

Request to Establish a Doctoral Program in Fisheries and Wildlife Sciences at North Carolina State University

Introduction

Following a recommendation from the Graduate Council and from the Senior Vice President for Academic Affairs, the Committee on Educational Planning, Policies, and Programs approved on January 13, 2005 the request from the North Carolina State University to plan a doctoral program in Fisheries and Wildlife Sciences. The North Carolina State University now seeks approval to establish a doctoral program in Fisheries and Wildlife Sciences (CIP: 03.0101) effective January 2007.

Program Description

The Fisheries and Wildlife Sciences program (FWP) will offer doctoral education that integrates the study of wild terrestrial and aquatic organisms, their management as important natural resources, and their conservation. In a world where rapidly expanding human populations place stress on natural and human dominated ecosystems, new knowledge and expertise must be generated at a rapid pace to successfully sustain a balanced biosphere and acceptable lifestyles. The funded research of the Fisheries and Wildlife Program faculty continually generates important new knowledge addressing key environmental issues ranging from advanced technical solutions (pathogen detection, identification of critical habitat, etc.), to novel integrated philosophical and scientific approaches to challenges at the human/wildlife interface. Doctoral students in the Fisheries and Wildlife Sciences will have the opportunity to participate in and gain valuable experience from this research. The Fisheries and Wildlife Sciences Doctorate is designed to prepare creative scholars with a solid foundation in use of the scientific method, and the integration of new knowledge into practical applications to meet the conservation challenges of the 21st century. Graduates will have the tools to lead efforts to counter declining biodiversity, the collapse of global fisheries, the spread of invasive exotic species, and the impact of diseases capable of devastating wild populations or spreading to domestic stock, and humans. The successful doctoral candidate will understand the need to integrate human socio-political and economic interests into research and development activities including subsistence and recreational use of fish and wildlife.

The Fisheries and Wildlife Sciences Doctoral Program will expand the frontiers of knowledge through provision of graduates with broad-based expertise in applied ecology, quantitative methods, and human dimensions in the conservation and management of fish and wildlife. Doctoral candidates will also contribute significantly to helping public and private agencies solve complex environmental problems and be good stewards of the land through their teaching and outreach skills.

The Fisheries and Wildlife Sciences Doctoral program will graduate students who are highly qualified to become national leaders in the creation of new knowledge and understanding about ecosystem function, the biota sustained therein and the importance

of these natural resources to humans. The doctoral candidates will become the leaders in higher education, natural resources policy and human dimensions of fisheries and wildlife conservation. They will also be leaders in developing strategies to sustain the health and well being of wild populations of all animal species. NCSU Fisheries and Wildlife Sciences Doctorates will be qualified to lead university research and teaching programs, state and federal natural resources management agencies, wildlife health laboratories, non-government research and advocacy groups, and serve as private sector consultants.

Program Review

The review process is designed to surface strengths and weaknesses in proposed new degree programs. Proposals to establish new doctoral programs are reviewed internally and externally. The concerns from the two review processes were summarized in a letter to the Chancellor prior to the presentation to the Graduate Council. That summary follows:

The external review that is in hand pushes the human dimension referred to in the proposal to mean an involvement of social science faculty in the interdisciplinary mix for this program. It will be important to more clearly specify what is meant by the human dimension and what type of faculty will be responsible for providing that dimension. Is the reviewer reviewing a program you did not propose or is the direction the reviewer points an important one to carry out the full vision of this proposed program.

Another reviewer raised issues about the organization of the program and who will be responsible for the effective management of this program which crosses colleges and programs.

The other external reviewer has promised the review shortly and has indicated she finds this a good program for which she is very supportive. We will send this review as soon as it arrives.

Graduate Council

The Graduate Council had, as a basis for its consideration, the proposal to plan the program, copies of the outside reviews of the program, the summary letter to the Chancellor, and a presentation to the Council by representatives of the program. No additional significant issues were raised by Council members.

Response

Representatives of the program presented some of the history of Fisheries and Wildlife Sciences at NC State, a history that dates back to the 1930s. Everything is in place to offer the degree program and currently students can work in other programs to complete a degree program with a focus on Fisheries and Wildlife Sciences. While human impact on the environment is an important part of the focus of this program, it will not be primarily through social sciences but through scientist who study human impact and the consequences for the environment and wildlife.

Need for the Program

This has been an area of academic and research focus at NC State for more than seventy years. Certainly the fishing industry, both commercial and recreational, is important to the economy of North Carolina and the research and leadership in fisheries and wildlife is important to maintaining them. The University and the program have well established relationships with federal and state agencies, and private organizations and companies who have been consumers of research and graduates in this area. This would be the only doctoral level program offered in the State.

Resources


Almost all resources are in place for this doctoral program. There are 36 faculty with expertise in fisheries and wildlife sciences spread across a number of departments in the University with an additional faculty member in Wildlife being added for 2007-08. Additional support staff for the program is being provided by the University. In addition to grant support, the University will add two to three additional graduate stipends for the program.

Recommendation by the Graduate Council

After consideration of the issues raised by reviewers and Council members, the Graduate Council voted, without dissent, to recommend approval for North Carolina State University to establish a doctoral program in Fisheries and Wildlife Sciences.

Recommendation

The staff of the General Administration recommends that the Board of Governors approve the request from North Carolina State University to establish a doctoral program in Fisheries and Wildlife Sciences.

Approved to be Recommended for Establishment to the Committee on Educational Planning, Policies, and Programs

Senior Vice President for Academic Affairs Harold Martin

January 3, 2007