

9.0 OUTREACH ACTIVITIES

This section contains a brief description of outreach activities organized into five areas: (1) major program activities, (2) major program plans of work, (3) workshops, conferences, displays and signage, (4) web-based technologies and (5) meetings and monthly summaries. The reader should note that this section reports activities, not impacts. Impacts are reported in another section of this document as are responses to performance measures. This section contains only summary information to highlight major areas of outreach activity.

Major Program Activities

Many of the most successful outreach activities represent “programs” of work. That is, they are much more than one major workshop or conference. The “program” may utilize research faculty or research findings, may involve several methods of outreach technology or may represent a series of workshops. All these elements are reflected during major activities ongoing during 2006. Several examples follow.

Marine Biotechnology

In contrast to many other subjects addressed by university outreach and extension efforts, in which the established audiences and client groups are large, widespread, and established, marine biotechnology is relatively small and young. But its promise to contribute socially and economically significant health and industry-related products and processes from living ocean resources is great. Thus, Florida Sea Grant has found itself in a unique role of educating decision-makers with focused needs, including business executives, legislators and their staffs, and scientists -- in contrast to broad and general public audiences. A principal effort was organization by FSG of the Florida Marine Biotechnology Summit V held concurrently with the annual BioFlorida conference. This affords an outstanding and unique opportunity to deliver science-based information directly to executives in industry, who may be considering “the buzz” about marine biotechnology and whether to get involved. In fact, one business executive responded to the panel on future marine biotechnology opportunities by indicating his interest to expand into this field. The summit sessions attracted the largest attendance (up to 85) of any of the concurrent sessions of the BioFlorida event. Governor Jeb Bush participated in the Florida Sea Grant Marine Biotechnology Student Awards presentations. The associate director also presented a briefing on marine biotechnology to the U.S. State Department. Development of a national website on marine biotechnology was completed. The FSG associate director participated on the national Sea Grant network “theme team” for marine biotechnology to develop greater coordination and resources among leading Sea Grant programs in the U.S., participated on the board of directors of BioFlorida, the statewide trade association for this field, and maintained liaison with Scripps Florida as well as Tequesta Marine Biosciences, the start-up company based in part on FSG research. Finally, a business plan drafted in concert with the industry advisory panel was circulated for review and presented to the University of Florida Foundation.

Florida Ocean Alliance

The Florida Ocean Alliance is now into its seventh year. This is a non-partisan organization dedicated to bringing together government, academia and private sectors in Florida to protect and embrace Florida’s ocean and coastal resources for continued social and economic benefits. Members of the Florida Ocean Alliance in 2006 were:

Audubon of Florida
Carnival Cruise Lines
FAU/Cantanese Center for Urban and Environmental Problems
Florida Institute of Oceanography
Florida Institute of Technology
Florida Ports Council
Florida Sea Grant
Harbor Branch Oceanographic Institution
Hubbs-Sea World Research Institute

Lewis, Longman & Walker, P.A.
Marine Industries Association of South Florida
Maritime Communications Services
Organized Fishermen of Florida
IGFA, Fishing Hall of Fame and Museum
Mote Marine Laboratory
Royal Caribbean International Cruises
The Nature Conservancy
University of Miami/RSMAS

The Alliance assists with the annual Ocean's Day in Tallahassee and provides other educational services throughout the year.

Florida Ocean and Coastal Resources Council (FOCRC)

The FOCRC was created during 2005 by the Florida Legislature. It is an 18-member council and is co-chaired by the Secretary of the Florida Department of Environmental Regulation, the Executive Director of the Florida Fish and Wildlife Conservation Commission and the Commissioner of the Florida Department of Agriculture and Consumer Services. The responsibilities of the Council are to conduct a statewide marine and ocean research review, complete an annual scientific research plan that will be used by the Legislature in making funding decisions on needed projects and conduct a resource assessment that shall serve as a baseline of information to assist in the research plan. The 2006 Research Plan was submitted to the legislature and \$3M was appropriated by the legislature to begin the highest priority research. However, the "termed out" governor vetoed the appropriation and the FOCRC proceeded during 2006 with limited funding. A revised plan for 2007 was created and forwarded to the legislature for consideration. Florida Sea Grant is directly involved in this statewide effort since James Cato, Director, is appointed to the FOCRC for a four-year term.

Ocean Observing Systems

Florida Sea Grant is a member of the Southeast Atlantic Coastal Ocean Observing System (SEACOOS) project. This is an integrated research, extension and education effort with the Sea Grant programs of North Carolina, South Carolina and Georgia. It also includes a host of universities, businesses and other organizations involved in ocean observing systems activity in the Atlantic. The University of North Carolina is the overall contract lead for this project that has been sponsored by the Office of Naval Research. A SEACOOS Extension and Education Work Group coordinates outreach activities. Mike Spranger serves as FSG representative to this work group. Chris Simoniello serves as SEACOOS regional extension coordinator. She is based at the University of South Florida. She works with the eleven partner university scientists, educators and extension professionals in the region in the development of educational materials, products and services.

Florida Sea Grant is also involved in the Gulf of Mexico Coastal Ocean Observing System (GCOOS). FSG is a signed party to the GCOOS Memorandum of Agreement, and FSG faculty actively participate in meetings. Mike Spranger is an elected member of GCOOS Board of Directors, representing the extension and education community. In 2006, he coordinated the first meeting of the GCOOS Education and Outreach Council (EOC). At this meeting, he was elected their chair. At this meeting, the EOC developed their organizational structure, work plan, and provided recommendations to the GCOOS Board of Directors. Chris Verlinde, Extension Agent for Santa Rosa County is also a member of the EOC. During 2006, presentations on GCOOS were made to a number of Florida organizations that included the Clean Boating Partnership, Florida Marine Science Educator Association, the Extension Professional Association of Florida, and the Florida Caucus on Ocean Observing Systems.

Finally, Florida Sea Grant has been involved in the Florida Coastal Ocean Observing System (FL COOS) Caucus. This group was formed in the fall of 2005 through convening efforts of the Deans of the University of Miami's Rosenstiel School of Marine & Atmospheric Science; Nova Southeastern University's Oceanographic Center; and University of South Florida's College of Marine Science. FL COOS Caucus meetings provide a mechanism to bring together Florida's scientific, management, regulatory and private sector provider and user groups interested in ocean observing systems. FL COOS Caucus meetings provide a mechanism to discuss the latest issues related to ocean observing systems, and to have a dialogue that looks at options and policy parameters consistent with Florida's diverse ocean resource and ecosystem needs. Chris Simoniello provides assistance to this group.

Marinas and Boatyards

Florida has more than 2,000 marinas and boatyards and more than 1 million registered boats; this is the largest number of marine facilities and registered boats for any state in the nation. The industry generates over \$18 billion annually. To assist this industry, Florida Sea Grant is a member of the Florida Clean Boating Partnership (CBP), the sponsor of the first clean marina program in the nation. Major partners include the Florida Department of Environmental Protection (FDEP), Marine Industries of Florida, and the U. S. Coast Guard. In recent years, the CBP has also created a Clean Boatyard Program. In 2006, it created a Clean Marine Retailer Program. Through a voluntary compliance process, marine industry businesses adopt best management practices at their facilities; they then become designated as a "clean marina, boatyard or marine retailer" by the Clean Boating Partnership.

FSG contributes to the CBP in several ways. Mike Spranger serves on the CBP Board and Outreach Committee. Don Jackson served on the Outreach Committee and provided invaluable staff to the CBP. FSG County Agents participate in local workshop presentations and are involved in the onsite "designation" inspections with FDEP and Marine Industries representatives. Currently there are 133 clean marinas and 28 clean boatyards in the state; these represent over 25% of all the "wet slips" in Florida. In September 2006, MarineMax Cape Haze was designated the first Clean Marine Retailer in the country. Ten other states are now involved in clean marina programs, and a number of states are contemplating initiating a program. Most of these programs have used elements of the Florida Clean Marina model in designing their programs. In addition, over 2,000 copies of the popular "Panic File" produced by FSG on behalf of the CBP have been distributed to marinas across the United States.

Gulf of Mexico Center for Ocean Science Education Excellence (GOM-COSEE)

Florida Sea Grant is part of a unique, thematic collaboration among the five states (Alabama, Florida, Louisiana, Mississippi, Texas) that border the Gulf of Mexico. The primary goal of GOM-COSEE is to strengthen ocean sciences education through the interpretation of research results for interested public, pre-college teachers and their students, informal educators and university faculty and their students concerning the relevance of the oceans to our daily lives. This project links educators, researchers, and interested publics both regionally and thematically, focusing on the Gulf of Mexico as the vehicle to teach ocean sciences education. FSG collaborators include the Florida Museum of Natural History and the University of Florida Seahorse Key Marine Lab.

An intense one-week, field-based education institute for eleven teachers and seven scientists was held in the summer of 2006. The field-based course focused on the broad areas of coastal habitats, coastal processes and marine technologies, and how they relate to federal and state curricula standards. FSG Extension faculty provided presentations at the institute. The field-based institute was complemented with a six-week internet-based distance learning program that focused on topics related to hurricanes. More than 50 educators from the region participated in the online program. Evaluations indicate that all participants increased their knowledge and are utilizing this new knowledge and skills in their respective classrooms. GOM-COSEE and FSG also were sponsors of the Florida Marine Science Educator Association Conference, held in Crystal River, Florida, and the 2006 State 4-H Youth Marine Ecology Contest that was held at the 4-H Youth Camp in Sebring, Florida.

Waterfront Communities

Due to the rapid increase in population in our coastal areas, there is increased pressure along the land/water interface resulting in the loss of public access for water users, as well as a loss of recreational and working waterfronts. As such, planning for the management of waterways and for the protection of working waterfronts have become major policy initiatives in the state of Florida. The Florida legislature has passed important legislation requiring local governments to address these issues in their comprehensive plans, the basic instrument that regulates growth in Florida. To assist local government, Florida Sea Grant, under the direction of Tom Ankersen and Richard Hamann and students and faculty associated with the University of Florida Law Conservation Clinic developed an online resource entitled “Waterways and Waterfronts: A Community Guide and Policy Tools.” This website addresses the legal and policy issues facing Florida waterways and waterfronts and offers a variety of tools for state and local entities to consider in planning for the sustainable management of Florida’s waterways and the preservation of its working waterfronts. For more information on this project, see <http://www.law.ufl.edu/conservation/waterways>

In addition, in the fall of 2006, Florida Sea Grant, the Florida Fish and Wildlife Conservation Commission and University of Florida Levin College of Law sponsored a major state conference “From Stem to Stern: Boating and Waterways Management in Florida” that addressed boating and waterway planning and management issues. Bob Swett, Charles Sidman and Tom Ankersen provided key leadership roles in the development of this conference. More than 180 local governmental officials, planners, agency staff, boating industry representatives and interested public attended this program. Not only did the program provide up-to-date information on current issues, but also the meeting served, through a facilitated process to identify and prioritize needs and strategies to address boating and waterway issues in the future. Florida Sea Grant, Florida Fish and Wildlife Conservation Commission, Florida Department of Environmental Protection, and Florida Department of Community Affairs are using this information to develop joint educational and outreach programs and projects that will be developed in the 2007-08 time frame.

Major Program Plans of Work

Long range planning for the FSG Extension Program is carried out under the auspices of the University of Florida IFAS Extension’s four-year plan of work and strategic plan. Every four years, Extension develops a planning process that is used to define their future needs and work activities. The work activities are updated annually through the annual plans of work that are developed by all Extension faculty. Extension faculty concentrate their activities through Goal Teams, Focus Teams and Work Action Groups. Goal areas identified for 2004-2007 are listed below:

1. To enhance and maintain agriculture and food systems.
2. To maintain and enhance Florida’s environment.
3. To develop responsible and productive youth through 4-H and other youth programs.
4. To create and maintain Florida friendly landscapes
5. To assist individuals and families achieve economic well-being and life quality
6. To achieve economic prosperity and community vitality in Florida’s urban and rural communities
7. To promote professional development designed to enhance organizational efficiency and effectiveness.

The goal teams and focus teams (sub areas) consist of interested faculty in specific areas of common interest. Specific task-oriented work action groups (WAGs) are then formed among interested specialists and agents to develop materials and educational activities for local, county, state and regional audiences. Project leads reviewed activities and future plans for each of the WAGs at the annual FSG Extension meeting that was held in May 2006 in Naples, Florida. The Extension faculty utilized these updates to refine their 2006 plans of work. These WAGs focus on the topics of artificial reefs, ethical angling, clean marinas/boatyards, invasive species, boating and waterway management, seafood technology and safety, water quality, and marine education..

To develop their major extension program activities, FSG Extension faculty rely on advisory committees to assist in identifying program needs, strategic planning and priority setting. Each faculty has an advisory committee to guide the development of their annual plan of work (POW). These POWs correspond to one of the seven Extension goal areas cited above. These individual POWs are integrated into the statewide goal and focus team areas that are reported through the University of Florida Faculty Extension Accountability System.

This annual planning process accounts for approximately 70 percent of a FSG Extension faculty's work activities. The goals and tasks related to extension activities found in Section 2.0 result from the planning efforts described above. The remaining 30 percent of a FSG Extension faculty member's time is used for emerging issues, responding to stakeholder questions and dealing with important marine issues that may arise outside of the seven identified goal areas. Annually, the planned activities undertaken in these POWs are documented through a report of accomplishment (ROA). The ROAs are used for individual staff evaluation, as well as used to develop new FSG work activities at the annual FSG Extension meeting that is generally held in the Fall.

FSG Extension Program proposals are also developed as a part of the overall Florida Sea Grant College omnibus proposal. Two, three or four-year proposals are developed, as appropriate. Much of the material for the FSG Extension Omnibus proposal is taken from the UF IFAS Extension planning process that has been previously discussed. FSG Extension faculty POWs are also integrated into the overall Florida Sea Grant College Program's long range planning process, which helps link identified research and extension program priorities and program areas.

Workshops, Conferences, Displays and Signage

Workshops and Conferences

During 2006, a total of 791 educational events were conducted by Florida Sea Grant Extension faculty and funded researchers and graduate students. These events represent data through January 31, 2007. Some research reports are still pending, with due dates after this report is due. These range across the following examples of activities.

- scientific presentations by funded research faculty at scientific conferences
- workshops organized by Sea Grant Extension faculty
- marine 4-H camps
- K-12 teacher education events
- international conferences organized
- media articles and large attendance events
- etc.

The number of examples is quite varied, but the activity has been organized by Florida Sea Grant goal area as shown in Figure 1. The three leading areas are marine education (41.3%), fisheries (13.9%), and ecosystem health (11.8%). Audience type has also been documented as shown in Figure 2. Community and general education is the leading audience type (33.6%). Finally, Figure 3 shows that 90.4% of all activity has occurred within Florida. Complete details are listed in Table 1.

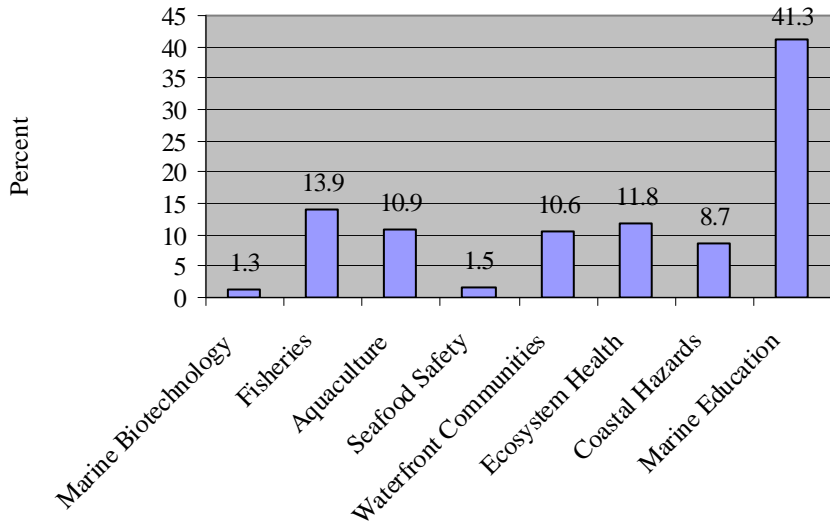


Figure 1 -- Percent of educational events by Florida Sea Grant goal area, 2006.

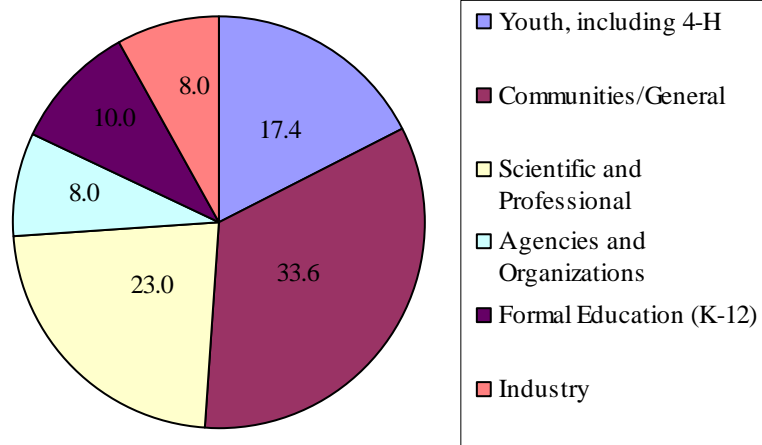


Figure 2 -- Percent of educational events by Florida Sea Grant audience type, 2006.

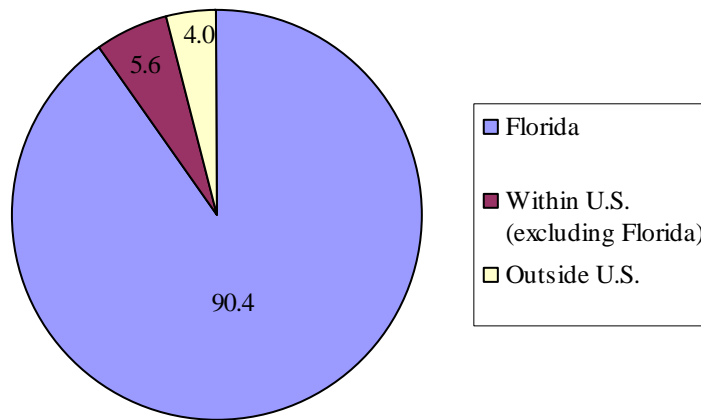


Figure 3 -- Percent of educational events by Florida Sea Grant geographic area of delivery, 2006.

Table 1. Total number of Florida Sea Grant educational events by audience type, geographic location and strategic goal area, 2006

Audience Type/Strategic Goal Area	1: Marine Biotechnology	2: Fisheries	3: Aquaculture	4: Seafood Safety	5: Waterfront Communities	6: Ecosystem Health	7: Coastal Hazards	8: Marine Education	Total	Percent
Agencies/Organizations	0	10	5	4	14	15	3	12	63	8.0
Communities/General	1	37	31	0	31	42	38	86	266	33.6
Formal Education	0	10	1	0	1	3	3	61	79	10.0
Industry	0	9	15	3	11	12	3	10	63	8.0
Scientific/Professional	9	31	31	5	27	17	19	43	182	23.0
Youth, including 4-H	0	13	3	0	0	4	3	115	138	17.4
Total	10	110	86	12	84	93	69	327	791	100.0
Percent	1.3	13.9	10.9	1.5	10.6	11.8	8.7	41.3	100.0	
Within Florida	6	99	66	7	81	87	63	306	715	90.4
Within US (outside of Florida)	3	4	17	5	3	4	3	5	44	5.6
Outside US	1	7	3	0	0	2	3	16	32	4.0
Total	10	110	86	12	84	93	69	327	791	100.0

The educational events were also separated into two categories: (1) media or large attendance events and (2) those events targeted to people in attendance at a workshop or conference (face-to-face). Of the 791 events during 2006, 90 were media or large attendance events with a potential total audience of 6.2 million. The remaining 701 were face-to-face educational events. Of these, attendance of 46,706 was recorded at 632 events, or 74 people per event. Extrapolating to the total means that 51,812 people attended all events. Since 791 events occurred during the calendar year (365 days), an average of 2.2 events per day occurred during 2006.

Displays and Visual Aids

Communications staff supports research, extension and education programs by developing displays, signage and other productions that share information or explain complex issues to an audience. In 2006, staff produced a wide variety of support pieces for events ranging from Oceans Day in Tallahassee to the joint statewide meeting of BioFlorida and the Florida Marine Biotechnology Summit.

A sample of displays and productions for 2006 follows:

<u>Theme</u>	<u>Event/Need</u>	<u>Location</u>
Ocean partnerships	Oceans Day in the capitol	Tallahassee
SEACOOS/Ocean observation	Miami Boat Show	Miami
Fish resuscitation/Partnerships	Sea Grant Annual Extension Program	Naples
Fish resuscitation panel & brochure	Florida Outdoor Writers Association Annual Meeting	Islamorada
Boating and waterway management	Statewide conference TP-157: Anchoring Away: Government Regulation and the Rights of Navigation in Florida	Cocoa Beach
Registration website	Florida West Coast Artificial Reef Workshop	Palmetto
Fish mortality reduction	Extension in-service training workshop (SGEF-166: A Practical Guide to Assembling and Using a Fish Resuscitation System for Florida Catch-and-Release Fishing Tournaments)	Gainesville
The Promise of Marine Biotechnology in Florida	Florida Marine Biotechnology Summit V	Gainesville
Hurricane preparation	Television PSAs for boaters	Statewide
Fish mortality reduction	Fish Venting Cards	Statewide

Web-based Technologies

Florida Sea Grant's website (www.FLSeaGrant.org) serves as a principal contact point, reference and archive for Sea Grant information serving Sea Grant personnel, collaborators and outside users. It has become a valuable and dependable resource for transmitting and receiving information with target audiences.

Web enhancement is a scheduled and concerted effort to create new content and delivery techniques that give users greater utility than was previously available. Page maintenance is a continual effort that requires daily attention, especially focused on writing and uploading new content. During 2006, maintenance and enhancement of the Florida Sea Grant website included the collapsing of ten strategic program areas into nine, and the conversion of existing pages to CSS style-sheet regulated pages for enhanced consistency and faster download times.

New feature stories and links have been added to Sea Grant programmatic areas. All numbered Florida Sea Grant publications for 2006 have been added. New staff listings to accommodate the expanding network of county extension faculty have been incorporated; others have been updated.

The need to stay abreast of "interactive" aspects of web-based technologies continues. Sea Grant personnel attended the National Extension Technology Conference in 2006 and learned about emerging and waning trends for web developers and providers of distance learning. The conference provided an opportunity to explore technological collaborations with universities in the national land-grant system. Sea Grant personnel were also able to more fully explore the practicality of adopting systems to manage text and image content. One outcome of participation in the conference was the opportunity for Sea Grant staff to participate as a judge in a competition among extension offices in the Northwest District encouraging the use of Polycom videoconferencing for education programs.

The web-based Request for Proposal and Review, constructed in 2003 to streamline Florida Sea Grant's biennial RFP process, was revised and made ready for the RFP cycle that begins in early 2007. This electronic proposal format has made the research proposal process faster and less expensive for researchers, reviewers, and Sea Grant administrative staff alike. Researchers are able to submit brief pre-proposals for research grants to the Florida Sea Grant office, which in turn has those pre-proposals reviewed by impartial reviewers for research merit. Reviewers can not only review the full text of pre-proposals through a web browser, but submit their comments and project scores as well. Sea Grant administrative staff monitor the submission and review process from a series of user-friendly admin-interface screens.

Interactive websites are also being developed in support of Florida Sea Grant goal areas. The boating and waterways extension team continues to be a leader in the adaptation of content to a worldwide boating audience. The Southwest Florida anchorage inventory successfully transitioned from a static to an interactive website, using database-driven technology to enhance the content and improve the inventory's usability. The boating and waterways team, in cooperation with the Jupiter Inlet District, also adapted its Navigational and Historical Guide to the Jupiter Inlet and Loxahatchee River to an interactive boater's guide website using Flash technology that, with a few clicks, allows boaters to zoom in on a detailed aerial map of the Jupiter Inlet area, and bring up detailed information about points of interest.

The SEACOOS Regional Education and Extension workgroup also unveiled a novel use of ocean observation data that will enable South Florida fishermen to find better fishing grounds. Using real-time or near- real-time surface currents, water temperatures, bathymetry and other sea conditions, fishermen and divers can use the Internet to create maps of their anticipated destination in just minutes. Having this ability can save time and money, especially if sea conditions are unfavorable. Though the system is in its infancy and limited geographically, it indicates that precise ocean observation data previously used only by high-end users like the U.S. Navy can be put to practical use by everyday citizens.

Florida Sea Grant Communications staff routinely submits electronic or portable document file (PDF) versions of all of its numbered publications to the National Sea Grant Library (NSGL). Florida's publications productivity exceeds by far that of most other Sea Grant programs. In 2005, 75,419 PDF downloads of Florida Sea Grant publications were accessed from the national archive, far more than any other Sea Grant program in the country. The National Sea Grant Library's *Program Activity Summary Reports* for 2006 shows a 42% increase over 2005, with 106,425 public access downloads of Florida Sea Grant documents from the library's website in 2006.

Meetings and Bi-Monthly Summaries

All outreach activities from our 17 field-based faculty and 10 campus-based specialists are too extensive to report in this document. In fact, it is a real accomplishment to maintain communications among our far-flung off-campus faculty who are separated by almost 1,000 miles at the extreme of the range (Pensacola – Key West). Agents and specialists touch base at regional district extension meetings, and statewide meetings where there is specific content interest (e.g. fisheries, artificial reefs, Clean Boating Partnership, shrimp TAA workshops). A bi-monthly Faculty Progress Report is also completed and emailed via campus coordinators to about 800 faculty members located statewide. This document announces funding opportunities for faculty and students, as well as other information of interest. This report can also be found at the FSG website, www.flseagrant.org.