Center for Excellence in Integrative Fisheries Science


UF/IFAS Department of Fisheries and Aquatic Sciences

What is a Center for Excellence?

- A Center for Excellence can occur within a single academic unit, across units, can span multiple institutions, and some centers occur in agencies.
- The State of Florida has designated certain academic units as Centers for Excellence in recent years and provided up to $1M in start-up funding.
- Our Center will focus on Integrative Fisheries Science.

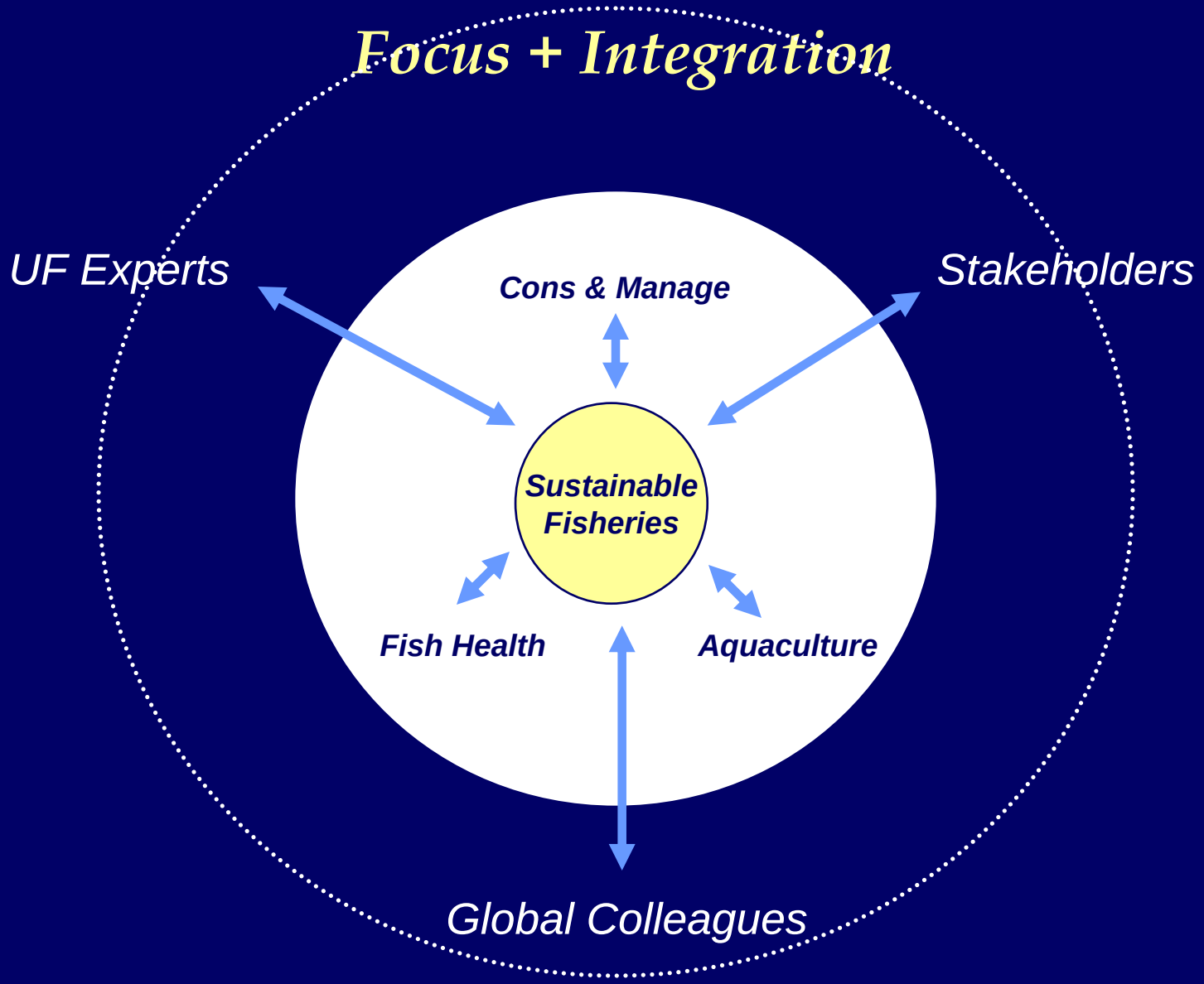
'Integrative Fisheries Science'

- Existing programs in the Department of Fisheries and Aquatic Sciences occur in four core areas:

    1. Sustainable Fisheries
    2. Conservation and Management
    3. Aquatic Animal Health
    4. Aquaculture

- Integrative Fisheries Science will harness this broad expertise, and additional expertise at UF beyond the Department, to address critical issues in Sustainable Fisheries.

IFS Conceptual Model of Collaboration



Why This Center is a Critical Need

- $50 billion US marine and freshwater fisheries
- Impacted by over fishing, habitat loss, water quality degradation, changes in water flow, etc.
- Need for objective science to address key issues and help guide solutions
- Need for highly competent graduates, skilled in quantitative methods of stock assessment, modeling, fish ecology, and fisheries management

Why UF ?

- Broad Departmental expertise, spanning freshwater to marine continuum
- Strong commitment by the University to support water-related initiatives
- Proven track record of providing objective science and competent graduates to support fisheries management in Florida and USA
- Land-grant mission for teaching, research, outreach

Complex Fisheries Issues Requiring an Integrative Approach

- Understanding stock dynamics in context of fishing pressure, toxic algae, and other stochastic events
- Establishing Minimum Flows and Levels in the context of freshwater and estuarine fisheries
- Predicting impacts of climate cycles on fisheries
- Quantifying impacts of nutrient runoff from watersheds on downstream fisheries

Major Outputs of the Center

- Practical and innovative SOLUTIONS to current problems and emerging challenges of sustainable fisheries
- GRADUATES with skills and knowledge necessary to be highly competent practitioners of integrative fisheries science
- Integrative fisheries RESEARCH in Florida with national and global relevance

Examples of Some Specific Outputs

- Enhanced collaboration with agencies to develop new tools for fisheries management
- Workshops to define state-of-the-science and research needs in specified focus areas
- Educational opportunities (courses, degrees) for agency scientists
- Collaboratively funded research grants with agency partners

Major Action Items

- Development of a specialized graduate curriculum
- Filling gaps in faculty expertise, technical support, technology and infrastructure
- Holding state-of-science workshops
- Developing expanded program of continuing education and outreach
- Developing integrated research programs

Potential Sources of Funding

- Congressional Appropriation
- State Legislature Appropriation
- Foundations and Private Donors
- Competitive Research, Teaching and Extension Grants

Q/A and Discussion

- Do our goals and objectives align with your needs?
- Have we clearly identified what we will do?
- Have we made it clear that our over-arching premise is cooperation with agencies?