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Did you Know?

The wedding ring goes on the left ring finger because it's the only finger with a vein that connects to the heart.

Can you solve this Puzzle?

The Pope has it but he does not use it. Your father has it but your mother uses it. Nuns do not need it. Arnold Schwarzenegger has a big one, Michael J. Fox's is quite small. What is it?

Answer on Page 4

Comments about this Newsletter?

Please email comments, articles and ideas to Ian Roberts, Communications Manager at ian.roberts@marineharvest.com

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Wharfside

Restructuring & improving our business

By Vincent Erenst, Managing Director



In September we announced that in light of the market situation we were planning to reduce the number of fish put to sea in 2011 and 2012 and that consequently several sites would be temporarily taken out of production.

These plans have now been finalized and those employees in production and administration whose jobs are affected have now all been informed. We strongly regret the approximately 60 job losses that result from these changes, but it is a necessary step to preserve the future of our company. We want to thank the employees who will leave the company over the next months for their hard work and commitment to MHC and hope they will soon overcome this setback.

Beyond the reduction of staff we are developing the following initiatives to gain competitiveness in the current market:

Elimination of Kudoa

The November 2010 issue of Wharfside highlighted our challenge with Kudoa – a common fish parasite that poses no human or health risk, but can result in the meat quality deteriorating after harvesting, leading to fish being discarded at filleting. We believe that this issue can be avoided by stocking our farm sites with larger, fully seawater adapted fish, so we have identified five farm sites which have had a high historical rate of Kudoa that will be stocked using this new strategy. We will await the harvest

results from these sites before we restock other sites using this new strategy.

Improvement of growth and condition factor

Many of our sea sites experience a large variation in weight of the fish at harvest. The majority of the fish grow well with an acceptable condition factor, but there is a part of the population that does not perform as well. These fish end up being long and skinny and bring down the overall growth and average weight. There are several potential causes for these poor performers that may be tracked back to both freshwater and saltwater. Fish Health and Farming Management are investigating the matter and are expected to make recommendations in November. More uniform growth of the stocks will most likely also improve Feed Conversion Ratio's (FCR) beyond the results already obtained through better feeding management.

Efficiencies and cost reduction

During the preparation of the 2012 budget it became clear that there are still many opportunities to gain efficiencies and reducing “line by line” costs throughout the value chain. Examples are; concentration of smolt and fry production at four hatchery sites, reduction of costs for diving, net rigging, marine freight, consolidation of all purchases, a change in packaging for whole fish, optimization of plant volumes, and many others. All these initiatives have been integrated in the 2012 budget and their success will be tracked month by month.

(continued on page 4)





Organic Aquaculture in North America

By Paula Galloway, Certification Manager



While organic production is the fastest growing agricultural segment in North America and despite many years of draft standard development, neither Canada nor the US has organic aquaculture standards at present. This may change in the next few weeks when the results of a vote on the draft organic aquaculture standards developed through the Canadian General Standards Board (CSGB) become known. However, even if the standard passes, organic aquaculture products will continue to be a niche market that depends upon consumer willingness to pay premium market pricing.

Why has it taken so long to get to this point and why is aquaculture the only major food group in Canada and the US that does not benefit from organic production standards and the use of an organic label?

The biggest stumbling block in North America is an environmental movement that has vocally opposed the development of any kind of certification for aquaculture – even if that certification promotes better environmental practices. Particular concerns are ocean pen culture and the use of wild-sourced fishmeal and oil for feed.

And there are other reasons...

By comparison with Europe, the failure may be partly due to fewer and less advanced food certification systems (and, as a result, possibly less demanding consumers). Europe has led the development of many food certification initiatives – in fact, the first organic salmon standard was developed in Ireland by Naturland (1995). Since then, the UK-based Soil Association (1998), BioSuisse and the European Union (2010) have developed organic standards. Worldwide in 2009, there were 240 organic aquaculture operations (including 22 salmon farms) in 29 countries.

Additionally in Europe, as food certifications are often integrated throughout the food supply chain and with the development of diverse standards in different countries, being competitive often means obtaining the

certification required by your customers. This may require more than one certification. A good example of this is Marine Harvest Ireland which has seven certifications (including three organic) for its production.

Continual improvement is a fundamental organic production ideal. This same value guides MHC and; therefore, many of the changes seen in our production in the short and long term are consistent with a movement towards organic-based principles. These include:

- Reduction in antibiotic usage with more production groups not receiving any treatment during growout
- Consideration of technologies that are more environmentally friendly, such as net materials that don't require antifoulant use
- Culture densities that consider fish health and welfare first with good growth and production as a natural outcome
- Feed ingredients that are responsibly sourced

Defining Organic – organic production is a holistic, ecologically-balanced approach to farming that considers the environment, plants, livestock and people. Interestingly, “organic” cannot be applied to wild caught product as inputs (feed source etc.) can't be controlled.

Invitation to Campbell River Family Services Society Board

Campbell River Family Services Society (CRFSS) is inviting applications from Marine Harvest employees to sit on the Board of Directors.

What is CRFSS?

CRFSS has been providing programs and services to individuals, children and families living in the Campbell River area since 1977. With a yearly operating budget of over 1.5 million dollars, we offer over 20 different programs and services and have a staffing compliment of 30 full and part time employees.

Please find out more about what we do on our website: www.crfss.ca

CRFSS needs strong, skilled board members to promote the Society and its services. Specific responsibilities include:

- Understanding the Society's purposes and plans (strategic plan is current)
- Attending monthly board meetings, committee meetings (if required) and the Annual General meeting
- Provide constructive input and criticism
- Being familiar with the Board Governance model



This is a governing board and as such is not involved in the day to day operations of the organization. Board meetings are fun (lots of laughs), quite productive and Family Services is a great organization doing amazing work in this community. If you are interested in applying to become part of the CRFSS Board, please email Ian Roberts at ian.roberts@marineharvest.com



Repeat customers



Parkville Probus Club members had such an interesting trip to a MHC hatchery and marine farm in the spring that they asked for more members to attend a second visit. A beautiful day in September set the scene for another enjoyable tour to Sayward North's recirculating aquaculture system and also the Hardwicke Island farm. Special thanks to managers Craig Schelter and Jason Swartz and their staff for being such welcoming hosts to many tourists this summer.

Benthic Management at salmon farms in BC



Take a tour with biologist Greg Gibson to learn more about how BC salmon farmers take care of the ocean bottom below a salmon farm. Greg is also featured in this month's employee profile on Page 5. To view the video, visit MHC on YouTube at bit.ly/MHCanada

"Brad the Biologist" shares his salmon sense



On behalf of Miracle Beach Nature House, I would like to thank "Brad the Biologist" for coming to Miracle Beach Provincial Park Nature House and teaching children all about his occupation and about fish! The children and parents were extremely happy and engaged. The evening was the best turn out for programming we had this summer! I would like to extend my sincere gratitude to you for making this possible with your generous donation of fish, and to Brad for his time. We have had many requests for the return of "Brad the Biologist" and hope to see him again this summer if possible!

Submitted by April Lowey, Naturalist at Miracle Beach Nature House

Campbell River goes quackers



MHC was proud to again support the Campbell River Daybreak Rotary Club's annual Quacker 5000 Duck Race. For four years now MHC has been a presenting sponsor and sponsored 1st prize. Ian Roberts, Communications Manager at MHC, was on hand to congratulate Anne Davey of Campbell River and her duck "Sweet Pea" with the top prize - a \$3000 travel voucher. Proceeds from the duck race go toward many different community projects in Campbell River.



Restructuring & improving our business (continued from page 1)

Quality Grading

Our superior percentage so far this year at 75-80% is well below our target of > 90%. A low superior rate affects the average price we get for our fish. The low percentage is the result of several quality defects combined with not always precise grading at the plants. The main reason for downgrades are mature and undersized, skinny fish. Improvements to our lighting (photo-manipulation) policy is expected to decrease the amount of mature fish. Improving the condition factor as outlined above will take care of the undersized fish. Over the last months good progress has been made in both processing plants in refining the grading practices and this has to be maintained.

Ultimately our cost of production should be equal to the cost of the Chilean industry including the airfreight cost from Chile to North America. With similar costs and a fresher product there will be no doubt that we will be very competitive.

We may be going through tough times at this moment but we remain optimistic about the future of the industry and our company. Demand for farm-raised salmon has grown year after year and will continue to do so for many years to come. The current weak prices are the result of a sudden supply spurt from Chile and Norway but with limited opportunities for the salmon industry to grow beyond the volumes projected for 2012, it is likely that demand will again exceed supply within a few years. It is up to us to make sure we are in top shape when the market picks up.



BC Senior's Games and Ride to Conquer Cancer



MHC'er Jacob Koomen and his wife Jannie participated in the 2011 BC Senior Games held in August in the Kootenays. The cycling events were held in hilly Nelson, BC. Jannie entered the time trial and road race, while Jacob entered the time trial, road race and hill climb.

Both Jannie and Jacob came back with medals; Jannie won a bronze in the time trial and Jacob won the bronze in the hill climb.

The Koomens are once again entering the Ride to Conquer Cancer - June 9-10, 2012 - throughout Ontario's picturesque countryside on their tandem and are looking forward to support from their friends at Marine Harvest Canada. This great cause benefits cancer research. For more information about the Ride to Conquer Cancer 2012, please visit <http://to12.conquercancer.ca>

Submitted by Jacob Koomen

Photo 1: Jacob Koomen (far left) being awarded his Bronze medal for the hill climb.

Photo 2: Jannie Koomen (2nd from right) being awarded her Bronze medal in time trial.





Farm Tech privileged to tell his whale of a story

By Gina Forsyth



Self-confessed “water guy” and farm tech Mike Stoskopf is looking back on a summer like no other. An unexpected legacy in the form of a whale bearing a name he chose has not only strengthened his interest in whales but has also added to the body of knowledge surrounding these majestic animals who call the waters of BC home for part of the year.

Mike first sighted the humpback whale that would later be known as Stovetop in the spring while on shift at Mahatta East in Quatsino Sound. It regularly travelled with a juvenile and another whale. Mike consulted an on-line whale database and after careful study, realized that the chances were high that the largest of the three humpbacks had never before been sighted locally.

I took several pictures of the whale which eventually came to the attention of Jackie

Hildering at the Marine Education and Research Society (MERS), said Mike. After extensive consulting with her colleagues, Jackie confirmed to Mike that he was in fact the first person to see this particular whale.

Anyone who is the first to sight a whale is given the privilege of naming it. “I was called Stovetop Stuffing as a kid because of my last name, and I decided Stovetop was the perfect name,” explained Mike.

“This summer was a moving experience. I made eye contact with the whales and simply knew there was not only intelligence but gentleness as well. Not once did I ever feel like I was in danger,” adding that it’s been fantastic to watch the juvenile whale grow and become more independent as the months went by. “I developed a bond with Stovetop and the others throughout the summer,” Mike added.

Another connection Marine Harvest staff have to whales is through the BC Cetacean Sightings Network, a joint effort between the Vancouver Aquarium Fisheries and Oceans Canada that was established in 1999. This research and conservation program’s goal is to teach the public

about not only BC whales but dolphins, porpoises, and sea turtles, and issues threatening their survival.

An essential part of the network is the observers across the province, from not only aquaculture employees, lighthouse keepers, recreational boaters to whale watching operators who report their sightings of whales and other cetaceans.

Beginning in June 2011, each Marine Harvest farm site as well as all company vessels are equipped with log books where whale sightings are recorded. The date, time, and location of each whale is written down, as well any other pertinent details.

The Marine Harvest maintained log books will be submitted to the BC Cetacean Sightings Network on an annual basis. This data, along with what is collected by others, provides valuable information about which whales are found where as well as assisting in future management plans for at-risk species.

For more information, check out www.wildwhales.org.



Vancouver Island “lifer” knows home is where the heart is

By Gina Forsyth



Greg Gibson, a native Vancouver Islander, knows that you don’t always need to travel far from your birth place to build a fulfilling life. As an Environmental Assessment Biologist, Greg’s job requires

both office and field work. “My main focus is compliance and making sure any benthic impacts from the sites are within acceptable

limits. I’m also involved with site amendments and technical work,” he explains.

Born in Nanaimo, less than two hours south of Campbell River, Greg graduated from high school in Courtenay, and then enrolled at the University of Victoria in pursuit of his BSc in biology. His introduction to aquaculture in 1993 was through a summer job in the Broughton for what is now Mainstream Canada. Plans to return to school that fall changed when Greg realized how much he enjoyed site work. A three month job became a three year job but I did complete my Biology degree in 1998 with a minor in economics, Greg says, laughing.

After graduation, Greg worked for Island Sea Farms and then travelled for several months throughout south-east Asia. He came back to a full time job in 2001 with Aquamatrix Research, an environmental consulting company. When it was time for a different focus, Greg found his way to Marine Harvest in 2008.

Greg and his wife have three kids ranging in age from five to sixteen. They’re involved in a variety of activities so when they’re not busy driving to and from soccer, or piano, their house in Comox keeps both Greg and Tammy occupied with landscaping and planting. “It’s a work in progress and we’re getting it done piece by piece.”



New Sturgeon Study Centre furthers aquaculture R&D



Vancouver Island University's (VIU) International Centre for Sturgeon Studies (ICSS) grand opening ceremony drew a large crowd to Nanaimo BC last month. The \$5.25 million dollar state-of-the-art facility was funded in part by Marine Harvest Canada (MHC).

Sturgeon is an awe inspiring species of freshwater fish that may grow up to five metres in length and live for over 100 years. Many river stocks of wild sturgeon are at risk and aquaculture will play an increasingly important role in conservation of the species.

The ICSS hopes to lead the world in Sturgeon biological research, development of culture techniques and marketing of the meat and caviar products.



VIU approached MHC in the development stage of the Centre because MHC operates freshwater recirculating aquaculture systems for salmon that are very similar to the systems used to raise sturgeon. This conversation identified over \$200,000 of infrastructure, including growing tanks and plumbing, redundant to the needs of MHC that was subsequently donated to the ICSS.

"It's great to see VIU continuing this leadership role in aquaculture and seafood studies," MHC's Communications Manager Ian Roberts stated at the opening event. "Whether it's for sturgeon, salmon or trout or other species, this investment into aquaculture research and its business development in British Columbia is very important."

VIU offers Fisheries & Aquaculture diploma and degree programs with many of its graduates having found permanent careers with MHC.

"Not only is VIU providing qualified staff to work in aquaculture, they are also investing in business and product development to ensure their graduates have a place to work," Roberts commented.

VIU and the City of Nanaimo will use the Centre to host the 7th International Sturgeon Symposium in 2013.

The Centre was funded by the Canada Foundation for Innovation, Vancouver Island University, BC Knowledge Development Fund, Island Coastal Economic Trust, Western Economic Diversification Canada, Marine Harvest Canada and Community Futures WestCCAP.

Marine Harvest Canada is BC's leading salmon aquaculture company with operations on the Northern half of Vancouver Island and Klemtu.

Wharfside goes digital

As of December 1st, our Wharfside newsletter will be distributed only in digital format. Distribution via email means you can now decide whether you want to print a copy to read or simply look at it online. Employees with MH email addresses will get the newsletter monthly via email. It is also available on our website at <http://www.marineharvestcanada.com/newsletters.php> and internally on our

SharePoint Intranet. If you have any comments on the new distribution format, we'd be pleased to hear from you – just email me at ian.roberts@marineharvest.com.

If you are not already on our newsletter distribution list, you can get the latest from Marine Harvest Canada by joining our newsletter sign up list at <http://www.marineharvestcanada.com/newsletters.php>. That's all it takes!

Ian Roberts, Communications Manager

