction of a product called SLICE, which is not a solution here in Canada because it attacks crustaceans. Crustaceans equal prawns and shrimp and crabs. They do not have those industries to consider.

I think you need to, as a provincial government, broaden out your environmental monitoring, because focusing on the benthic area is not good enough. We have to look at the far-field effect. We have to take into consideration what the foodstuffs mean to the first nations people in Canada.

As I mentioned previously, it's not that we just happen to enjoy seafood. It is who we are. You come to our village, you see [Kwak'wala spoken] which is our word for a broken-clamshell beach. You may think of it as a midden. The Broughton Archipelago is riddled with these, hundreds of them. Again, that shows our reliance upon the clams. This is what is being compromised, but the environmental monitoring being solely to the tenure is not acceptable.

I wait for the day when Campbell is going to do something that is actually reflective of the principles of the New Relationship, because it's nowhere to be seen. I think it's time that all British Columbians understand that. I think it's time that all first nations make the same public statements and demand that we hold him accountable. Nice words spoken.

R. Austin (Chair): Thank you very much, Chief.

I would like to call Scott Gibson up to the witness table.

[1740]

S. Gibson: Hello. Thank you. I'm Scott Gibson, and I live in Port McNeill. I'm an executive board member for Steelworkers 2171. We were previously the IWA. I'm proud to say that Alpha is a Steelworkers operation. All the hourly people are Steel.

I used to work for Weyerhaeuser, and we're going through transitions. We've been going through transitions for a long time. This is in the logging industry. In my operation, you can go in, and they are not happy

people. In the logging industry I've worked in six camps this year so far, just trying to feed my family. Each camp I go into, people are nervous. They're hesitant, and it's just not a good time.

I had the opportunity to go into — actually, I should say Pan Fish instead of Alpha — Pan Fish two months ago. My God, what a change. The people in there are happy. They're vibrant. They sit down and have lunch, and they talk to people. It looks like they're actually doing something that I haven't done for a long time: they're enjoying their work.

I'd like to make a comment that it's a very.... I'm not trying to be sexist or anything like that, but women around here have a hard time getting a job that's up to 20 bucks an hour. Go down the street, and ask a housewife: how would she like to have an opportunity for a job at 20 bucks an hour? Before the fish farms and year-round employment came in, there weren't any opportunities, really. There were a few scaling jobs in logging, and that was about it.

Now, like you heard, over half the jobs at the processing plant are female. That's great. They love it, and they know that they're fortunate to have those jobs. Like I said, everyone's just so happy to be there.

If you are going to make any decisions, please make them on actual, real, hard evidence. Again, as a logger I went through all of this. Greenpeace says this; Sierra Club says that. They shut down the industry in the Albern area. A lot of people lost their jobs. Now they're finding out: "Hey, maybe we made a mistake. Maybe those jobs shouldn't have been gone." Please don't make the same mistake. If there's a perceived notion that something's bad, investigate it.

That's about all I have to say. Thank you.

R. Austin (Chair): Thank you very much, Scott.

At this time I'd like to invite Bruce Dirom up to the witness table.

B. Dirom: Good afternoon. Thank you for giving me the opportunity to tell my story regarding my family's and my company's dependence on fish farming. My name is Bruce Dirom.

My wife Carol and I own and operate a company called Hardy Buoys Smoked Fish. We are located in Port Hardy in a 10,000-square-foot, federally registered facility. We started our business in June 1994. At that time we employed one full-time and four seasonal employees. Our business was solely dependent on the sport fishing sector from 1994 to 1996 — extremely seasonal.

Our company was growing with new services. It became very apparent to my wife and me that we were providing a much-needed service in Port Hardy. It was obvious to us that we had to expand our market outside of Port Hardy in order to survive. This was done by supplying grocers like Thrifty Foods and a few other independents on the Island. Our product line consisted, at that time, of hot-smoked wild chum, coho and pink.

For the next few years our business grew very fast, with employment opportunities in a new customer

base. Unfortunately, in 1997 our federal government decided to pull the pin on sport fishing and commercial fishing retention of coho salmon. This decision caused a lot of grief amongst both fisheries as, with the reduction of the catch, the fishery collapsed — all to protect the elusive Thompson River coho.

At the time of this decision, we were using coho as a primary source of raw product. As well, for our sport fishing business, coho was the main catch preferred by the customers for smoking and simply cutting, vacuum-sealing and freezing.

[1745]

In 1997, 95 percent of the fish we were cutting for our wholesale business was a combination of coho, chum and pinks. Fortunately, I had a job with B.C. Hydro at the time, which provided my wife and me the needed income to raise three young children and pay for the necessities during that time. Our business was growing, and we could see a bright future.

However, we wouldn't get anywhere unless we could find a reliable source of raw product. With the reduction of the commercial fishing fleet and allowable catch opportunities for both sport fishing and commercial fishing, we had to start looking soon. There was a big demand for our product, but we were unable to find raw product source.

In 1998 we started using farmed salmon. We were basically just researching and developing new products at that time. The farm salmon issue was a new and hot topic in 1998, especially with the commercial fishermen — some who threatened and some who refused to use our services again because we supported an industry that produced a product that did drugs.

In November 2000 we moved into our current location, 9300 Trustee Road. We were forced to move because we had outgrown our other facility. After the move, my wife and I realized we were in way over our head financially, to the point that in April 2001 we decided that we would close the doors to Hardy Buoys forever in mid-September.

We were planning on working for one last summer to pay off many family members and local businesses, to whom we had outstanding bills. This was primarily done to save face in the community we wanted to continue living in. This was a very trying time for us. Fortunately, we had a great summer. Again, we felt we were back in control.

In January 2002 we were entered into a competition for our smoked salmon nuggets, which were made from farmed Atlantic salmon. A couple of weeks later we received a call that we placed first or second, and we were summoned to Vancouver to receive our award. A week after receiving our award, we were contacted by the largest seafood distributor in western Canada, called Albion Fish, as they were interested in carrying our new product line.

Five years later we're still conducting business with Albion. On April 6 of this year we had three new products, including a new package line, listed with Save-On-Foods — 120 stores in western Canada. Our new product line consists of farmed Atlantic salmon.

The products are original nuggets, candied salmon and dressed-up nuggets. I've brought you all samples.

On May 26 to 28 we were at a food show in Vancouver to basically set off our new product line. We were also there to support the B.C. Salmon Farmers information booth — more like booth-bait, they call it. It was our fourth consecutive year at the food show, and it was a great time. Everybody there would see the response from the Vancouverites who were coming up and eating the salmon and aahing about the fresh salmon that was being cooked there as well.

While I was promoting the product, I received a phone call from my product supplier: "My price just went up 35 cents a pound." I was in the middle of preparing my company to launch a new product line, and now I had to deal with a product increase. We had three days to prepare for this. I was very concerned about how it was going to reflect on the launching of our new product.

Our product price has gone up 40 percent in the last year. The bottom line is that I understand this is a supply-and-demand issue. There's not enough fish in the water ready for processing to ease the demand, and there are not enough site allocations to raise enough fish to meet the demand. This is a world commodity, and somebody will produce the farmed salmon regardless of what happens here.

I'd like to see it stay. I'd like to see it get stronger and bigger, provided that it is following the environmental guidelines that we put forth. The environmental issues shouldn't be set up to shut it down but to make it better.

My wife and I, along with 20 other employees, depend on the farmed salmon industry for our livelihoods. From May to October our company has the added bonus of processing for the sport fishing industry. However, from October to May we have a workforce in place, and most earn their primary income from our farmed salmon market. These employees would not have jobs with Hardy Buoys if it wasn't for a strong industry.

We are proud to say that we support an industry that provides jobs, economic growth and stability to small communities, as well as providing a fresh and safe protein product that is rich in omega 3s.

[1750]

R. Austin (Chair): Thanks very much. Do any members have any questions? Okay. Thank you very much for that presentation.

I am going to ask.... Oh, sorry. Shane has a question.

S. Simpson: Yeah, I do actually have a question. Thank you very much for the presentation.

As you said, the business has taken off. It has grown in the last number of years. As you've identified, some product lines have been particularly effective in the market. How much product are you producing now in a year?

B. Dirom: Weekly we're doing 2,000 pounds currently — that is, the finished product. We have an ex-

pectation of about another 2,000 pounds monthly with the new product line that we've launched, and that's only with one retail store. We do have current retail stores that have not even been approached with the new product line.

Right now we want to walk before we run, which is very difficult to do, obviously, when there's not enough product. I'm happy to say that we're anxious to get going but content to stay where we're at until we're able to get some more product allocated to us.

S. Simpson: So you're in a situation now where the business, as it stands, is solid and you see the growth opportunity here...

B. Dirom: Absolutely.

S. Simpson: ...and you're just wanting to be cautious about making sure you do it right.

B. Dirom: I don't want to say I can produce something that I can't produce.

S. Simpson: Fair enough. Thank you.

R. Austin (Chair): Great. Thank you very much for your presentation.

At this time I'd like to call Marty Whitehead up to the witness table.

M. Whitehead: Good afternoon, and welcome to the true north Island area. My name is Marty Whitehead. I'm with the chamber of commerce here in Port Hardy. Our presentation is on economic value.

June is graduation month throughout B.C., and students are making important decisions about their future. These include post-secondary education or even joining the workforce. A career in aquaculture adds another choice to the field of opportunity, from entry-level employee all the way to university and college degrees. Island colleges offer a variety of programs suited to the aquaculture industry.

As our north Island payrolls started to decline due to cutbacks and layoffs in traditional industries such as logging, mining and fishing as we once knew it, aquaculture started to fill these voids. Direct employment on fish farms drew the first wave of new jobs. This progressed to processing plants operating in the regional district, with finished product being trucked out to the north Island.

This all promoted offshoot industries operating in the north Island, from tradesmen in the building and construction sector to contractors such as welders, mechanics and service people to maintain equipment; marine and rental agencies; trucking companies; net cleaning and maintenance. As you can well imagine, all this activity pumped millions of dollars into the north Island economy, enabling businesses to maintain and increase their workforce.

Keltic Seafoods, a locally owned processor, traditionally of wild salmon, was able to see considerable

benefit from processing farm fish, due to an unfortunate fire at the Alpha plant. Alpha Processing, run by Pan Fish, employs over 100 people and has a payroll of approximately \$4 million annually. They pay municipal taxes, contribute to many local charities and sponsor events throughout the region. Pan Fish also runs eight fish sites, with up to 40 people employed.

Englewood Packing, run by Marine Harvest, employs 125 people full time. They process 18,000 tonnes, or 40 million pounds. Along with their plant and 15 fish sites, they also have an annual payroll of \$4 million. Mainstream has ten fish sites in the north Island area.

[1755]

Cards Aqua, a fishnet cleaning and repair facility, employs 35 to 80 people, depending on the time of year, and has an annual payroll of \$1.6 million. This company purchased a building left empty when Island Copper closed, converting a mechanical warehouse and a repair shop to the service of the aquaculture industry. This facility is within municipal boundaries, paying taxes and services.

As Bruce just mentioned, Hardy Buoys smokehouse, again locally owned, has utilized farm fish to earn nominations as both business of the year and entrepreneur of the year on a provincial and local level, thereby substantiating farm fish quality.

We as a chamber see all these activities as a welcome economic positive for the north Island and, ultimately, for our province of B.C. With the formation of this committee, aquaculture should not be viewed as a negative. It is an opportunity for the industry, the governments and the people of B.C. to establish a workable solution to meet the increased food — or, better yet, fish — demands of an ever-increasing global population.

S. Simpson: In terms of the area here, what percentage of the economic activity in the area do you think comes out of the fish farming industry?

M. Whitehead: In Port Hardy a very large percentage, because all the logging has moved further south to Port McNeill. I couldn't put an exact number on it, but the aquaculture industry is probably on the heavier side in Port Hardy.

S. Simpson: A rough number, even? One-quarter, one-third, 10 or 20 percent? If you don't have a number, I respect that.

M. Whitehead: I would take a rough guess — at least 50 percent.

S. Simpson: That much?

M. Whitehead: Yeah. A lot of people are keeping their business going because of the work from the fish farms. I know that when I had my business, I used to spend my evenings and weekends in the '70s and '80s on the road changing tires on fish trucks coming out of Winter Harbour. In the '90s and on into 2000 I spent my

evenings and weekends changing tires on forklifts for the fish farms. There was that much difference.

S. Simpson: Is a significant amount of that business indirect, coming from businesses and companies in the area that are delivering service in some form to the industry?

M. Whitehead: Yes. I would say practically every business in town does derive an income from the fish farms.

S. Simpson: Of some kind.

M. Whitehead: Yup.

S. Simpson: Thank you.

R. Austin (Chair): Thank you very much for your presentation.

I'd like to call Aaron Brotchie up to the witness table, please.

A. Brotchie: Greetings, committee members and north residents of north Island. Thank you for the opportunity to speak of my personal experiences related to the aquaculture industry.

As a member of the Kwakiutl band of Fort Rupert, I have lived most of my life here on the north Island. For more than 23 years I was a commercial fisherman. I have been personally affected by the changes that have taken place in that industry over the past few years. I have also been very aware of the economic impact those changes have had on the north Island community.

[1800]

About ten years ago I became an employee of Cards Aqua in Port Hardy. Over the years many of my family and friends have been employed at Cards and other companies directly related to the aquaculture industry. The transition from commercial fishing to aquaculture was not as difficult for us as the changes faced by others who found themselves displaced by the downturn of a traditional fishery. Many of the skills could be directly transferable. If you're still working and supporting our community, this is something which cannot be underrated.

I'm also able, on occasion, to return to my old way to fish, commercially, knowing that when I return my job will still be there. Few employers would be willing or able to allow me this opportunity.

As you're aware, there are many challenges faced by small, remote coastal communities seeking to rebuild and maintain these economies. As a witness of the changes faced by the community and others, I feel I have the right and the obligation to give testimony here today. It seems to me there are fewer and fewer opportunities for sustainable employment, and economic benefits to remain are limited. Unfortunately, many of us are not in a position to look elsewhere. Aquaculture provides sustainable employment....

R. Austin (Chair): Aaron, can you just slow down?

A. Brotchie: Yes, I'm trying. I always read that way. I'll read it over, if you want.

R. Austin (Chair): No. Just relax, and read slowly.

A. Brotchie: As many times as you want. Now I lost my spot. Can you help me out?

D. Jarvis: Fewer and fewer opportunities.

A. Brotchie: Opportunities — okay. Here we go. The economic benefits to remain are limited. Unfortunately, many of us are not in a position to look elsewhere. Aquaculture provides sustainable employment, far-reaching economic benefits and new opportunities to act as environmental stewards. I would ask the government at all levels to responsibly support growth of this industry.

Thank you for your time and consideration. Do you want that again?

R. Austin (Chair): No. I didn't realize it was so far towards the end of your statement. That's fine. We did hear it. Don't worry.

Do members have any questions?

Okay. Thank you very much for your presentation, Aaron.

I'd like to call Barney Bjermeland to the witness table.

B. Bjermeland: Good evening. My name is Barney Bjermeland. I am the general manager at Keltic Seafoods here in Port Hardy. I've lived in the north Island for most of my life, and I've worked in the fishing business here for 35 years. The last 13 have been directly involved with aquaculture.

I've seen first hand how aquaculture has helped Port Hardy thrive. I was a GM at the Alpha Processing plant for eight years, and in that time frame is when the BHP copper mine had closed its doors. In that time they were displacing 400 jobs where we were able to employ 280 people in that time frame. It wasn't the kiss of death right overnight for Port Hardy. It has helped out immensely here, for a small town.

Keltic Seafoods has an employee base of 60 persons, full and part time, year-round, increasing to over 160 in the busier summer months, with an annual payroll of \$2½ million and contributing \$385,000 to the local economy.

Aquaculture alone in the last four years has provided \$4 million in direct business in either direct processing, freezing or ice sales. Keltic Seafoods is a federally registered custom seafood processing operation. We unload, process and freeze wild and farmed salmon. We process over 14 million pounds of commercial and aquaculture seafood annually. Keltic is diverse in its product base. We custom process many products as well as sell dogfish and some groundfish species.

In order to survive within the confines of the new commercial fishing plan, we cannot limit ourselves to the wild industry but embrace and work with the aquaculture industry as the world's demand for salmon and protein is increasing beyond supply.

[1805]

Our overall focus at Keltic is to provide sustainable long-term employment in order to keep a trained workforce year-round. Farmed salmon is an integral part of this future. We promote closer networks between the wild and aquaculture sectors in order to create a healthy path towards this goal. We believe in aquaculture, and it does have a sustainable future here in British Columbia.

R. Austin (Chair): Thank you very much. Shane has a question for you.

S. Simpson: Thank you very much for the presentation. Your business today — what would you say in terms of percentages is aquaculture-based product versus wild product?

B. Bjermeland: Oh, about a third right now.

S. Simpson: About a third is aquaculture or a third is wild?

B. Bjermeland: Yeah. A third of the....

S. Simpson: Is which?

B. Bjermeland: Is aquaculture.

S. Simpson: In terms of the product, do you do right down to value-added product? Is that part of what you do?

B. Bjermeland: We do, but we aren't right now.

S. Simpson: You aren't. You're just doing mostly whole fish?

B. Bjermeland: At this point right now. It fluctuates over the year. We're sometimes gutting fish. We're sometimes freezing fish. Sometimes just ice sales, sometimes rendering the offal from these farmed salmon facilities here. It all depends on the day, really.

S. Simpson: It depends on what you've got there to work with, I guess.

B. Bjermeland: That's right.

S. Simpson: Do you also do other seafood products — prawns, things like that?

B. Bjermeland: Off-load, yes.

S. Simpson: Thank you.

C. Trevena: Thank you, Barney. I enjoyed coming around your facility a few months ago now. What I wondered is.... Obviously, Pan Fish has its own supply, because they've got Pan Fish farms. Where is your supply of farmed fish coming from?

B. Bjermeland: Like I say, ours is an overflow plant. When some plants are in distress, we're there for their taking.

C. Trevena: So you basically backfill. If somebody can't deal with it or they're closed down or whatever, you can come in and help out.

B. Bjermeland: Yes. If we could get a couple of farms for ourselves, we'd be laughing. Let's put it that way.

C. Trevena: All right. Because of the time when wild fish come in.... How do you balance the processing with wild fish and farmed fish?

B. Bjermeland: Like I was saying, we're very diverse in all of our products. We have five areas in the plant where there could be, on any given day, five different processes going on. That's the way we operate.

C. Trevena: Thank you very much.

J. Yap: Thank you for your presentation. You mentioned a figure of 14 million. What was the figure? Fourteen million pounds, is it?

B. Bjermeland: Yes.

J. Yap: That's your annual production each year, 12 months a year?

B. Bjermeland: Yes.

J. Yap: What are the species that you focus on? Atlantic salmon is one?

B. Bjermeland: You name it — Atlantic salmon; wild, commercial salmon; dogfish; turbot; hake; pollock; rockfish; skate; halibut. We'll do it.

J. Yap: So it's a real variety. Okay. Thank you.

R. Austin (Chair): Great. Thank you very much for your presentation.

We are, believe it or not, actually running ahead of schedule, which is a good thing because we have some other people who wanted to come up and use the open-mike forum to present their views and opinions. I'm going to go back to that list. If I could ask them to please limit their presentations to a few minutes, then we will still be able to finish on time.

The next person is Howard Rees, if Howard would like to come up to the witness table.

H. Rees: I'm a fish farmer. I used to own a pet store here in Port Hardy. When the mine shut down, things got pretty tough, and I was able to get a job as a labourer on a fish farm. I now manage a fish farm for Marine Harvest. I've been fish farming now, like I say, for 18 years.

I've seen a lot of positive development. Some of it has been driven by our own industry. Some has driven

by good science, and some has been driven by bad science. I just want you to know that the regulations in the industry now are quite comprehensive.

[1810]

We can grow a good product. As a manager of a fish farm, I'm very comfortable with our environmental impact. It was alluded to earlier that we should be testing our soil, our benthic within two kilometres. We're mandated to keep control sites at base levels. I believe it's a kilometre, and these are based on levels that are outside, so we can have no impact at that point.

I just wanted you to know that from my perspective, growing salmon, the industry has come a long way. I often compare it to the computer industry, where the changes are so dramatic that if you miss it for a year, you're lost. You have to retrain.

That, and the fact that Mayor Hank Bood alluded to the fact that we pay, as a group, about 20 percent of the property taxes.... I contribute to that. I also pay our provincial and federal tax, so I think that the industry definitely has a place. I truly believe it has a future.

We work with a lot of first nations people. The people we work with on the farmsites, of course, have a different perspective than some of the people you've heard here today.

I just wanted to share that with you. If you have any questions, I could....

R. Austin (Chair): John has a question.

J. Yap: How many farms do you manage?

H. Rees: I just manage one farm.

J. Yap: One farm for Marine Harvest.

H. Rees: Over in Holberg Inlet, Quatsino Sound.

J. Yap: It's Atlantic salmon?

H. Rees: Yes, it is. We've raised Atlantic salmon for 18 years there.

J. Yap: My understanding is that after the harvest, within an 18-month period, there is a fallowing that happens. Is that correct?

H. Rees: Yes, that's correct. The farm I operate is actually a yearly cycle. I bring smolts in, in the fall and ship them out in the spring. We fallow over the summer, and that's when the remediation would happen.

The farms we actually ship our fish to for the grow-out cycle fallow for about 14 months. They have fish for about 12.

J. Yap: Can you tell us a bit about the remediation? From a practical standpoint, what's involved?

H. Rees: You would be able to go on to the website for Marine Harvest and see all the data for that, I believe. I don't want to get into the micromoles and all

that kind of stuff here, because not too many people would understand it, and somebody could take it out of context.

J. Yap: Fairly complicated?

H. Rees: Yes. But I think the regulations that are in place now are manageable.

J. Yap: Thank you.

S. Simpson: How many fish are in the farm that you manage?

H. Rees: We grow enough fish on our farm to supply two grower sites, so we annually stock about a million fish.

S. Simpson: About a million fish a year. How many people work at the farm in terms of shifts? How many people are there?

H. Rees: In my crew there are myself and six — three per shift and myself.

S. Simpson: You have 12-hour shifts?

H. Rees: We work a ten-hour shift.

S. Simpson: Ten hours.

H. Rees: Eight days on, six days off.

S. Simpson: Eight days on, six days off. Where is this farm located?

H. Rees: This farm is in Holberg Inlet, just over at Coal Harbour.

S. Simpson: How have you found, with your farm...? Are there issues around lice or any of those issues on your farm?

H. Rees: Not on the one in Holberg Inlet. It has a lot of fresh water. We've never been impacted with lice. We of course do the mandated testing.

S. Simpson: Of course.

H. Rees: We do two samples a month, all year round, all year long.

S. Simpson: One last question. I'm still trying to sort out exactly.... To get a number in my head, I've been asking the feed number. How much feed do you use?

[1815]

H. Rees: I heard that. I thought that Dave kind of skirted the question. On my farm, of course, I'm raising small fish, so I wouldn't even come close to the numbers that Dave was telling you. On a full day, maybe three tonnes at our farm.

S. Simpson: About three tonnes a day would be about what you'd use?

H. Rees: That's right.

S. Simpson: That's for — what did you say you had? — a million fish there.

H. Rees: That's right. That's right at the end of the cycle. Of course, when we start we may be only using 300 kilos. It's a growing thing. As the fish grow, so does the feed. Nobody can answer your question — just: "That's what they feed."

S. Simpson: Fair enough. Thank you.

A. Walkus: Good afternoon. My name is Alvin Walkus. That's my government name. My real name is [Kwak'wala spoken]. That's the name given to me when I was a kid.

One of the questions that was asked of Letsie Blackmore when she got up was: "What jobs did our crew have before working at the plant?" My first job was as a summer day-camp worker. I did that for a summer. Then I did cleanup crew the following summer for the elders who couldn't get out and bushwhack and chop down their own grass. After that I did several other jobs — just little random jobs like babysitting and everything else people need — to get money.

One of the bigger jobs that I had was for my nation, the Gwa'Sala'-Nakwaxda'xw. I sat in on their treaty meetings for six months. I worked with Winalagalis and that. I was there as a research assistant, there to sit with the elders and find out what they know about where I come from and to write down where our people seem to be in the next couple of generations. We're losing our language, and we're losing a lot of our stories and a lot of our history.

A couple of my brothers that we have now.... We're trying to keep as much of our culture alive. I worked in the treaty office for six months, and after those six months were over I reapplied, because we were Winalagalis six member nations from the [Kwak'wala spoken].

I applied with the other five nations to see if they could hire me, because what's the use of putting somebody through a lot of this training...? You have to sit here with this mike. You need to know how to talk to people, how to listen to people. I have all this training, and it's gone to waste. I applied with the five nations, and I was happily told: "No. No. We have no use for you, really."

It was a challenge to me when my older sister, who worked in Alpha Processing before me, said: "You wouldn't last. They wouldn't have any use for you." I like challenges personally. So I applied, and I'm there for four and a half years. They gave me a lot of the experiences that I have with processing fish. They gave me, two years ago, a level 3 first-aid certificate. I was one of the first-aid attendants for about a year.

That's just to answer one of the questions, which was: "What did your crew do before working at the

plant?" Four and a half years later I'm still working at the plant, and I enjoy it. The life experiences that I have now are through the people that I work with.

A lot of the people that I do work with are single parents. They have to support their families. Rupert came up here, and he said: "People always say that it feeds their families." It feeds me. It feeds my mom and my dad, who both have heart conditions. We have to look at all these things.

Darcy is back there. She's a single mom who lives on what she makes at our plant. Now we're laid off for a little while, but we're living off EI. There's Hazel George, who's a member of the Bella Bella people, and she says the exact same thing. If we didn't have this, we wouldn't be here.

Who's going to look after us? Nobody. The government's not there to say: "Well, okay. You know what? Here's your paycheque. You don't have to work in the fish processing plant anymore. Somebody told me to take off my shirt, because it says "Alpha Processing." I proudly wear it.

One of the other questions which was asked of my uncle James when he was up here was: "What are the views of your nations?" I speak for the Walkus and the Henderson families, and I say that we support the salmon farming industry. It provides us jobs.

[1820]

A lot of people talk about the sea lice problem. There are a lot of sea lice. Well, sea lice are animals, which need food. They're going to go where the most abundant food is: isolated fish farms. Sea lice are always in the water. It's not: "Okay, this over here got introduced." Sea otters were introduced.

One of the other things mentioned was about clams. We can't eat clams in Hardy Bay. Well, there's a reason why. It's raw sewage that's going into Hardy Bay. They can't scapegoat just the farmed fish industry for every one of their problems. There are fish that are not there because of overfishing, because one company wants to make money. They have to feed their family; we have to feed ours. There are no ifs, ands and buts about it. Quit scapegoating farm fish. We do nothing but survive.

The logging industry is cutting down trees. That's feeding their family. Mining is feeding people. I strongly support you guys to tell us that the government is behind us in this aqua industry. We need that support.

R. Austin (Chair): I'd like to call up Stewart Shipley. Is Stewart around? He's not? Okay. Mike Haffenden.

M. Haffenden: Yes, I'm one of those dreaded commercial fishermen. I'm not as good as Mr. Walkus, and I'm not as big, but I've been in it longer than he has. I'm not against fish farming; I'm just against fish farming where migratory fish — we're talking salmon — migrate through. I put the philosophy this way, and I'm sort of an ideas man. I would like to see fish farms, if they persist.... I'm not pro or against them. It's an industry. It creates lots of work, and people need work, need money. You've heard that mentioned time and time again.

I would put fish farms in what I call dead inlets. I'm not talking of dead inlets as far as water recycling; I'm talking of dead inlets of migratory salmon or herring. I don't know if that's possible, but it should be looked into.

I also find fault with DFO. DFO have not been honest. They have ruined many fisheries. Just recently they've ruined the herring fishery that was a roe fishery — a very, very prosperous industry. DFO do not listen to fishermen; they do not listen to natives. You've heard a lot of native anxiety here — three or four speakers, one after another, decrying our system of bureaucracy. The bureaucracy in the DFO is not listening to people, communities, small fishermen or, above all, natives.

Now, I thank my industry fishing-wise, my history fishing-wise, to the natives themselves. I've fished with many natives up north. I grew up with them, and I sort of understand their way of thinking. They don't think like a white man and try to grab everything. They think of the whole group, and they think of, individually, themselves. Now, we in white society — especially in the halibut industry, which I know very well — have certain individuals who are grabbing up the industry. Whether it's Albion Fish, McMillan Fish, Pattison fish, Canfisco or certain individuals, this is not good. The only thing that I've got against the fish-farm industry is that it's big business — that, and the fact of dead inlets. Put it where there are not migratory fish. Thank you.

R. Austin (Chair): Thank you very much for your presentations. At this point I'd like to thank everybody for coming here today — all of those who have made presentations and taken the time and trouble to come and share your knowledge and experience with us, and also all of the people here, citizens who have come to witness the deliberations today. I thank you all for coming out.

I'd now like a motion to adjourn.

These hearings are adjourned.

The committee adjourned at 6:25 p.m.

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Published by British Columbia Hansard Services, and printed under the authority of the Speaker by the Queen's Printer, Victoria. Rates: single issue, \$2.85; per calendar year, mailed daily, \$298. GST extra. Agent: Crown Publications Inc., 521 Fort St., Victoria, B.C. V8W 1E7. Telephone: (250) 386-4636. Fax: 386-0221.

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