

The Statewide Committee for Research honors Alaska's

Northern Innovators



Pat Simpson

The Fisherman's Son

Northern Innovators Hall of Fame Member

In a chilly, dark building across Cook Inlet from the white pyramid of Mount Redoubt rest a few dozen plastic-lined cardboard totes. They are filled to the brim with an amber liquid. Here on the northwest shoulder of the Kenai Peninsula, each chest-high cube holds about a ton of fish oil extracted this summer from the heads of salmon. It's a product that would have been lost to the Kenai River if Pat Simpson had not recovered it.

Simpson, 49, is a fisherman-turned-entrepreneur who has for the past few summers purchased salmon heads from fish processors doing business here in Nikiski, a small industrial town north of the Kenai River. Using precision equipment made in Europe, Simpson's team steams and grinds the heads of pink, chum and red salmon to render a product now available in box stores as 90-count bottles of gel tablets.

"We sold all our fish oil the first three years (to companies that put it in capsules and sold it to large retailers)," Simpson says at his Nikiski plant, shut down for the offseason.

Simpson's venture with his company Alaska Marine Nutrition is part of a dream to enable fish processors in remote places to use the oiliest part of a salmon — its head — prized in other cultures but often returned to the ocean in Alaska fisheries.

Simpson first sensed an opportunity to extract and sell fish oil when he was a boy growing up in Cordova, fishing town at the eastern boundary of Prince William Sound. There, as in many rural Alaska places where commercial fishermen catch salmon, processors then kept the high-value filets but ground up the carcasses and released the slurry back into the ocean.

With increased awareness about the health benefits of the omega-3 fatty acids in

salmon oil, Simpson calculated the amount of wild Alaska salmon heads that made their way to fish processors near the mouth of the Kenai River. The numbers worked for him. He approached the owners of the area's seven fish-processing plants and told them he'd buy their fish heads.

They agreed to fill Simpson's totes with heads during the intense midsummer commercial salmon fishing season. He and his partners, his dad Ken Simpson and Richard Mullins, purchased a fish-processing facility in Nikiski and converted it to hold the specialized equipment used to extract oil from fish heads. Their plant stands amid refineries processing natural gas and oil from Cook Inlet rigs and metal-sided buildings of contractors who support the oil industry.

"We seem a little out of place here," Simpson says at his 12-acre facility, which includes his processing plant, office and bunkhouse for summer workers.

Simpson grew up in Cordova working on his father's tender boats every summer.

"He is the innovator and entrepreneur that inspired me," Simpson says. "He changed the shape of crab pots, applied scallop dredging to razor clams and was an early adopter of electronic charting of his fish catch."

Working for his dad, Pat and his crewmates would motor over to commercial fishing boats, pick up salmon and carry the fish to local processing plants on shore. Sometimes he would travel as far from Cordova as Bristol Bay, a six-day trip. On those trips, he learned his future was not on the decks of boats in Alaska's choppy wild oceans.

"I'd be lucky if I wasn't throwing up half of that," he says of the run to Bristol Bay. "To

be a successful fisherman, you have to be able to work in lousy weather."

The young Simpson looked to another passion, computer science. He went to the University of California at San Diego for college. Soon he began applying the same "fuzzy logic" techniques to the fisheries industry that he was using for Navy programs and made his way back to Anchorage. There, he honed skills he later used to start companies that developed sonar systems and underwater gliders for the science and defense communities. Once back in Alaska, he worked on a sonar system that could identify fish by their shape and coloration and proposed other systems, such as shipboard cameras that recorded the species and number of fish being harvested, that were ahead of their time.

As time went on, he again longed to be connected to the industry he knew best. That's when he saw there might be a niche on the west side of the Kenai Peninsula. Of the more than 200 fish processors scattered throughout the state, only about half recover the fish heads and guts. The fishing industry produces and dumps back to the ocean more than 1 million metric tons of fish parts each year.

"I wanted to build something I could hold in my hand," he said. "Wild Alaska salmon oil — that's our oil. It's very gratifying to produce."

Simpson sees a chance for to get even more out of the fish. He wants to produce more from the fish-waste stream, including fishmeal made up of ground-up fish carcasses and bones. That's in the future. For now he's pulling out the best fish oil he can and hustling to sell it to distributors in the Lower 48.