
An example Abstract for the 17th annual Meeting

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An informative abstract contains a statement of the problem and its significance, study objectives, principal findings, and key conclusions. State your results and conclusions and avoid statements like, "the changes in the fish populations after the regulation will be discussed." Remember, a well written abstract is the Program Committee's only measure of the quality of the presentation.

Non-student presentation

INSIDE:
GRANT GILMORE TALKS ABOUT THE GALAPAGOS
WHO WAS DON FELIPE AND WHY SHOULD YOU CARE
WHAT'S THIS I HEAR ABOUT DEAD CATFISH?
OWAA - FAN - SCIENCE FAIRS
MARINE FISHERIES IN THE AFS SOUTHERN DIVISION
AND MORE!!!!!!!!!!

Second Call For Papers

Ecosystems and Habitat: Research, Management, and Restoration

17th Annual Meeting of the Florida Chapter American Fisheries Society
Withlacoochee Training Center, Brooksville, Florida, 25-27 February 1997

The Florida Chapter American Fisheries Society will convene its 17th Annual Meeting at the Withlacoochee Training Center, Brooksville, 25 February 1997. The meeting's theme is "Ecosystems and Habitat: Research, Management, and Restoration." These are important topics to fisheries professionals in Florida in light of the demands of our increasing population and urbanization and their impacts on the environment. In addition to the technical sessions, the Florida Chapter will hold its annual business meeting on 26 February 1997. Other highlights will be the chance to meet and network with other fisheries professionals, socializing at the nightly bonfires, and the Chapter's outstanding raffle. Mark your calendar and plan to attend.

While we encourage submissions that pertain to the meeting's theme, any paper dealing with aquatic organisms, fisheries management, aquatic ecology, or the marine or freshwater environments will be considered. Oral presentations are limited to 20 minutes and the time limit will be strictly enforced. The recommended format is a 15-minute presentation followed by a 5-minute question-and-answer period. Two by two slides in horizontal format are preferred, but the Withlacoochee Training Center has a projection VCR. We won't prohibit other media such as computer projection screens, but it will be the presenter's responsibility to provide and setup the equipment.

Abstracts must be submitted by **7 January 1997** in the format shown in the example on the reverse. List the authors' names as they should be printed in the program and abstract book. If the presenter is not the first author, indicate the presenter with an asterisk. Please include complete addresses and phone numbers for all authors, and, if available, the FAX number and e-mail address for the presenter. Abstracts should be 200 words or less and concisely state the problem and its significance, study objectives, principal findings, and key conclusions. Avoid statements like "the impacts of the regulation on the bass population will be discussed." Indicate following the body of the abstract whether the presenter is a student or non-student. Remember that your abstract is all the Program Committee has to judge the merit of the presentation, make it as informative as possible.

Submit the abstracts to **Larry Connor**, Program Committee Chair, Florida Game and Fresh Water Fish Commission, PO Box 1903, Eustis, FL 32727-1903, or by e-mail at flconnor@aol.com. We prefer to get the abstracts electronically either on disk or by e-mail. Our experiences with e-mail at Tampa '95 showed that e-mailing files through the Internet is less than perfect, so you may need to follow up with a hard copy or disk. The file should be in WordPerfect and in a PC compatible format. If you use a Mac or can't send an electronic copy, submit a good quality hard copy as a last resort. FAX's are not acceptable. **The Florida Chapter does not waive registration fees for participants in the technical sessions.**

Student Travel Grants

The Florida Chapter American Fisheries Society awards a limited number of travel grants to assist students attending the Annual Meeting. These grants cover the cost of meals and lodging. Registration fees are not waived. Contact **Bob McMichael**, Florida Marine Research Institute, 100 8th Avenue SE, St. Petersburg, FL 33701-5095, (813) 896-8626 for more information.

Symposia and Other Special Sessions

If you have a proposal for a topical symposium, workshop, or other special session, contact **Larry Connor**, Program Committee Chair, Florida Game and Fresh Water Fish Commission, PO Box 1903, Eustis, FL 32727-1903; (352) 357-6631 before **7 December 1996** for information.

25, 1996, the National Oceanic and Atmospheric Administration released its finalized plan for managing the Florida Keys National Marine Sanctuary. A single 'replenishment reserve' or 'no-take area' was designated after three had been proposed in the earlier draft plan. [Assoc Press]

The above news items were derived from weekly summaries compiled by Gene Buck, Senior Analyst, Congressional Research Service. These summaries appear on several electronic mailing lists such as the AFS list. I have extracted items that I thought were topical to Florida or were weird enough to be of interest to the membership - Peter Hood.

Upcoming Meetings

Southeastern Association of Fish and Wildlife Agencies Annual Meeting, Oct. 6-9, 1996 in Hot Springs, AR.

20th Annual Meeting of the Florida Aquatic Plant Management Society, Oct. 8-10, 1996 in Fort Meyers, FL. For more information, contact S. Redovan (p:941-694-2174).

Third Joint Conference of the Seafood Science and Technological Society of the Americas and the Atlantic Fisheries Technological Society, November 3-6, 1996 in Clearwater Beach, FL. Contact Steve Otwell, SST Exec Director, Food Sci & Human Nutrition Dept., University of FL, Gainesville, FL 32611 (p:352-392-4221; f:352-392-8594) for more information.

International Symposium on the Role of Forage Fishes in Marine Ecosystems, Nov 13-15 in Anchorage, Alaska. Contact Brenda Baxter, Alaska Sea Grant College Program, Univ. of Alaska, PO Box 755040, Fairbanks AK 99775-5040 (p:907-474-6701; f:907-474-6285; e:fnbrm1@aurora.alaska.edu) for more information

16th Annual International Symposium of the North American Lake Management Society, Nov. 13-16, 1996 in Minneapolis, MN. Contact NALMS, PO Box 101294 Denver, CO 80250 (p:303-781-8287) for more information.

Seventh International Zebra Mussel and Aquatic Nuisance Species Conference, Jan. 28-31, 1997 in New Orleans, LA. Contact Conference Administrator, 567 Roy St., Pembroke, ON K8A6R6 (p:1-8 0 0 - 8 6 8 - 8 7 7 6 ; w:<http://www.foxfiresys.com/zebraconf/>)

17th Annual Meeting of the Florida Chapter of the American Fisheries Society, Feb. 25-27, 1997 at the Withlacoochee State Forest Training Center, Brooksville, FL. Contact Larry Connor, FGFWFC, PO Box 1903, Eustis, FL 32727-1903 (904-357-6631) for more information.

Third International Ocean Pollution Symposium, Apr. 6-11, 1997 at Harbor Branch Oceanographic Institution in Ft. Pierce, FL. For more information, contact Iver Duedall, Organizing Committee Chairman, Division of Marine and Environmental Systems, Florida Institute of Technology, Melbourne, FL 32901 (f:407-984-8461, e:iops@fit.edu) for more information.

Public hearings will be held on the proposal before it is submitted to the Secretary of Commerce for regulatory promulgation. [Assoc Press]

Florida Net Ban. On Sept. 9, 1996, a Wakulla County shrimper had illegal fishing charges dismissed by a Wakulla County court because the FL net ban language did not clearly specify whether nets were banned within 3 statute miles or within 3 nautical miles of the Gulf Coast. The Court ruled that the FL Marine Fisheries Commission improperly interpreted the ban to apply within 3 nautical miles of the Gulf Coast without sufficient cause rather than limit the ban to within 3 statute miles of the coast. The State has indicated that it would likely appeal this ruling. [Assoc Press]

Heroin Concealed in Crabs. On Sept. 9, 1996, Taiwanese investigators discovered more than 11 pounds of heroin stuffed inside 57 hollow crabs amid a one-ton shipment of frozen crabs arriving in Taiwan from Thailand. [Reuters]

Colorado Piranhas. On Sept. 2 and 5, 1996, two piranhas were caught by anglers from different waters in the upper Colorado River drainage in Colorado. Biologists are concerned that aquarium pets have been released, but believe waters are too cold to support a sustainable population of these fish. [Assoc Press]

Florida Aquarium Financial Losses. On Sept. 3, 1996, the Florida Aquarium (Tampa) released financial statements indicating that it lost \$2.3 million for the quarter ending July 31, 1996 -- a loss of about twice the rate of 1995. Attendance declined 40% from this quarter last year, while donations are only a third of that received for same period in 1995. [Assoc Press]

Chernobyl Carp Appear Undamaged.

On Sept. 2, 1996, Univ. of Georgia researchers announced that results of studies on carp in ponds near the Chernobyl nuclear disaster site will be published in the October 1996 issue of *Eco-Toxicology*, showing no evidence in genetic damage resulting in changes in appearance. However, blood analysis gave evidence of aneuploidy -- extra DNA not contributing to the genetic character of the fish. [London Telegraph via Greenwire]

Magnuson Act. On the evening of Sept. 18, 1996, S. 39 -- the Sustainable Fisheries Act -- was brought to the Senate floor for debate, with S. 39 passing the Senate on Sept. 19 by a vote of 100-0. This measure would extend the authorization of appropriations for three years and address concerns including individual fishing quotas, overfishing, bycatch reduction, and fish habitat protection. The House faces a decision on whether to accept S. 39 as passed by the Senate or try to complete a hurried conference on H.R.39/S. 39. [Assoc Press, Congr. Record]

PCBs in Fish. In the Sept. 12, 1996 issue of the *New England Journal of Medicine*, psychologists reported that children exposed to PCBs before birth (mothers had elevated PCB levels from eating PCB-tainted fish from Lake Michigan) had trouble reading when they reached school age. [Wash. Post, Wall Street J., and NY Times via Greenwire]

Fishing and Religious Freedom. On Sept. 25, 1996, a Maryland waterman and the American Civil Liberties Union filed suit in federal court asking that the fisherman be allowed to choose his day off so he can fish six days a week. The waterman is a Seventh Day Adventist and is forbidden by his religion from working on Saturday, while state law requires watermen to choose not to crab on either Sunday or Monday each week. [Assoc Press]

Florida Keys Sanctuary Plan. On Sept.

News Bits

Gulf of Mexico Dead Zone. On Aug. 12-13, 1996, winds forced oxygen-depleted water from the Gulf of Mexico's dead zone off the mouth of the Mississippi River close to shore causing a "jubilee" along about 20 miles of Louisiana coastline, east of the mouth of Bayou Lafourche. This condition causes shrimp, crabs, and finfish to crowd close to shore to escape the low-oxygen water and can be easily caught in large quantities. [Assoc Press]

Louisiana Gillnet Ban. On Aug. 7, 1996, U.S. District Judge Thomas Porteous deferred action on a class-action suit by the Louisiana Seafood Management Council to overturn a state ban on gillnet use, until state courts finish consideration of appeals on the issue. [New Orleans Times-Picayune via Greenwire]

Mercury Contamination. On Aug. 12, 1996, Louisiana State public health officials issued a warning for pregnant or nursing women and children under 7 years of age to avoid or limit consumption of bowfin and bass caught in the Bogue Chitto River. Bass and bowfin had been found to exceed the state 0.5 ppm and the federal 1 ppm standards for mercury. [Assoc Press]

Shark Cartilage. On Aug. 20, 1996, Wellington Medical School researchers (New Zealand) announced test results indicating some validity to the claim that shark cartilage inhibits blood vessel growth. [Reuters]

FDA Seafood List. On Aug. 19, 1996, the Food and Drug Administration announced the availability of a new Compliance Policy Guide -- "Common or Usual Names for Seafood in Interstate Commerce" -- to facilitate uniform species identification and labeling and to reduce consumer confusion. [Fed. Register]

Shark Quota Reached. On Aug. 15, 1996, NMFS announced that the Atlantic/Gulf of Mexico fishery for large coastal sharks will close on Aug. 31, 1996. The entire quota for the last half of 1996 is projected to be taken by this date. [Federal Register]

Turtle-Friendly Lighting. Under pressure from the U.S. Fish and Wildlife Service (USFWS), the city of Riviera Beach, FL, voted on Aug. 7, 1996, to spend \$120,000 on beach lighting design to install low-pressure sodium vapor lights. After bright beach lights caused some 600 sea turtle hatchlings to stray in 1995, the USFWS threatened action by the U.S. Attorney's office for Endangered Species Act violations. [Palm Beach Post via Greenwire]

Tilapia Pathogen. The Aug. 23, 1996 issue of Science reported that a bacterium, *Streptococcus iniae*, causing human meningitis has been transmitted from Tilapia to humans. Transmission was believed to be through injuries received while cleaning fish. Six individuals in Ontario were affected -- one with meningitis and transient arthritis and the other five with skin or blood infections. [Science]

Fatal Crab Pinch. In Aug. 28, 1996, a South Alabama resident died of a *Vibrio vulnificus* infection two days after being pinched by a blue crab she was preparing for dinner. Of 141 cases of *Vibrio vulnificus* infection from seafood reported by the Centers for Disease Control and Prevention since 1988, only 5 were not associated with eating raw oysters. [Assoc Press]

Bycatch Reduction Devices. On Sept. 12, 1996, the Gulf of Mexico Fishery Management Council voted to recommend bycatch reduction devices on all shrimp trawls (other than small test nets) in federal waters less than 100 fathoms deep in the Gulf of Mexico.

microbiology as appropriate to complete the diagnosis. The preserved tissues provide permanent reference collections and are available for scientists to borrow for study.

The Aquatic Health Group also investigates fish kills in marine and estuarine waters. A free state-wide fish kill hotline has been established to help the public report marine or estuarine fish kills or disease events (1-800-636-0511). While on-site investigations are limited to the Tampa-St. Petersburg area, an informal network of private citizens, universities, and numerous local and state government agencies have provided samples of fish, water and sediment. We are trying to increase participation in the network so we share information, facilitate investigations, and collaborate with other researchers in investigating the causes of aquatic mortality events. If you are interested in participating in this network, or would like more information, please call or write the Aquatic Health Group or e-mail us at forstchen_a@sellors.dep.state.fl.us.

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Florida Marine Research Institute
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St. Petersburg, FL 33701
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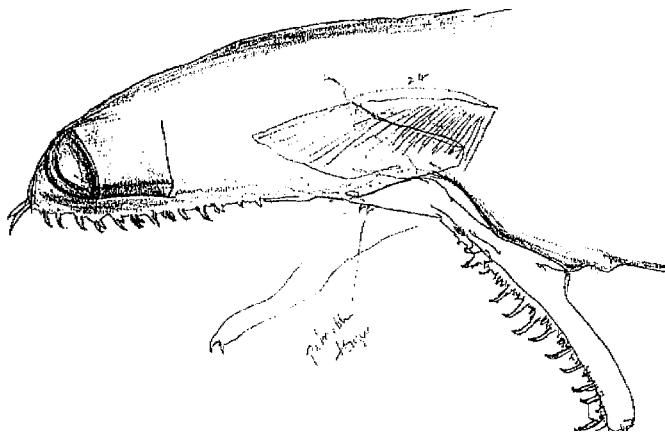


Photo Woes

By Rich McBride

A couple of common scenarios. You just received a camera as a gift but you do not know how use it! Or, you can take great family shots with your camera, but your photographs of your last field trip or your laboratory set-up came out terrible. Before you buy that expensive photography book or ask the advise of the long-winded colleague down the hall, check out these published articles by other scientists who have been there themselves. - Good Luck!

Banks, J.W., and W. Irvine. 1969. A note on the photography of fish scales, operculas and otoliths using an enlarger. *J. Fish Biol.* 1: 25-26.

Brigham, R.K., and A.C. Jensen. 1964. Photographing otoliths and scales. *The Progressive Fish-Culturist*. July: 131-135.

Emery, A.R., and R. Winterbottom. 1980. A technique for fish specimen photography in the field. *Canadian J. Zool.* 58 (11): 2158-2162.

Flescher, D.D. 1988. Get the picture. *Fisheries*. 13 (5): 2-4.

Flescher, D.D. 1983. Fish photography. *Fisheries*. 8 (4): 2-6.

Kuehne, R., and R. Barbour. 1983. Photography. In: *The American Darters*. The University of Kentucky Press. pp: 2-4.

McGrogan, D.G. and D.L.G. Noakes. 1990. Mirror-Box for photographing small fishes. *Copeia*. 1990 (4): 1174-1176.

Strange, A. 1987. Photomicrography in Fisheries Research. *Functional Photography*. July/August: 14-17.

HARDHEAD CATFISH MORTALITIES IN GULF OF MEXICO

By Ann Forstchen

A massive kill of hardhead catfish, *Arius felis*, along Florida's west coast occurred from early October to December 1995. A kill occurred again along the west coast from late May to July 1996, this time extending to Pensacola and the east coast. By mid-August, the mortalities appeared to have subsided in most localities. Similar hardhead catfish kills were reported throughout Texas during the fall mortality event and throughout Texas, Louisiana, Mississippi, and Alabama during the spring event. There are also reports of other massive marine catfish kills from as early as 1992 in coastal areas of Sierra Leone, Brazil, Uruguay, Belize, and Mexico.

Scientists at the Florida Department of Environmental Protection, Florida Marine Research Institute (FDEP, FMRI) in St. Petersburg have been responding to and investigating these mortality events. FMRI researchers are collaborating with scientists from other Gulf states and Central and South America to help pinpoint the cause of the mortalities. The mortalities have principally affected adult hardhead catfish and deaths have numbered in the hundreds of thousands. There are no historical records of any previous event of this magnitude along the Gulf Coast, although some biologists recall a major die-off about 20 years ago.

The Aquatic Health group at the FMRI has been examining samples of fish, water, and sediment from other Gulf states and from all over Florida. Our in-house laboratory diagnostic capabilities include bacteriology, parasitology, pathology, microalgae identifications, histopathology, and electron microscopy. The affected fish were characteristically seen swimming in a disoriented manner on the

surface. Gross pathology included blood-red lips and barbels, hemorrhagic fins, and petechia on the ventral body surface. During the fall event amoebae-like organisms were found in the liver and kidneys of some of the fish and were considered as a potential pathogen. In the spring event, however, amoeba-like organisms were not found. Bacterial growth from cultures of tissue from affected fish was negative. The kidney, spleen, and liver showed pathological signs with acute inflammation and tubular necrosis in the posterior kidney. Using transmission electron microscopy, scientists at the FMRI have found viral inclusion bodies and crystalline arrays in the nuclei of the tubular epithelial cells in the posterior kidney. Scientists are continuing to evaluate tissue histopathology and ultrastructure.

The Aquatic Health Group at the FMRI, funded by the Wallop-Breaux Sportfish Restoration fund monitors the health of marine sportfish in Florida waters. A database of fish health information collected during years of research and monitoring has been established at FMRI. This database can help researchers use the presence of fish disease and parasites as indicators of ecosystem and environmental health. The database continues to expand as the group studies additional sportfish species in new areas. Information has already been collected on various life stages of mullet, red drum, common snook, spotted seatrout, black seabass, Spanish mackerel, sheepshead, Gulf flounder, and gray snapper. We perform extensive necropsies for each fish, which includes a microscopic examination of fresh tissues from internal organs. Disease conditions and parasites are photographed for identification and documentation. Normal and diseased tissue is embedded in plastic, sectioned and stained to make histological preparations. We also process tissue for scanning and transmission electron microscopy, parasitology, pathology, and

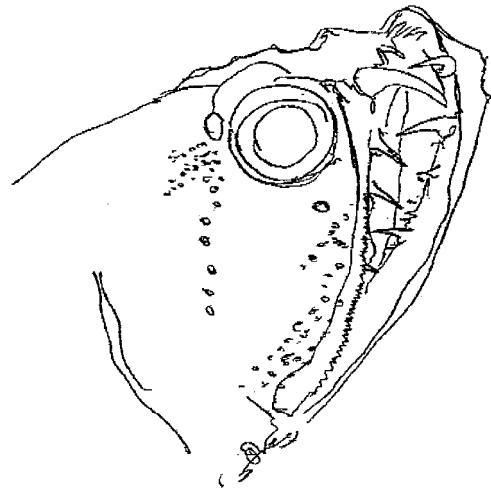
received the Netherlands' Lion Medal. The manuscript *Ictiologia Cubana*, 9 volumes of text and 20 volumes of figures, is deposited in the library of the Museo de Historia Natural de Madrid, and a copy is in the library of the Academia de Ciencias, Habana.

David S. Jordan visited Poey in 1883, and he studied Poey's fish descriptions. Jordan used this information in his *Fishes of North and Middle America*. Felipe Poey y Aloy worked alone and almost with no economic support. He subsidized his studies by selling parts of his fish collection. There are 188 of Poey's 389 fish types deposited at the Harvard's Museum of Comparative Zoology, and numerous specimens are deposited at the Academy of Natural Sciences of Philadelphia, the Smithsonian Institution, the Berlin Museum, and the Paris Museum of Natural History. Ichthyologists like Gill (1861), Steindachner (1867), Bean (1885), Jordan (1887), Jordan & Evermann (1896), and Bigelow & Schroeder (1848) recognized Poey's work by naming several species after him. Don Felipe, as the fishermen called him, died on January 28, 1891 at the age of 92 in complete mental health and surrounded by his students.

Poey y Aloy has been considered an intruder in the field of ichthyology, but, Poey earned the title of ichthyologist. There are 1117 fish species listed for the USA Atlantic Ocean above the 200 m isobath by Robins, et al (1991), and 6% of these were described by Poey. The 68 species characterized by Poey represent 15% of the fish known in Florida. Poey applied rigorous scientific and ethical principles during his fifty-year of distinguished career. In my humble opinion, Don Felipe not only stimulated the development of American ichthyology, but he also raised the standards of accuracy used in this field.

Note. Don Felipe Poey y Aloy's bibliography of fishes was compiled by Luis

Howell-Rivero, 1936. Mem. Soc. Cub. Hist. Nat. 10(1):43-50. But, for those of you interested in Taxonomy and Systematics, there is an incorrect pagination. In *Plantilla Descriptiva Ictiologica*. 1872. Ana. Soc. Esp. Hist. Nat. I, Junio, the correct pagination is: pp. 17-34 (1-18).



Felipe Poey y Aloy was not *de facto* a professional intruder

by Ramon Ruiz-Carus

Poey, a practicing lawyer, has often been considered an intruder in ichthyology and his work has been neglected without an objective evaluation. Even Carl L. Hubbs (1964) in *History of Ichthyology in the United States after 1850* dedicates only 13 words in two lines to this great Spanish ichthyologist. Because of the relevance of Poey's work to Florida and because of Poey's peculiar career, I deemed it necessary to write a few words about Don Felipe in an attempt to place his work in the proper perspective.

Felipe Poey y Aloy was born in Habana, Cuba on May 26, 1799. He received a Bachelors Degree in Law at 21 from the Real Seminario de San Carlos, Habana, and a Juris Doctor from the Universidad de Madrid, Spain at 25. He was appointed Professor in the Academia Nacional de Jurisprudencia, and one year later Poey left Spain to escape the political unrest of King Fernando VII's reign. He returned to La Habana and divided his time between his law practice and natural sciences.

In 1826, he married, gathered his fish drawings, 80 fish preserved with rum in a barrel, and moved to Paris where he worked in the Paris School of Law. He frequently visited the Museum of Natural History and he met George Cuvier. Cuvier, who was considered the greatest naturalist of his time, studied Poey's material and described numerous new species in *Natural History of the Fishes*. In 1832, Poey was one of the 14 entomologists who founded the Entomological Society of France. Unfortunately, Poey returned to Cuba and left his *Centurie de Lepidopteres de Ille de Cuba*, a magnificent collection of watercolors of butterflies with their taxonomic descriptions, unfinished; he was 34 years old.

In 1935, the Royal Zoological Society of London elected him a corresponding member. This was the first among many acknowledgments awarded by foreign scientific societies. At 43 he was appointed Professor of Zoology and Comparative Anatomy in the Universidad de la Habana. Poey's appointment has been the only exception in this university to appoint a candidate in a specialty in which he/she lacked credentials. During his 21 years at Universidad de la Habana, he taught, became Dean of the Faculty of Sciences, and later served as Vice-rector. Poey was a prolific writer in French, Spanish, English and Latin. He wrote about bees, termites, circulation of blood in alligators, crustacean taxonomy, terrestrial molluscs, Cuban fossils, philology, poetry, Spanish grammar, universal geography, mineralogy, and ichthyology. Poey's writings encompassed almost all of the specialties of the natural sciences.

Poey published more than 40 papers on fishes between his 52nd and 84th birthdays, but his most important work, *Ictiologia Cubana* a monumental body of fish information, was never published. In this classical work Poey described 782 species, and with the exception of the sharks, 1300 specimens were drawn at their actual size in a total of 1040 figures. It should be noted that of 793 fish species recognized in Cuban waters, 465 were described in *Ictiologia Cubana*, and 125 of the species names, 15 of the 27 genera, and three fish families used by Poey are still valid today. If Poey's manuscript had been published, then even more currently valid species would bear the name he gave them. He lost to the law of priority numerous species that he recognized, e.g., the large-scale lizard fish *Saurida occidentalis*, which was lawfully described in 1935 by Norman as *S. brasiliensis*.

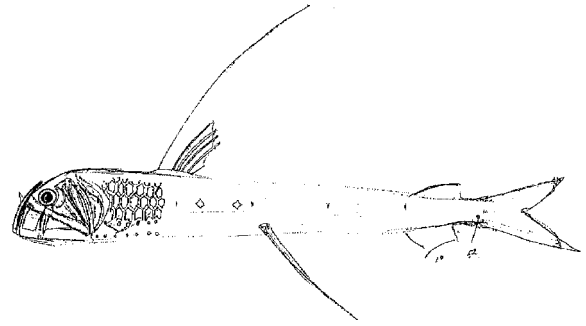
Poey's *Ictiologia Cubana* was exhibited in the Amsterdam Exposition of 1883, and he

fish stay in much shallower water than observed in the warm Caribbean. Water temperatures were so cold that we would have to go below 2,000 feet in the Bahamas to reach the surface temperature of the Pacific off west Fernandina in the Galapagos. This was a cold water upwelling zone - where extremely cold deep sea water was coming to the surface. In addition, cold Antarctic waters (the Humboldt current) flowed north from South America and is the reason why penguins, normally found in Antarctica, live on the equatorial Galapagos. It is strange to see penguins living with angelfish, butterflyfish, parrotfish, hammerhead sharks and other fishes derived from the tropics. Cold water also allowed deep sea fishes, normally occurring deeper than the *Johnson-Sea-Link* can dive, to come up into shallower water. We were guaranteed that we would see and capture a lot of weird and unusual animals.

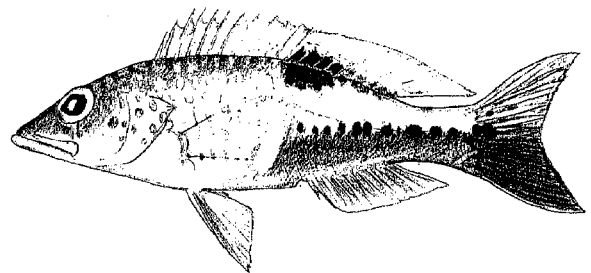
The upwellings created a soup of nutrients that formed the basis for a Galapagian feeding frenzy from microscopic zooplankters to enormous whale sharks, tuna and the 3,000 resident whales. It was literally mind boggling to dive into this soup of living creatures, more aquatic organisms than I had experienced anywhere else, and yet see a very high diversity that included many new species of fishes and invertebrates never before seen by man. We captured many rare fishes and brought them back alive for study and photography on the ship. If you saw the Discovery Channel presentation on 18 August, or the several showings thereafter, you are among the first to see many of these creatures.

This experience in the Galapagos gave me my own evolutionary theory regarding fish speciation in the Galapagos that I am now preparing for publication. I gave a talk comparing the Caribbean and Galapagos fish faunas at the international meetings of the American Society of Ichthyologists and

Herpetologists in New Orleans last June. I had a very interested audience. I can't wait to



publish my results. Unlike Darwin, I did not have to spend several years sorting things out. The theories, hypotheses and answers hit me like an ice cold shower. However, without Darwin's thoughts published more than one hundred years ago in the *Origin of Species*, I would not have gotten this far. We may have gone beyond Darwin, but we surely followed him.



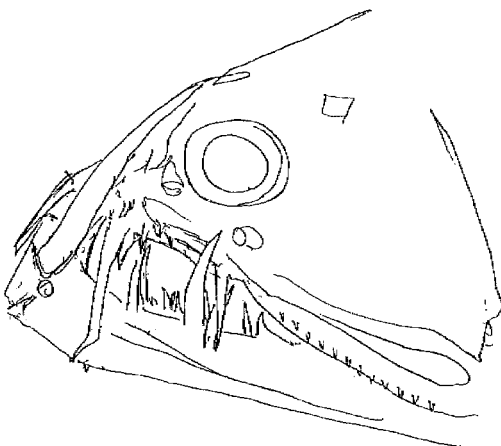
Editor's note - The illustrations found throughout the *Shell-cracker* are from sketches Grant made while in the Galapagos.

Personnel impressions - Galapagos Islands, November 1995

by R. Grant Gilmore.

As a professional biologist I had not escaped the profusion of written information that came from historic and recent discoveries in the Galapagos Islands. I had read the voyage of the *HMS Beagle* years ago in graduate school and understood that the strange assortment of creatures separated on each island had given Charles Darwin considerable pause for thought in his later years. Today's terrestrial scientists are still spending considerable time studying the details of finch, tortoise and iguana life histories, paleontology and evolution. In fact each year, we see numerous television programs on these terrestrial marvels. All of this did not prepare me for what I would experience when I first visited the islands with the Discovery film crew, *Johnson-Sea-Link I* and the *R/V Seward Johnson* last November.

When I got off the airplane on San Cristobol, I thought I had landed in Phoenix, Arizona. The island was a desert. We were in the late dry season, and all the parched, thorny vegetation had dry, small brown leaves if any at



all. Bare volcanic rock was everywhere down to the shore of the sea. Nearly all the islands

turned out to be this way, some more barren.

The shore was where the life was found. Sea lions were hauled out everywhere on the rocks and sand. Some were even using fishing boats to lounge in the sun. Blue footed boobies were also everywhere. It did not take me long to see and learn the finches, giant tortoises and iguanas. They were very tame and walked past me as if I was a rock.

The sea was the mystery and I was very anxious to check it out. I was so anxious that my first dive was on the featureless sand bottom under the ship while at anchor in Academy Bay. My first fish were the bull's-eye puffers and Darwin's batfish, a cute red faced fellow who was destined to be a star in the Discovery program. What struck me most was the fact that the water was very, very cold. None of my colleagues appeared to be impressed by the cold water, but they were from California where the water is even cooler.

My primary research objective was to compare the fish of the deep epibathyal zone in the Caribbean with that of the Galapagos Islands. The epibathyal zone is the twilight zone where light is lost to the depths. I had made more than 200 sub dives in the tropical western Atlantic and I was anxious to examine the related eastern Pacific fauna that is largely derived from the Caribbean. More than three million years ago, Panama rose from the depths to separate the two faunas.

I made my first sub dive on a sea mount that was once one of the Galapagos Islands, but sank beneath the waves millions of years ago. There were thousands of fish all over the sea mount and many were mirror images of fishes I had seen in the Caribbean or Bahamas. However, the cold water made many of these

Marine Fisheries in the AFS Southern Division

By Mike Van Den Avyle

In my "tenure" as officer in the Southern Division AFS I have wondered if the Division is properly serving its members in marine fisheries professions. Of 15 States and 2 districts (Washington, D.C. and West Indian Islands) in our Division, 12 have salty water along (or completely around) their shores. Despite this I have seen relatively little activity by marine fisheries folks at Division meetings. The Marine and Estuarine Resources Committee, which is one of eight Technical Committees in the Division, has not been active in recent years. Our annual meetings with the Southeastern Association of Fish and Wildlife Agencies tend to be freshwater oriented because the Directors of member agencies come mainly from inland fish and wildlife programs. In contrast, the Division Midyear meeting promises to be a more friendly environment, with relatively high participation by marine biologists at the meetings in Virginia Beach (1995) and Mobile (1996).

Do we have a problem? If so, what can be done to fix it? After discussing the matter with others, I have come up with three hypotheses (not mutually exclusive) that may explain the situation:

1. Marine professionals already attend numerous meetings of Councils, Commissions, etc., involving exchange of technical and political information and therefore do not have need (or time) for AFS to "serve them";
2. Marine professionals feel "disenfranchised" by the freshwater orientation of Division activities; and
3. It's just a bad habit.

I am inclined to primarily accept the "bad habit" hypothesis as it lays the blame on the organization rather than the members, but I certainly would like to hear arguments in favor of the others and welcome consideration of additional hypotheses. Part of the "bad habit" is (inactive) exclusion from the annual meeting, where I suspect that institutional support for travel is minimal in marine agencies. This can be partially remedied with emphasis of marine sessions at the midyear meeting. After attending numerous Chapter meetings, I have found that many alternate meeting sites regularly between inland and coastal locations. Should this be incorporated into Division planning for the Midyear? As a final note on the habit hypothesis, I have found little representation of marine professionals as Division officers. Of 46 former (and present) Division Presidents, I count only 2 that were primarily involved with marine fisheries. Should the Division's Nominating Committee be asked to recruit more candidates from marine disciplines?

I have posed these thoughts and questions to the Florida Chapter because of its large membership in marine fisheries and success with including all disciplines in its activities. I solicit your opinions, suggestions, gripes and other forms of feedback on this issue. I can be contacted at the Georgia Cooperative Fish and Wildlife Research Unit, School of Forest Resources, University of Georgia, Athens, GA 30602 or at vandenav@smokey.forestry.uga.edu.

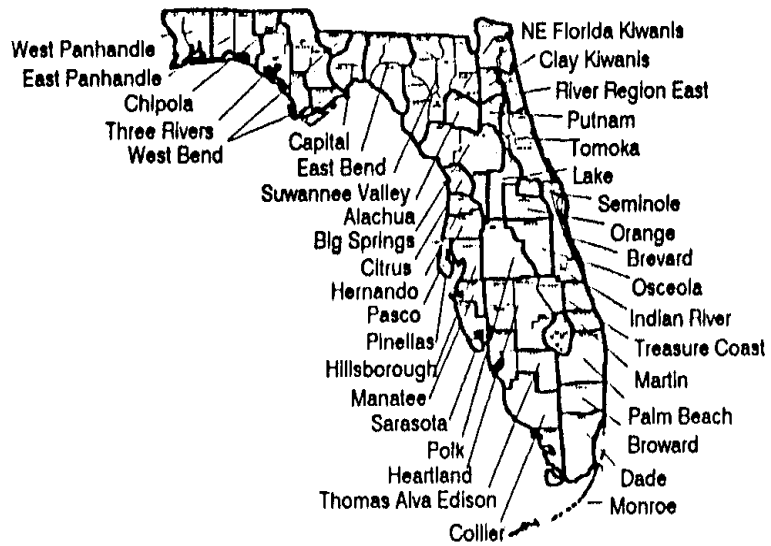
Other functions may emerge as FAN evolves and takes shape within the Florida Chapter. For example, the parent society envisions FAN to be a tool for proactive involvement in fisheries and conservation issues. Since the active participation in such issues has been controversial in the past within our chapter, the direction we take can be decided at the Chapter meeting.

Science Fairs

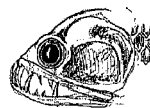
Our membership took a giant step at the 1996 Brooksville meeting toward support of science education and "grassroots" promotion of the use of scientific procedures. Chapter members voted to participate in high school science fairs at the regional and state-final levels and to support the state-final first place winner in international competition if the project is fishery-related. We will provide judging and a \$50 bond for the winner at regional fairs and a \$100 bond for the winner at the state fair for fishery-related projects.

The Florida Foundation for Future Scientists accepted our request to participate in the fairs as a state-level sponsor at their recent board meeting. The adjacent map shows the 38 regions that participate in the fairs. Please take a look at the map and see if there is an area in which you could serve as a judge.

— Regional Science and Engineering Fairs —



The Chapter's science fair committee would like to have as many regions represented by judging and awards as possible. We are proceeding slowly to gage what our level of participation should be and have limited Chapter expenditure to a total contribution of \$500 for this year's science fair awards. Therefore, Chapter participation in the regional fairs will be limited to a first come-first served basis. If you want to represent the Florida Chapter of the American Fisheries Society as a judge to select and award prizes for fishery-related projects in science fairs around the state please get in contact with any of the science fair committee members: Scott Willis, Bob McMichael, Jon Shenker, Tom Sminkey, Kraig Krum, or Ted Lange.



We have participated in some clinics with the Forest Service and Game and Fish Commission in the past, but an endowment would give us a dedicated funding source and might encourage us to do more. We all recognize the need for youth involvement in fishing and the environment. A youth angling endowment fund might be a good subject for the 1997 business meeting.

That's enough for now. I want to hear from you with any opinions on the above and any suggestions on projects and directions you would like see the Chapter pursue. I'd like to thank the membership for giving me the opportunity to serve the Chapter. I'm looking forward to the rest of the year, the annual meeting, and renewing old acquaintances at Brooksville.

Larry Connor

President Elect, Florida Chapter AFS

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From The Editor

My philosophy about the newsletter has been "If you write it, I'll print it". Although it is a good motto, it does assume that someone (other than the newsletter committee) will write something. The current newsletter reflects the more proactive approach we have taken where we seek out prospective authors. For example, I sat in on a talk Grant Gilmore gave on the Galapagos ichthyofauna at the ASIH meetings. I asked him if he could share his experiences with the chapter and he obliged us with his short essay. The point is, if you want to share your thoughts and opinions, let us know and we'll badger you until you submit something. Better yet (because this takes even less effort), if you would like to see an article on some topic, let us know who would be good author and we'll do the badgering. Just contact us. The newsletter committee is Tom Maher, Ramon Ruiz-Carus, Julie Wallin and myself. Ramon, Julie and I can be contacted at FMRI - FDEP, 100 8th Ave. S.E., St. Petersburg, FL 33701 (p:813/896-8626, f:813/). Tom can be contacted at OFMAS - FDEP, 3900 Commonwealth Blvd., MS 240, Tallahassee, FL 32399-3000 (p:904/922-4340, f:904/922-0463). My e-mail address is hood_p@sellors.dep.state.fl.us. Thank you for your support - Peter Hood, Newsletter Editor.

Fisheries Action Network

The Florida Chapter's Fisheries Action Network (FAN) is coming on-line soon. An Internet E-mail address will be established and maintained by Mike Mitchell. Conceived by the parent society, FAN's purpose is to provide a method for the timely transfer of fisheries information to interested parties such as other scientists, fishery managers, planners, elected officials, and other decision makers.

The first order of business for FAN is to establish a database that characterizes Florida Chapter members' expertise. Informational questionnaires will be in the next newsletter. The function of the database is to provide a readily accessible source of experts that can be called upon to provide information for fishery-related problems.

From the President Elect

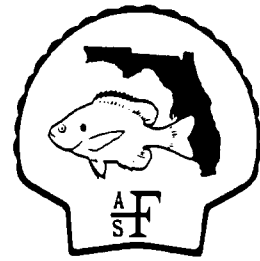
I'm excited about our 1997 meeting. The meeting is going to be 25 to 27 February 1997 at Brooksville. Your program committee, Grant Gilmore, John Benton, Ron Taylor, and myself has big plans for the meeting. We're working on a symposium entitled Florida Aquatic Ecosystem Restoration: Is It Possible? The symposium will look at ecosystem and habitat reclamation and protection from the central highlands to the south Florida reef track. We're looking for up to 20 papers in the symposium and another 20 contributed papers. This means that the technical sessions will probably begin some time on Tuesday afternoon and possible run into the afternoon on Thursday. We're thinking big, but as Teddy Roosevelt said, "It is better to have tried and failed, than to have never tried at all." Even if we aren't able to get all the speakers we envision, the meeting should be a success.

Speaking of the meeting, there is an important job waiting for the right person to fill it. We need a raffle committee chair to replace Doug Haymans and Dennis Renfro. I think that we all need to give Doug and Dennis a big round of congratulations for the superior job they have done over the past few years. Both of them are burned out and too busy to take the lead this year. The raffle has always been a highlight of the annual meeting and, if we want to continue the tradition, we need a "go-getter" to step forward and accept the challenge. I've been twisting a few arms (you know who you are), but I'm still looking for some one to say, "let me at it."

What else can we look for in 1997? The National Outdoor Writers Association's 1997 convention is at Greenlefe next June. Scott Willis, Bob Wattendorf, and I met with Kristin Merriman-Clarke, the editor of Fisheries, at Dearborn and tentatively agreed to work with AFS headquarters and have a presence at the convention. The plan would be to set up a hospitality suite and bring three to four "hot-topic" speakers who would be available to talk to the writers at the suite and possibly at a press event during the day. AFS President Chuck Coutant has already committed time to come the convention. The Minnesota Chapter hosted a suite at this year's convention. If we follow through on this, it should be a great opportunity to get the message out. Scott Willis has all the details.

Web page? Do we want one? Do we need one? If we had one, what would we put on it? There was a lot of interest in web pages at the AFS meeting in Dearborn. Several chapters and sections have web pages, and the AFS certainly encourages their creation. Mike Mitchell, our FAN coordinator, brought this at our 1995 meeting. As any net-surfer knows, there is a wealth of information out there. Maybe the Florida Chapter ought to get on the information superhighway. What do you think?

I ran into another interesting idea at Dearborn. The Michigan Chapter is in the process of creating a youth angling and outreach endowment. I talked briefly with Jaci Savino, the Michigan Chapter President, but I didn't get all the details. They plan to set up a trust account similar to the Rottmann Fund and use the income to fund youth angling clinics, environmental education, and other outreach activities. I really can't say much more until I have all their plans. The Florida Chapter may want to consider a similar program.



Outdoor Writers Association of America

The OWAA annual meeting will be held in Haines City, FL June 22-26, 1997. The conference attracts about 1000 people including about 500 outdoor communicators from around the nation. Having that many outdoor writers and media personalities in one place with the potential for positive press coverage for our Chapter is an opportunity we shouldn't pass up!

Your Ex-comm has tentatively agreed to have the Florida Chapter participate but we are soliciting concerns and comments from Chapter members. The Chapter would provide a one-evening, non-alcohol, hospitality suite at the meeting hotel. We would also sponsor a press event that would consist of three Chapter members speaking about Florida fishery issues. The speakers and topics to be presented are yet to be determined but will emphasize positive story-lines, ie., trophy bass, peacock bass, habitat restoration, stock enhancement. Please forward additional recommendations for other presentation topics for Ex-comm consideration.

I would like to compile an "experts" list of Chapter members that includes your address, phone number, and areas of expertise. We will publish the list and distribute it to each conference attendee. In the next newsletter, a Fishery Action Network (FAN) form will be enclosed so we can gather these data.

The total cost to support Chapter involvement at the OWAA conference will be about \$1500. I believe that the cost would be offset by positive interaction between the Chapter and the outdoor writers. We also gain by increasing the public's awareness of important fishery issues affecting all of us.

Please send your comments and suggestions to:

Scott Willis

Florida Marine Research Institute

100 8th Ave SE

p: 813-896-8626

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