



SPAWNING NEWS

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Producing salmon for fall fisheries involves factors from temps to timing

CULTURING OBSTACLES AND MULTISPECIES CONFLICT PUSH FALL CHUM PROGRAM TO BURNETT INLET HATCHERY

By JOHN BURKE
SSRAA General Manager

If we can consistently produce fall chum, we can extend the season for all gear groups, particularly those who are willing to fish through September.

The problem is that Neets Bay is a summer chum place, not the stuff for fall chum.

What's the difference? The water flowing into the hatchery at Neets Bay is generally cool; it's snow-fed for a good part of the year. The difference is all in winter water temperature. Fish are cold-blooded: They can't regulate their internal temperature. Salmon eggs need a specific amount of accumulated temperature to develop into fry—the same amount for summer and fall fish. To put it in simple terms, it takes longer in cold water than in warm water for a fertilized egg to become a free-swimming fry. The optimal time for all summer and fall fry to enter saltwater is during the zooplankton blooms in the spring. Fish spawning in streams of different temperatures need to produce

fry that enter saltwater at approximately the same optimal time.

How do they deal with that? Spawning is timed to generally match egg-to-fry development to the natal stream. Summer chum spawn earlier in colder water so the fry will develop and emerge at the right time in the spring. Fall chum spawn later in warmer water from ground sources or on the outer edge of the islands in Southeast where rain is more common than snow.

Producing fall chum at Neets Bay has been difficult and the results have been inconsistent. We can't easily

grow the fish to the specific size necessary for release earlier in the spring. We've worked to add temperature during incubation, accelerating the development of the eggs as much as possible—and sometimes it works.

And then, there are other factors that make this difficult—even more difficult than creating the right rearing temperature. These things came into play this

September. We had forecast the smallest-ever fall chum return to Neets Bay. We anticipated needing about half of the entire return for broodstock.

Collecting fall chum broodstock can be confused by the return of fall coho. We must put chum across the barrier seine for broodstock and keep the coho out—not an easy task, as coho are more aggressive about getting into fresh water. As it turned out, the coho return in 2014 was the largest we have ever experienced. Sometimes we

See 'Fall chum' on 3

Producing fall chum at Neets Bay has been difficult and the results have been inconsistent. We can't easily grow the fish to the specific size necessary for release earlier in the spring.

Cost recovery program switches to license basis



FOR THE FIRST TIME,
THE BOARD OF
DIRECTORS SET
A SPECIFIC REVENUE
GOAL SHORT OF
THE OPEN-ENDED
MAXIMUM HARVEST

Starting in 1996, SSRAA had its hand on every step in cost recovery: harvesting, tendering, custom-processing, freezing, holding in cold storage and, eventually, selling its cost-recovery carcasses and roe.

This changed in 2014, when Trident Seafoods was licensed by SSRAA to harvest cost-recovery fish returning to Neets Bay. The process was similar to what occurs with other salmon enhancement organizations in the state.

Trident was selected through a bid process and SSRAA was paid based on the round weight of the fish harvested. Everyone involved with harvesting and tendering, except for SSRAA's harvest manager, was a Trident contractor.

Because it took a number of years to repay debt from the construction of SSRAA facilities and the goal for operational reserves has not been met, cost recovery had always involved "whatever could be harvested" in the Neets Bay special harvest area (SHA). For the first time in 2014, the SSRAA Board of Directors set a specific revenue goal short of the open-ended maximum harvest.

The revenue goal determined how many round pounds were to be harvested in cost recovery. Harvest ended as the revenue goal was met and the SHA was opened to common property rotational fisheries. This fishery continued until the end of August, when fall chum

See 'Cost recovery' on 5

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Board election features races in seine and gillnet gear groups

Voters in the seine and gillnet fleets have choices to make in elections for the SSRAA Board of Directors.

Ballots are due at SSRAA on Dec. 4, 2014.

David Klepser and Jeffrey McKean offer to serve in the single gillnet seat up for election this winter. Klepser runs the F/V Hannah Point and lives in Ketchikan. McKean runs the F/V Sham'mah and lives in Port Hadlock, Wash.; he served two terms on the SSRAA board from 2000 to 2005.

The seine slate features one incumbent and three new names vying for two seats. Incumbent Mitch Eide of Petersburg runs the F/V Rose Lee and has served on the SSRAA board for one term. Jerome Dahl skips the F/V Rebel Isle and lives in Petersburg. Jim Castle runs the F/V Miss Ada and resides in Ketchikan. And Leif Dobszinsky runs the F/V Chasina and lives in Port Townsend, Wash. Two seiners will be seated in January 2015.

The power troll and hand troll open seats are expected to be retained by incumbent runners Tom Sims of Wrangell who has served on the SSRAA board since 2003 and Craig Ring of Ketchikan, serving since 2012. Sims representing the power troll gear group and Ring representing the hand troll gear group.

SSRAA board members serve three-year terms.



Dec. 2	Gillnet Task Force	Petersburg
Dec. 3	Purse Seine Task Force	Petersburg
Dec. 4	Regional Planning Team (RPT) meeting	Petersburg
Dec. 4	SSRAA Board of Directors ballots due to SSRAA office	
Dec. 8	SSRAA Election Committee	SSRAA offices
Dec. 15	SSRAA Production Committee	Landing Best Western Plus, Ketchikan
Dec. 16	SSRAA Finance Committee	Landing Best Western Plus, Ketchikan
Dec. 16	SSRAA Marketing Committee	Landing Best Western Plus, Ketchikan
Dec. 16	SSRAA Board Development Committee	SSRAA offices
Dec. 17	SSRAA Board of Directors	Landing Best Western Plus, Ketchikan
Jan. 15	SSRAA Finance Committee	Site TBA
Jan. 15	SSRAA Board Development Committee	Site TBA
Jan. 16	SSRAA Board of Directors	Site TBA
March 13	SSRAA Board of Directors	Site TBA

SSRAA Spawning News is published by the Southern Southeast Regional Aquaculture Association, a private, non-profit aquaculture corporation based in Ketchikan, Alaska.

Our web site is www.ssraa.org.

This publication is mailed free to all limited-entry salmon permit holders for purse seine, drift gillnet, power troll and hand troll in Alaska Districts 1-8. It is also mailed free to any person interested in SSRAA.

To receive Spawning News, send a request with your name, your organization's name and your address to: Spawning News / 14 Borch St. / Ketchikan, AK 99901.

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The CFEC fax number is 907-789-6170.

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SSRAA asking to bump releases to buttress summer chum egg take

It's become increasingly obvious that Neets Bay broodstock collection is running on the red line.

All of SSRAA's summer chum eggs are collected at Neets Bay and there's no backup option. Because of numerous limiting factors—including the availability of water, brood collection and the egg-taking process itself—it isn't possible to consistently take more eggs than we've been taking. Any serious hiccup in that process would result in a loss of production in that brood year. The problem could be something as simple as an extended period of high pressure without rain.

The situation came into clear focus when we considered Prince of Wales Hatchery's request for 8 million summer chum eggs for their recently permitted Port Asumcion release site. In terms of summer chum eggs, 8 million is not a large number. We could take the additional eggs if the stars aligned themselves as they usually do—but we can't count on doing it sustainably.

It's no longer possible to ignore the stress put on Neets Bay. We will submit a permit alteration request (PAR) at the RPT meeting in Petersburg on Dec. 4. We'll ask for a new release of 6 million summer chum fry from Burnett Inlet Hatchery. Returning adults would provide a second source of summer chum eggs for SSRAA's programs. If the PAR is approved, 6 million chum fry will be released in Burnett Inlet next spring. We could expect to start taking summer chum eggs at Burnett Inlet in 2018, when four-year-old adults first return.

SSRAA Board of Directors

SEINERS

Dan Castle	Ketchikan	F/V Little Lady
Russ Cockrum (pres.)	Ketchikan	F/V Viking Maid
Mitch Eide	Petersburg	F/V Rose Lee
John Peckham	Ketchikan	F/V Alsek

GILLNETTERS

Brennon Eagle	Wrangell	F/V Danegeld
Rudy Franulovich	Ketchikan	F/V St. Raphael
Chris Guggenbickler	Wrangell	F/V Maranatha
Bob Martin	Petersburg	F/V Sumner

POWER TROLLERS

Tom Fisher	Ketchikan	F/V Carol W
David Otte	Ketchikan	F/V Sarah E.
Charles Piercy (v. pres.)	Ketchikan	F/V Tuckahoe
Tom Sims	Wrangell	F/V Arctic Nomad

HAND TROLLER

Craig Ring	Ketchikan
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APPOINTEES

John Clifton (treas.)	Ketchikan	Sport fish
Paul Cyr	Ketchikan	Processor
David Landis (sec.)	Ketchikan	Native Corp.
Cindy Lasiter	Ketchikan	Public at Large
Nick Ohmer	Petersburg	Chamber of Comm.
Mike Painter	Ketchikan	Municipality
John Scoblic	Ketchikan	Public At Large
John Yeager	Wrangell	Subsistence

The 21-member SSRAA Board of Directors includes 13 commercial fishers along with representatives of interest groups and the public.

SSRAA Staff

ADMINISTRATION AND OPERATIONS

John Burke	General Manager
Bill Gass	Production Manager
Vacant	Assistant Production Manager
Bret Hiatt	Operations Manager
Cindy Walters	Executive Administrative Assistant
Liz Jones	Administrative Assistant
Jay Johnson LLC	Accounting Services

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Susan Doherty	Research & Evaluation Manager
Michelle Leitz	Research & Evaluation Assistant Manager
Alan Murray	Technician III

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Jay Creasy	Hatchery Manager
Mark Tollfeldt	Assistant Hatchery Manager
Ted Addington	Assistant Manager for Special Projects
Mike Blanchard	Maintenance Manager
Cody Pederson	Fish Technician III
Henry Hastings	Fish Technician II
Jesse Knock	Fish Technician II

NEETS BAY HATCHERY

Matt Allen	Hatchery Manager
Brian Lundeen	Assistant Hatchery Manager
Shane Ewalt	Maintenance & Constr. Supervisor
Chris Lundeen	Maintenance Technician III
Mike Moreno	Fish Technician II
Stan Rice	Fish Technician II
Gavin Roa	Fish Technician II
Dale Wainscott	Maintenance Technician II

BURNETT INLET HATCHERY

Steve Reid	Hatchery Manager
Jon Thorington	Maintenance Supervisor

CRYSTAL LAKE HATCHERY

Loren Thompson	Hatchery Manager
Kevin Chase	Assistant Hatchery Manager
Don Franklin	Fish Technician III
Wesley Malcom	Fish Technician II

NECK LAKE REARING AND HARVEST FACILITY

JR Parsley	Facility Manager
Delores Loucks	Fish Technician II

DEER MOUNTAIN HATCHERY

Vacant	Assistant Hatchery Manager
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SSRAA PEOPLE | SSRAA PROGRAMS

Spike in Neck Lake coho return coincides with veteran's 30-year pin

The Neck Lake coho program yielded record returns in 2014, providing a commercial harvest estimated at more than a half-million dollars.

JR Parsley takes an almost paternal pride when coho broods come home in such numbers.

"The Neck Lake program has got to be my number one point of pride," Parsley said by phone from the Neck Lake facility on northwest Prince of Wales Island. "I started with it and now I'm managing it."

PARSLEY HIT the 30-year mark with SSRAA last summer. He got on the association's payroll in 1984 as a part-time seasonal worker.

Harvest tickets indicate that more than 160,000 Neck Lake coho were harvested in 2014—comprised of commercial catches, sport catches and SSRAA cost recovery. Every user group except the seine fleet had an unprecedented harvest number. Neck Lake coho made up nearly every fish harvested in the District 106 gillnet fisheries through statistical week 28 ending July 12.

The preliminary harvest value just for commercial fishermen is more than \$550,000, not including those who direct-market their catches.

The cost-recovery value of these fish is estimated at nearly \$1.1 million

The estimated 30,000 Neck Lake coho caught by sport anglers has an incalculable value to the northern Prince of Wales Island economy.

Parsley said the record return numbers and overall large size of 2014's Neck Lake coho were just spikes in a good long-term graph.

"**SURVIVAL RATES** are up and down of course since our first return in 1998, which ran at 16 or 17 percent," he said. "But the commercial guys, especially gillnetters, tend to do very good up here on this stock."

Parsley was full-time with SSRAA when staff initiated the Neck Lake coho program in 1995 with egg takes of Reflection Lake summer coho stock at Deer Mountain Hatchery and Ward Lake. About 600,000 resulting summer coho incubated at Whitman Lake Hatchery were released from Neck Lake in 1996. Releases increased each year until 2000, then held relatively constant. Between 2000 and 2014, SSRAA reared and released an average of 1.75 million coho at Neck Lake, with

broodstock production shifted to Burnett Inlet Hatchery.

THE NECK LAKE fall coho program came along in 2012. About 1 million fall coho fry from Whitman Lake Hatchery were reared in Neck Lake net pens before transport to Neets Bay and release the next spring. SSRAA bumped up its use of Neck Lake in 2013, rearing 2 million Burnett Inlet fall coho fry; those fish were released at Neets Bay and Anita Bay in 2014. That cycle will be repeated in 2015.

Parsley has ridden out many years of salmon rearing



JR Parsley

The Neck Lake program has got to be my number one point of pride.

— JR Parsley



Snow Pass Summer Coho became an established brand through SSRAA's efforts. Their status in the market benefits commercial fishers.

on SSRAA net pen arrays, including stints at Nakat Inlet and Earl West Cove. He said he likes the assignment managing the Neck Lake program partly because of access.

"I admit it's nice to have the road system," he said. "I have a daughter in Whale Pass and I can find two or three other reasons to get into town every month."

PARSLEY BARELY has time to look up during cost recovery harvests, when longtime fisheries tech II Dolores Loucks and seasonal employee William Pattison join him. Summer coho coming into the holding areas at Neck Creek are the fish that SSRAA harvests for cost recovery. Snow Pass Coho is a valuable brand in the Pacific Northwest and beyond. These coho are captured and minimally processed for shipment to E.C. Phillips in Ketchikan for final processing.

"We just bleed them at the gill plates as they come in and count them," Parsley said. "They pack in slush-ice totes and we get them quickly to Phillips."

The SSRAA crew puts 120-140 summer coho in each of 32 totes in a good year, loading the totes into 20-foot container vans for trucking by Samson Tug & Barge to the Inter-Island Ferry Authority's Hollis terminal. IFA and Samson get the round coho to the processor just a few hours after they're pulled from the water. From the processor, they are shipped south to be sold in the fresh market through Barnett Brokerage.

ROAD WORK on Prince of Wales Island in 2014 limited road traffic and cut that typical harvest volume in half. Parsley said that constraint was unfortunate: the coho were larger than usual this year and returned in record numbers of almost 69,000.

Parsley was preparing in mid-November to participate in broodstock spawning at Burnett Inlet Hatchery. The eggs in the 2014 incubation cohort will grow to about half a gram before their flight to Neck Lake next May—about 300,000 fry in each

of the 200-gallon loads taking the short hop by floatplane. If all goes well, about 90 percent of those coho fry will survive net-pen rearing and swim out of Neck Lake over a barrier falls to saltwater in May 2016.

Parsley said that what he knows about aquaculture he learned at work, not in a classroom. He managed Burnett Inlet 2003-2013.

"**I CAME TO** Alaska with my family to build houses in 1976," he said. "I also worked on a seiner in the summer and the skipper had a contract for cost recovery, so that's where I got involved with SSRAA." He tagged thousands of SSRAA salmon as a seasonal worker before taking permanent work.

"I've worked almost all the hatcheries and sites since then and I guess I just learned it on the job," Parsley said.

Fall chum program moving to Burnett Inlet *continued from 1*

are lucky and the chums get back early enough to naturally separate themselves from the coho. That was not the case this year; we couldn't capture chum for broodstock without also catching coho.

There is something else in the fall. Fish placed behind the barrier at Neets Bay must volitionally migrate a short distance up Neets Creek and through a fish pass to enter broodstock raceways. In five of the past 10 years, there have been serious storms during the period when broodstock was behind the barrier. Fish can't get up the creek and into the raceways in these conditions, though the storm itself always causes them to try. They exhaust themselves in the current and die.

This fall, we had our largest coho return and our smallest fall chum return, and about halfway through the egg take there was a serious storm that stopped the broodstock from entering the hatchery. As soon as the current subsided, there was a second storm. The upshot was that we took about 26 million of the 36 million eggs we had intended to take.

For all the obvious reasons listed above, we are moving the fall chum

broodstock to Burnett Inlet Hatchery, where there are no fall coho and entry to the hatchery is a fish pass from saltwater directly into the hatchery.

The second release of fall chum fry at Burnett will occur next spring. It is possible that some eggs can be taken there in the fall of 2016, but the egg take is more likely to be in 2017 with returning four-year-old fish. Burnett Inlet will be SSRAA's primary source of fall chum eggs.

There are consequences from this year's shortfall. We will not be able to release the planned number of these fish next spring. The SSRAA board at its October meeting directed the release of the intended 6 million fry at Burnett; the intended 8 million fry at Nakat Inlet; and the remaining fish (12 million fry?) in Neets Bay.

There were quite a few three-year-old fish in this year's return. Though we don't currently have a forecast, with any luck at all we will not be writing about adjusted releases of fall chum next year. And with even a bit more luck, the storm that now seems inevitable each fall will hold off until early October.

Technology that improves Chinook production is designed into the new incubation building at Crystal Lake



The new incubation building isn't fancy on the outside, but the culturing technology inside provides advances in Chinook production. SSRAA PHOTO

By **BILL GASS**
SSRAA Production Manager

Eight months after the fire that destroyed the incubation building at Crystal Lake Hatchery, a brand new building stands in its place.

The new building was designed around current production levels and programs, with some additions that are intended to address ongoing challenges at the site. The original building—constructed in the early 1970s—incorporated several features that proved to be unnecessary or unworkable as time passed. The fire on March 3 presented an opportunity to rethink the mission of the facility, which is owned by the State of Alaska and operated by SSRAA.

Crucial to the new design was a recognition that existing programs at Crystal Lake are unlikely to change. The primary purpose of the hatchery is the production of Chinook salmon for release into Blind Slough, with additional production capacity fully utilized for rearing of Chinook smolts that are transported to net pen sites at Neets Bay, Anita Bay and City Creek.

The new facility incorporates advances in water use technology over the last 40 years. The hatchery manager will be able to literally flip a switch to warm hatchery water during the initial feeding of emergent fry. Because of the high elevation of Crystal Lake (the lake itself, not the hatchery), in many years water temperatures don't increase until June. In SSRAA's other hatcheries, water temps usually climb in April. At Crystal Lake Hatchery, those two months of cold water can result in severely undersized fish. The new nursery system is designed to ensure that emergent fry always get off to a good start.

Construction of the new building began in August and included a dedicated supply pipe. The new construction required extensive excavation to

lower the foundation to a level that will allow water to flow into the incubators without pumping. The hatchery receives water after it has passed through a hydroelectric plant and there is very little head pressure driving the flow to the hatchery. The original building used pumps to push water up to an elevated building. The new design is gravity-fed and doesn't need any mechanical assistance to keep water flowing to the eggs.

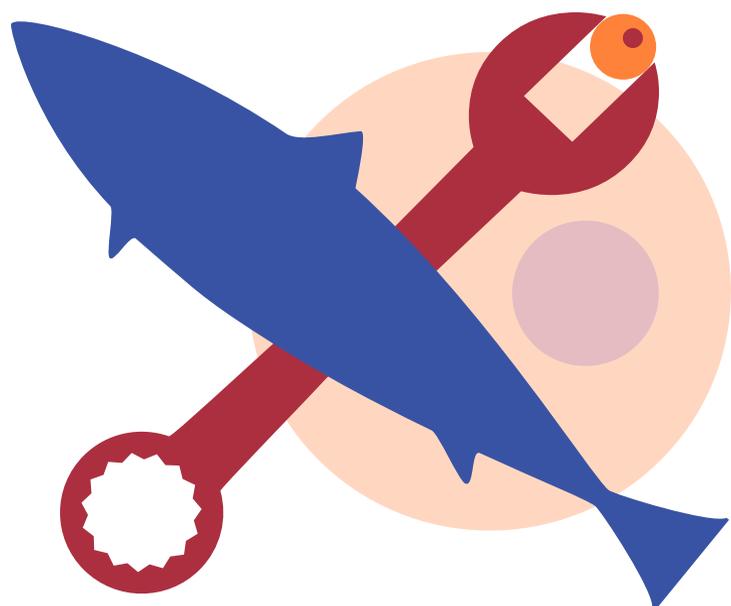
The entire construction process was a race against egg development. For the first time in five years, Crystal Lake was able to recruit enough returning adults to meet all production goals—but there wasn't a building available to hatch the eggs into fry. Eggs were collected and held temporarily at Crystal Lake Hatchery until it was safe to move them to Whitman Lake Hatchery, where much colder water is available that time of year. Crystal Lake water users have only one tap in the lake, which means very

cold water flows in the winter and very warm water in the summer. Whitman can access cold water even in summer through one of two intakes. Despite a very dedicated effort by the contractors, who met or exceeded the production schedule, the eggs began hatching before the building was ready to receive eggs. SSRAA was able to secure an emergency permit from the state to allow the eggs to hatch and remain at Whitman until the spring of 2015, when they will be transported as fry to Crystal Lake. SSRAA and the State of Alaska owe a huge thank you to Marble Construction, Reid Brothers Construction and on-site project supervisor Marty Susort for pulling off a difficult and complicated project on time and on budget.

There are details yet to be finished inside the building over the winter, but the most important fact is that there will be no loss of production beyond what occurred the night of the fire.



The new facility incorporates advances in water use technology over the last 40 years. The hatchery manager will be able to literally flip a switch to warm hatchery water during the initial feeding of emergent fry.



ONGOING S.S.R.A.A. PROJECTS

WHITMAN LAKE HATCHERY

Ketchikan Public Utilities is working on a permanent bypass line for the hatchery and finalizing projects in the new powerhouse. Once the bypass line is in place, SSRAA can finish the degassing towers, which will complete our water supply upgrades to the hatchery. Projected completion is spring 2015.

DEER MOUNTAIN HATCHERY

The City of Ketchikan will transfer the facility to SSRAA by mid-November. SSRAA will start renovations and be operational by spring 2015. Planning phase will get under way soon for the tourism and community outreach component. The tourism component is expected to start up in summer 2017.

BURNETT INLET HATCHERY

SSRAA intends to create an alternative site for the collection of summer and fall chum broodstock to alleviate some of the pressure on Neets Bay. Phase 2 of expansion is in the final planning and permitting stages. Construction is projected to start in spring 2015. A concrete pad will be built over piling at the site, reclaiming the original square footage constructed years ago by Alaska Aquaculture Association. This new addition will be seaward of the original site footprint to accommodate the changes in production and to allow deepwater access for larger vessels. Projected completion of Phase 2 is summer 2015.

2014 SEASON REVIEW | Prince of Wales Hatchery Association

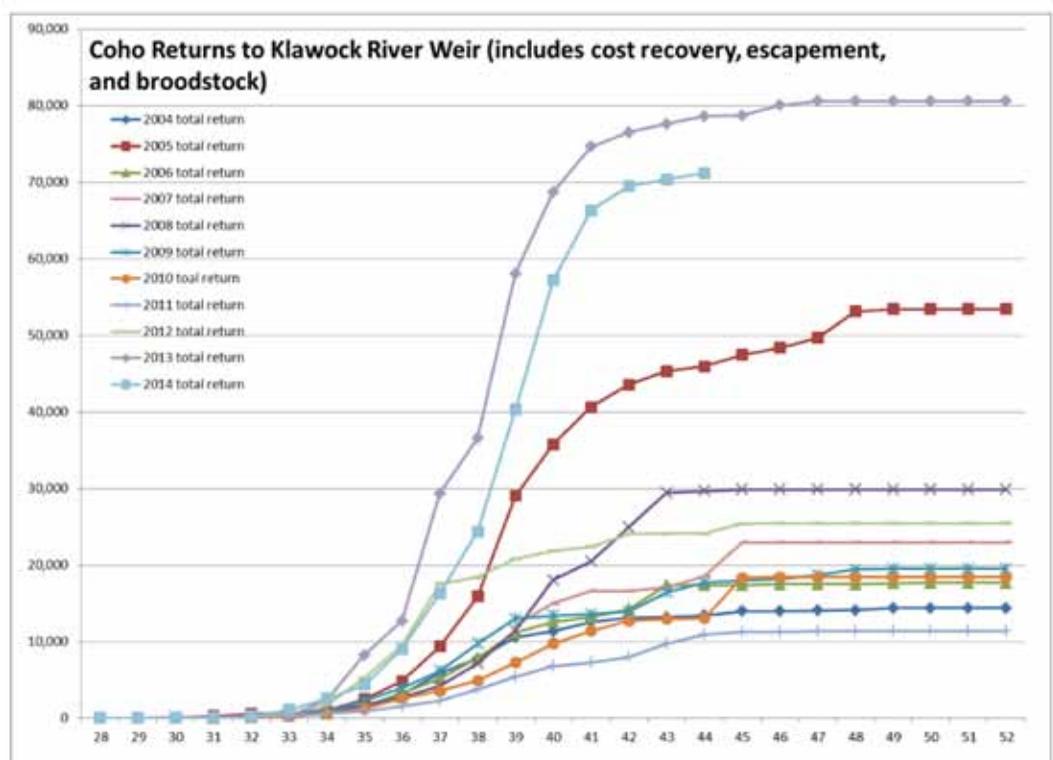
From Staff of POWHA

Prince of Wales Hatchery Association had another successful season in 2014.

We provided 129,000 coho to common property fisheries. The total return of coho to the hatchery was 71,000, of which we harvested 61,393 for cost recovery. The remaining fish were for broodstock and required escapement into the lake for natural spawning. Our permit requires us to pass 6,360 coho upstream for mitigation of the weir in the river. Overall survival was 5 percent for brood year 2011. At this writing, we have secured 3.5 million eggs out of our goal of 5 million eggs and have enough broodstock on hand to obtain our permitted capacity. We will finish eggtake on November 11.

We realize that coho alone do not provide enough revenue to cover all operational costs, so we applied for and received last April state permits for release programs at Port Asuncion: an 8 million-egg chum release and a 250,000-smolt coho release. This will be a joint SSRAA-POWHA endeavor; SSRAA will provide the eggs/fry and POWHA will rear and release the fish. SSRAA has also committed to assisting POWHA for the next three years, providing funds and professional-administrative expertise. In the spring of 2014, we received a \$500,000 grant from DIPAC, which is administered through SSRAA. These funds are being used to supplement operations and complete much needed work-safety capital improvements at the hatchery. We also received a Chinook Salmon Hatchery Enhancement Grant (CSHE) grant for \$281,000 to replace the original hatchery Techite pipeline in spring 2015.

We have 4.1 million smolts overwintering in netpens in the lake for release in 2015. These fish are large and healthy and will provide more adult coho for common-property fishers off the west coast in 2016.



Coho returns logged by POWHA in the past two years are the best of a decade (top two trend lines).

We instituted professional fish culture practices and recruited a competent and dedicated staff. Many of the changes were simple, some were challenging, and all were needed. The past two years of returns indicate the Klawock Hatchery can produce substantial numbers of coho.

If you are visiting Prince of Wales Island, stop by and visit.

Owner of rare earth claim near Kendrick Bay invites fleets' comments and questions on mine proposal

The company moving toward opening a rare earth metals mine at the head of Kendrick Bay wants to know whether the fishing fleets have any questions or concerns.

Ucore Rare Metals is preparing a plan of operations to submit to the U.S. Forest Service for development of a rare earth underground mine above the far western shore of the head of Kendrick Bay on Prince of Wales Island. Submission of that plan will initiate review by state and federal agencies.

"We have been in early and continued contact with senior managers at SSRAA and made a presentation to the full board in December 2012, all to ensure that the members of SSRAA will be informed and consulted about the project." Randy MacGillivray of Ucore wrote in a release for Ucore. MacGillivray is the director of environment and community relations for the mining company. "To this end, through your operations manager we will deliver an initial plan of operations for the Kendrick site to the SSRAA office for review. If anyone has any questions or concerns regarding the proposed mine development, we would certainly appreciate hearing from you."

MacGillivray provided contacts for questions: by phone, (604) 842-9802; by e-mail, randy@ucore.com. The web site is www.ucore.com.

UCORE RARE METALS IS PREPARING A PLAN OF OPERATIONS TO SUBMIT TO THE U.S. FOREST SERVICE FOR DEVELOPMENT OF A RARE EARTH UNDERGROUND MINE ABOVE THE FAR WESTERN SHORE OF THE HEAD OF KENDRICK BAY ON PRINCE OF WALES ISLAND. SUBMISSION OF THAT PLAN WILL INITIATE REVIEW BY STATE AND FEDERAL AGENCIES.



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Cost recovery continued from 1

normally enter the special harvest area and broodstock is again a concern.

The process went much as anticipated and was positive from SSRAA's perspective—and also from Trident's perspective, we hope. There were few if any surprises and Trident proved to be a good partner. The cost recovery goal was met on Aug. 12 and the board-designated rotational fishery continued until Aug. 25, when it ended to allow collection of fall chum broodstock.

Cost recovery plans for 2015 and beyond have not been finalized, but they are likely to resemble the 2014 harvest at least in the near future. Rotational fisheries in August will usually be constrained, at least in area, as the summer chum egg take extends well into the third week of August—and sometimes beyond. Broodstock cannot be protected if the SHA is open to the barrier itself. Regardless, there will be open areas where the gear groups can effectively harvest summer chum that are in excess of broodstock and cost recovery requirements.

SSRAA returns

CONTRIBUTION ESTIMATES FOR 2014 | PRELIMINARY

COHO Release Site	COMMON PROPERTY				SPECIAL HARVEST AREA			SSRAA	COST	Other	Total
	Gillnet	Seine	Troll	Sport	Gillnet	Seine	Troll	Brood	Recovery		
BURNETT INLET	7,460	1,330	3,060	2,130				3,260	14,100	2,500	33,840
NECK LAKE	46,505	3,615	11,220	30,420					69,000		160,760
ANITA BAY	5,845	170	7,960	235	7,020	2,680	165				24,075
CRYSTAL LAKE	345	60	985					1,585			2,975
HERRING COVE	4,960	2,150	12,050	2,607				5,500	4,480		31,747
NAKAT	7,700	1,100	10,720	215	15,025		65				34,825
NEETS BAY	79,760	16,685	184,250	14,960	10,075	36,180	12,300	3,800	36,800	17,555	412,365
% By Group	22%	4%	33%	7%	5%	6%	2%	2%	18%	3%	100%
Total	152,575	25,110	230,245	50,567	32,120	38,860	12,530	14,145	124,380	20,055	700,587

CHINOOK Release Site	COMMON PROPERTY				SPECIAL HARVEST AREA			SSRAA	COST	Other	Total
	Gillnet	Seine	Troll	Sport	Gillnet	Seine	Troll	Brood	Recovery		
ANITA BAY	6,130	290	2,255	100	7,035	2,680	165				18,655
CRYSTAL LAKE	495		1,113	95				800			2,503
HERRING COVE	250	55	2,975	1,240				2,020	2,520		9,060
NEETS BAY	550	830	4,920	290	3,170	6,290	775			600	17,425
% By Group	16%	2%	24%	4%	21%	19%	2%	6%	5%	1%	100%
Total	7,425	1,175	11,263	1,725	10,205	8,970	940	2,820	2,520	600	47,643

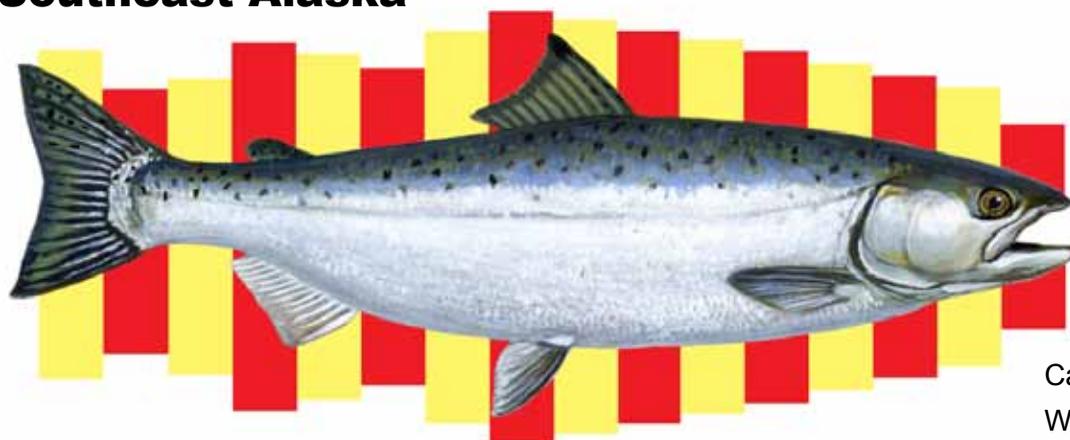
SUMMER CHUM Release Site	Common Property				Special Harvest Area			SSRAA	Cost	Other	Total
	Gillnet	Seine	Troll	Sport	Gillnet	Seine	Troll	Brood	Recovery		
ANITA BAY	84,185	106,650	2,115		43,485	30,570					267,005
NAKAT	92,540	13,070			70,730						176,340
NEETS BAY	59,760	191,520	53,855		2,360	29,025	66,620	177,900	558,595		1,139,635
KENDRICK	15,210	331,110	810			106,035					453,165
% By Group	12%	32%	3%	0%	6%	8%	3%	9%	27%	0%	100%
Total	251,695	642,350	56,780	0	116,575	165,630	66,620	177,900	558,595	0	2,036,145

FALL CHUM Release Site	Common Property				Special Harvest Area			SSRAA	Cost	Other	Total
	Gillnet	Seine	Troll	Sport	Gillnet	Seine	Troll	Brood	Recovery		
NEETS BAY	17,150	6,905	12,830		5,980	16,935	15,860	48,600	18,955		143,215
NAKAT	13,020	750			10,805						24,575
% By Group	18%	5%	8%	0%	10%	10%	9%	29%	11%	0%	100%
Total	30,170	7,655	12,830	0	16,785	16,935	15,860	48,600	18,955	0	167,790

SSRAA releases | SMOLT PRODUCTION FOR 2014

Species	Release Site	Date (2014)	Number	Size (grams)
SUMMER CHUM	Neets Bay	4/15 - 4/25 - 5/1	65,455,000	2.80
	Nakat Inlet	4/29	8,137,000	2.57
	Kendrick Bay	4/29	27,249,000	2.64
	Kendrick Late/Large	5/14	2,312,000	4.89
	Anita Bay	4/25 - 4/30	22,658,000	2.51
FALL CHUM	Neets Bay	5/1	13,579,000	1.30
	Burnett Inlet	5/8	4,906,000	2.16
COHO	Whitman Lake	5/22	324,500	23.51
	Neets Bay	5/20 - 5/24	4,240,000	26.45
	Nakat Inlet	5/21	601,000	26.30
	Anita Bay	5/22	594,000	27.90
	Crystal Lake	5/27	175,000	11.83
SUMMER COHO	Burnett Inlet	5/19	234,500	30.40
	Neck Lake	5/6	1,809,000	28.05
CHINOOK	Whitman Lake	5/22	535,000	29.40
	Neets Bay	5/19 - 5/24	1,045,000	21.72
	Anita Bay	5/15 - 5/23	551,000	30.43
	City Creek	5/30	194,000	25.40
	Crystal Lake	5/30	646,000	18.62

Coded wire tag coho contributions to 2014 traditional common-property fisheries in Southeast Alaska *

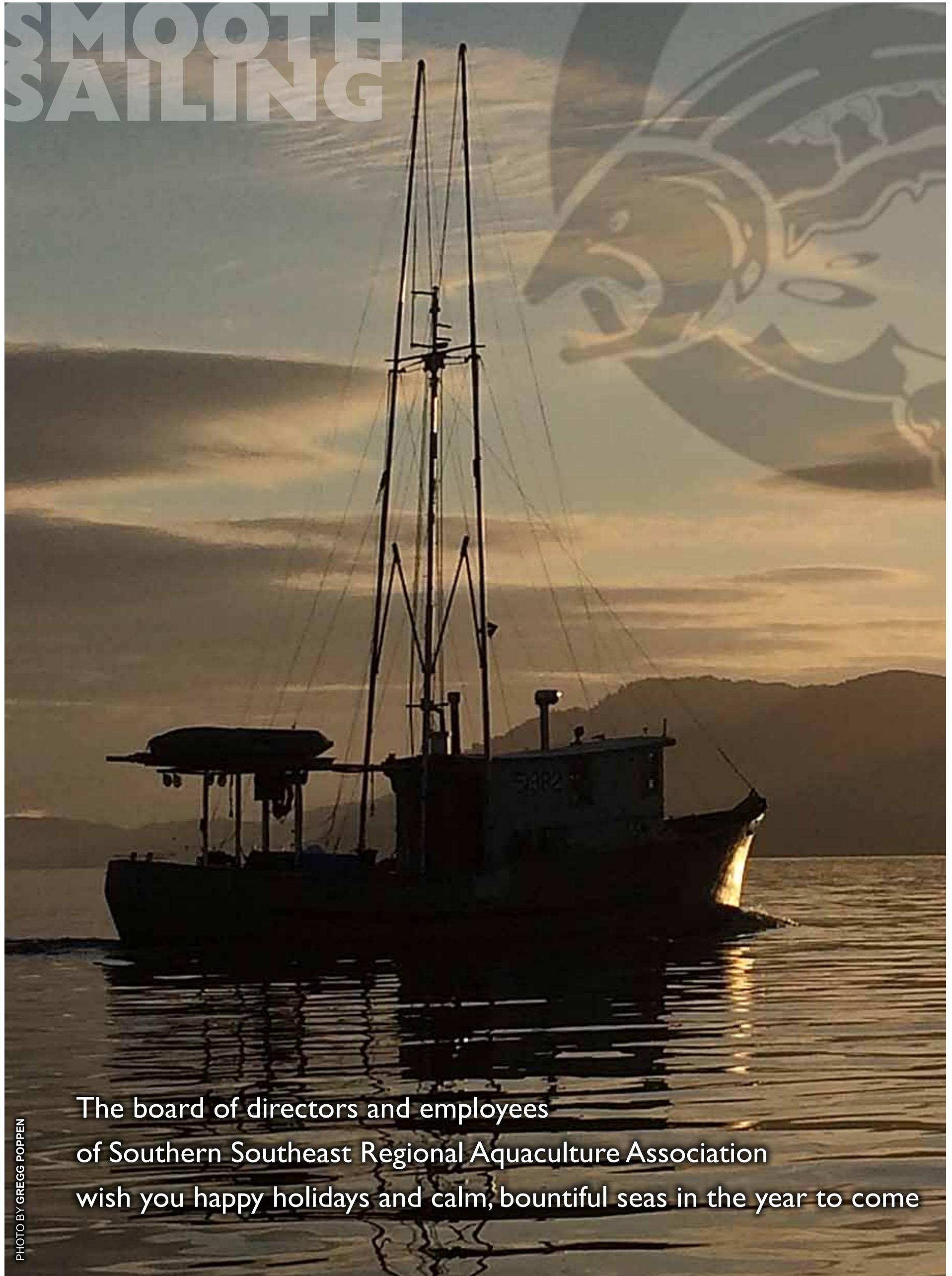


Location	Agency	Contribution	
Alaska	SSRAA	407,935	
	NSRAA	136,972	
	POWHA	125,881	
	AKI	90,837	
	MIC	72,736	
	DIPAC	9,240	
	ADF&G [☐]	4,095	
	KTHC	2,427	
	KAKE	2,255	
	USFS	149	
	Canada	ALL	1,041
	Washington	ALL	488
	Total		862,597
Percentage produced by SSRAA		47%	

* Does not include special harvest areas

☐ Includes wild stock tagging programs

SMOOTH SAILING



The board of directors and employees
of Southern Southeast Regional Aquaculture Association
wish you happy holidays and calm, bountiful seas in the year to come