

Compliments of

Commercial **Fisheries News**

a collection of lobster articles from our most recent issue

PO Box 600, Deer Isle, ME 04627 207-348-1057 / 800-989-5253 www.fish-news.com/cfn

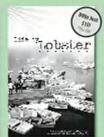
Just in time for the holiday

Enjoy great savings on a gift subscription to Commercial Fisheries News (new or renewal); order your own copy of the terrific new film, Life by Lobster on DVD; or combine the two for even greater savings!

Here's the deal:

- Buy a CFN gift subscription (one year, 12 issues) for just \$19.95 during this special holiday promotion. That's a savings of more than \$1 per issue off the cover price, and a savings of 10% off our regular subscription rates.
- Order your copy (or several) of Life by Lobster on DVD for just \$15 each, plus shipping and handling.
- Or, combine your order a CFN gift subscription with a Life by Lobster DVD and save an additional \$4.95. That's right, combine the two and we will cut your CFN subscription price to just \$15. You simply will not find a better price anywhere!





Place your order today. Use the form at right,

order online at <www.fish-news.com/cfn>, or phone us toll free at (800) 989-5253.

It's the film everybody's talking about - young independent filmmaker lain

McCray Martin's paignant, insightful, and occasionally comic documentary about a group of 20-somethings in coastal Maine, pursuing careers in the state's famed and threatened lobster fishery.

Shot entirely on - and in the waters surrounding - Stonington/Deer Isle, Maine, Life by Lobster tells it like it is for Martin's friends and high school classmates, five young lobstermen who have put everything on the line to pursue the Downeast dream: to own a business, raise a family, and stay true to a proud way of life.

		Quantity	Cost
CFN Gift Subscription - 1 year - \$19.95			
"Life by Lobster" DVD - \$15.00 (shipping addition	nal)		
COMBO: CFN Gift Subscription - 1 year	for \$15		
And "Life By Lobster" - \$15 (s	hipping additional)		
. P.	Sub Total		
in Maine add 5% tax for DVDs			
add \$5 shipping for each DVD			
PAYMENT: check enclosed credit	card TOTAL		
VisaMC DiscoverAr	n Ex	pholocopy for	additional order
Name on card			
Account Number	exp cvv _	_	
Your Info:	GVR To:		
Name	Name		
Address	Address		
City State Zip	City State Zip		
Phone			
Email			
subscription should come to:me my fri	end		
dvd should come to:memy fr	end		
Clip and mail to: Commercial Fisheries News		or Isle. ME	04627

SNE lobster crisis requires all hands on deck

n extensive and credible review of the science has resulted in devastating news: The Southern New England (SNE) lobster stock is in a perilous state.

And, although lobstermen are not to blame, they will shoulder the burden of a monumental and unprecedented effort to rebuild the population, making their participation in what happens next critical to creating a rational plan of action.

While it is highly unlikely that managers will take the radical step of shutting down the fishery for five years - the remedy initially suggested by scientists the findings almost certainly mean there will be drastic

The Atlantic States Marine Fisheries Commission's (ASMFC) American Lobster Management Board has directed its plan development team to put together two packages of proposed measures - one that would reduce Southern New England lobster landings by 50% and another that would slash landings by 75%.

All areas - except the Area 1 Lobster Conservation and Management Area (LCMA) and most of the Outer Cape Cod LCMA - will be affected. Lobstermen from Massachusetts to New Jersey have been shocked and angered by this turn of events.

Not surprisingly, they are wondering how they can possibly need or tolerate any more cuts after enduring years of trap reductions, gauge increases, and license limits following the impacts on the stock of the 1996 North Cape oil spill in Rhode Island, the 1999 Long Island Sound die-off, and the persistent shell disease problems that are gradually creeping north.

ASMFC managers, many of whom are fishery agency officials committed to protecting not only the resource

but also the valuable lobster industries of their home states, are struggling with this new reality, too.

After initially hearing the grim news from the American Lobster Technical Committee (TC) back in May, ASMFC commissioners called for an independent review of the TC's report, which was titled "Recruitment Failure in the Southern New England Lobster Stock.'

Three independent reviewers were engaged to go over the data, analyses, and methods the TC used to reach its conclusions. While there were disagreements over some aspects of the report, there was unanimous agreement among the scientists that the Southern New England lobster stock is in very poor shape and that sizeable reductions in effort are needed "immediately."

One reviewer concluded that overfishing was likely a primary contributor to the problem. Two of the reviewers suggested a need to consider the possibility that the lobster resource simply may be returning to a lower natural level, such as that last seen in the 1980s. Most disturbing is the nearly unanimous belief that warming water temperatures are playing a role in the stock's inability to replenish itself.

Southern New England lobstermen must come to terms with this discouraging state of affairs and find the strength to help regulators make the best decisions possible going forward.

Gulf of Maine lobstermen would be wise to pay close attention, too. The fact is no one knows how high water temperatures will go or how far this warming trend will reach in the coming years. Everyone needs to be engaged and prepared to deal with the possible impacts. /cfn/

Ocean acidification ... Fishermen can defend the sea that feeds us

CUEST COLUMN by

and

Mark Green

Brad Warren

hen Angela Sanfilippo arrived in Gloucester in 1965, her young family enjoyed gathering oysters and other shellfish around the harbor for weekend feasts. Now the "den mother of the Gloucester fleet" shakes her head ruefully.

"There's nothing," she says. Sanfilippo, a well-known advocate for Massachusetts fishing communities, has struck a theme that's painfully familiar to many of us who grew up reveling in sloppychinned shellfish picnics. Something is going awry in our bays.

Clam diggers in Maine have witnessed an unexplained disappearance of two thirds of their production since the early 1980s. Shellfish lovers and harvesters are puzzling over similar losses along northern shores all the way to Alaska. Overharvesting and shellfish pathogens are part of the problem, but they can't explain this trend. Something is overwhelming young shellfish - especially certain mollusks - long before they can mature.

Now scientists are starting to find a common culprit in many of these disappearances – acidification of seawater. It is driven mainly by emissions from burning fuels and, in many bays, by run-off from sewers, livestock farms, fertilizers, and other land-based activities.

These two waste streams, loaded with carbon and nitrogen, often compound to produce severe acidification in estuaries. By overdriving algae blooms, which then decay, they can generate enough acid to dissolve the freshly

spawned larvae of clams and ovsters.

In the flats south of Portland, ME, researchers have documented soft-shelled clam larvae dissolving in acidified water and mud. "Death by dissolution"

may now be a leading cause of mortality for clams throughout the Northeast.

Upwelling can further compound this acidity, flooding the shallows with deep, carbonrich water that some oyster hatcheries now dread. A natural source of nutrients that fueled

seafood production in the past, upwelling on parts of the West Coast now seems to push over-enriched waters past a tipping point. A telling symptom is that the larvae of Pacific oysters in the Northwest have been vanishing, both from bays and hatchery tanks.

Sanfilippo is one of many fisheries leaders who aren't taking this lying down. In April, she made common cause with dozens of commercial and recreational fishermen, shellfish growers, marine scientists, and conservationists from nearly every coastal state, signing a letter urging US federal lawmakers to "mitigate the causes and reduce the economic harm resulting from ocean acidification."

Using technical advice from the Sustainable Fisheries Partnership, leaders in the West Coast salmon, oyster, and "wetfish" (mainly sardine and

See GUEST COLUMN, page 33

EDITORIAL/PUBLISHING OFFICE

PO Box 600, Deer Isle, ME 04627 Phone (207) 348-1057 • Fax (207) 348-1059 Website: www.fish-news.com

PUBLISHER

Richard W. Martin rmartin@fish-news.com

EDITOR

Lorelei Stevens lstevens@fish-news.com

EDITORIAL STAFF

Janice M. Plante, Associate Editor Susan Jones, Managing Editor Ann Kane Rheault, Contributing Editor Skip Fleet, Contributing Editor Brian D. Robbins, Columnist

EDITORIAL FIELD OFFICES

Lorelei Stevens Harwich, MA Phone (508) 432-0602 Istevens@fish-news.com

Janice M. Plante Ithaca, NY Phone (607) 277-5355 jpcomfishnews@twcny.rr.com

FIELD CORRESPONDENTS

Peter K. Prybot, Steven Kennedy, Sandra Dinsmore, Diane Cowan, Lauren Simmons, Ann Backus, Fred Mattera

ADVERTISING

Main Office: Richard W. Martin rmartin@fish-news.com

Fraun Cragg Martin fmartin@fish-news.com

SALES REPRESENTATIVES

Brian Robbins Phone (207) 624-2764, Fax (207) 563-3094 brobbins@fish-news.com

Frank X. Simonds Phone (207) 677-2582 or (207) 348-1057

Clive Bullard Phone (845) 231-0846, Fax (845) 265-9695 cbullards@cs.com

> International: John Gold Phone/Fax +44-20-8641-7717 JohnGoldspace@aol.com

BUSINESS MANAGER

Leslie H. Carr lcarr@fish-news.com

PRODUCTION

Keith Kastelic production@fish-news.com

SUBSCRIBER SERVICES

Joy Carter, jcarter@fish-news.com Phone toll-free (800) 989-5253

Compass Publications, Inc. Publications for marine markets:

FISH FARMING NEWS FISH FARMERS PHONE BOOK **COMMERCIAL FISHERIES NEWS** COMMERCIAL MARINE DIRECTORY **SEA TECHNOLOGY** SEA TECHNOLOGY BUYERS GUIDE

TO SUBSCRIBE: 1-800-989-5253 Commercial Fisheries News (ISSN: #0273-6713) is a monthly publication of Compass Publications, Inc.—Fisheries Division. Editorial, advertising, and circulation offices: PO Box 600, Deer Isle, ME 04627. Telephone: (207) 348-1057. Copyright © 2010 by Compass Publications, Inc. Periodicals postage paid at Stonington, Maine 04627 USPS 128-570 and at additional mailing

Stonington, Maine 04627 USPS 128-570 and at additional mailing offices. Printed in USA. POSTMASTER: Forwarding and address correction requested. Send address changes to Commercial Fisheries News, PO Box 600, Deer Isle, ME 04627. CIRCULATION INFORMATION: US surface: \$21.95 per year. First Class: US \$45.95, Canada \$51.95, other foreign \$87.95. Make checks payable to Compass Publications, Inc., PO Box 600, Deer Isle, ME 04627. ADVERTISING: Rates furnished on request.



Southern New England lobsters

A June-through-September

lobster stock during the entire

thereby preventing handling

stress and mortality.

high water temperature period,

—American Lobster Technical Committee

closure would protect the

Board to consider 50%, 75% landings reduction

CHARLESTON, SC – Responding to serious warnings from biologists that the Southern New England lobster stock is in very poor condition, the Atlantic States Marine Fisheries Commission's (ASMFC) American Lobster Management Board has charged its lobster plan development team (PDT) with developing two complete packages of measures that would reduce landings from the stock by 50% or 75%.

The board took this action on Nov. 10 during ASMFC's annual meeting here after being informed that three internationally renowned peer review scientists supported the American Lobster Technical Committee's (TC) findings that severe measures were needed to reverse the Southern New

England lobster stock's troubling status (see related stories pages 9-10 for peer review details).

The TC first presented its concerns to board members last May and called for a fiveyear harvesting moratorium

on the Southern New England stock, fearing that it was in "recruitment failure." The TC said this meant the stock was at "the point where environmental conditions and/or fishing have resulted in successive years of poor recruitment."

The board then met again in July and August to discuss the situation but delayed action pending an independent review of the TC's findings.

In the interim, the board asked the TC to evaluate the potential impact on landings of six types of effort reduction measures – seasonal closures, area closures, quotas, trap limit reductions, a male-only fishery, and modifications to minimum and maximum gauge sizes – and to analyze how the board could achieve a 50% or 75% reduction in landings.

The board did not take the five-year moratorium recommendation off the table, but many commissioners have implied that they are unwilling to take such drastic action.

Quota, summer closure

At the Nov. 10 meeting, TC Chairman Carl Wilson of Maine said that after conducting the requested

analyses, the TC agreed to recommend a combination of two measures to achieve a 75% reduction in exploitation – a quota coupled with a Junethrough-September seasonal closure.

The quota, which also could be used to achieve a 50% reduction in landings, is the TC's preferred option to "provide maximum benefit to the Southern New England stock," said Wilson.

Furthermore, he said, a peaksummer closure would offer maximum biological benefits because it would restrict harvesting during prime-time molting, egg extrusion, and "high environmental stress periods."



Peter K. Prybot/CFN photo

I think we have to recognize what an incredible task we have in front of us.

—Dave Simpson

In its formal report to the board, the TC

said, "A closure from June through September would protect the lobster stock during the entire high water temperature period, thereby preventing handling stress and mortality when water temperatures are above 20°C, the threshold temperature causing immune, respiratory, and cardiac trauma."

The four-month summer closure also would span the first big wave of molting, which typically occurs in June and July, and it would allow more females to extrude eggs in July and August prior to being captured, the TC said.

The TC emphasized that a seasonal closure was "an effective way of implementing the quota." However, the TC added that, by itself, a closure would not achieve a 50% or 75% reduction.

The reductions in "exploitation" would be achieved through a 50% or 75% cut in landings from the base years 2007-2009.

Preliminary TC estimates indicate that a 50% landings reduction from the base years would result in a 2.74-million-pound quota for the Southern New England lobster stock. A 75% reduction would result in a 1.37-million-pound quota.

As requested, the TC did evaluate the other alternatives, but Wilson said the committee:

ullet Does not recommend using area

closures as the primary method for reducing exploitation;

- Does not recommend "the use of trap limits alone" as a mechanism to cut fishing mortality;
- Does not recommend using additional gauge increases or decreases as the sole means to reduce exploitation; and
- Does not recommend a management strategy that focuses solely on singlesex harvest like a males-only fishery or a stock-wide mandatory v-notch program.

The TC provided elaborate justification for each of its decisions.

A new addendum

After hearing this report, the board debated what to do next.

Maine board member George Lapointe said that, under the circumstances, ASMFC's normal process of developing an extensive range of alternatives, which often requires many months of analysis, culling, and revisions, might not be the best approach.

"I do think we need to convey a sense of urgency here," he said.

Lapointe suggested that the board charge the PDT with developing an addendum with only two alternatives – one to achieve a 50% reduction in exploitation, and another to achieve a 75% reduction.

Lapointe said each alternative could be made up of a number of different provisions to reach the desired cuts,

See SNE LOBSTER CUTS, page 10

Smithwick & Mariners Insurance Agency

We are a full-service independent insurance agency providing personal, commercial, business & marine insurance.

- VERY COMPETITIVE LOBSTER BOAT PROGRAMS
- Wide Range of Package Options
- New Vessel, Older Vessel Including Wood Construction we can obtain coverage for any well maintained boat

Competitive programs for Lobster Boats, Draggers, Scallopers, Gillnetters, Boat Builders, Marinas and more.

366 U.S. Route 1 Falmouth, ME 04105

Tel: 800-370-1883 • Tel: 207-781-5553

Fax: 207-781-5571

77 North Water Street, New Bedford, MA 02740

Tel: 800-348-1405 • Tel: 508-993-7411

Fax: 508-990-7733

www.smithwick-ins.com

With affiliated offices in Damariscotta,
Bath, and Kennebunk

LOCAL KNOWLEDGE - DEDICATED TO SERVICE



Harvesters working the Southern New England lobster stock are facing sobering reports of the resource's poor condition. Managers are considering how to achieve a severe reduction in fishing effort that could be beneficial to stock rebuilding.

Peer review finds SNE lobsters in 'poor state'; fishing cuts needed

CHARLESTON, SC - Three independent experts charged with reviewing a report called "Recruitment Failure in the Southern New England Lobster Stock" all agreed that the stock is "in a poor state" and that severe reductions in fishing mortality are needed immediately to maximize chances of stock rebuilding.

The recruitment failure report was produced by the Atlantic States Marine Fisheries Commission's (ASMFC) American Lobster Technical Committee (TC), which first presented its findings to ASMFC's American Lobster Management Board last May (see CFN June 2010 for details).

Given the gravity of report's conclusions and the TC's call for a fiveyear harvesting moratorium, the board agreed to have outside professionals scrutinize the findings before taking

ASMFC turned to the Center for Independent Experts in Miami, FL for help. The center then contracted three independent reviewers to do the work:

- Michael Bell, a European lobster biologist at the International Centre for Island Technology in Orkney in the United Kingdom;
- Norman Hall, a western rock lobster assessment scientist at Murdoch University in Perth, Western Australia;
- Stewart Frusher, a rock lobster biologist and assessment scientist at the University of Tasmania in Australia.

The CIE also called on Michael Murphy of the Florida Fish and Wildlife Conservation Commission's Fish and Wildlife Research Institute to present the results to the lobster board. Murphy himself was not a reviewer.

Reviewers' conclusions

During the lobster board's Nov. 10 meeting in Charleston, Murphy said two of the three reviewers found "strong evidence" of recruitment failure, while

a third did not, believing instead that overfishing was "a stronger possibility" for the stock's deteriorated status.

However, he said, all three agreed that "immediate reductions" in fishing effort were needed, at least on the order of 50% or 75% if not more.

Two reviewers said ASMFC should consider alternative possibilities to recruitment failure, one being that the lobster resource in Southern New England was simply returning to its former - and lower - 1980s level following a period of high recruitment and ramped-up effort in the 1990s.

Murphy said all three reviewers agreed that "increases in sea temperatures and the increased prevalence of shell disease indicate that natural mortality likely has increased."

And, he said, the reviewers noted several impediments to stock rebuilding and indicated that "rebuilding to historical levels may not be possible."

"They were not convinced that reduced fishing pressure will rebuild the stock if warming trends continue or if there's no stock/recruitment relationship," said Murphy.

While the reviewers' opinions varied on several subjects, Murphy said, "It was clear that they all saw the need to act on the TC findings to reduce fishing pressure. They thought that even if recruitment failure is environmentally driven, a reduction in fishing pressure could be beneficial."

The reviewers, who each produced their own written report, commented on numerous aspects of the TC's work and made a number of recommendations about research, information gathering, monitoring, and other related issues.

Asked for his opinion of the peer reviewers' conclusions, TC Chairman Carl Wilson said, "I think they made several very constructive points."

The board agreed by consensus to accept the reviewers' reports.

Janice M. Plante



WE KEEP WORK BOATS WORKING



- 3 marine travel-lifts (35,150 and 300 tons)
- 3 railways (1,000, 500 and 400 tons)
- · Factory-trained technicians
- · Quick and easy haul-outs, day or night
- · Fast turnaround, less downtime
- Full-service yard
- Competitive rates

508-999-1600 Fax: 508-999-1650 www.fairhavenshipyard.com South Yard: 50 Fort Street, Fairhaven

North Yard: 32 Water Street, Fairhaven

Contact Kevin McLaughlin at kevin@fairhavenshipyard.com or call 508-999-1600

SNE lobsters: What independent scientists say

Three internationally acclaimed experts - Michael Bell, Norman Hall, and Stewart Frusher - independently reviewed the American Lobster Technical Committee's (TC) report titled "Recruitment Failure in the Southern New England Lobster Stock." Here are excerpts from the reviewers' individual

Michael Bell

- "The main conclusion of my review is that the TC presents a coherent and plausible scenario of an American lobster stock at the southern (end) of its geographical range experiencing recruitment failure owing to environmental and biological changes."
- "The combined picture shows that it is highly probable that the Southern New England stock is at a depleted level compared with the 1990s and that this situation is being exacerbated by low levels of recruitment."
- "The available data provide a limited historical perspective against which to compare recent observations, and there is a need to consider alternative scenarios such as a return to previous productivity levels after a period of much higher productivity during the 1990s 3
- "Sea temperature and disease incidence provide the strongest evidence that current conditions are different

from those prevailing during the early 1980s, and, thus, that the TC scenario of recruitment decline is the most likely one.

- "Removal of fishing mortality is the one opportunity available to managers to influence the likelihood of rebuilding the stock '
- "On the basis of the analyses presented by the TC, I would assess the probability of their recruitment failure scenario as being true as being high and the risk of failing to rebuild if the moratorium is not imposed as high."

Norman Hall

- "Whether or not recruitment failure has occurred, there is sound evidence that recruitment to the Southern New England lobster stock has declined and that low levels of recruitment have persisted despite relatively recent reductions in trap hauls and other management initiatives. This, in combination with the current low levels of lobster abundance, should be of concern to both managers and fishermen."
- "The proposal by the TC that managers impose a five-year moratorium on exploitation ... is endorsed, as this should allow the stock to rebuild and will provide crucial data on the current dynamics of the stock."
- "If continued exploitation is

permitted, rebuilding under such exploitation is likely to be maximized if males are preferentially exploited and females protected to the extent

- "The TC has produced solid arguments that if, as expected, the Southern New England region continues to experience elevated water temperatures, the impact of these temperatures on the lobster stock will impede rebuilding of lobster abundance.'
- "There appears little doubt that if natural mortality has increased, the stock is now experiencing conditions unlike those that it has previously experienced. A highly precautionary management approach is therefore warranted."

Stewart Frusher

- "This review does not support the conclusion that the Southern New England lobster fishery is experiencing recruitment failure. While recruitment failure is one possibility, overfishing is a stronger possibility."
- "The current effort in the fishery is too high and is approximately 50%higher than when the abundance was a similar level in the early 1980s. A 50%-75% reduction in effort is recommended immediately.'
- "As the Southern New England fishery is at the southern limit of the

commercial distribution of lobsters, then any changes in physical properties related to warming are likely to move the southern extent of the commercial fishery further north. The increased warming recorded in the 2000s is of concern for the longer-term viability of the fishery."

- "The fishery experienced a large increase in recruitment that was reflected in the landings. As recruitment and landings have returned to lower levels equivalent to the early 1980s, effort has not reduced to the equivalent level in the 1980s.
- "It is recommended that effort be reduced in the fishery to a level equivalent to the 1980s and that a socio-economic study be implemented to determine the economic viability of effort reductions."
- "If the changes in environment are affecting larval recruitment (i.e. the free swimming phase), then the fishery has a limited future. If the environment is affecting the settlement or postsettlement phase (e.g. water is too warm) then the fishery in this region only has a future if settlement and postsettlement can occur in deeper, cooler
- "There is limited support for a total closure or for a closure for a defined period. There is a need to substantially reduce effort with reviews undertaken to adjust effort if required." /cfn/

Continued from page 8

I do think we

urgency here.

—George Lapointe

a sense of

need to convey

SNE lobster cuts

but the suite of measures needed to be bundled together.

"I think we need to look at a package deal," he said.

Board Chairman Mark Gibson of Rhode Island said he intended to "augment" the current PDT by bringing in people willing to help with the undertaking.

Two board members - Dan McKiernan of Massachusetts and Dave Simpson of Connecticut - volunteered to work closely

with the PDT on the addendum's development. And, lobster plan coordinator Toni Kerns,

up the PDT,

Peter K. Prybot/CFN photo

who heads

specifically asked for help from people with social science expertise.

"We need individuals with socioeconomic backgrounds and, first and foremost, people who have the ability and time to write all of this out," she said.

Gibson agreed to work with ASMFC's staff, McKiernan, and Simpson to determine the final "fortified PDT," and everyone agreed to gather industry input through the Lobster Conservation and Management Teams that will be impacted by the decisions.

McKiernan said he also wanted to bring in people with practical permitting, administrative, and enforcement expertise "so we can deliver to you a plan that still has a workable fishery in it."

"We're probably looking at a millionand-a-half pound fishery, and we need to figure out how we are going to structure it," he said.

Simpson emphasized the enormity of the undertaking and noted that, under existing

environmental conditions with warmer water temperatures, stock rebuilding is likely to be extremely difficult under any potential suite of alternatives.

"We are swinging in the dark here," he said. "Even a moratorium may achieve nothing. I think we have to recognize what an incredible task we have in front of us."

The board may convene a special meeting in January or February in New England to work on the addendum prior to looking at a more refined document during ASMFC's winter meeting, which is scheduled for March 21-24 in Alexandria, VA.

Janice M. Plante



Web Site: www.zf.com