

Employees Receive NOAA Awards

—By Dane Konop

Over 150 individuals and groups received NOAA Administrator Awards and other honors during a ceremony in the NOAA auditorium in Silver Spring, Md., May 10.

The awards followed an introduction by Zane E. Schauer, acting director of human resources management, opening remarks by acting administrator Scott B. Gudes and a keynote address by Sean O'Keefe, deputy director of the Office of Management and Budget.

Gudes said the Administrator Awards recognize "excellence in teamwork," the Diversity Spectrum Awards recognize "those who have made the special effort to make the NOAA workplace a better workplace," Best Practices Awards are for employees to recognize excellent managers, the Technology and Hammer Awards recognize innovation, the Environmental Hero Awards "recognize some of our outside partners," and the NOAA Employee and Team Member of the Month awards "recognize people who make NOAA work on a day to day basis."

Except when otherwise indicated, the following award winners are from the listed offices that nominated the winners.

Administrator Awards

Office of Policy and Strategic Planning: Roger B. Griffis.

Office of the Deputy Under

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Digital Data Replace Pencil and Paper in Fish Surveys

—By Jeanne Kouhestani

During a dinner meeting in Mobile, Ala., in June 1999, strategically placed packets of sugar and bottles of ketchup and Tabasco sauce signaled the beginning of the end of nearly four decades of pencil and paper data recording aboard NOAA fishery survey ships in the northeast.

As NOAA fisheries scientists explained the process of a fisheries trawl survey to software engineers huddled around their dinner table, the condiments represented fish, trawl net, sorting baskets, weight

scales, data recorders and so on.

From these initial ersatz demonstrations of trawl operations, the Fisheries Scientific Computer System was spawned—an automated system for recording biological and oceanographic data during a trawl-based fishery resources survey. The system is now replacing manual data recording aboard NOAA ships and shaving months off the time required to make cruise data available to fisheries researchers and managers.

A month after their brainstorm-
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Ensign David Zezula/NOAA

Researcher Chad Keith of the Population Dynamics Branch of the National Marine Fisheries Service enters fish lengths into the new Fisheries Scientific Computer System aboard the NOAA Ship Albatross IV.

Fish Surveys

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ing dinner meeting, software engineers Dennis Shields and David Benigni of NOAA's Office of Marine and Aviation Operations were making some adjustments to the scientific computer system aboard the NOAA ships *Albatross IV* and *Delaware II* in Woods Hole, Mass. The two asked the fisheries scientists if there was anything they needed help with.

"Well, there might be just one thing," they were told.

NOAA Fisheries for several years had been experimenting unsuccessfully with ways to automate data recording during ship trawls to survey fish stocks in northeast coastal waters.

Since the Fisheries Service began surveying fish in coastal waters of the northeast in 1963, scientists used paper logs to record a variety of information about each fish brought up during a survey trawl.

Analysts then waited up to three months after a survey cruise while the data were transferred to a database and audited before being used by NOAA Fisheries to set quotas for the amount of fish that can be harvested each year in U.S. coastal waters.

Shields and Benigni thought there might be a way to automate the process. They sat down with the fisheries scientists to talk about creating an automated system that would work at sea.

One of their biggest challenges would be to find computer hardware that could survive conditions in February in the North Atlantic—sleet, ice and temperatures below zero, frozen fish slime and salt air.

A project team was assembled

that included Shields and Benigni, Doug Perry of OMAO's Marine Operations Center, and William Cramer, Paul Kostovick, Nancy McHugh and Holly McBride of NOAA Fisheries.

Before Shields and Benigni could design a system, they had to learn the drill. *Albatross IV* would later be a testing ground; but first it was their classroom.

"We had been on ships a lot, but had never been on the back deck where the fish were sorted," said Benigni. "We needed to learn what

"The Fisheries Scientific Computer System represents the single greatest improvement in data collection over the 38-year history of the survey. With the Fisheries Scientific Computer System, we will be able to begin analysis almost immediately to update stock assessments important to fishery managers."—Tom Azarovitz, chief of NOAA Fisheries' Ecosystem Surveys Branch at the Northeast Fisheries Science Center.

was going on. Dennis and I learned to be data recorders, working the midnight to 6 a.m. shift."

Imagine the tedious task of hand-recording information about each fish in a catch of thousands. The sheer magnitude of information that must be collected can be overwhelming.

Nearly 400 trawl tows are conducted per cruise at stations throughout U.S. northeastern waters in the world's longest running survey of this kind.

Fish and invertebrates netted during each tow are sorted on deck by species. The scientists then record characteristics of each fish, such as its sex, weight, length and stomach contents.

A typical fishery resource survey cruise takes about 45 sea days, with scientists and the ship's crew working around the clock on alternating shifts.

"We got a great appreciation of

the need for a new system," Shields said. "The methods used were steeped in nearly 40 years of tradition. Recording by pencil and paper was how they'd always done business, along with rubber banding, stamping envelopes and doing red line edits," Shields said.

"We basically learned to do their business as well as they did. We had to, to build a new system," he said.

"The process took a long time and required constant communication between us and the fishery experts," he said.

Shields and Benigni went back to the drawing board to begin writing a software program. They got support not only from the project team, but from other fisheries biologists and technicians at the Northeast Fisheries Science Center, who

did everything from role playing ("I'm a fish, you're a scale.") to system testing.

Kostovick, the center's project coordinator, with expertise in both survey work and data base design and management, fielded hundreds of questions from Shields and Benigni and found the fisheries experts who could best respond.

Through the development process, the center's staff was able to validate and streamline the fisheries data structure to make it compatible with the new system. Once the prototype Fisheries Scientific Computer System was ready, Shields and Benigni set up the hardware in the center's conference room for a trial run.

"Lots of people from the fisheries center signed up to try it. They tested it all the time, and worked on it continuously," Shields said. "They'd call and say if something

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William Morehouse Is Team Member of the Month for June

—By Dane Konop

William Morehouse, a consultant to the Office of Finance and Administration's Facility, Acquisition and Management Division, is the NOAA Team Member of the Month for June.

If you've spent any time on NOAA's Silver Spring, Md., campus, you've almost certainly encountered Morehouse as he shepherds employees into their new offices and work stations.

Although he appears to be older than his facilities colleagues and the employees he helps move, he also seems quicker on his feet than those around him, darting around with a floor plan in his hand, moving this, rearranging that, as open space is transformed into a work station from disjointed stacks of modular furniture components.

Morehouse has been in the office furniture and supplies business since starting as a salesman with the Charles Stott Company in

Washington, D.C., and suburban Maryland in 1947. He eventually went on to manage all five Stott office supply stores and started its specialty advertising line.

He had planned to retire earlier to a life of leisure with his Finnish wife, Sisco. "One summer we'd spend in Finland and one summer in the U.S.A.," he said.

But his wife died in 1985.

So he kept working. After retiring from Stott in 1992, he spent a 2-year stint with the B.T. Ginns Company, supplying furniture for the new Silver Spring Metro Center.

"I was selling the systems furniture I am now working with," he said.

Following a 2-year second retirement, Morehouse returned to work for his current employer, RGII Technologies in 1996.

During the years he has moved employees into their Silver Spring Metro Center offices, Morehouse has been cited for repeatedly finishing work ahead of schedule, often working nights and weekends to ensure that employees' needs were met, according to his supervisors.

He also manages the inventory of NOAA systems furniture. Through his efforts to sell unneeded furniture parts back to the manufacturer for reimbursement, NOAA has collected over \$100,000 to augment in-house inventory.

Morehouse has an obvious, infectious penchant for life, perhaps because he doesn't take it for granted. As a 22-year-old seaman, he survived an intense, 40-ship sea battle in the Pacific during World War II, when his anti-aircraft cruiser *Atlanta* and a Japanese destroyer sunk each other at extremely close range on "Friday the 13th, 1942," plunging both crews into waters off Guadalcanal.

His secret to staying youthful is simple: "I enjoy life." ☺

Kevin Sellner Is Employee of the Month for June

—By Dane Konop

Kevin Sellner, the manager of the interagency harmful algal bloom research program in the National Ocean Service's Center for Sponsored Coastal Ocean Research in Silver Spring, Md., is the NOAA Employee of the Month for June.

Sellner serves as the focal point for coordinating federal research funding to determine why coastal waters sometimes erupt in massive growths of phytoplankton, sometimes referred to as red or brown tides, than can kill fish and even threaten human health.

"It's a huge problem," Sellner says. "It's estimated that on the order of about \$50 million a year is lost to harmful algal blooms. For example, red tides off the Florida coast cause massive fish kills. Dead fish wash up on the beach and tourists flee," he says.

"But the biggest problem is paralytic shellfish poisoning, and *continued on page 8*



Dane Konop/NOAA

William Morehouse.



Dane Konop/NOAA

Kevin Sellner.

Focus On...

NOAA's First 100 Officer Training Classes



NOAA Corps file photo

Ship handling has always been a key component of any officer's training. Shown in 1973 learning bridge operations are two women members of the forty-sixth basic officer training class, Ensigns Karen O'Donnell (right) and Evelyn Fields, who now heads the NOAA Corps and the Office of Marine and Aviation Operations.



NOAA Corps file photo

Landlubbing members of the forty-fifth officer training class in 1973 earn their sea legs by learning to sail. Then Ensign Francesca Cava (on the boat's bow) continues to work with NOAA on the Sustainable Seas Expeditions with the National Geographic Society.

—By Dane Konop

May 9 marked a significant milestone for the NOAA Commissioned Officer Corps, when nine men and four women completed basic officer training—the one hundredth class to graduate since formal training classes were first held in 1960.

Since it was established in 1917 as the Coast and Geodetic Survey Corps, the Corps has always trained new officers, but on the job at sea.

Today, officer training takes place in classrooms at the U.S. Merchant Marine Academy in Kings Point, N.Y., and aboard the Academy's training ship *Kings Pointer*.

With 232 officers in traditional naval ranks ranging from ensign to admiral, the NOAA Corps is by far the smallest of the seven U.S. uniformed services, but also the most selective. There are no enlisted ranks, and officer recruits must be college graduates with degrees in science, engineering or mathematics.

For three months during training, the NOAA Corps recruits learn seamanship, ship and small boat handling, navigation, firefighting, military protocol and other skills needed to serve as junior officers aboard NOAA vessels.

When they graduate, they are commissioned as ensign before reporting to their first duty station at sea, where they will work under the supervision of senior officers and begin specialized training in hydrographic surveys, fisheries science and oceanic and atmospheric research. ☺



NOAA Corps file photo

Members of the one hundredth basic officer training class, who graduated and received their commissions in May. Front row (left to right): Ensigns Jennifer Pralgo, Nickie Lambert, Shannon Ristau and Nicole Colasacco. Middle row: Seung Suk, Dan Simon, Steve Snow and Jeff Kelley. Back row: Chadwick Brown, Sean Cimilluca, Chad Cary and Micah Miller.



NOAA Corps file photo

Three of the six officers in the first officer training class in 1960 are pictured with training officer Cdr. Raymond Stone (left). Then Ensign R. Lawrence Swanson (second from left) remembers he and other recruits were called "pee wees" during shipboard training at sea.



NOAA Corps file photo

Member of the twenty-seventh officer training class assemble on the bow of their training vessel in 1968.



NOAA Corps file photo

The forty-first class in 1972 included the first women recruit, Pamela R. Chelgren.



NOAA Corps file photo

The seventy-fifth class at the Kings Point training center in 1983.



NOAA Corps file photo

The eighty-seventh class in 1990.

Awards

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Secretary: Barbara Moore (OAR), Michael Kelly (OAR), Christine M. Maloy (OAR), Claire Johnson (NOS), Daniel Cohen (DOC OGC) and Mark R. Haflich (DOC OGC).

Office of Finance and Administration: Victor R. Stewart, Rich Beeler (OAR), Gregg Bass (OMAO), Carol Baldwin (OMAO), David Barglow (OMAO), Sandy Wine, Annie Baker and Charlotte Melton.

Office of General Counsel: Lindy S. Johnson and Ole Varmer.

Office of Public and Constituent Affairs: Gregory Hernandez and Janet Ward (HPCC).

Office of Marine and Aviation Operations: Dennis Shields, David Benigni and Paul Kostovick (NMFS).

National Marine Fisheries Service: Garth Griffin, Steve Stone, Tony A. Lowery, Bradley S. Weinlaeder, Ambrose Jearld, Gary C. Matlock (NOS), William Chappell, Miriam McCall (OGC), Marilyn Luipold and Gary Stauffer.

National Ocean Service: John J. McDonough, III, Samuel P. Orlando, Jr., David M. Lott, Craig W. Russell, Jr., Christopher G. Clement, Christina C. Johnson, Stephen R. Gittings, Laura A. Francis, Douglas A. Friske (OMAO), George A. Ringstad (OMAO), Lt. Cdr. Michele G. Bullock (OMAO), Nina H. Garfield, Kathryn L. Ries, Stephen T. Morrison, Thomas J. Culliton, Davida G. Remer, Cdr. Jonathan W. Bailey, Michael L. Aslaksen, David B. Zilkoski, Edward D. Allen, Charles J. Klein, III, Lt. Cdr. William B. Kearse (OMAO), John Lindsay, Thomas F. LaPointe, Arthur E. Paterson, Stephen T. Morrison, Susan H. Buda, Denise P. Yver, Ronald G. Gouguet, Dwight D. Trueblood, Cynthia B. Fowler, Megan E. Treml, Timothy R. Goodspeed,



Telfair H. Brown, Sr./USCG

Ed Levine (left) and Charles Henry (middle) of NOAA's Office of Response and Restoration were honored by Secretary of Transportation Norman Y. Mineta May 8 for their role in the U.S. response to the oil spill in the Galapagos Islands in January.

David W. Kaiser, Billy D. Causey, Theodore M. Beuttler (OGC), June E. Cradick, Joanne M. Delaney, Mark R. Haflich (DOC OGC), Benjamin D. Haskell, Vernon R. Leeworthy and Peter C. Wiley.

National Environmental Satellite, Data and Information Service: Kenneth D. Davidson, John Paquette, John Pereira, Linda A. Brown, Christopher D. Elvidge and Carolyn Alderman.

National Weather Service: Sallie Nolan, Steve Collins, Frances Misenheimer, Daniel Starosta, Sue Murphy, Carl L. Peabody, Carl Gorski, Graham Stork, Bartlett C. Hagemeyer, Solomon G. Summer, Armando L. Garza, Edwin C. Clark, Richard A. Stitt and Michael S. Lewis.

Office of Oceanic and Atmospheric Research: Julius F. Craynock, III, Georgia Madrid, Daniel Law, Scott A. McLaughlin, Sergio A. Pezoa, Madison J. Post, Robert Webster, David C. Welsh, Daniel E. Wolfe and David A. Merritt.

Diversity Spectrum Awards

Support Category: Joy Hayden.

Manager Category: David B. Reed, Bruce Bauck and Bob Diaz.

Analyst Category: Nina Petrovich, Janice M. Sylvestre and Ann Thorne.

Group: OFA/CASC Diversity Council, Northwest Fisheries Science Center/Center Management Team and NESDIS Satellite Operations Control Center.

Concept: National Ocean Service Special Projects and Office of Finance and Administration.

Best Practices Award

National Marine Fisheries Service: Robert N. Iwamoto, Julie Peddy, Joan Palmer, James M. Nance, Thomas E. Bigford and John T. Everett.

National Weather Service: William T. Davis and Jay del Cano.

Office of Oceanic and Atmospheric Research: Richard Beeler.

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Awards

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Technology Transfer Award

David A. Merritt, Kenneth P. Moran, Madison J. Post, David C. Welsh and Thomas Ayers.

Hammer Award

Gary Matlock, Michael Fraser, Rebecca Lent, Ronald G. Rinaldo, Mariam McCall, Sarah McLaughlin, Pasquale J. Scida, Brad McHale, Mark Murray-Brown, Marie J. Uitterhoeve, Bobbie Browning, Mike McEwen, Steve Garelick and Anne Cleaver.

Employees of the Month

John W. Hill, Ross Dickman and Elaine Prins.

Team Members of the Month

Danny Dillon, John Graves and James Ramer.

Environmental Hero Award

Francis Paul Spadaro and Mari Lou Livingood. ☺



Dane Konop/NOAA

NOAA Administrator Award winners Gary Stauffer and Marilyn Luipold joined other honorees for a buffet breakfast before the awards ceremony.

Fish Surveys

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didn't work, so it could be changed. They compared it to the manual system by entering data from previous logs, and discovered errors in the way the Fisheries Scientific Computer System was doing things so we could fix it."

The first Fisheries Scientific Computer System was installed aboard *Albatross IV* and successfully tested last fall.

The installation did not happen painlessly.

"The Fisheries Scientific Computer System is a front line system. We were paranoid about the system going down; we didn't want to lose (data from) a single fish. We made a backup system that would always be able to recover the old system," Shields said.

"We were out there on all shifts. At one point they were doing both systems," Benigni said. "We compared the Fisheries Scientific Computer System results against the manual records. There were periods of huge tension to get things working. We had to finish recording the data from one station before starting the next station. Everyone was always patient, and they were willing to slow the ship down if we had to. We never did, but it was good to know they would."

Shields added, "We were concerned that if our system didn't work, it would be disastrous. Ship time is about \$12,000 a day, so it was really stressful. I don't think people understood that."

The system's hardware suite consists of two redundant network servers and three each of the following at the sampling locations: PC with touch-screen terminal, digitized fish measuring board, label printer, bar code scanner and digitized weight scale.

Touch screens are used to enter

species type, gender, maturity stage, stomach contents and so on. Fish boards are used to measure lengths. Printers generate identification labels for samples.

The system performs all sub-sampling calculations and runs self-audits to find data entry errors and other inconsistencies.

An "event logger" developed by software engineer Tom Stepka starts up at the beginning of each trawl and runs for its duration, providing the station number and the ship's precise geographic position, speed, water depth, duration of tow and other information essential to the overall picture.

The data are sent back to shore so analysts can check for consistency while the ship is still out at sea, which enabled the people on the ship to focus on the system itself and to get feedback if there were problems with the data.

Dave Hiltz of the Northeast Fisheries Science Center built layers into the fisheries database to make it user-friendly, enabling easier access to the new data as they came in.

According to Shields, the Fisheries Scientific Computer System had to be safeguarded against "biological threats." A renegade lobster with a great attachment to the fish board nearly severed a cable linking the board to the computer, setting off a panic call from the sampling station.

Despite these unanticipated hurdles, the new system passed the test and began operation on *Albatross IV* during its 2001 spring trawl. The test trawl ended in April.

"The biggest thing was that we did it on time and within budget," Benigni said. "But the best thing was working with the scientists and *Albatross* crew. They were extremely dedicated, and their enthusiasm made the work a lot of fun. That was the best part." ☺

Sellner

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has been for some time,” he says, hence the warning that always accompanies human consumption of raw shellfish, which can accumulate toxins by eating the poisonous phytoplankton.

As the coordinator of the federal harmful algal bloom program, which includes the National Science Foundation, the Environmental Protection Agency, the Office of Naval Research and NASA, his responsibility is “to make sure that all the agencies’ interests are addressed,” he says. “I interact with our partners in those other agencies and we come up with research topics of interest for each agency, which we then advertise in a *Federal Register* announcement.”

He receives all the research proposals that come in, then distributes them for peer review. “These (reviewers) are all colleagues of mine. I know the majority of them. I came out of the harmful algal bloom research community,” he says. It’s an advantage that allows him “to interact on a personal level with them. The people who are out there submitting proposals can feel confident that they’re going to get a straight answer from me,” he says.

Sellner has spent his entire professional career as a phytoplankton researcher and research administrator. A native of upstate New York, he received an undergraduate degree in biology from Clark University in Wooster, Mass., his masters in marine science from the Baruch Institute of the University of South Carolina, and his Ph.D. in oceanography from Dalhousie University in Halifax, Nova Scotia. He then spent twenty years as a researcher at the Academy of Natural Science in Philadelphia before coming to NOAA in 1997

Students Receive BIG Scholarships



Juan Tricoche/DOC

The NOAA Silver Spring, Md., chapter of Blacks in Government presented \$1,000 scholarships to three local high school seniors May 24. Pictured from left to right are BIG president Bernard Cody, students Alexis Tobe, Charlotte Okwudi and Erica Webster, and singer and musician Michael Orr, who performed at the awards ceremony.

to head up the National Ocean Service’s harmful algal bloom program.

“I really miss research,” he says. But being a research administrator is “a real high, a real turn on because I try to make sure that the best science is supported. It ensures that public dollars are going to the best science.”

But there is a downside to being a bureaucrat, he says. “The low is just getting wrapped up in the bureaucracy, processing grants or making sure the money gets out to the researchers.”

Sellner says with a hint of regret in his voice, “I’m leaving NOAA. August 24 is my last day. It’s going to be difficult leaving the cutting edge harmful algal bloom program in the U.S.”

He’ll take over as the director of the Chesapeake Research Consortium in Edgewater, Md., which represents six institutions and universities in the Chesapeake Bay region.

“It’s going to be exciting,” he says, “because I get to do some

harmful algal bloom research and cover many other issues that relate to problems in the Chesapeake, such as land use.”

A committed family man, the move will allow him to spend more time with his wife, Stella, and daughters, Sarah and Emily, at their home south of Annapolis, only ten minutes from his new office. “I really enjoy being with my family,” he says. “We try to make every day special.” ☺

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