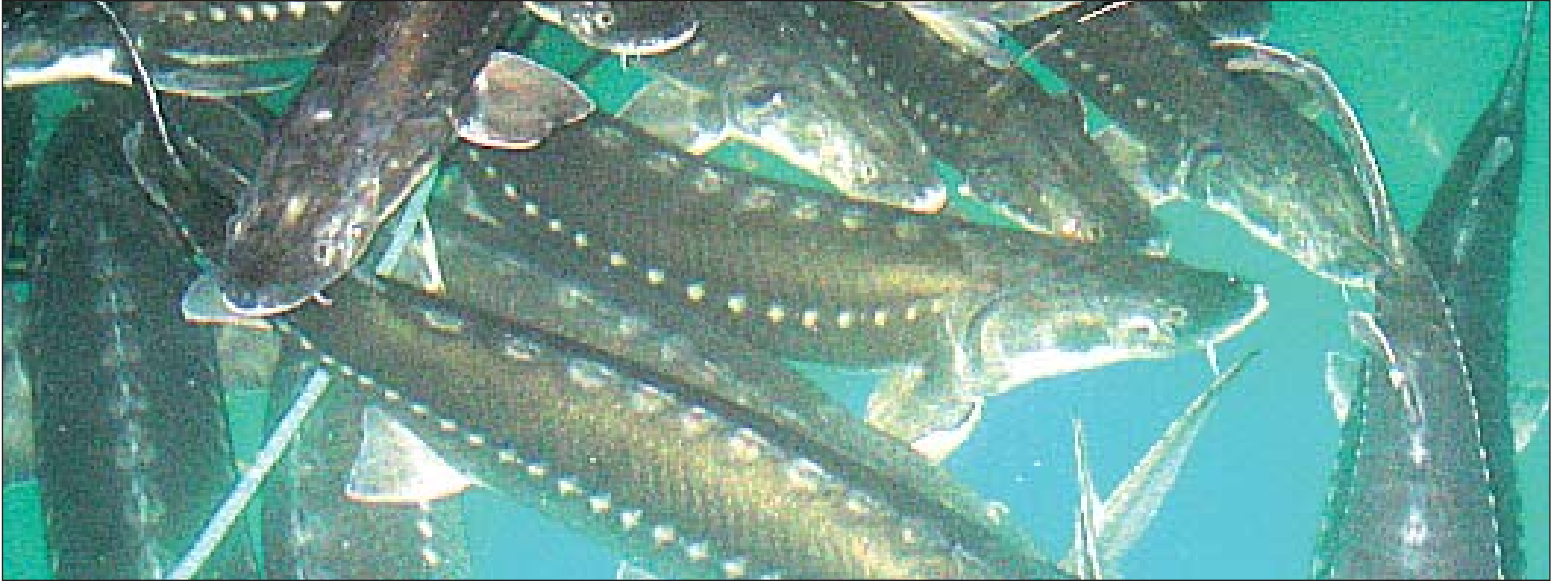


Target Marine aiming to produce BC's most expensive food product



Linda Morton photo

Only seven years old, these sturgeon average 40 kilograms each with some over 70 kilograms. They will produce 10 per cent of their body weight in caviar.

By Brian Lee

Until recently, Bernie Bennett and Target Marine's focus was salmon farming.

Specifically, he was involved in the salmon egg business, harvesting the most profitable product from salmon — the roe — to sell to the

Japanese sushi market as ikura.

He knew the egg business could be lucrative but salmon are delicate, expensive to rear and the market didn't always offer a payoff for such a risky investment.

In 1998, Bennett was waiting for a flight in London's Heathrow Airport when he stumbled across a

caviar kiosk.

"I'm looking at the tins of sturgeon caviar and looking at the prices and went 'Oh my God!' because it's like 100 times more than we were getting for salmon stuff and I said if ever get the chance I want to get into that business."

As luck would have it, when Bennett returned to Canada there was a man named Ken Beers speaking at an aquaculture conference in Victoria about the success of farmed sturgeon in California.

While there Bennett heard about some research taking place at Malaspina University-College in Nanaimo.

"So we contacted them and it turns out the head sturgeon guy, a guy named Dave Laine, was thinking it was about time to get sturgeon commercialized in BC, so the timing was perfect," Bennett says.

"In 1999 we got our first fish."

Just three years later the sturgeon hatched from those first 14 brood stock were sexed.



Joyce Francis photo

This sturgeon's roe is examined to see if it's ready for harvest. If not, the sturgeon is stitched back up and they wait another year.

Sturgeon have no external sexual characteristics so, after they're anesthetized, a small incision is made on the underside of the belly to examine for roe.

Bennett says the recovery rate for this procedure is virtually 100 per cent.

Females are saved for caviar production and the males are then harvested for meat and sold through seafood brokers to various markets.

"If you see sturgeon meat in B.C. and it's legal, it's probably us," Bennett says.

Bennett describes sturgeon as having firm white meat that is neither oily nor remarkably flavoured but pleasant.

It has been well received in high-end Vancouver seafood restaurants like C and the Cannery.

"It's definitely white tablecloth," he says.

"That's our market. It costs a lot to rear and a lot to process and it's hard to get it through with all of the bureaucratic stuff."

Bennett has had to verify that each sturgeon harvested for meat or caviar has complied with CITES, the Convention on International Trade in Endangered Species.

CITES requires certification that international trade in specimens of wild animals or plants doesn't threaten their survival.

"[The sturgeon] can be verified genetically," says Rob Haines, Target Marine's hatchery manager.

"If you took a paper clip to one of the fins of any fish here, it could be verified that it's our stock."

Global poaching markets—and a burgeoning local one for the endan-

gered Fraser River White sturgeon—threaten the few remaining wild stocks.

Because of the demand, caused by a worldwide shortage of caviar and the near extinction of the Caspian Sea sturgeon population, Bennett says that his caviar will likely be the most

expensive food produced in BC.

One female sturgeon will produce approximately 10 per cent of her body weight meaning a 70 kilogram fish will yield 7 kilograms of caviar.

Sold in one-kilogram tins at current market prices, each fish will

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A short history of sturgeon caviar

Sturgeon have been around for more than 80 million years and are found only in the northern hemisphere. They live in brackish or salt water but return to fresh water to spawn. They can spawn multiple times throughout their lives and can live to be over 100 years old. The beluga sturgeon (beluga caviar) is found in the Caspian Sea and is the largest freshwater fish in the world with a record weight of 4,350 pounds.

The first written record of caviar was from Batu Khan, the grandson of Genghis Kahn, in the 1240s. The caviar industry started in Eurasia and the Mediterranean where the roe was heavily salted to extend shelf life and then transported in wooden caskets. By the 1800s the French began importing caviar from Russia where it had become a popular aristocratic delicacy. Molossol, the lightly salted variety which we generally eat today did not become available until the advent of refrigerated transport.

By the end of the 1800s, North American varieties of Atlantic sturgeon and white sturgeon on the West Coast were found to have a roe quality comparable to that of Russian sturgeon. By 1900 there was more caviar going to Europe from North America than from Russia and the commercial harvest of these species continued until the resource was virtually destroyed. By 1915 North American fisheries were closed to sport and commercial use. A sport fishery was reintroduced for white sturgeon on the West Coast in the 1950s but an illegal poaching trade continues to this day.

Most of the world's caviar still comes from the Caspian Sea but after the Soviet Union broke up the strict controls on harvest and caviar production around the Caspian Sea disappeared. The new free states found caviar a quick way to generate cash and the so-called "Caviar Mafia" has taken over much of the processing and distribution. Stocks are further threatened by pollution and it is now being seen that most of the eggs in mature female Caspian sturgeon are sterile due to genetic malformation.

[sterlingcaviar.com]

Target Marine (cont.)

produce a volume of caviar valued at approximately \$12,500 to \$17,500.

Clearly the potential yield is worth the wait.

“When you produce caviar it will typically go out in one-kilogram tins but nobody eats caviar in one-kilogram tins unless you’re the sultan of Brunei,” he says.

“Most people will buy caviar for consumption in one-ounce or 20- to 30-gram tins. So the reality is that people that are going to sell that to them, they take your one-kilo tin and they break it and when they break it never has your name on it anymore.”

The sturgeon are raised in 125 cubic-metre, land-based tanks that hold 400 to 500 fish each.

The system is constantly circulating, refiltering and reoxygenating, requiring at least one person to monitor it 24 hours per day.

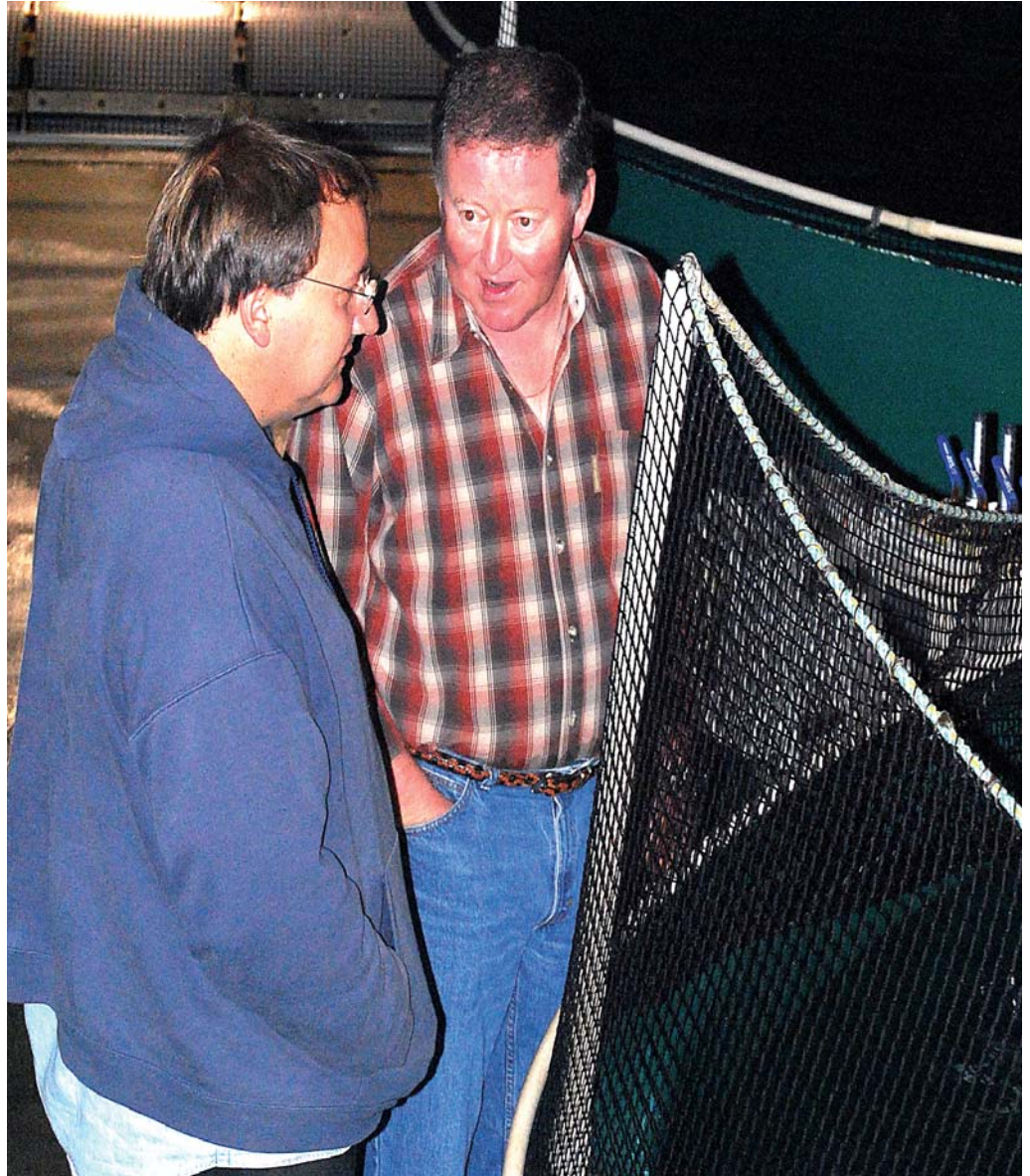
Target Marine currently employs about 20 people at the Porpoise Bay site and another three in the Sechelt office.

All solid waste is pumped into a septic tank and then trucked away for disposal, adding cost to an already expensive operation.

Bennett says you could never raise salmon in this way because you couldn’t recoup the cost of production.

The literature says that it should take seven or eight years for a sturgeon to mature enough to produce caviar quality roe so it is a long-term venture requiring a lot of start up capital.

To get to this point Bennett says he’s invested well over \$2 million and was hoping for caviar production to start this year but it looks like the



“Hey Rob, what kind of fish can perform operations?” Rob Haines and Bernie Bennett compare sturgeon jokes.

sturgeon won’t be ready for another year yet.

Sturgeon aquaculture in California is about 12 years ahead of Target Marine and another company in Italy is pursuing caviar production but Bennett isn’t worried about competition.

“There’s such a shortage given

what’s been happening to the wild stocks and caviar worldwide that there’s going to be a shortage for years to come,” Bennett says.

“It takes such a long time to bring one on that there’s not going to be a glut of caviar anytime soon.”

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