

THE UNIVERSITY OF TEXAS AT AUSTIN
MARINE SCIENCE INSTITUTE
PORT ARANSAS, TEXAS

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The Lazarette Gazette

NEWS FROM

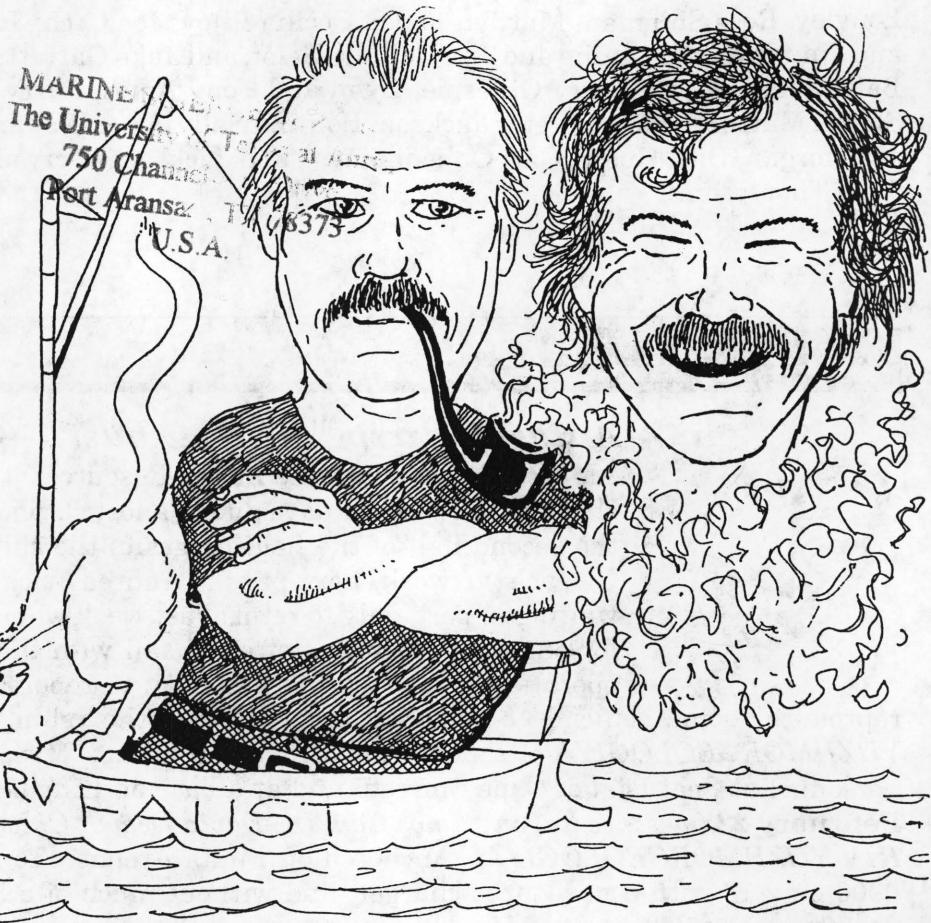
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MSI REUNION — APRIL 4, 5, 6

Plans are nearing completion for the

Marine Science Institute reunion. Registration will begin at 1:00 p.m. on Friday, April 4, with an open house and facilities tour in the afternoon. There will be a beach party Friday evening. A full day of activities, old timer stories and cruise on the *R/V LONGHORN* are planned for Saturday with a BBQ in the evening. Breakfast will be available in the cafeteria Sunday morning and tours for anyone who missed them on Friday. Please confirm your attendance to Patty Webb or John Thompson if you have not already done so. You may pay upon arrival if you wish (\$25 each), but please confirm your attendance so plans for the meals can be made. The *R/V FAUST* (Parker — Reunion chairman, Ph.D. 1977) on the masthead is a reminder to please send *before* and *after* photos if you have them. Also don't forget to bring other snapshots and slides of the *good-old-days*.

List of attendees with confirmed attendance — Donald and Marjorie Wohlschlag, Bill and Karen Longley, Ross Shipman, Marilyn Fogel, Cecilia Riley, Joe Cech, Joan and Scott Holt, Evan Royal (Parker) and Jimmy Cantlin, Julie and Jim Collins, Helen and Jake Garrett, Lexa Crane (Frishman), Carol and John Batterton, Bill and Terry Gillespie, Lynn and Tony Amos, Larry Powers, Faust and Julie Parker, Brian Sharp, Martin Arhelger, Peter Jackson, Bob and Sally Jones, Pat and Lynn Parker, B.J. and Jean Copeland, Joe Morgan, Dick Hoes, Carl Oppenheimer, Rod Jackson, Gerry and Carol Fonken, John Calder, John and Jane Thompson.

Tony's Tidings...



Antarctic trip "bit of a bust" — The eighth year of our program called AMLR (Antarctic Marine Living Resources) turned out to be a bit of a bust. First the ship was delayed for days due to a lost shipment, and then after getting underway for the second half of the field program, the ship blew a crankshaft (as shown by Mike Gibson's artwork, next page). Andrea Wickham spent 24 days at sea and 36 days waiting in port, only to return last week when the cruise was reduced to allow no time for our work. Chuck Rowe did sail with the ship to keep our underway equipment operating. Perhaps the best way to report on the saga of AMLR97 is to partially

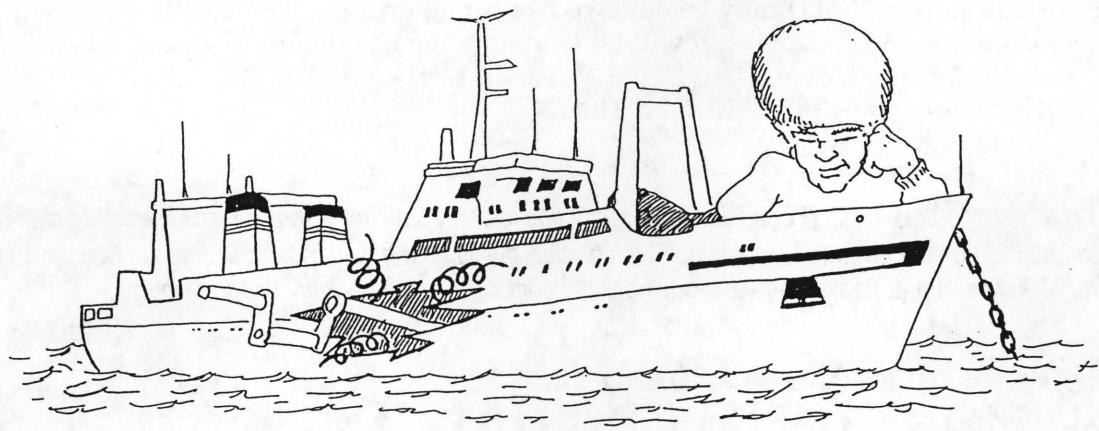
reproduce some official e-mail messages from the ship. The ship is the Russian *R/V YUZHGOROLOGIYA*. Its delay affected three groups of people left in field camps in Antarctica: personnel at Seal Island, Cape Shirreff, and at a base on King George Island called Copacabana.

February 22 (*message to Tony Amos from Dr. David Demer, Chief Scientist, U. S. AMLR Program, aboard R/V YUZHGOROLOGIYA*) Anchored off Punta Arenas. To recapitulate, the AMLR Leg II began at 0900 on 2/18 with a new turbo-charger, and without much of a hitch. However, while transiting to the eastern exit of the Strait of Magellan, things quickly turned 180 degrees. At 1714, a crank-shaft bearing failed (the bushing that connects the crank shaft to the connecting-rod which, in turn connects to the piston). As a result, the connecting-rod shattered and both propulsion and electrical power were temporarily lost.....The following morning, under a magnificent double-rainbow, the hook was dropped off Punta Arenas.....Today, 2/22, an in-situ machining tool and two machinists will arrive from Valparaiso to turn-down the crank-shaft journal.....the major problem is obtaining an appropriately-sized set of connecting-rod bearings. The world is being searched, but it is a weekend.....Captain Marchenko recently requested that the cruise be conducted using only one engine. Due to the obvious safety hazards, I have declined this proposition. Additionally, the trawl operations could not be performed under the power of a single engine.

February 22 (*Andi Wickham*) Hi Tony. Didn't write yesterday because there was nothing new. You apparently get the info before I do. We are planning on sailing the 27th as you wrote. The equipment to repair the ship should be here today (*Actually arrived three weeks later!*).

March 1 (*David Demer*) Tony, Thank-you for your reply. I arranged the services of *POLAR DUKE* to transport island personnel. Although that strategy would've saved us two days, it would have cost the scientists aboard the Duke at least one day. Rennie decided that the lives of the Seal Island inhabitants were not in danger, and that profiting by the *DUKE*'s loss was unjustified..... In the event that we sail on 6 or 7 March, we will do every-other station in the main Elephant Island grid (36 stations); still concluding the cruise on 27 March. The ship problems are causing us all anxiety and inconvenience, and I greatly appreciate your support.

Weekly Report (*David Demer*) We're still at anchor off Punta Arenas following failure of one main engine on 18 February. The most optimistic sailing date is currently 5 March. Machining of the crank-shaft continues and we await arrival of the replacement bearings, possibly tomorrow. The weather in Punta Arenas has been variable between clouds and sun, wind and calm, but generally pleasant. A Magellanic penguin was sighted through a starboard port hole today.



March 4 (David Demer) Due to continuing engine repair operations, the most optimistic sailing date is currently Sunday, 9 March. Additional delays are very possible. Machining of the crank-shaft continues..... Transport of some or all island personnel by the *R/V POLAR DUKE* is being considered..... The *POLAR DUKE* has four more Palmer Station support cruises. The *YUZHGOROLOGIYA*'s net reel was installed too close to the deck and only one-half of the net can be spooled. Consequently, the vessel must be docked, a crane rented, and the shipyard contracted to raise the net reel off the deck. This action will alleviate a somewhat dangerous situation during the set and retrieval of the trawl. Necessary modifications to the stern roller must also be made at this time. A fourth ship-to-shore launch was added to the daily schedule (0830, 1300, 1800, 2400). The action boosted both moral and efficiency. With luck, the ship should be ready to sail on Monday, 10 March. The current cruise plan includes Island operations, approximately two days of standard survey stations, (tentatively 55W and 56W transects), and trawl operations.....

March 6 1.) Today, an individual from the bearing manufacturer will fly from Holland to pick up bearings in France. From there, he will hand-carry the bearings to Broome, the ship's agent, in Santiago. Broome will be waiting at Customs and fly the bearings via private plane from Santiago to Punta Arenas. The bearings should be on the ship by Friday. 2.) The decision has been made to raise the net-reel. The shipyard has begun making the parts and the ship is scheduled to go to the pier on Monday for installation. 3.) With luck, the ship should be ready to sail later on Monday, 10 March.

March 10 (David Demer) The new crank-shaft bearing arrived to the ship on Saturday, 8 March. Today, the ship weighed anchor at approximately 0800 and moved to the Punta Arenas pier. The ship plans to stay at the pier until the engine repairs and net reel modifications are completed. Following engine reassembly, tests, and final inspections, the ship may sail on Wednesday morning. Seal Islanders report that they are fine and remain busy dismantling the observation blinds. The *POLAR DUKE* will pickup both Chilean and U.S. personnel at Cape Shirreff and arrive in Punta Arenas on or about 17 March. The *R/V YUZHGOROLOGIYA* will be used to pickup Seal Island supplies and personnel and transport them to Cape Shirreff, as well as close Cape Shirreff and Copacabana bases. In the event that the *YUZHGOROLOGIYA* is not soon operable, Copacabana and Seal Island personnel have permission to come out on the *POLAR DUKE* on 01 April for the 04 April in-port date. However, this option would require the *POLAR DUKE* to adjust their science activities, and will therefore be avoided if possible. The weather in Punta Arenas has been a little cloudier and windier than usual judging from only three weeks experience.

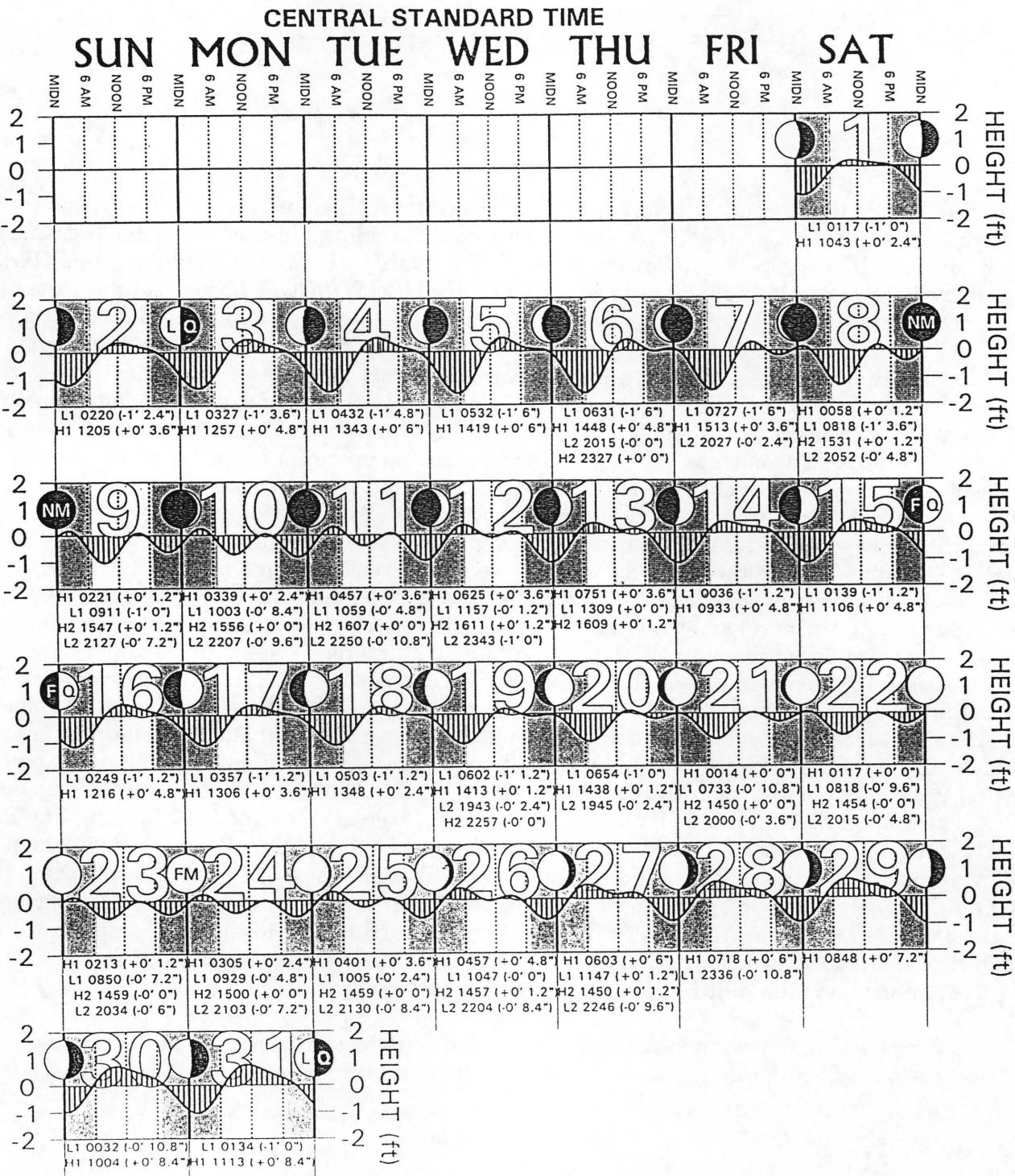
March 12 (David Demer) The following is the most recent plan: Engine reassembly should be completed by noon. Engine tests should be conducted pier-side from 1200-1600. Underway tests and inspections

should occur from 1600-2300. Requisite bearing inspections should be conducted from 2400-0600. If all goes well, the ship should sail at 0830 on 13 March..... **All CTD operations have been canceled and the conducting cable** (our operations) **is being swapped for one trawl warp.** All "underway" data will be collected and an autonomous CTD may be deployed as time permits. The IKMT cable will remain atop the other warp so that the mid-water trawl will be available for use during the first 2 days of island operations.

Note: The ship finally sailed at 1430, 13 March 1997

—Tony Amos

Tide Predictions for March (For tidal heights at the tide tower, South Jetty, the Aransas Pass. Heights are in feet above or below mean sea level. The shaded area is nighttime. Remember, this is tidal height, not tidal current. Slack water is when the wiggly line crosses the MSL line, not at peaks and valleys, where the tidal current will be a full flood or ebb.)



Weather Report for 6 January 1997 - 2 February 1997

3 - 9 FEB 1997		MON	TUE	WED	THU	FRI	SAT	SUN	MEAN
DATE		03	04	05	06	07	08	09	
AIR TEMP	HIGH	74.6	74.6	61.8	62.7	67.4	53.6	56.1	64.4
AIR TEMP	LOW	58.6	57.7	55.4	57.7	49.6	45.8	44.4	52.7
SEA TEMP	LOW	--	--	--	--	--	--	--	--
RAINFALL	TOTAL	0.00	0.00	0.00	0.00	0.10	0.00	0.15	0.25

10 - 16 FEB 1997		MON	TUE	WED	THU	FRI	SAT	SUN	MEAN
DATE		10	11	12	13	14	15	16	
AIR TEMP	HIGH	55.7	61.7	68.3	53.6	54.6	59.9	62.9	59.5
AIR TEMP	LOW	47.6	49.6	51.4	46.9	47.1	42.6	48.9	47.7
SEA TEMP	LOW	--	--	--	--	--	--	--	--
RAINFALL	TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

17 - 23 FEB 1997		MON	TUE	WED	THU	FRI	SAT	SUN	MEAN
DATE		17	18	19	20	21	22	23	
AIR TEMP	HIGH	66.9	70.3	71.9	69.9	79.3	61.8	60.6	68.7
AIR TEMP	LOW	48.9	60.6	62.7	63.1	58.0	50.5	56.8	57.2
SEA TEMP	LOW	--	--	61.5	--	61.6	--	58.5	60.5
RAINFALL	TOTAL	0.00	0.00	0.00	1.30	0.00	0.00	0.04	1.34

24 FEB - 2 MAR 1997		MON	TUE	WED	THU	FRI	SAT	SUN	MEAN
DATE		24	25	26	27	28	01	02	
AIR TEMP	HIGH	62.0	63.6	66.7	64.7	71.7	75.5	76.8	68.7
AIR TEMP	LOW	55.2	52.5	55.5	57.9	60.8	66.5	60.8	58.4
SEA TEMP	LOW	--	--	59.0	--	--	--	60.1	--
RAINFALL	TOTAL	0.15	0.02	0.00	0.06	0.00	0.00	0.00	0.23

3 - 9 MAR 1997		MON	TUE	WED	THU	FRI	SAT	SUN	MEAN
DATE		03	04	05	06	07	08	09	
AIR TEMP	HIGH	72.8	75.3	77.9	64.5	74.6	77.3	76.8	72.1
AIR TEMP	LOW	56.4	64.2	63.5	53.7	62.2	65.6	67.2	61.8
SEA TEMP	LOW	--	63.4	--	57.3	--	63.2	--	61.3
RAINFALL	TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

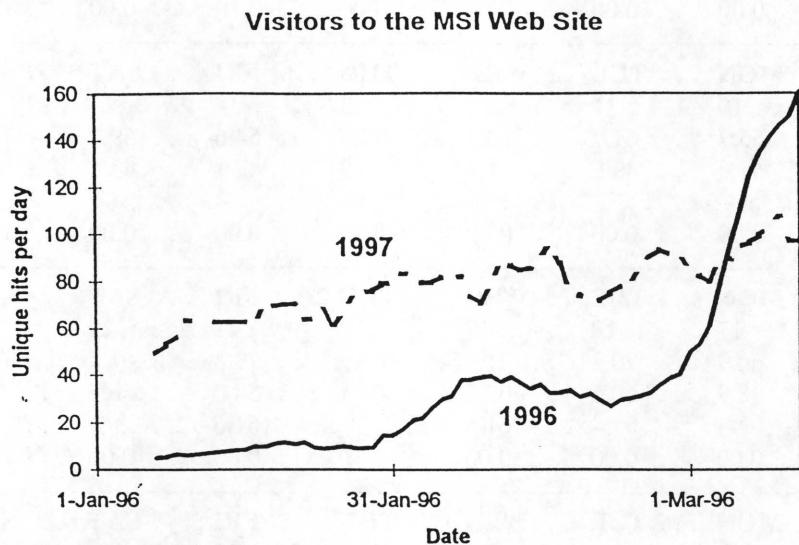
10 - 16 MAR 1997		MON	TUE	WED	THU	FRI	SAT	SUN	MEAN
DATE		10	11	12	13	14	15	16	
AIR TEMP	HIGH	72.1	69.2	71.4	75.5	75.5	64.5	72.3	71.5
AIR TEMP	LOW	66.3	66.2	64.0	65.1	56.3	53.9	64.5	62.3
SEA TEMP	LOW	65.3	--	63.6	--	66.2	--	63.5	64.6
RAINFALL	TOTAL	0.06	1.25	0.59	0.00	0.00	0.00	3.52	5.42

—Tony Amos

Seminars

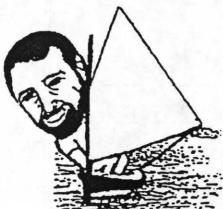
- Dr. Lisa Campbell, Texas A & M, College Station, *The importance of prochlorococcus to community structure in the North Pacific subtropical gyre*, Friday, February 21.
- Dr. Tracy Villareal, University of Massachusetts, *Biogeochemical implications and physiology of vertical migration by open ocean phytoplankton*, Tuesday, March 18, 10:45 a.m. at the Visitor Center Auditorium.

Recent Usage of the MSI Web Site



So far this year, the MSI web site is enjoying even greater popularity than it did this time last year. The number of visitors to the site each day averaged 69 in January, 85 in February, and is up to 92 so far in March. The number visitors per month was between 2100 and 2400 in both January and February. It looks as though our site will reach far more people this year than last, despite the short-lived spike in the number of hits during March 1996 (which was a result of our attempts to get other sites to establish links to our site). The MSI web site is constantly updated. Keep checking back for new improvements.

—Lee Fuiman



Irish Pennants

Texas Coastal Issues Conference — March 24 and 25 — The Texas General Land Office will host the first annual Texas Coastal Issues Conference on March 24 and 25, 1997, in Corpus Christi at the Bayfront Convention Center. The conference will bring together public officials, technical experts, industry, public interest groups, and coastal area residents to assess the state of the coast, discuss coastal policy directions and share ideas and technologies for improved coastal management and the solution of coastal problems. Workshop topics will include the Texas Coastal Management Program; shorefront protection; wetland conservation, restoration, and enhancement; coastal information management systems; and emerging coastal technologies. For more information, call Dorothy Browne at 512-475-1468 or 1-800-854-BEACH. The e-mail address is dbrowne@glo.state.tex.us.

Letters to the editor

■ I regularly get inquiries about MSI and the marine science degree due to my being listed as the contact person on the web page. Some are routine, others more interesting. This has to be the most unique so far: *Hi scott, im 13 and this university is cool. I want to major in marine biology, and minor in music/art. I want to make my own band. I need to know what courses to take so i know how to do effects and all that. please e-mail me and tell me how.*

(Many thanks to Scott Holt for sending the above—which is reproduced exactly as written.)

■ Your mention of Bill Gillespie (masthead of the last issue of the *Lazarette Gazette*) brings to mind another story. We were out on Redfish Bay in a small boat doing a diurnal curve when a passing boat's wake caused a rocking motion. The bottle of concentrated acid used for acidifying the Winkler oxygen samples spilled on the boat's seat occupied by Bill. Bill slid across the seat, right through the acid which proceeded to eat a hole in his trousers. After that Bill was always complimented on his "assifying" technique in the Winkler procedure. I certainly wish I could make the reunion. A couple that are friends of ours went to one of your Elderhostels and brought back videos of the station. It certainly has grown. Maybe Barbara and I can make one of them in a few years when I retire.

(Robert J. Beyers, Ph.D., 1962)

■ How have you been these days? Thank you very much for sending me the LazGaz each issue letting me know what is going on at Port Aransas. For the upcoming big event—50th anniversary of UTMSI, I am most delighted to share it with you people and would like to contribute a very little tiny fund although I do not plan to attend. Enclosed is a check in the amount of 200 US dollars; please find it. Thank you again. Best regards,

(Woei-Lih Jeng, Ph.D., 1976)

Marine Education Services

OCEANOGRAPHY DAY —

★ Boy Scout *Oceanography Day* is scheduled for Saturday, April 26. Scouts are required to complete the first six questions on the Oceanography Merit Badge before they may attend. The deadline for submitting the written work is April first. Hundreds of Scouts across Texas are now studying Oceanography and working on their answers, for example Troop 194 in Pleasonton whose Scoutmaster, Grady Schorsch sent the following message: *We spent two hours at the library today and we are going again tomorrow. The boys are enjoying the project. They really know quite a lot already—I'm impressed. I'm glad you advised me to encourage Jeremy to go ahead and do the project. He really does like things dealing with the ocean. He was worried about his writing and I told him you were more concerned with his interest rather than his penmanship. He relaxed after that and really got into the research. Thanks.*

★ Christopher Zelasko, age 12 of Troop 405 in Georgetown supplied the following definition for a "sea" — *A sea is a wave that is beggining to be formed and sometimes called choppy.*

★ Already qualified for attendance at Oceanography Day —

—Corpus Christi: Ken Aoshima, Masato Aoshima, Giorgio Suarez

—Austin: Nicholas Branson, David Sietsema

—Floresville: John Couhig

—Skidmore: Benjamin Craig

—Georgetown: Josh Daleiden, Justin Daleiden, Christopher Zelasko, Creighton Welch, Robert Stephenson, Nate Sparks, Nathan Schroeder, Joseph Rossi, James Dean Poulos, Wesley Morrow, Will McKinnon, Thomas Jones, Charles Heeneman, Brandon Griffin, Chris Foote, Robby Frost, Peter Flinn, Mike Eaton, Byron Davis, Nick Currier, Neal Carlton, Joshua Berger, Matthew Bain, Chris Anderson

—College Station: Mike Edwards,

—Dripping Springs: Nicolas Kosa, Erik Kosa

—San Antonio: Jonathan Kidwell, Michael Martinez, Jason Shell,

—Aransas Pass: Rafal Lecki, Marty Moore, Clinton Williams, Adam Morton, Javier Ruiz, Israel Ruiz, Joshua Morton

—Mercedes: Jacob Lyle, Jason Lyle

—Atascosa: Michael Pue, Daniel Pue

—Kingsville: Stephen Yates

—Pleasanton: Jeremy Huth

—Houston: Matthew Wall, Andrew Harnack, Robert Henderson, James Eicke, Ryan Holeywell, Andrew Rapp, Alex Rapp,

—Jourdanton: Henry Schorsch

—Richmond: Blake Smith

—La Coste: Luis Miranda

—Missouri City: Michael Austin

—Jarrell: James Barker, Donny Davol, Clay Davol, Frank Makal, Trevor Makal, Jason Grubb, Arron Fuller, Carl Gayhart, Chris Johnson

Trip Reports & Travel

Travel ending between February 15 and March 21

→*Allen Davis, Cynthia Faulk, Claire Fernandez, Joan Holt, Jay Rooker*, February 15—16, San Antonio, participate in Southern Division American Fisheries Society midyear meeting.

→*Noe Cantu*, February 11—28, Bayou LaBatre, Alabama, monitor work by the shipyard on the *R/V LONGHORN*.

→*Joan Holt*, February 20—23, Seattle, Washington, participate in World Aquaculture Conference.

→*Connie Arnold, Allen Davis*, February 19—24, Seattle, Washington, present paper at World Aquaculture Conference, *Response of Atlantic Croaker fingerlings to practical diet formulations with varying protein and energy contents*.

→*Juan Lazo*, February 19—24, Seattle, Washington, present paper at the World Aquaculture Conference, *The effect of dietary protein level on growth, feed and protein efficiency and survival of Yellowtail Snapper (*Ocyurus chrysurus*) in culture*.

→*Wayne Gardner*, February 23—26, Washington D. C., attend NAML (National Association of Marine Laboratories) board meeting.

→*Peter Thomas*, February 26—27, College Station, present talk at Sea Grant recruitment workshop.

→*Dean Stockwell, Scott Holt*, February 26—27, College Station, attend Sea Grant recruitment workshop.

→*Terry Whitley*, March 6—7, Huntsville, present paper at Texas Academy of Science Meeting, *Nutrient utilization and biological productivity from freshwater inflows in Nueces Bay for 1990—1996*.

→*Paul Montagna*, March 6—7, Huntsville, present invited paper at Texas Academy of Science Meeting, *Effect of freshwater inflow on infaunal benthos of Texas bays*.

→*Stephen Opsahl*, March 6—9, Tallahassee, Florida, present seminar, *Distribution and cycling of terrigenous dissolved organic matter in the ocean*.

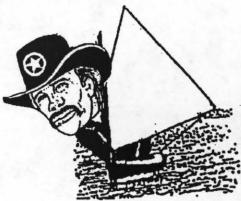
→*Susan Ziegler*, March 5—10, Port Isabel, conduct field work.

→*Beau Hardegree*, March 6—10, Port Isabel, conduct field work.

→*Andi Wickham*, January 9—March 14, Punta Arenas, Chile, join the Research Vessel *YUZHNMORGEOLGIYA* as part of the Antarctic marine living resources program.

Bureaucratic Beatitudes

BLESSED ARE THEY WHO CANCEL THEIR BOAT RESERVATION FORMS WHEN A TRIP IS SCRATCHED



Listen people and aggies, be advised that you need to cancel your boat reservation slip when you do not make a trip. Get yourself up to that office and write *cancel* on the reservation form. Elsewise you may get charged for a trip you didn't make. Contrary, the fiscal office will charge you and you tel'em *nope* and then all that paper and computer mess has to be changed.

BLESSED ARE THEY WHO OBSERVE THE UT VEHICLE RULES

Folks, be advised that you are not supposed to be having any booze when you are operating the UT vehicles and there is to be absolutely no booze inside the vehicles! And be advised also that your kinfolk and buddies have got no business in the UT vehicle unless they have University business at the destination. Those who violate these rules are going to be denied use of the university vehicles. Anyone who is in violation of these rules and is involved in an accident is going to be standing in cow chips up to the eyebrows.

—Walker

Egabrag WoCs

Grand Puisance Filloux II — Following the article in the last issue, I have learned additional factual information about the MSI WWII gun mounts. I also have heard an interesting true story and an exciting false story. First, the facts: *Fort Port Aransas* was short lived—completed in December of 1942 and declared surplus in January 1945; serial numbers of the two 155 M1918 guns (aka GPF — Grand Puisance Filloux) were #1033 and #1038; cost for the two Panama mounts, \$24,726.42; for five timber magazines, \$13,538.47; for the timber plotting room, \$4,464.82. One hundred feet to the back of the gun mounts a 30' fire control station was constructed by the troops with salvaged lumber. According to *Report of Completed Works — Seacoast Fortifications, Fort Port Aransas*, it was "not concealed". With a total height of 63' (it was perched atop a high dune), that is hardly surprising. Sanitation was either extremely casual or required a walk or jeep ride to the barracks as all reports state *not connected to sewer* and *no latrine*. Next, the story: Bill Gillespie remembers when the barracks (destroyed by fire in the late 50's) and guard house still stood in Port Aransas, the guard house being near my own Lantana Street residence. Bill's father, Oscar, was Justice of the Peace in Port Aransas years later, but during the war worked for the Army in Port Aransas, providing a *target* with his boat during searchlight drill. The army would give Oscar courses, times and speeds to run, and then try to find him with their search lights. One time Oscar decided to make it more difficult for the Army (and more fun for him) by quickly reversing and taking other evasive action whenever he was discovered by the search light; unfortunately it was the same time a humorless Army General came to observe the exercise. Next, the battle of Port Aransas: A story is sometimes told of a battle with a surfaced German U-boat. It is an exciting story with shells bursting in the dunes and the Nazi's forced to submerge by the gallant soldiers manning the GPF's at Fort Port Aransas. I wish it were true. About once a year I lead a hike from the Scout Hut to the gun mounts. High in the dunes overlooking Port Aransas and the ship channel it is a great location to work on the Citizenship award for Webelos Scouts, discussing the history of Port Aransas and having refreshments. I wish I could add a gunfight with a U-boat to the agenda. But no history of WWII mentions it, or any gun battle between the

U. S. shore and German U-boats. U-boat captains had standing orders not to fire on coastal installations. Finally, a future possibility for the site: The two Panama Mounts are in a beautiful location and at a height which provides a scenic view of the MSI, the gulf and beach, and the ship channel. At the least there should be a historic marker. But wouldn't this be a great location for a small historic/scenic park? The high dunes should be preserved from development anyway, and parking and access could be on the County Park land adjacent to the area.

—John Thompson

Attaboys

■ On behalf of the staff and students here at Valley View, I want to thank you for bringing the Touch Lab to Austin! Everyone has "raved" about your presentation, the materials, the animals, and having such a wonderful opportunity to see and touch items related to our M.A.R.E. study! Your presence on our campus has made a significant impact—one which I feel sure will carry over to our students and their concern for the ocean. Thanks again for coming and sharing this presentation with us.

(To Maureen Terry from Betty Ann Courtney, Principal of Valley View Elementary, Austin, Texas)

■ On behalf of the Port Aransas Garden Club, my committee and I would like to thank you and the University of Texas Marine Science Institute for the gracious hospitality extended to our organization. Our guests on the tours enjoyed the many exhibits along with our refreshments as they waited for their buses to depart. We feel that everyone at the University went above and beyond in accommodating us. We would like to extend our appreciation to your guard, Tom. He was there on time to open and close and could not have been more obliging. Also, the cheerful lady who helps keep things clean in the building was more than gracious. Please extend our "thanks" to them. Linda, it is with deep appreciation that we thank you and the University for your assistance in helping make our annual "Home Tour" a success.

(To Linda Fuiman from Barbara Watson, Port Aransas Garden Club)

■ From February 23, 1997 to February 28 I was enrolled in the U. of T. Marine Science Institute ELDERHOSTEL program at Port Aransas, Mustang Island. It was a fabulous intensive study program conducted by a most learned and well programmed staff. Our entire group was impressed, indeed, with the generous explanations, knowledge and instructions given in the laboratory, the library and on the *R/V KATY* and the wildlife refuge hikes and presentations by the staff of Judy Reynolds, Coordinator; Rick Tinnin, Director; Jim Cooper, Bus Driver; and Ray Little, Ornithologist and the excellent cafeteria meals prepared by Toni and Sally. My husband, Ross J. Martin, was Director of the University of Illinois College of Engineering Research and Experiment Station and Associate Dean of the College of Engineering. He died before he retired—just as President Everhardt was appointed U. of I. President. The College of Engineering remembers Ross every April with a generous award to an outstanding graduate research student. I remember when you were here as Vice-Chancellor for Academic Affairs after Ross' death. Copies of my letter are being sent to: Dr. Mary Ann Rankin, Dean College of Natural Sciences; Dr. Wayne Gardner, Director, Marine Science Institute; ELDERHOSTEL, Boston, Maine; and Wayne Hunt, Director, Texas ELDERHOSTEL, UT at Austin. You must be very proud of The University of Texas Marine Science Institute, Mustang Island.

(To Dr. Robert M. Berdahl, President, The University of Texas at Austin from Marian Martin)

■ I want to thank you for opening your facility to the Garden Club Home Tour. It is always so special because it gives participants the added treat of viewing your interesting displays and exhibits. Port Aransas is so fortunate to have the university here. Thank you again.

(To John Thompson from Peg Schmidt)

Grants & Contracts

AWARDS UPDATE — Since February 1996, when last this report was updated, MSI researchers have been awarded \$3,385,488 in sponsored research projects.



★ *Environmental Protection Agency*

96-11 **Montagna:** "Developing a New Monitoring Tool for Benthic Organisms in the Gulf of Mexico: Loss of Genetic Variability in Meiofaunal Populations," EPA, R825355-01-0, 12/01/96-11/30/98.

96-23 **Montagna:** "Sediment Quality Assessment of Storm Drain Outfalls and Other Sites in the CCBNEP Study Area," EPA/TNRCC/TAMU—Corpus Christi, PO#14689600, 09/01/96-08/31/97.

★ *National Institutes of Environmental Health Science*

94-38/2,3 **Thomas:** "Endocrine Effects of Reproductive Toxins in Female Fish," NIEHS, 2-R01-ES04214-10/11, 03/01/96-02/28/98.

★ *National Oceanic & Atmospheric Administration*

94-15/3 **Thomas:** "Red Drum Growth Hormone: Production by Eukaryotic Expression Systems, Physiology and Effects of Dietary Administration on Growth," Subcontract, NOAA/Sea Grant Biotechnology Initiative/TAMU-Maryland, SC3527620A, 09/01/96-08/31/97.

95-17/2 **Tinnin:** "Marine Field Experiences for Teachers and Students," NOAA-Sea Grant/TAMU, ET/C-32/404175, 09/01/96-08/31/97.

95-18/2 **Holt, S & Holt, J:** "Recruitment of Estuarine-Dependent Marine Fishes: Growth and Natural Mortality of Larval and Juvenile Recruits," NOAA-Sea Grant/TAMU, R/F-65/404165, 09/01/96-08/31/97.

95-19/2 **Holt, J:** "Microbial Hatchery Technology for the Utilization of Artificial Diets in Intensive Culture of Fish Larvae," NOAA-Sea Grant/TAMU, R/M-41/404157, 09/01/96-08/31/97.

95-23/2,3 **Thomas:** "Steroid Receptor-mediated Mechanisms of Endocrine Disruption in Atlantic Croaker by Chemicals in the Marine Environment," NOAA-Sea Grant/TAMU/Wisconsin), R/MBT-3/404168, 09/01/96-08/31/98.

95-31/2,3 **Thomas:** "Identification of the Ruffe Maturation-inducing Substance and Characterization of Its Receptor," NOAA-Sea Grant/TAMU/Minnesota, 06/01/96-05/31/98.

95-59/2 **Amos:** "Physical Oceanography of the AMLR Study Area for the Southwest Fisheries Science Center," NOAA, #50ABNF600015 Mod 2, 11/01/96-10/31/97.

96-15/1 **Whitledge:** "Investigation of the Origin of Nutrients on the Southeast Bering Sea Shelf in Relation to Dominant Physical and Biological Processes," NOAA/Coastal Ocean Program/TAMU-Sea Grant, 03/01/97-08/31/97.

96-19 **Whitledge:** "Specification for Providing Scientific Support for NOAA's National Estuarine Eutrophication Survey," NOAA, 43AANC600105, 04/29/96-12/31/96.

2660-9702 **Amos:** "Marine Turtles Survey," NOAA/NMFS, 40GANF600155, 10/01/96-09/30/97.

★ National Science Foundation

92-33/3 **Tinnin:** "Adaptation and Implementation of the Marine Activities Resources & Education (MARE) Program to the Texas Gulf Coast," NSF/Univ. Calif, SA1183-21359NM, 05/01/96-04/30/97.

94-01/3 **Whitledge & Thomas:** "Research Experiences for Minority & Women Undergraduates at the Marine Science Institute of The University of Texas at Austin," NSF OCE-9322284, 03/01/96-02/28/97.

94-04/3 **Benner:** "Characterization of Dissolved Organic Matter in Seawater by Ultrafiltration and Chemical Analysis," NSF OCE-9413843, 05/1/96-04/30/97.

94-07/3 **Benner:** "Biological and Photochemical Transformations of Dissolved Organic Matter in a Subtropical Estuarine Ecosystem," NSF DEB-9420652, 03/01/97-02/28/99.

94-08/2 **Benner:** "Bacterial Carbon Metabolism in the Amazon River," NSF/Univ Washington, Sub #540429, 11/01/95-10/31/96.

94-23/3 **Ingall:** "Burial and Preservation of Phosphorus in Marine Sediments: Response to Bottom Water Oxygenation," NSF OCE-9415563, 11/01/96-10/31/97.

94-27/3 **Whitledge/(Suttle):** "Viral Dynamics in the Sea," NSF OCE-9415602, 11/01/96-10/31/97.

95-55/1 **Buskey & Whitledge:** "Why Has the Texas Brown Tide Persisted for Over Five Years?" NSF OCE-9529750, 6/15/97-5/31/97.

95-57 **Thompson:** "Shipboard Scientific Support Equipment," NSF OCE-9530497, 01/01/96-12/31/96.

95-58 **Whitledge:** "Oceanographic Instrumentation," NSF OCE-9530829, 03/25/96-12/31/96.

96-01 **Dunton:** "Ozone Depletion and UV Inhibition of Photosynthesis in Arctic Kelps: Spectral and Temporal Dependence," NSF OPP-96-22483, 06/15/96-05/31/98.

96-28/1 **Whitledge:** "Prolonged Production and Trophic Transfer to Predators: Nutrient and Primary Production Processes at the Inner Front of the SE Bering Sea," NSF OPP-9617236, 03/01/97-02/28/98..

2660-9703 **Thompson:** "Ship Operations—1997," NSF Coop Agrmt OCE-9707821, 01/01/97-12/31/97.

★ Texas Natural Resources conservation Commission

96-09a **Whitledge:** "Biological Monitoring of the Effects of Wastewater Diversions on Primary and Secondary Production in Rincon Delta and Nueces Bay as Indices of Water and Habitat Quality," TNRCC (& City of Corpus Christi), #6600000143, 08/15/96-08/31/97.

96-09b **Whitledge:** "Biological Monitoring of the Effects of Wastewater Diversions on Primary and Secondary Production in Rincon Delta and Nueces Bay as Indices of Water and Habitat Quality," City of Corpus Christi (& TNRCC), UTA97-0049, 11/19/96-11/18/97.

2660-9705 **Holt, J:** "Gathering, Evaluation and synthesis of Technical Information Related to Status of CCBNEP Study Area," EPA/TNRCC #7200000036, 01/01/97-08/31/97.

★ Texas Parks and Wildlife Department

96-25 **Thompson:** "Transport Buoys to Artificial Reef Sites," TPWD, IAC96-0271/#3770562, 9/1/96-8/31/97.

★ Texas Water Development Board

94-24A2 **Whitledge:** "Rincon Bayou-Nueces Marsh Wetlands Restoration and Enhancement Project: Biological Monitoring," TWDB Project 94-483-06 Amendment #2, 10/1/96-09/30/99.

96-27 **Montagna:** "Effect of Freshwater Inflow on Macrobenthos Productivity and Nitrogen Losses in Texas Estuaries," TWDB Contract #97483-199, 09/01/96-08/31/97.

★ U.S. Army Corps of Engineers

96-16 **Dunton:** "Effect of Dredge Deposits on Distribution and Productivity of Seagrasses: An Integrative Model for Laguna Madre," USACE/TAES UTA961267, 04/01/96-12/31/97.

★ U.S. Department of Education

96-07/1,2 **Tinnin:** "Investigating our Blue Planet," USDE/Southwest Educational Development Lab, UTA96-0187 & UTA97-0060, 02/15/96-09/30/97.

★ U.S. Department of Energy

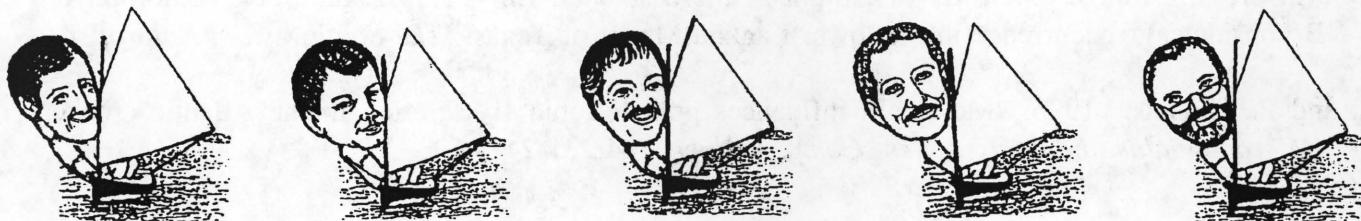
96-26 **Benner:** "Mechanisms of Dissolved Organic Carbon Cycling in an Ocean Margin," USDE, DE-FG03-94ER61907, Amd 02, 09/01/96-08/31/97.

★ U.S. Department of the Interior

92-38/4,5 **Whitledge & Thomas:** "Marine Toxicology Program," Cooperative Agmt 1445-CA09-95-0013, USDI/USGS/NBS, 10/01/95-09/30/97.

96-21/1 **Montagna:** "Selection, Settlement and Growth of Hard-bottom Epifauna in the Mississippi-Alabama Pinnacle Shelf Habitat," USDI-NBS/Continental Shelf Assoc. Ctr #1445-CT09-96-0006, Ltr 11/15/96, 09/30/96-09/29/97.

96-37/1 **Montagna:** "Stability and Change in Gulf of Mexico Chemosynthetic Communities: Data Analysis Support," USDI-MMS/TAMURF-GERG, Contract S700032, 11/1/96-9/30/98.



Publications

New listings since March 1996

- Amos, A.F. (in press). Hydrography of the Elephant Island, Antarctica area: water masses and geostrophy. *AGU Antarctic Research Series*.
- Biddanda, B. and R. Benner. (in press). Major contribution from mesopelagic plankton to heterotrophic metabolism in the upper ocean. *Deep-Sea Research*.
- Buskey, E.J. (in press). Behavioral components of feeding selectivity of the heterotrophic dinoflagellate *Protoperidinium pellucidum*. *Marine Ecology Progress Series*.
- Buskey, E.J., P.A. Montagna, A.F. Amos and T.E. Whitledge. (in press). Disruption of grazer populations as a contributing factor to the initiation of the Texas brown tide algal bloom. *Limnology and Oceanography*.
- Calvert, S.E., R.M. Bustin and E.D. Ingall. 1996. Influence of water column anoxia and sediment supply on the burial and preservation of organic carbon in marine shales. *Geochimica Cosmochimica Acta* 60:1577-1593.
- Chen, F. and C.A. Suttle. 1996. Evolutionary relationships among large double-stranded DNA viruses that infect microalgae and other organisms as inferred from DNA polymerase genes. *Virology* 219:170-178.
- Chen, F., C.A. Suttle and S.M. Short. (in press). Genetic diversity in marine algal virus communities as revealed by sequence analysis of DNA polymerase genes. *Applied Env. Microbiology* 62(8):
- Fuiman, L.A. (in press). What can flatfish ontogenies tell us about pelagic and benthic lifestyles? *J. of Sea Research*.
- Henley, B. and K.H. Dunton. (in press). Effects of nitrogen supply and continuous darkness on growth and photosynthesis of the arctic kelp, *Laminaria solidungula*. *Limnology and Oceanography*.
- Higgs, D.M. and L.A. Fuiman. 1996. Ontogeny of visual and mechanosensory structure and function in Atlantic menhaden. *J. of Exp. Biol.* 199:2619-2629.
- Ingall, E.D., P. Van Cappelen. 1996. Redox stabilization of the atmosphere and oceans by phosphorus-limited marine productivity. *Science* 271:493-496.
- Kaldy, J.E. (in press). Range extension of *Halimeda incrassata* (J. Ellis) J.V. Lamouroux (Chlorophyta, Bryopsidales): occurrence in the lower Laguna Madre of Texas. *The Southwestern Naturalist*.
- Khan, I.A. and P. Thomas. 1996. Melatonin influences gonadotropin II secretion in the Atlantic croaker (*Micropogonias undulatus*). *Gen. Comp. Endocr.* 104:231-242.

- Khan, I. and P. Thomas. 1996. Disruption of neuroendocrine function in Atlantic croaker exposed to Aroclor 1254. *Marine Environmental Research* 42:145-149.
- Khan, I.A. and P. Thomas. (in press). Aroclor 1254-induced alterations in hypothalamic monoamine metabolism in the Atlantic croaker (*Micropogonias undulatus*): Correlation with pituitary gonadotropin release. *Neurotoxicology*.
- King, V, W., S. Ghosh, P. Thomas and C.V. Sullivan. 1997. A receptor for the oocyte maturation-inducing hormone $17\alpha,20\beta,21$ -trihydroxy-4-pregnen-3-one (20 β -S) on ovarian membranes of striped bass. *Biology of Reproduction* 56:266-271.
- Laidley, C.W. and P. Thomas. (in press). Changes in plasma sex binding protein levels associated with ovarian recrudescence in the spotted seatrout (*Cynoscion nebulosus*). *Biology of Reproduction*.
- Lee, K.-S. and K.H. Dunton. (in press). Effects of *in situ* light reduction on the maintenance, growth and partitioning of carbon resources in *Thalassia testudinum*. *Journal of Experimental Marine Biology and Ecology*.
- Lee, K.-S. and K.H. Dunton. 1996. Production and carbon reserve dynamics of the seagrass *Thalassia testudinum* in Corpus Christi Bay, Texas. *Marine Ecology Progress Series*.
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- Pinter, J. and P. Thomas. (in press). The ovarian progestogen receptor in the spotted seatrout, *Cynoscion nebulosus*, demonstrates steroid specificity intermediate between progesterone and glucocorticoid receptors in other vertebrates. *Journal of Steroid Biochemistry and Molecular Biology*.
- Rooker, J.R., Q. Dokken, C. Pattengil and G.J. Holt. (in press). Fish assemblages on artificial and natural reefs in the Flower Garden Banks National Marine Sanctuary, U.S.A. *Coral Reefs*.
- Rooker, J.R., G.J. Holt and S.A. Holt. (in press). Condition of larval and juvenile red drum (*Sciaenops ocellatus*) from estuarine nursery habitats. *Marine Biology*.
- Spies, R.B. and P. Thomas. (in press). Reproductive and endocrine status of mature female kelp bass *Paralabrax clathratus* from a contaminated site in the Southern California Bight and estrogen receptor binding of DDTs. *Environmental Toxicology and Chemistry*.
- Street, G.T., G. Lotufo, P. Montagna and J. Fleeger. (in press). Loss of genetic diversity in a meiobenthic copepod exposed to a xenobiotic. *Journal of Exp. Mar. Biol. and Ecol.*
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Zhu, Y. and P. Thomas. (in press). Studies on the physiology of somatolactin secretion in red drum and Atlantic croaker. *Fish Physiology and Biochemistry*.

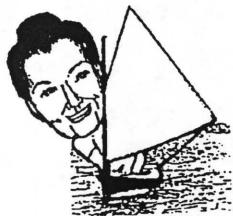
Zhu, Y. and P. Thomas. 1997. Effects of somatolactin in melanosome aggregation in the melanophores of red drum (*Sciaenops ocellatus*) scales. *General and Comparative Endocrinology* 105:127-133.

Zhu, Y. and P. Thomas. 1996. Elevations of somatolactin in plasma and pituitaries and increased α -MSH cell activity in red drum exposed to black background and decreased illumination. *General and Comparative Endocrinology* 101:21-31.



In keeping with the "50th Anniversary" - I thought the Lazgaz readers would find the following facts interesting. I have totalled the number of contributions recorded since 1945. The number of "refereed publications" recorded totals to 1,392 minus 215 assigned to GGL equals 1,177 for UTMSI researchers. The number of "Technical Reports" recorded since 1948 totals to 171 and the number of "Miscellaneous Publications" recorded since 1947 totals to 245.
—Patty Webb

Library



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General Libraries Automated Book Purchase Plan —

GB 1399.6 M36 1997 MSL

Manual of physico chemical analysis of aquatic sediments.

Edited by: Alena Mudroch, Jose M. Azcue & Paul Mudroch
CRC Lewis Publishers. 1977

QL 365.53 AL R89 1996 MSL

The venomous and poisonous marine invertebrates of the Indian Ocean.

Findlay E. Russell & Rachakonda Nagabhushanam

Science Publisher, Inc. 1996

HT 395 G7 C62 1996 MSL

Coastal recreation management: the sustainable development of maritime leisure.

Edited by: Tim Godhead & David Johnson

E. & FN Spon (Chapman & Hall). 1996

Mary Anderson Abell Library Funds —

QC 639.8 S87 1996 MSL

Survival strategies in early life stages of marine resources

Edited by: Yoshiro Watnabe, Yoh Yamashita & Yoshioki Ooseki

A. A. Balkema.

Marine Science Advisory Council —

GC 984 T4 N6 1995 MSL

The Changing Climate of Texas

Jim Norwinde, et. al.

Texas A & M University

Exchange/Gifts to the Library —

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Understanding our dynamic earth through ocean drilling

Joint Oceanographic Institutions.

QE 566 F56 B74 1985 MSL

The flower gardens: a compendium of information, Gulf of Mexico OCS region

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GC 228.6 N67 S35 1996 MSL

On the world ocean circulation: Volume 1 — some global features / North Atlantic circulation

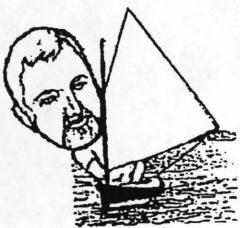
William J. Schmitz, Jr.

Woods Hole.

GC 30.5 C37 1995 MSL

Careers in oceanography and marine-related fields

The Oceanography Society.



My computer screen saver is a picture series of spectacular sailing disasters—a reminder to me that there are at least some things worse than sitting in the office. Perhaps a similar reason motivates the publication of the woeful messages to Tony Amos from the Antarctic—our few minor problems with the shipyard, and the inconvenience of doing work on the *R/V LONGHORN* in Alabama, are trivial indeed. Now that *U. S. News and World Report* has placed Texas A & M within the top 50 in their ranking of America's best colleges, Texas Ranger Walker should include *aggies* within the term *people* rather than refer to *aggies* as a separate category. An article in the *Texas Alcalde* seeks to minimize the significance of A & M's ascendancy and UT's drop to the second tier, while *Texas Monthly* features the *aggies* this month with a largely complimentary article. But suddenly, there is good news for The University of Texas—Dr. Flawn's appointment as interim President. We at MSI may no longer be able to enjoy as great a portion of the time and counsel of our Marine Advisory Council member now that he will have active responsibility for all The University, nevertheless, what great news. There is probably not another person in The University with Dr. Flawn's knowledge of MSI, which includes a term as MSI's Acting Director and extends back more than 30 years. It was in that 30 years plus era that I received my first letter from Dr. Flawn, and I remember it clearly. It was short and to the point. As a neophyte in the world of academics, I had termed our research program in Marine Geology as our *Department of Marine Geology*. *Dear Mr. Thompson: There is no Department of Marine Geology at The University of Texas. Yours very truly, Peter T. Flawn.* It is great to have Dr. Flawn return, but I must now be

more careful what I write.

—John Thompson