ORGANIZATIONAL, ADMINISTRATION AND PLANNING

Suggestions:

(1) That the Department Head consider a routinely distributed electronic newsletter, perhaps quarterly, to strengthen internal FAA communications, improve AU public relations, and highlight work and accomplishments of faculty, students and staff. It could also be distributed to alumni to energize its global network.

(2) Early- and mid-career faculty can especially benefit from annual evaluations by the Department Head to monitor progress in achieving career and FAA goals.

(3) College of Agriculture is encouraged to support leadership development training to assist the FAA Head in his newly acquired duties and provide assistance via an open door policy to help address critical issues in a timely manner. Mentoring in strategic planning will be timely and critical as well.

Recommendations:

(1) FAA can strongly benefit by developing a long range strategic/action plan that is dynamic and visionary in concert with strategic investments and resource allocations to support world class programs in research, instruction and extension. This plan should define the vision and direction for FAA in the 21st century. Ultimately, decisions collectively rest with the FAA Head and faculty to identify this vision and develop and implement strategies. These strategies should focus on niches of excellence on cutting edge issues that although limited by resources, target priorities for long-term success and preeminence. This process may result in a name change for FAA as well. The plan should be oriented as a business plan based upon both direct and indirect value to constituents and returns on investments.

(2) FAA Head, with the final decision-making role, should solicit faculty assistance in some decision roles. This will provide for the development of future leadership and will distribute the heavy departmental work load. The FAA Head is also encouraged to establish a "Consultative Committee" with representatives elected by each of the discipline groups. We believe this committee will promote communication among the discipline groups and support unification of the department. Over time, the Consultative Committee will also encourage a departure from the disciplinary-centric paradigm currently embedded in Department functioning while still maintaining the benefits and strengths of the strong discipline-oriented groups in FAA.

FACULTY

Suggestions:

(1) Faculty may wish to pursue more team-teaching; teaching credit hours could be shared.

(2) Any critical inter-departmental needs, such as economics, should be located in the department that is most appropriate for meeting the requirements for tenure and promotion.

(3) A mentoring program should be implemented to assist junior faculty in successfully achieving promotion and tenure. Senior faculty should begin mentoring efforts the first year that a new faculty member arrives on campus. Specific assignments should be made to ensure adequate mentoring is accomplished.

(4) Strong communication channels must be cultured and maintained among faculty within the Department. Where necessary, strong ties with faculty in other Departments on campus must be promoted and advertised as it relates to conducting effective interdisciplinary research that can overcome deficiencies of expertise within the Department and contribute to comprehensive, high-quality research.

(5) FAA offers three graduate degree options and faculty should emphasize the importance of each to foster respect among students regardless of their program of choice.

(6) Compile a synopsis of interdisciplinary projects to determine and document whether the current level of interdisciplinary work is indeed sufficient, or whether further interactions might be desirable. The results of this effort must somehow be effectively communicated to the upper administration, which should be considered an essential task.

Recommendations:

(1) FAA faculty should design a plan to accommodate sabbatical leave that can be integrated among faculty members. FAA Head should coordinate the plan with the College Dean. If faculty cannot take a sabbatical, develop a plan to recruit other faculty to take their sabbatical at AU.

(2) 'Senior' graduate students, especially those nearing the end of their programs, might be used to teach courses for faculty who are on sabbatical or involved in other important endeavors. The students expressed a very high level of interest in such teaching opportunities and faculty could directly mentor student teaching. FAA should ensure that a set of teaching evaluations be conducted for each teaching student.

(3) Faculty and FAA Head, in consultation with CA, should immediately develop a strategic/action plan to replace retiring faculty. The plan should be directed toward enhancing and balancing the research, teaching, and extension efforts of the Department. The Plan should fulfill the Department's mission and vision within the context of the College, land-grant status, and pursuit of excellence.

(4) The type of new faculty to fill the positions vacated by retirement must be expeditiously defined and agreed upon by the faculty, particularly in context with the needs of clientele and stakeholders. The filling of faculty positions should also be conducted with the intent of meeting any deficiencies that are identified through strategic planning activities and that capitalize on the strengths of other faculty in the Department, and other research scientists on the Auburn campus.

PROGRAM SUPPORT

Suggestions:

(1) Given the extensive amount of O&M support needed, we recommend that funding prioritizations for facility operation be developed within the FAA strategic plan in addition to a renovation plan with anticipated returns to investment.

(2) There is a lack of academic expertise at AU in several knowledge areas that impacts or impedes several research areas. The best option to access this expertise may be through contractual agreements as it is uncertain when AU might fill gaps in expertise.

(3) Make better use of IT specialist by developing an annual work-plan based on Department identified project priorities, and dedicated time of work schedule to complete activities, and placing the individual under supervision of the Department Head to direct work.

(4) Several federal agencies have competitive programs for graduate and postgraduate grants that could benefit faculty and graduate students.

Recommendations:

(1) Expedite the construction of a new building housing the FAA Department at the North Auburn Fisheries Station or another appropriate site. The North campus location will consolidate FAA faculty and provide the space needed for future program growth in FAA. It should also help programs operated at the North Auburn station by other departments.

(2) Establish permanent support in FAA for teaching assistant funds to recruit highly qualified graduate students to the program and assist faculty in developing and teaching introductory university-wide courses that are cross-listed in other colleges. Many peer institutions provide permanent teaching assistantships. An investment in graduate teaching assistants represents one action that AU/CA can do with Peak's funds and reap an excellent return on investment through undergraduate enrollment. Teaching also provides the mechanism to help resolve the perceived or real "silo" issues as students belong to the entire faculty.

(3) In the AU administration's process of allocating research associate and technician positions within the departments of CA, strong consideration should be given to FAA because of the consistently high return on investments by productive faculty.

(4) Convert Swingle Hall to a primary, on-campus teaching site for FAA and possibly other AU environmental studies programs across campus to facilitate interaction among diverse but related faculty and students. Placing FAA and other significant environmental teaching programs in Swingle Hall would enhance multidisciplinary programs and initiate more interaction and subsequent collaborations desired by the Administration, faculty, staff, and students.

RESEARCH PROGRAMS AND SCHOLARSHIP
Suggestions:

Recommendations:
(1) AU/CA/FAA must establish a consistent definition of on- and off-campus sites because these designations have significant implications relative to AU support for O&M costs. Then conduct economic analyses that use correct indirect overhead costs.
(2) FAA should develop marketing strategies to more-effectively communicate the economic impact of its research and extension activities within the university and within the state. FAA should seek the assistance of AU marketing/sales faculty. FAA faculty must be aware that the nature of the audience determines how the presentation should be made.
(3) Market FAA strengths within each of the discipline groups in FAA and the capacity for cross-disciplinary approaches to gain a competitive advantage in the ability to address new and emerging aquatic-related opportunities and challenges in the state. FAA should also reach out to other AU programs with aquatic expertise to reduce internal competition (where possible) in the aquatic arena.
(4) Seek strategic partnerships with extension and education programs as required for federal competitive integrated programs funding in the numerous knowledge areas. The integrated approach and funding can support not only research, but also extension and/or teaching.

ACADEMIC PROGRAMS AND TEACHING-- Undergraduate Programs

Suggestions:

(1) The Marine Biology program at AU should be encouraged to advise students about FAA courses and possibly cross-list courses of potential interest to Marine Biology undergraduates.

(2) The time of the IT specialist is best used for high-demand IT support and not undergraduate student recruiting. The intensity of undergraduate recruitment should be decided based upon FAA strategic goals to actively increase undergraduate enrollment with sound advisement.

(3) Find a way to utilize the benefits of the Dauphin Island Sea Lab for undergraduate education.

(4) An introductory seminar/orientation course be required for all students and taken during the first semester.

(5) The undergraduate education experience can be enhanced with quality advising, that also covers transition to a large university setting with multiple learning opportunities and choices.

(6) FAA should require exit interviews for departing undergraduates to learn about student issues and areas for potential improvement.

(7) An Undergraduate Student Handbook modeled after the currently available Graduate Student Handbook should be produced for undergraduate students in FAA to provide necessary information in the form of academic guidance.

Recommendations:

(1) After careful analysis of the options, the FAA faculty should develop a collegial vision concerning the fate of the undergraduate academic program based on tradeoffs and workloads. If not eliminated, then some strategy concerning an increase in enrollment that can be sustained must be made. FAA must also decide whether they can provide both a professional and a non-professional fisheries degree while the job market indicates diverse training is important to all AU degree programs.

(2) If an anticipated increase in undergraduate enrollment occurs, then students should be required to have attained a certain grade point average at the end of the sophomore year, or they would no longer be able to continue matriculation within the fisheries major.

(3) A capstone-type course be required and offered during the senior year whereby groups of students have an opportunity to apply collectively their educational skills through a project that involves management of a natural resource, or an aquaculture enterprise (such a course would also qualify in the human-dimensions category for AFS certification).

(4) Internship credits should not be included toward the 120-credit major, unless necessary. However, internship availability should be retained because some job opportunities available within the profession require a formal internship program from the sponsoring school.

(5) Post-graduate tracking should include collection of job placement data. Trends for critical core competency areas and job skills can then be assessed to revise curricula and learning activities as needed.

ACADEMIC PROGRAMS AND TEACHING-- Graduate Programs

Suggestions:

(1) There is some concern for the MAQ program because of decreasing student interest. A re-evaluation may be worthwhile based on financial resources, job placement opportunities, industry needs, consultation with ACES, and commitment by FAA.

(2) FAA should determine the feasibility of establishing a computer teaching laboratory.

(3) We suggest that the graduate students develop a council of elected representatives who then can coordinate and relay commonly experienced concerns to the Department Head and carry responses back to the graduate student body.

(4) We encourage FAA faculty to discuss the possibility of making an exception whereby non-thesis option students are allowed to enroll in the program without an available assistantship. Departmental admission standards would still apply. We suspect that such enrollments would not be large. Under this plan only slight enrollment increases in graduate courses that might occur would have limited effect on faculty time.

(5) FAA faculty should consider assessing the need for and utility of a non-thesis Master's degree option for other disciplines in the Department. A larger program to accommodate the MAQ degree, as well as other uses for a non-thesis Master's degree, could be designed in such a manner that the MAQ program is not affected.

(6) FAA should consider adding a graduate-level marine fisheries or marine biology course to the curriculum.

(7) We suggest that FAA consider the addition of a human-dimensions course and the offering again of an advanced ichthyology course that would be an appropriate addition to the graduate curriculum.

(8) When appropriate, consider the offering of more graduate classes in alternate years to assist in meeting the minimum enrollment requirements.

(9) A comprehensive assessment of overall graduate course scheduling would be appropriate to achieve more efficient use of faculty teaching time.

(10) At a minimum, placement data should be collected by degree type and eventual employment. Trends then can be assessed over time.

(11) The Graduate Student Handbook should be updated with annual updates implemented as needed.

Recommendations:

(1) That the College and University administration consider the provision of Graduate Student Teaching funds. A limited availability of financial resources would likely increase the quality of graduate students recruited into the Department, and could pay dividends in terms of additional research proposal submission by PhD students and their faculty advisors.

(2) The College and Central Administration should consider the need for expertise and courses in biochemistry, molecular biology, genetics, toxicology, and bioinformatics in their long-term strategic planning efforts. In addition, input from FAA might be used to determine where a useful marketing course might best be placed within the College and linked to promotion and tenure support.

(3) In anticipation of future employment opportunities, we recommend that FAA make a concerted effort to produce as many qualified students as possible in anticipation of compensating for the impending retirements, especially in fisheries-related areas. While faculty members already are highly involved in graduate education and quite busy, the next 5-10 years appears to offer unique opportunities within the fisheries profession.

(4) FAA faculty should include curriculum development for graduate courses during development of their strategic plan to reflect the needs of graduate education and not specific needs of faculty student groups.
(5) That FAA faculty seeks opportunities for PhD students, especially experienced students nearing the end of their graduate program, to gain classroom-teaching experience. Such activities might be tied to an increased faculty sabbatical program, as noted in the "Faculty" section of this report. If teaching activities are not allowed without a teaching assistantship, then we recommend that the College administration consider providing a small amount of funds that could be split into small appointments for support of multiple graduate students per semester.

EXTENSION PROGRAMS

Suggestions:

(1) That clientele groups be included in the development of funding mechanisms for analytical services and personnel for servicing these requests, or provide assistance to constituents in locating the most reasonable commercial laboratories.

(2) Accelerate the transition to digital supported programs by assessing the potential adoption of existing technologies used by other programs that have made these transitions.

(3) Develop short- and long-term strategies to increase FAA/ACES/SG investment in technical computer support personnel.

(4) With the assistance of ACES administration, explore opportunities where a portion of program costs can be recovered from industry while not in conflict with University- associated policy.

(5) In team efforts, work with industry to identify where funding measures are to be employed, and, if accepted, raise these issues to the highest priority.

(6) Extension should seek funding for integrated extension-research projects from the catfish feed check-off program to add educational value to investments in research.

(7) Accelerate the adoption of web-based technologies to facilitate cost and time reduction associated with regional planning, training, and program delivery.

(8) The ACES and Sea Grant Extension faculty should form a joint planning group, and in a team effort, develop an Extension strategic plan for insertion into the FAA Department Strategic Plan.

(9) Obtain needed assistance for economic development evaluations for the Blackbelt Initiative through inter-departmental joint faculty appointments, outside contractual agreements, or other viable options so that the needed interdisciplinary science for this highly visible project is acquired.

(10) The FAA Head and Extension Administration should engage in dialogue as needed to address any critical issues or concerns related to the different reporting and supervisory lines for the area extension specialists for everyone’s benefit. FAA and the Extension Administration have numerous commonly linked programs, initiatives, facilities, and personnel.

Recommendations:

(1) Evaluate each program thrust as to the percentage commitment of time and funds internally and with advisory input. As priorities change, reduce the level of commitment to lesser priorities. In the face of extreme resistance, request program contribution or assistance in obtaining contributions from invested user groups.

(2) Monitor the status of the identified long-term challenges by examination of those industries already impacted by imports; monitor international development of aquaculture production to assess potential impact.

(3) Seek partnerships and stress new opportunities with research scientists to compete for funding in integrated (research-extension) grant programs.

(4) Examine the potential of internal alliance with natural resource programs to lessen potential impacts of aquaculture to natural resources, and locate/accumulate resource materials that address animal welfare issues in states where these social challenges are currently being confronted. Shift priority requests for clerical assistance to development of IT and associated computer assistance to facilitate digital delivery of information as the primary means of handling information requests, thus reducing the cost and workload of postal delivery and conserving this priority to clientele who have limited Internet capabilities.

INTERNATIONAL PROGRAMS

Suggestions:

(1) The leadership responsibility for ICAAE could transition to a senior tenured faculty member as a part-time role needed during the interim when FAA determines the level of leadership and management needed to meet strategic departmental goals related to international programs.

(2) Identify potential sources of extramural funding for various types (scientific collaborations, development, technical assistance, scientific exchange programs, international scholarships, study abroad, etc.) of international projects or experiences that can be matched with FAA faculty interest and scholarly expertise, or those of students.

(3) Any strategic planning associated with IP should respond directly to and align with the broader mission and goals of AU and new Institute as future reorganization occurs.

(4) FAA faculty may wish to engage in international scholastic work under sabbatical leave.

(5) Consult with University of Rhode Island's Coastal Resources Center relative to their experiences and lessons-learned in administering and managing projects overseas as they have sustained an active global assistance and training program in spite of reductions in core funds from USAID. USAID Collaborative Research Support Program management entities at land-grant universities also have extensive experience in the financial and business management of international programs.

(6) FAA faculty can be involved in USAID Collaborative Research Support Program (CRSP) international aquaculture research and development projects at various levels, including graduate student training and scholarly endeavors, without a significant business management demand that is assumed by the CRSP Management Entity.

Recommendations:

(1) The work demands, complexity of issues, and need for focused leadership for both FAA and ICAAE require that each have a separate leader. The Department Head cannot be expected to dedicate much attention to ICAAE at this time or assume other than an "emergency management" role. FAA may consider a permanent position to direct the ICAAE with the appointment commensurate with the desired level of support for international programs.

(2) FAA should develop a road map or action plan for establishing an enabling capability for AU to efficiently administer and manage short- and long-term international programs. Within the FAA Strategic Plan, the international program should emphasize scholarship outcomes wherever possible, create desired engagement capability, and identify program staffing options.

(3) Develop a database of FAA and other potentially interested AU faculty with an interest in international work, including a description of experience and knowledge areas in aquatic sciences. Include critical knowledge areas of faculty in other departments or colleges for a more-comprehensive AU-wide capability in the aquatic sciences. This action should integrate new science disciplines and expertise for more complex projects or those with critical expertise lacking in FAA. AU/FAA can develop a portfolio of multidiscipline scholarship in aquatic sciences.

(4) With complications with overseas payments exacerbated with compliance to Alabama laws that impede needed financial business in a foreign country (Uganda), FAA needs more enabling business management and support procedures before other large projects are considered. Currently, complications and problems with international projects often require much time and energy for proper management. Experiences gained may result in valuable lessons learned for the administration of potential future projects.