

Highlighting releases, returns, policy and legislation affecting the Southeast Alaskan salmon fisheries

High Prices Produce A Record Year: NSRAA Fish Are Worth \$19.7 Million Ex-Vessel Value to the Fleet

*Trollers fish for chum salmon near
Six-Mile Rock.*



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A Record Year - \$19.7 Million Value to Fishermen

The NSRAA contribution to the commercial fleet was 19.7 million dollars in ex-vessel value, a record high number. That is 484 percent higher than the value in 2007, and 230 percent higher than the five-year average.

NSRAA contributed 2.71 million fish to the commercial fleet, which is 110 percent of the five-year average. 74 percent of NSRAA's returning fish were caught by the fleet; 21 percent went for NSRAA's cost recovery. The remainder includes sport catch and broodstock.

"There were high prices for all species. So although there were only slightly above average returns, the near-record prices resulted in an extremely high paycheck to the fleet," said Chip Blair, NSRAA data analyst and cost recovery manager.

Fishermen benefitted from improved chum returns in 2008 to all NSRAA sites, which was especially important to the seine fleet in a year of poor pink returns.

"We also saw a strong Chinook return to Medvejie and a strong coho return to Hidden Falls," Blair said. "And, fish quality was very high for all species. They returned to the terminal area as brighter fish than usual, probably because of the colder water temperatures."

The majority of Medvejie Chinook are caught in the spring troll fisheries. In a normal year Medvejie Chinook comprise 8 to 10 percent of the total numbers of the catch in these fisheries. But in 2008, 30 percent of the Chinook in the Northern districts and 26 percent in all Southeast spring fisheries hailed from Medvejie.

The commercial value of NSRAA's Medvejie Chinook set an-

other record: \$2 million in commercial value. Hidden Falls Chinook had a commercial value of \$537,000, its second highest value ever.

As a result of the high numbers of hatchery fish in the spring troll areas, those areas were allowed to be left open for a longer period of time than usual, as per Chinook treaty agreements, giving trollers more fishing time.

There were also record Chinook catches in the Deep Inlet net fisheries.

Hidden Falls chum also set a new record for value this year: \$10.48 million. The seine fleet caught 1,748,000 Hidden Falls chum.

"With higher prices, the highest return since 2000 couldn't have come at a better time for the seine fleet," Blair said. "Coupled with the extremely poor pink return this sum-

mer, this fishery had a huge impact on the seine season."

The Boat Harbor and Limestone Inlet projects also had record value years of \$2.88 million and \$940,000 respectively, with the highest gillnet catch at Limestone Inlet since 2000.

These projects have been cooperatively managed by NSRAA with Douglas Island Pink and Chum (DIPAC), but are destined in 2009 to become solely DIPAC projects.

"DIPAC's chum survivals have been on an upswing for the past few seasons," Blair commented. "This has resulted in a sizeable bonus for the gillnet fleet."

Hidden Fall's coho "bounced back" from a poor return last year, with 100,500 fish going to the troll fleet, the highest contribution ever. The value of this catch also set a new

record of \$1.5 million.

"This was the highest terminal troll fishery catch by a wide margin," Blair said. 19,000 coho were caught near the hatchery, surpassing the previous record of 5,000 caught in 2000, and the five-year average of 2000.

Deep Inlet chum are experiencing a period of lower marine survival and lower returns.

"Despite this, we still saw a very high value for the catch," Blair said. Deep Inlet's contribution was worth \$3.98 million in total for all gear groups, which is 360 percent higher than last year's total value.

A Perennial Issue: Allocation

They say that history repeats itself. Jim Becker, Dennis Eames, and Earl Johnson would probably agree. They were all actively fishing and serving on the NSRAA board in the early 1990s, when divvying up enhanced salmon fairly among the gear groups first became a contentious issue.

"As soon as there was a piece of pie to fight over, we fought," recalled Eames, referring to the salmon that NSRAA's programs had begun to produce with regular success.

Eames was a handtroller in the early days of NSRAA and is now retired and living in Hawaii. Johnson is retired from trolling and lives in Sitka, and Becker is a gillnetter who lives in Juneau, serves on the DIPAC (Douglas Island Pink and Chum) Board, and still fishes commercially.

Steve Reifenstuhl Leaving NSRAA After 29 Years



Steve Reifenstuhl, NSRAA operations manager, will soon be working in the commercial sector of the seafood industry after almost 3 decades in salmon enhancement at NSRAA. He has accepted a position at Silver Bay Seafoods in Sitka beginning in February 2009.

"I wasn't looking to leave NSRAA," Reifenstuhl said. "It is very hard to leave after such a long time."

Reifenstuhl began his career with NSRAA in 1979, doing lake surveys all over Chichagof and Baranof islands to find locations suitable for Coho stocking projects. It was the perfect job for someone who loves the wilderness and being outdoors as much as Steve does, a co-worker noted, because he was able to visit nearly every lake on both islands.

After working on the Port Camden chum project as well as the Haines projects, he became the

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Hatchery Reports

Hidden Falls Hatchery Report

Cold water temperatures for both salt and freshwater posed a challenge for the rearing salmon fry at Hidden Falls this past season, but mild spring conditions partially made up for that difficulty. And, a very strong Coho return helped the season end on a very positive note, reported hatchery manager Scott Wagner.

Wagner and his crew kept everything on track despite the presence of very large, hungry mammals around the hatchery this year. (See related story on bear, page 3.)

"A whale actually tried to bubble feed on our net pen of Chinook," Wagner said. "Fortunately the whale never came to the surface while underneath the net pen, but they were hanging around while we were releasing a group of fish. Hopefully it was only able to target a small portion of our release."

Chum

Despite the cold water, which delayed their release by two weeks, the regular rearing fry (Brood Year 07) exceeded their size goals. 9.7 million Late-Large chum were released in late June at 3.56 grams, slightly less than their goal of 3.75 grams.

A total of 84.6 million chum fry were released from Hidden Falls and Takatz Bay combined.

"Chum egg takes went as well as could be expected despite being plagued by unusually high water flows which kept the fish from entering the lagoon, and a high incidence of 'green' or 'bad' females (females with water-hardened, bloody eggs) caused by the fish having to beat their way into the lagoon against the high water flows,"

Wagner said.

The crew worked hard to overcome these challenges and only missed the egg take goal by 5.5 percent.

Chinook

498,000 BY06 Chinook were released in late May at 46.3 grams, the second largest size ever released from Hidden Falls. They attained this good size despite being very small at saltwater entry due to cold water conditions in 2007. Another 245,000 Zero Check Chinook were also released.

1.2 million BY07 Chinook are now rearing in saltwater for release next year. These fish were slightly larger at saltwater entry than last year's group, but still quite small.

Staff collected approximately 2.4 million eggs for the Hidden Falls Chinook programs. About 250,000 of these will be "Zero Check" Chinook – released the same year instead of being overwintered – and the rest will be for the regular Chinook program.

Hidden Falls is also incubating 245,000 Douglas Island Pink and Chum (DIPAC) eggs for the Haines "Zero Check" Chinook program.

Coho

2.3 million Coho fry were released from Kasnyku Bay this year in excellent health, although they were slightly smaller than desired due to the cold water.

3.1 million Coho are rearing at Hidden Falls for release next spring. 250,000 of these are overwintering in saltwater.

"This is the second year of a saltwater trial for Coho, similar to our Chinook winter rearing strategy," Wagner said. "Last year our trial group experienced high enough over-winter

survival that we believed it was worth expanding the trial to production scale."

This trial group is uniquely tagged so their marine survival can be tracked. The strategy also allows additional Coho to be released from Hidden Falls without taking up freshwater rearing space in the winter.

A total of 6.5 million BY08 eggs were taken this year, with 2.5 million reserved for Deer Lake and 4 million for Hidden Falls.

Medvejie Hatchery Report

Record heavy snows in the spring resulted in some of the coldest water temperatures Medvejie Hatchery staff have ever seen. This made the task of raising Coho and Chinook "extremely difficult," said hatchery manager Lon Garrison.

"We've had to continue to adapt our strategies for what will hopefully be the best outcome," Garrison said. "Fortunately our staff works very well together."

Medvejie will be getting a new manager this winter as Lon Garrison takes over as NSRAA operations manager. With the wide variety of programs and rearing strategies at Medvejie, combined with the first year of operations for the new Sawmill Cove Hatchery, all the staff at Medvejie will

have plenty of challenges to test their skills.

Chum

NSRAA released into Sitka Sound a total of 60.7 million chum fry in the spring of 2008.

51.54 million were released at Deep Inlet, with another 9.17 million released at Medvejie for future broodstock.

Chum growth was delayed by cold water, so the dates for moving the fish into ponds and then releasing them were pushed back about a week as well. Overall there were few health problems and good growth.

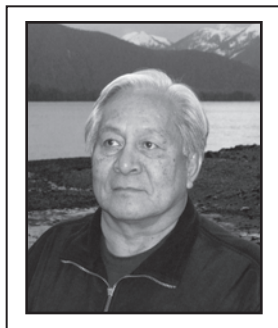
"This was the fifth year of late-large chum, a rearing strategy which will be discontinued at Medvejie due to poor performance at an increased cost," Garrison said. Late-large chum adults will continue to return for another four years and staff will evaluate their marine survival rates.

The adult chum returns to Medvejie were very weak, with net fisheries being curtailed earlier than usual in August.

"By late August our broodstock situation was dire," Garrison said. Less than half of the 65,000 fish necessary for broodstock were available.

"We ended up about 4.5 million eggs short of our goal," Garrison reported. "In addition we are about 4.5

General Manager's Notes



by Pete Esquiro

Now that all the numbers are in and we have had a chance to digest everything, and despite the somewhat different adult return patterns of the past season, we know that the 2008 salmon season was another success.

Rising adult chum returns coupled with rising prices, and higher than predicted numbers of Chinook and Coho salmon, fetching top dollar, made for a profitable year for fishermen as well as for NSRAA's cost recovery program.

I believe that we will count ourselves among the lucky ones, well-positioned to survive the upheaval in our nation's economy.

We, at NSRAA, will continue to seek out ways to economize within our operations, but not at the expense of our top quality fish culture program. Quality and consistency within our programs remains the foundation upon which we built our reputation in the salmon enhancement industry, and it should remain that way.

I hope that you enjoy reading this issue of the Fishrap. We try very hard to provide you with useful information about NSRAA programs as well as on other topics relevant to the salmon fishing industry. Any feedback you would like to provide pertaining to the Fishrap would be welcomed.

Finally, on behalf of NSRAA's Board and Staff, I want to wish you, your families and crew, a Merry Christmas and a Happy New Year!

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Hatchery Reports *continued*

million eggs short of what we normally receive from Hidden Falls for release at Deep Inlet. Thus we will be about 9 million eggs short of our permitted capacity for release at Deep Inlet."

Garrison anticipates that Medvejie will incubate a total of 56.8 million chum eggs, which includes 20 million transferred from Hidden Falls. The majority of these will be standard Medvejie and Hidden Falls stock for Deep Inlet.

Chinook

Two million zero-check Chinook were released at Medvejie Hatchery and Deep Inlet in June and July. Another 2 million Chinook were released as yearlings from Medvejie and Green Lake in late May.

While cold water temperatures slowed the Chinooks' growth, Garrison was very pleased with their health at release.

"I think our release of yearling Chinook smolts late last spring were some of the best, most fit smolts we have produced. While they were not the largest smolts we have released their overall condition and health were the best we have seen in years," Garrison said.

The Deep Inlet zero-checks tripled their size over their 25-day saltwater rearing period and did not experience any significant health problems.

"Overall mortality during rearing was exceptionally low and these smolts looked to be the best we have raised at this site," Garrison said.

The Green Lake yearlings were also some of the largest and healthiest to date, Garrison noted.

"This was the first year we had completely eliminated the use of the freshwater lens for the Green Lake smolts and it was a great success. We worked hard to ensure that we moved this group of fish to saltwater when they appeared ready to go instead of

specifying a particular date for transfer," Garrison said.

Low water levels at Green Lake made it difficult to move fish, food, and equipment into place so NSRAA's boom truck has been put to good use there.

Chinook egg takes this fall went very well despite the fishing moving a little slowly up the ladder, Garrison reported.

A total of 4.8 million eggs were collected for Medvejie programs, with an additional 160,000 taken for the Sheldon Jackson Hatchery.

Coho

2008 proved to be a disastrous year for Plotnikof Lake Coho broodstock. These Coho are supposed to provide the eggs for the new Sawmill Cove Hatchery, Garrison reported.

Marine survival for broodyear 2005 was exceptionally poor, and with a release of just 10,000, the 2008 return was very small, leaving Medvejie to rely on a wild stock egg take from Plotnikof Lake.

However, it is likely that the high incidence of Bacterial Kidney Disease in the Plotnikof stock, which has been an ongoing problem, will result in a change in broodstock for Sawmill Cove, perhaps to Salmon Lake Coho. NSRAA will be able to report more fully about this in the spring.

Meanwhile, Medvejie has about 250,000 Plotnikof Lake fingerlings on hand from broodyear 2007. 50,000 are destined for release at Medvejie with the rest for release at Deep Inlet.

Infrastructure

"We made some real improvements in terms of replacing old equipment and accomplishing facility repairs at Medvejie in 2008," Garrison said.

Major improvements were made to the aeration system at Deep Inlet this year, with the installation of upwelling bubblers in each net pen, which kept the fish happy.

The old Medvejie forklift was replaced with a 2005 4WD rough ter-



The crew of the Hukilau deals with a large cost recovery set in Deep Inlet.

rain model, which has kept Medvejie maintenance man Mike Pountney happy. Staff are also happy to have a new electrically driven fish pump, and a reconditioned bridge-crane hoist.

"The beauty of the fish pump is that it is very easy for one person to use, very easy to prime, and works extremely well with our counter and grader," Garrison said.

One of the biggest improvements at Medvejie will be the installation of a new stand-by generator.

"In September we experienced a power failure at the hatchery and the current standby generator started but soon failed. While Mike and the crew and the city electrical department were able to get us back on city power, it made it clear we could no longer depend on the 20 year old machine," Garrison said. "The new one will let us all sleep a little easier."

The new hospital-grade generator will arrive in February and will be installed as soon as possible.

Medvejie staff will be completing the interior plumbing at Sawmill Cove Hatchery over the winter, and beginning the design for a new feed barge at Deep Inlet.

NSRAA Employee Changes

2008 is turning out to be a year of many transitions for NSRAA employees, with operations manager Steve Reifentstahl moving on after the New Year to work in the for-profit sector, at Silver Bay Seafoods. (See story, page 1.)

Lon Garrison, formerly Medvejie Hatchery manager, will be taking Reifentstahl's place as operations manager, and a search is underway for a new Medvejie manager.

"I have truly enjoyed my stint as the Medvejie Hatchery manager and feel privileged to have worked with such a great crew of folks out there. It is a dream staff and I will miss working with those guys on a daily basis," Garrison said. "Nonetheless, I know that the facility and program are in good hands and I look forward to working with them and the rest of the NSRAA programs and projects in the future to continue the exceptional work Steve has led us to do."

Haines projects and Deer Lake project leader Todd Buxton left NSRAA in July, and a search is underway for his replacement as well.

Former NSRAA employee Ben Gilles has returned to NSRAA after taking a few years off to finish his bachelor's degree in Fisheries. Gilles will be a fish culturist at Hidden Falls. He comes with his previous two years' experience at Medvejie, and high praise from Reifentstahl.

"Ben is one of our 'typical' employees: very hard working, smart, loves fisheries, and loves the outdoors," Reifentstahl said. "He's been here before and wanted to come back, so I expect him to be a long-term employee."



The Bear Facts

Hidden Falls staff are taking bets on when a very persistent bear that arrived in August and hung around the hatchery throughout the fall will return in the spring.



A well-traveled bear - the tag can barely be seen in the bear's left ear.

Medvejie staff might need to take bets, as well, given that the same bear caused them problems in mid-summer.

"I thought it was pretty unusual that this tagged bear was hanging around, and then I thought it was pretty strange when I told Steve Reifentstahl about it and he asked what number and color the tag was," said Hidden Falls hatchery manager Scott Wagner.

It turned out that the bear had been causing problems at Medvejie hatchery in July, getting into buildings and the raceway. The Dept. of Fish

and Game tranquilized and tagged the bear and moved him to Krestof Sound, about 20 miles from Medvejie and 30 air miles from Hidden Falls. He showed up at Hidden Falls just a few weeks after being relocated.

"He pretty much lived in our 'bone yard' for a couple of months," reported Wagner. "He was non-aggressive but hard to scare. Rubber bullets would only get him to run off into the woods for fifteen minutes or so and then he'd be right back."

Fortunately the bear found plenty of fish in the lagoon to occupy his time until he finally wandered off in November.

Hidden Falls staff is trying to think of a good "gift" they could send Medvejie's way, to reciprocate, Wagner said.

Market Outlook

Market Outlook: An Interview with Gunnar Knapp

University of Alaska – Anchorage Professor of Economics Gunnar Knapp knows more about the economics of the Alaska salmon industry than anyone we know. We recently posed some questions to Dr. Knapp about salmon markets during a recession; here are his responses.

How does the current economic crisis affect the various parts of the salmon industry?

We can't fully answer this yet because we don't know how the economic crisis will play out. We don't yet know how severe the economic downturn will be, and how it will affect different countries and different markets for Alaska salmon. We don't know how soon credit may ease up, or whether it may get tighter. We don't know how the economic crisis will affect other variables that are very important for the salmon industry, such as energy prices and exchange rates. So there are a lot of unknowns out there!

That said, we can speculate generally on what some of the potential effects of the economic crisis on the salmon industry may be:

- **Reduced consumer demand for seafood - particularly higher-priced products.** When consumers have less money they cut back on spending - particularly on eating out at restaurants and on higher-priced items. I would expect that recession to result in a significant cut-back in demand for higher-end products that go to white tablecloth restaurants. This could translate into downward pressure on prices for halibut, crab, and higher priced salmon. (However keep in mind that lots of things can affect the price of any particular product,

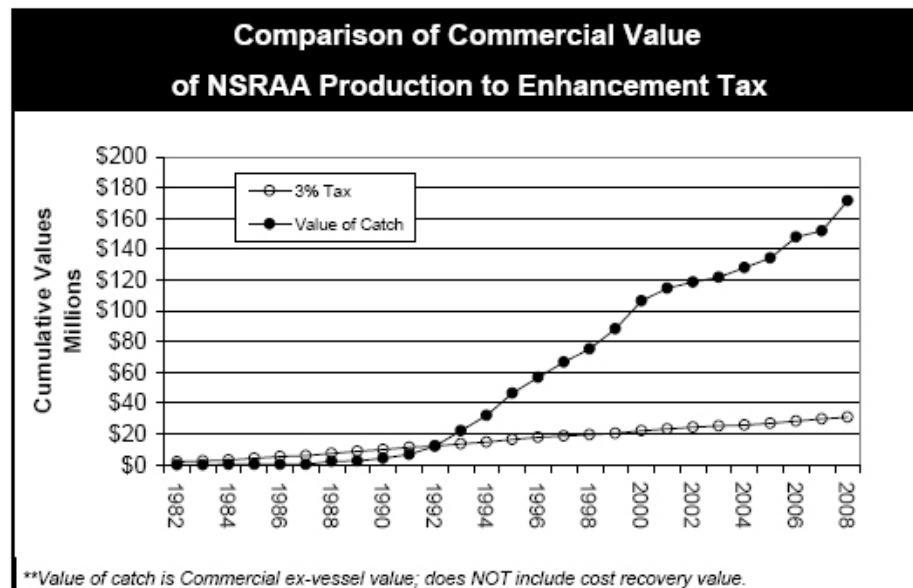
including the supply. So even if you have downward pressure on prices due to lower demand, for any given species that could be offset by other factors pushing prices the other direction-for example if you have low catches). I wouldn't expect the effects of the recession to be as great for lower priced fish such as Pollock or pink salmon, because people are more likely to eat these as staple foods at home, and they will continue to consume staple foods even if their incomes decline sharply.

- **Credit problems for salmon processors' customers - further lowering demand.** If seafood buyers such as wholesalers and food service and retail buyers have difficulty getting credit, this could reduce demand even if consumer demand weren't affected. How big a problem this may be will depend crucially on how quickly or not problems in credit markets get addressed - which I just don't know.

- **Credit problems for salmon processors in getting pack loans.** If processors have trouble getting credit to gear up for the season or for buying fish during the season, this could affect how much fish they want to buy from fishermen. Again, I just can't predict how much of a problem this may or may not be next spring or summer. Probably this will be a bigger issue for some processors than for others.

- **Effects on exchange rates.** The economic crisis is affecting the exchange rates between the dollar and the currencies of important Alaska markets. For reasons that I don't understand (and I'm not sure that anyone understands them that well) the economic crisis has been driving down the value of the Euro - meaning the Europeans can't pay as much for our seafood. In contrast it has been driving up the value of the yen, meaning that the Japanese can pay more for our seafood.

- **Effects on energy costs.** The



silver lining of the economic crisis for fishermen (but not for the State of Alaska's oil revenues!) is that it has led to a dramatic decline in oil prices. I would expect this to lead to a significant decline in fuel prices for fishermen over the next few months - just as it has led to a significant decline in gasoline prices for automobile drivers.

The bottom line is that there is a lot of uncertainty about what the effects of the economic crisis may be - certainly I feel quite uncertain. It may affect the salmon industry in a variety of ways, and the effects could vary for different species and regions, depending in particular on their markets.

Fuel prices were high this past summer, which made fishing expensive, but now prices have gone down again. Can anyone predict what will happen to fuel prices in the short- or long-term future?

Fuel prices are affected primarily by crude oil prices, and I don't think that anyone can predict with any certainty what will happen to crude oil prices in the near term or even thing the long. There are all kinds of predictions out there, and some of them will end up being right and some wrong,

but I think that those that are right will be right more because they are lucky rather than that the people actually know with certainty what will happen.

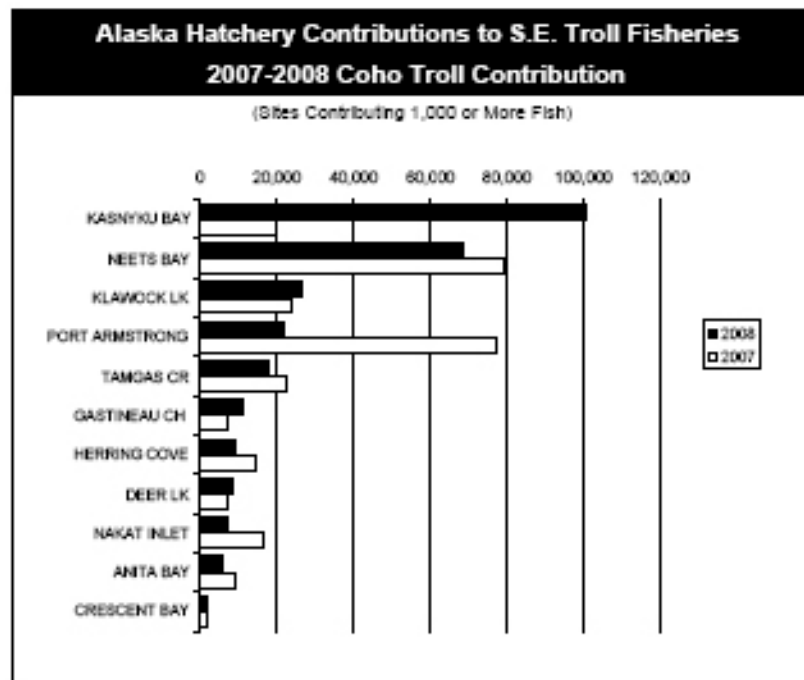
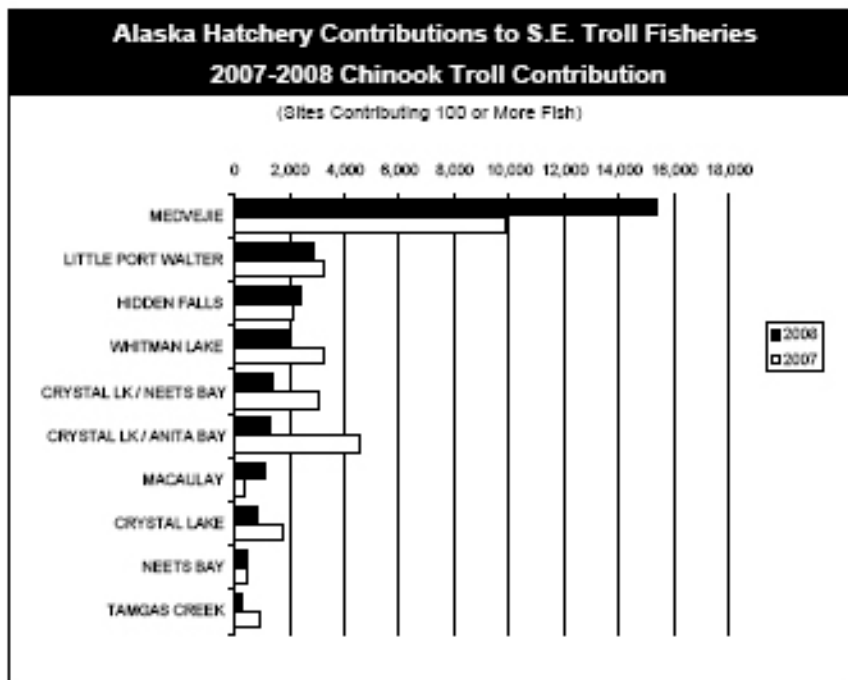
Two basic forces will tend to drive crude oil and fuel prices in different ways.

- The world economic downturn is reducing - and may continue to reduce - global economic demand for oil (volume demanded at any given price). This has led to a surplus of supply over demand, which tends to drive prices down. This has been the primary factor contributing to the very rapid decline in oil prices over the past few months. Prices could continue to fall if the global economic downturn continues.

- Future economic growth - particularly in China and India - and declining global oil production (as well as political instability) were until recently causing demand for oil (volume demanded at any given price) to expand more rapidly than supply (volume supplied at any given price). This tends to drive prices up.

Personally, I think it's unlikely that crude oil prices or fuel prices will return to the very high levels of the

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NSRAA Contribution to Southeast Alaska Commercial Fisheries								
Number of Fish : 2007 - 2008								
	Gillnet		Seine		Troll		All Gear	
	2007	2008	2007	2008	2007	2008	2007	2008
Chinook	2,369	6,929	6,009	7,096	11,901	17,593	20,279	31,618
Chum	304,934	431,514	606,552	2,087,778	167,630	51,306	1,079,116	2,570,598
Coho	1,115	1,230	10,295	3,323	28,917	108,565	40,327	113,118
Sockeye	-	-	-	-	-	-	-	-
All	308,418	439,673	622,856	2,098,197	208,448	177,464	1,139,722	2,715,334

U.S. salmon consumption expected to fall, but consumers still want what Alaska fishermen have to offer

“After several years of solid increases, seafood consumption in the U.S. has stalled,” said Seafood.com News in December. Per capital annual seafood consumption is projected to fall in 2009.

“Marketers and retailers can reverse this trend by emphasizing the health benefits of seafood, as well as demonstrating their commitment to the environment by implementing sustainable practices in the raising, harvesting, and selling of fish,” said the article. “The sustainable seafood movement has gained momentum as more people become aware of over-fishing and environmentally harmful fishing methods.”

Alaska fishermen are well positioned to benefit from consumer interest in sustainable seafood, having kept the health and abundance of wild stocks as their top priority for many decades, while increasing the numbers of enhanced fish through NSRAA’s and other hatchery’s programs.

The Alaska Seafood Marketing Institute has developed a campaign featuring Food Network celebrity Alton Brown talking about Alaska’s sustainable seafood. Check it out at www.alaskaseafood.org/sustainability. Kind of makes you proud to be an Alaska fisherman.

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early summer of 2008 anytime soon, given the severity and sharpness of the global economic downturn. But they could rise from their current levels - or decline farther. I just don’t know, and I don’t think anyone else does either.

How have fishermen coped with high fuel prices?

I haven’t studied this question in depth. I think the answers probably vary widely by fishery, depending on how fuel-intensive the fishery is.

A survey conducted by the University of Alaska Marine Advisory Program and UFA this fall gave some indicators of some of the ways that fishermen have adjusted to high prices.

In general, the answers seem to be similar to how automobile drivers cope with high gas prices: in lots of different ways, depending on the circumstances of the individual. From the survey responses and some of the press accounts I’ve read, a lot of fishermen have tried to reduce how far they travel and how fast they travel. This affects how and where they search for fish, where they deliver, and what they do between openings and seasons.

Does salmon consumption go up or down in the U.S. when times are tough?

To get a good answer to this question you’d have to talk to people in sales departments for big retail and

food service chains, or maybe some of the big processors.

We just don’t have very good publicly available data about U.S. salmon consumption or how prices affect salmon consumption. The only way to estimate U.S. salmon consumption is by starting with U.S. production, subtracting exports, and adding imports. This doesn’t allow for very precise or accurate estimates, and it doesn’t tell us how much is sold at different prices, or how prices and incomes affect consumption.

My guess, based on standard economic reasoning, is that the answer for how - tough times - affect salmon consumption varies widely depending on the species and product. I would guess that demand for traditionally high-end products—like fresh Chinook and sockeye fillets - would go down significantly. In contrast, I would guess that demand for traditionally lower-end and cheaper products like canned pink salmon would not go down very much - and might even increase.

Note that effects on demand are not the same as effects on consumption. If demand goes down, it doesn’t necessarily mean consumption will decline. Lower demand will cause prices to fall. If they fall enough, the lower prices may result in the same amount of consumption. Put differently, if fishermen catch the fish, they will in all likelihood be sold and consumed. But fishermen (and everyone else in the distribution chain) may get a lot lower price for the fish.

Will there be long-term fallout in

the salmon industry or will it bounce back to business as usual?

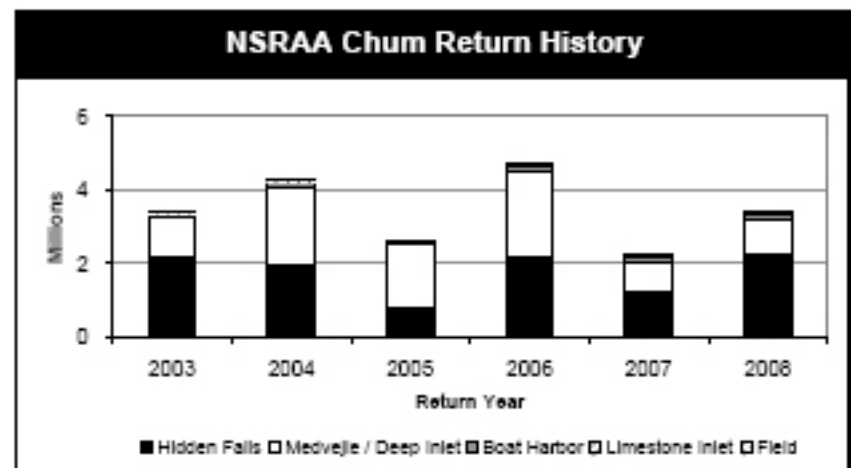
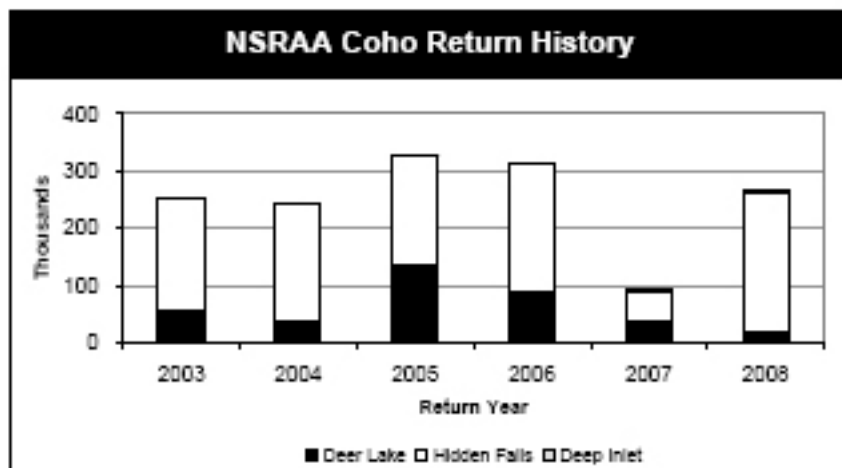
I’m not sure there is a “business as usual” in recent years in the salmon industry. A lot of change has been going on - in products, markets, prices, competition - and I would expect this change to continue regardless of the effects of the recession. Something that could certainly affect “business as usual” - for better or worse - is ocean conditions and salmon runs.

But in general, I think Alaska wild salmon is an excellent product for which there will be demand as long as the world economy is in reasonable shape. In general, I’m optimistic about the long-term future of the industry as the world economy recovers - as long as we continue to focus on meeting evolving market demands for quality, sustainability, and traceability.

BOARD MEMBERS NEEDED

Two open seats on NSRAA Board of Directors need to be filled: the Interested Person seat and the Subsistence seat.

Both seats are appointed. If you are interested in joining the NSRAA Board please contact general manager Pete Esquiro or operations manager Lon Garrison at 907-747-6850.



Board Member Profile - Alan Anderson



Long-time troller Alan Anderson on the fishing grounds.

Alan Anderson has been on the NSRAA Board in the open troll seat for 13 or 14 years or so, "so long I can't remember," he said.

Anderson fishes on his boat the *Sea Haven* out of Sitka, where he has lived since high school. He grew up in Pelican, where he started fishing with his father when he was about 11 years old, in 1960.

Besides serving on the NSRAA Board, Andersen has served on the Board of Seafood Producers Co-op for about 20 years. He might not remember exactly how long he's helped guide NSRAA, but that's about the only thing that's hazy in his mind.

Anderson remembers well when the first Southeast Alaska Allocation Task Force first worked out its allocation management plan back in the early 1990s, and isn't surprised that the issue has come around again.

"The regional planning team meeting was all allocation. It drives so many of our Board decisions," Andersen said. "The trollers have been out of their range from the start, so we can ask for more money to be spent on our

projects. It gives us more political power at the Board level."

Discussing happier subjects, Andersen recalled when NSRAA became debt-free after paying back all the money it owed to the State, which was a "pretty major event."

"The organization has been lucky to have Pete and Steve running the place," Andersen said. And he believes that Southeast is lucky to have NSRAA.

"For the last 30 years, when it comes to Southeast Alaska salmon, the formation of the regional aquaculture associations is the most important thing that has happened," Andersen said. "A lot of people don't remember what it was like before. Having NSRAA has mellowed out the bad years, and now we don't have as many of them."

"We have had some hard times as an organization, when we were tight for cost recovery mon-

ey, but it's been pretty easy the past few years; cost recovery has been fairly flush," Andersen said.

"Sometimes I like to lecture younger people on how good they've got it now, just like I used to do with my kids," Andersen joked.

The biggest challenge now for NSRAA, and everyone, Andersen noted, is the recession.

"It's the same old problem: our operating expenses aren't going to go down but fish prices will. It will be a big thing for all individuals and also for the association."

Through good times and bad, Andersen has stuck with his Board commitment because he knows how much he and everyone else have benefitted from NSRAA's work.

"I'm an extremely firm believer in the regional aquaculture associations."

Deer Lake Update

Rearing

Staff for the coho lake rearing project tried a new tactic this past year: leaving the fish in net pens throughout the winter. This strategy is meant to keep the lake's non-native rainbow trout population from eating all the coho fry, and to keep the fry from leaving the lake before they have reached peak readiness.

Unfortunately heavy snow pack submerged the top of the pens below water level sometime after early January until mid-May, which allowed some 700,000 fish to escape over the top of the pens. Still, after 4 months of an open escape route, 268,000 fish out of 990,000 remained in the nets, with the majority of escapees rearing in the lake. These were released in late May and early June.

Summer "never really happened" in 2008, making rearing conditions very challenging once again for the million plus coho fry delivered to the lake from Hidden Falls in late June. The lake experienced the coldest water temperatures ever measured with a daily average of 7.7 Celsius from June 1 to Oct. 1. The normal average for this period is around 12.5 Celsius.

This trend is quite a change from 2005 and 2006, when keeping the fish from growing too large was the problem.

It was also the wettest year that staff have recorded at the lake, with 170" of rain from Mar. 19 to Nov. 13, an average of .71" a day.

The crew adopted a fairly aggressive feeding program to compensate for the cold lake conditions, and this year's batch of fry are doing well as of press time.

This winter, fish-tight covers will be installed on the pens to prevent escapes even if the snow pack sinks the pens again.

Release

Keeping the fish in net pens also allowed the Deer Lake crew to try a new method of release. Instead of just releasing the fish into the lake and letting them find their way to the falls, a 900' pipeline was built from the weir at the top of the falls to the pens, and the fish were transferred directly to the weir by means of a hydraulic fish pump.

"This was successful, with no increase in mortality, so this will allow us to dictate when the fish are released in the future," Homer said.

This year the program had the 4th highest emigration ever. 68 percent of the lake-reared coho fry made it out of the lake to Mist Cove as smolts. A total of 678,433 smolts were counted between April 21st and July 30th.

The weight and length of the emigrating smolt averaged just slightly less than the program's historic average but the condition factor was slightly higher than the historic average. And, Homer noted, the emigration timing peaked just one week later than the historical average despite very cold water temperatures.

This bodes well for the coho's future in the open ocean. In the past, Deer Lake fish that emigrated two weeks late (as in 2007) averaged just 3.3 percent marine survival, whereas fish that emigrated one week late averaged 13.8 percent survival. In the future, the use of the pipeline and pump will help prevent late smolt emigrations.

Returns

2008 was the second year of returns for fish reared in net pens at Deer Lake. The 2007 release, which makes up this year's return, was "large and healthy" but it was two weeks later than average. The marine survival rate of the 2007 release turned out to be 3.8 percent: "Not a banner year, but respectable," Homer said.

The first year's return of pen-reared fry averaged 8.3 percent marine survival, so Homer had been hoping for more in 2008. 8,459 fish contributed \$122,430 to the commercial fleet, with another 8048 fish contributing \$71,100 to cost recovery.

Staff - New Project Leader

The coho lake rearing project experienced a change in leadership this past year, with former project biologist and assistant project leader Josh Homer stepping up to fill the position of project leader after Todd Buxton resigned last July. Homer has been associated with the project for nine years and the project biologist since 2004.

"So far my transition to project leader has gone very smoothly, even

with me becoming a father on June 16 to a beautiful little girl named Avalynn," Homer said. Avalynn has visited Deer Lake twice already, her father reports.

The crew at Deer Lake was minimal, with only two people on site at one time throughout most of the season.

The early season was, of course, devoted to snow removal, as well as building the new 20' x 32' floats and welding the new 4" smolt emigration pipe. The snow pack was not quite as deep as last year's record year but it was denser and heavier.

Staff had hoped to start a new trial program this spring of feeding the fish in the pens to improve their growth and condition before release. However, the ice stayed on the lake until the end of May, making the trial impossible this year.

Homer noted that the flat expanse of ice did make it easier to build the first of two new feed floats which will be necessary to store greater amounts of feed for next season, when the number of coho fry in the program will double, from 1 million to 2 million.



New project leader Josh Homer works on the construction of a feed float at Deer Lake.

Field Reports

Limestone Inlet/Boat Harbor

The cooperative chum programs at Limestone Inlet and Boat Harbor, jointly operated by Douglas Island Pink and Chum (DIPAC) and NSRAA, will both become solely DIPAC projects in 2009.

Limestone Inlet had a good rearing season despite cold water temperatures. A total of 15.15 million fry were successfully transported to Limestone in late March, with 6 million released as "regular" chum and another 9 million as "late-large."

This was the first year for the four- and five-year-old late-large returns. 156,000 chum in total returned to the site this season, well over the 95,000 that were forecast.

Boat Harbor's adult return was exceptionally good for the third year in a row. 481,000 chum were harvested by gillnet, well over the 319,000 fish projected in the preseason. It was the second highest harvest for Boat Harbor on record.

15 million fry were transport-

ed to the site this past spring, arriving in bad weather and cold temperatures. Still, the fry attained decent growth.

Just over 14.7 million fry were released. 6.1 million were reared and released as regulars and 9.1 million were reared as late-larges, released a week later at a bigger size.

The late-large rearing strategy is proving very successful at both of these sites. All age classes of late-large have performed better than their regular counterparts, with marine survival rates up to 2.3 times higher.

Haines Programs

The new spawning channel on east Herman Creek was completed in late November. This was the second new channel funded by a \$300,000 grant from the state legislature, which also funded the rehabilitation of the west Herman Creek channel. The new Confluence Channel was completed earlier but has not been used to its full potential yet due to low returns to the Chilkat River.

Chilkat River chum

Minimal numbers of eggs were taken at the 17-mile incubation site due to low or late returns and the same situation occurred this year. Only 100,000 eggs were seeded after weeks of effort.

"The fish entered the river in a slow trickle, which allowed them to spawn in low densities and in deep, high velocity areas that could not be seined," reported NSRAA staff.

The return to the 24-mile spawning channel was low or late as well.

Klehini River chum

Klehini River chum returned in good numbers and allowed NSRAA staff to collect and seed 1.609 million eggs in the incubators at Herman Creek. Eggs were also seeded to the



The Salmon Lake crew beach seines coho as part of a mark-recapture population study at the lake

permitted capacity of the 31-mile incubation site.

The renovated Herman Creek spawning channel attracted lots of chum. The number of fish in the channel was regulated by a weir to prevent overcrowding.

Lutak Inlet Chinook

The Tahini Chinook project in Lutak Inlet is the newest NSRAA program. The Alaska Dept. of Fish & Game Sport Fish Division contracted with NSRAA to incubate, rear, and release up to 250,000 zero-check Chinook smolt each year.

The first 165,000 fish for the program were released into the ocean in June of this year and will begin returning in 2010 as two year olds. They will show up in the troll and gillnet fisheries as well as in the terminal area.

These Chinook fry are well traveled by the time they hit the ocean. Eggs are gathered in August from Tahini Chinook stock (originally from the Chilkat River system) returning to Pullen Creek, near Skagway. The eggs are transported to the Macaulay Hatchery in Juneau for incubation until the eyed egg stage, when they are transported to Hidden Falls in October for completion of incubation and rearing.

The fry are ponded and reared

in raceways at Hidden Falls through the winter and spring, using lights to accelerate their growth, and finally, transported to Lutak Inlet for 30 to 60 days of ocean rearing in net pens before their summer release.

The program got off to a rocky start with a long and difficult permitting process, followed by an unanticipated problem: the newly placed net pen prevented the Alaska Marine Lines barge and tug from reaching its dock at the site, adjacent to the Alaska Marine Highway terminal in Haines.

Plenty of local news reporters publicized this sad story, but didn't show up to cover the good-natured cooperation between AML, the City of Haines, Turner Construction, Stickler Brothers, and NSRAA that got the net pen anchors moved within the week, in time for the next barge's arrival as well as the arrival of the F/V *Perseverance* with its load of Chinook fry.

The Haines programs will have a new leader next year, as former project leader Todd Buxton left NSRAA in July. NSRAA plans to hire a replacement who will be based at Hidden Falls and travel to Haines when necessary throughout the year to prepare the incubation boxes, set up and take down the net pens and gear for the Lutak Inlet Chinook program, collect eggs and seed the incubation boxes, and clean up when spawning is done.



The new Herman Creek Spawning Channel was completed in late November.

Allocation

Cont. from front page

"The Board worked together so well in the beginning. It was really satisfying. We were working together for the common good. But it got to the point where all we did was fight," Eames said.

"The problem was that gillnetters in Northeast and seiners in Southeast felt they were being left out and not getting what was due," said Becker. "Somewhere along the line the idea of making an allocation plan for the whole area was born."

Numerous allocation proposals were submitted to the Alaska Board of Fisheries (BOF), but none were acted upon. Finally the BOF asked NSRAA and SSRAA to take on the challenge.

Becker and Johnson served on

the Southeast Allocation Task Force (SATF) formed in 1991 that eventually worked out a proposal adopted by the BOF in January of 1994. This group was comprised of members of NSRAA and SSRAA's boards, and benefitted from the experience of fishermen in Prince William Sound who had gone through a very long process of allocating wild and enhanced salmon.

"When we started meeting we knew it would take a while," Becker recalled. "But the people from Prince William Sound came down and laid out what they did which was helpful to us. Suddenly we had a map, a schematic, on how to do it."

The allocation percentages set forth in SATF's proposal – seine 44 to 49 percent, troll 27 to 32 percent, and gillnet 24 to 29 percent – and how close (or far) each gear group is to its range have guided almost all of NSRAA's

program decisions ever since.

The plan could never have made everyone happy. But having it allowed the NSRAA Board to move forward.

"I was never pleased with the formula that they used to come up with these numbers. But without the plan we weren't very productive; the associations couldn't do anything, we couldn't even agree on which projects to fund. So developing the plan was a necessity. With the plan, we were able to work within its parameters," Eames said.

Now, there are allocation proposals before the Alaska Board of Fisheries once again.

Becker, Eames, and Johnson are glad to miss what is certain to be another round of tense meetings. But their experiences also make them realistic about the process and the results of whatever new agreement is eventu-

ally adopted.

"I don't think there is any way to make everybody happy, there is no easy solution," Johnson said. "Everybody has to compromise and it'll work out one way or the other."

"Even with the plan, there is still disagreement. For a long time trollers were behind, and NSRAA has tried hard to get them into their range. Now I think the seiners are behind. Things seem to average out," Eames said. "Over time it kinds of works itself out."

"We're better off when reasonable fishermen can sit down in a room and say, 'We're going to give ourselves enough time to do this, we're going to decide by consensus, we'll bring in the experts and lay out the actual facts instead of shooting from the hip,'" Becker said.

Sawmill Cove Hatchery Construction Complete

The new Sawmill Cove Hatchery facility is complete. As of press time, the last remaining detail is to outfit the incubation room, and then it will be ready for eggs and fish, said Steve Reifentstahl, outgoing operations manager.

NSRAA staff are especially proud that the project came in under budget.

"We're very happy with how construction went, and that now we have a very functional facility that will serve the fishing community well," Reifentstahl said.

NSRAA has had to adjust the new Sawmill Cove Coho program slightly due to problems with the Plotnikof Lake Coho that were supposed to be used for the program's broodstock.

Besides the stock's low marine survival rate, there has also been a very high incidence of Bacterial Kidney Disease (BKD) in Plotnikof Coho. NSRAA had to destroy from 12 percent up to a whopping 70 percent of the eggs they had taken due to the presence of the disease

in the adult fish. BKD can only be detected by laboratory testing the kidneys of the adult fish from which the eggs were taken.

The disease is fairly common, occurring naturally in wild and hatchery salmon stocks. But it can have serious consequences; an outbreak of BKD can devastate an entire net pen of salmon fry in a very short period of time. NSRAA carefully screens its broodstock for BKD in order to keep its stocks as healthy and resistant to BKD as possible.

NSRAA has negotiated a tentative agreement with the Alaska Department of Fish & Game that will allow them to switch to Salmon Lake Coho in the fall of 2009. Salmon Lake Coho are a fall run Coho, while the Plotnikof stock is a summer run Coho.

"I think it will be a better stock," Reifentstahl said. "It is a larger fish, and more local, only 3 miles from the hatchery itself, and all the other fall stocks we have dealt with have had low incidences of BKD."



The Sawmill Cove Hatchery is complete with a capacity for 2 million coho smolts.

Important Message to Purse Seiners

Bids for Harvest of Cost Recovery Fish

NSRAA will not be mass mailing cost recovery contract solicitations this year. The cost of printing and mailing is not justified for the small number of proposals returned to NSRAA for consideration.

If you are interested in submitting a bid to harvest cost recovery fish at Hidden Falls or Deep Inlet/Medveje in 2009 please contact us and we will send the bid packet and forms to you. Bid forms will be sent out to interested parties in February and due late April.

Phone: 907-747-6850

Fax: 907-747-1470

E-mail: pete_esquiro@nsraa.org

Mail: NSRAA 1308 SMC Rd., Sitka, AK 99835

Reifentstahl Cont. from front page

NSRAA field projects manager, and later, in the late 1990s, when former operations manager Bruce Bachen left NSRAA, Reifentstahl became operations manager.

"Steve has played a huge part in creating what NSRAA has become from those early beginnings," said co-worker Chip Blair.

Some of Reifentstahl's long-time colleagues have shared a few of their memories of working with him (below), but they are not really saying goodbye. It is highly likely NSRAA staff will still see him often, since Silver Bay Seafoods is located just next door to NSRAA's new Sawmill Cove Hatchery.

First Day on the Job – Chip Blair

Early April, 1985. I flew into Little Port Walter late in the afternoon. The landscape was totally white with a gray sea. Still winter here. Steve boated down from Rostislaf Lake just before dark.

"Too late to head back, we'll leave at 5 a.m.," he said.

It was blowing pretty good the next morning; whitecaps in Chatham. Looking at the loaded 16-foot Lund and the water, I said, "Kind of rough isn't it?"

"Don't worry, we'll be fine."

Following a white-knuckle 10-mile ride up Chatham, we pulled into a small cove. 6:15 a.m. Steve pulled the motor off the boat; which we winched out onto some skid logs. Steve pulled some snowshoes from behind a tree. "Here, put this stuff in your pack, put these on, let's go! We're late!"

We shouldered our 80-pound packs and trudged up the mountain. I trudged, anyway, Steve was up ahead like it was a stroll in the park. The knee-deep snow turned into waist deep snow. Steve hiked back down with a huge grin on his face. "Want me to carry some of that?"

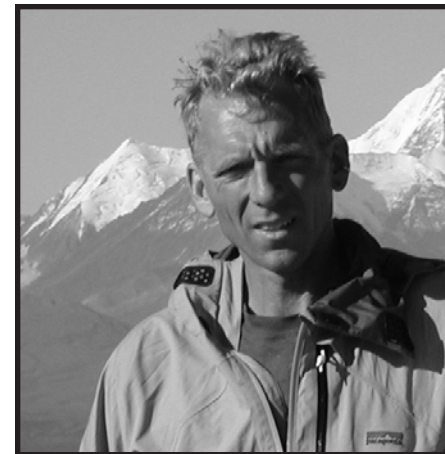
"I'm fine," I lied. It started to snow. We climbed. 7:20 a.m. Finally we reached the ridge. I felt like puking, I felt like quitting. There was a faint trail in the snow. "Dump your pack here, get a few warm things, we have to get down to the trap to work. Hurry up, we're late!"

Dick [Crone], Robert [Rose], and Randy [Ferguson] were already at the trap. Dick yelled at us: "Where the heck have you been! You're late!!!"

We worked till dark in the icy stream, then went back to a cold and soggy camp. Steve and Robert kept up a constant banter of jokes. It went like this for two weeks. Long days, hard work, good times, a foot of new snow most nights. This was my introduction to Steve and NSRAA.

Fast-forward almost 24 years.

Early December, 2008. Steve and I are still working together, still at NSRAA. Hard to believe it's been this long. Steve is moving on. I wish him the best of luck. As operations man-



ager, as in the field, he's always led by example and with an amazingly positive and humorous attitude and with a tremendous amount of energy. Steve has played a huge part in creating what NSRAA has become from those early beginnings. He'll still be in town. And I'm certain he'll always be involved with NSRAA at some level.

My First NSRAA Job Interview

– Lon Garrison

I first interviewed for the Haines enhancement biologist position with Steve in August of 1987. At the time I was working for the National Marine Fisheries Service (NMFS) in a remote part of Newfoundland collecting coded wire tagged data from Atlantic salmon. I left Nippers Harbor, Newfoundland, and 18 hours later arrived in Sitka.

Steve and I had a good interview and I knew right away I would like to work for this man. Once we were done in the mid-afternoon, Steve said he had to go to his property to work on his new house under construction. I said I would like to come along. Little did I know I would be carrying 4' x 8' sheets of plywood several hundred yards through the woods to the beach where Steve was building. In reality, I thought this was just another part of the job interview, so I carried plywood for a couple of hours. I think Steve saw at that moment he had a strong back and a weak mind and that I was the perfect flunk for him in Haines. I have to agree, I think I was! I flew back to Newfoundland the next morning thoroughly exhausted.

Over the next several years, Steve and I carried all kinds of things great distances into the woods to complete our projects. I think the most difficult one was when we carried 2 aluminum incubation boxes (4'w x 8'l x 2'd) approximately 2 miles over a primitive trail we had blazed through the woods at Chilkat Lake. My brother, a college student at the time, happened to be visiting and we enlisted his help. He has never returned to Alaska to visit me.

After carrying supplies all morning, Steve took off for his usual lunch-time run, which I was used to by now, but my brother thought was absolutely ludicrous. I have to say, when I met Steve and first began working with him I knew I had met a person that shared my same fervor for good, hard, productive physical work and to this day I still feel the same way.