

FISHERMEN'S NEWS

The Advocate for the Commercial Fisherman

Pacific Fisheries Review

PETERSBURG, ALASKA IS AN ISLAND COMMUNITY WITH A RICH fishing history and a strong Norwegian heritage. Growing up in a small town like Petersburg it's hard not to get involved in the fishing industry. Like many other people from this town Josh Dunham was fascinated by the fishing industry at a very young age. In his early teens he got his first job as a fisherman working with longlining, seining and pot fishing. While working toward his engineering degree from Central Washington University in Ellensburg, Washington he reached out to Mustad Autoline who offered him a trainee program while he finished his degree. Years later he now works for the company as one of their main service technicians and visits autobaiting vessels all over the world. We asked Josh to answer a few questions about his job.



Josh Dunham inspects the Mustad Autoline Superbaiter one last time before seatrial on the new *Blue North*. Photo courtesy of Mustad.

Q: How did you first learn about Mustad Autoline?

A: While working towards my degree in Ellensburg I also crewed on a fishing vessel called the *Cape Reliant*. One year the captain and owners decided to purchase a Mustad Autoline system. I had seen these systems before but never had the chance to work with one. This was my first contact with the company when they came and installed the system followed by 4-5 days of training at sea.

Q: Why did you want to work for this company?

A: I have always been interested in mechanical systems and automation, cars, engines, boats etc. which led me to my engineering degree. Combining this interest with my experience as a fisherman I figured it's the perfect combo getting to work with the most advanced technology and equipment in the longline industry.

Q: What was it like to change from being a commercial fisherman to a service engineer?

A: Since I already had a lot of experience longlining by the time I began working with Mustad it was pretty easy to roll right into it. Office life isn't nearly as exciting but one of the best parts is that from time to time I still get the chance to get back out on the water and go fishing.

Q: Describe your job, what does a normal work week look like for you?

A: This varies greatly from week to week and throughout the year. Sometimes I'm travelling for weeks at a time working on installations and service in other countries. In spring and early summer there are always a lot of vessels in port getting ready for their upcoming season so this gives me a chance to get onboard and check up on the equipment. While not travelling I work at our Seattle office creating layouts for potential customers, refining system designs, planning upcoming installations, and taking service calls. I typically create 2-3 system layouts for potential customers during the week. Each vessel is different so each system layout must be designed to maximize the available space on deck while at the same time allowing for a comfortable working environment.

Q: What do you enjoy most about your line of work?

A: I get to meet a lot of great people from all over the world. It's great to have the chance to help them increase their catch and efficiency and decrease their labor. I particularly enjoy seeing how quickly a crew learns the ins and outs of an autobaiting system. They are always a bit apprehensive at first but usually by the 2nd or 3rd day they've got it figured out. I have always enjoyed travelling and this has given me an opportunity to see places I might not have otherwise. Earlier this year I visited Greenland and Tasmania.

Q: When visiting Autobaiting vessels what are the most common mistakes you see?

A: I think lack of general maintenance and cleanliness are the two issues that I see causing the most problems. General maintenance is as simple as greasing bearings every other day and looking over the equipment to make sure everything is in order. It's hard to keep equipment on a fishing vessel clean, but when the machines are clean it is much easier to see if there are any parts that may be out of spec or worn beyond the service life of that part. The saying "a clean boat is a happy boat" also applies to the autobaiting system.

Q: You have seen many different styles of longlining the last years. What do you find most interesting?

A: I find it interesting that certain markets fishing for the same species can be so different when it comes to selecting gear specifications. Say for example fishing for Cod in Norway and Iceland, all vessels use 1.4m spacing between swivels on their groundline and the length of their gangions are 15-16 inches. In the US fishing for Cod the spacing is 1.2m or 1.1m while their gangion length is 12-13 inches. I don't think one way or the other is right or wrong, but it's still fascinating that there is a difference. Line diameter varies vastly as well even in markets that are fishing the same depths. In Greenland they use 5.5 to 7mm line while in Alaska 9.5 to 11.5mm line is the standard. It's always interesting seeing how vessels fishing in different parts of the world with the same basic system have adapted their style and technique to maximize efficiency in their particular markets.

Q: New longline vessels are being built and are needed. What is the biggest difference between new and old longliners in your eyes?

A: The new longliners being built are actually designed from the start as longliners. This means they are much more efficient than the vessels that were converted in the past from other fisheries. It's important to consider that a longline vessel spends about 80 percent of its life hauling gear mostly idling along, unless of course the weather is bad. This means that a longliner's propulsion system needs to be designed to match this need. The newer vessels are being built with diesel electric drive systems so they use far less fuel. Also the amount of automation on these newer vessels is incredible. One thing that hasn't changed however is that each fish is still caught and handled one at a time.

Q: How do you envision the future of longlining?

A: The future of longlining is bright! We notice that more and more consumers appreciate one fish caught and handled at a time and are willing to pay more for this. We've seen most of our customers steadily improving their data collection techniques. This provides information that the vessel can use to improve their catch per unit effort (CPUE). With better data collection increasing catch efficiency the vessels can pass this savings onto the consumers.

Q: Any tips you would like to give to longliners out there, both handbaiters and autobaiters?

A: Consider how large the size of your bait is for the species you are targeting. For the last few years we have been working

closely with a large number of our customers and some have seen massive bait savings just by cutting a few millimeters smaller and in some cases using a smaller hook. I feel back in the day fishermen always said the bigger hooks and baits catch bigger fish. This may be true for some species but there is always a point of diminishing returns. Today we are focusing on selecting the ideal size hook, bait and line for the target species, finding the equilibrium between these three provides our customers with the highest return of investment.

Q: The shape of the hooks has gone from J-hook to Circle and now seems to be going back to J, is that correct?

A: Yes, that is partly correct. The most popular hook these days is what we call a semi-j, semi-circle hook. This hook provides a balance between strength, penetration, and catch retention while also minimizing equipment wear. It provides the advantages of both circle and j-hook shapes combined in one hook. One of the greatest advantages with this hook is that we have been able to reduce its diameter to a 13/0 hook while retaining the strength of a 15/0 hook. This reduction in material used leads to an increase of hook storage capacity and a slight reduction in price.

Q: Could you name a few of the projects you are currently on?

A: Yes, I can mention a few of my main current projects. I am finalizing a Deep Sea installation in Seattle which should be fishing later this year. Preparing several installations on the East Coast of Canada and expecting at least two Coastal System installations in Alaska early 2018. Normally during the Pacific Marine Expo in Seattle we sell a couple of systems so I expect to add a couple more projects to that list. We also meet lots of potential customers or as we like to call them potential future partners. It's also a great place for us to launch new products and promote our company.

Q: Why do you call them "potential future partners"?

A: The truth is we strive to work as close as possible with every system owner, not just supplying spare parts and service but also helping them improve their operation; lowering their overall expenses increasing their catch while helping with any challenges they might be facing like by-catch in certain areas or whale interactions. In other words, we rely on them and they rely on us. We don't want them to think of us as a company only trying to sell them equipment but more as a lifetime partner wanting both parties to succeed. **FN**