



Vice Provost Havidán
Academic Affairs and International Programs
101 Hullahen Hall, Newark, DE 19716-1520

RE: Graduate Program Review Entomology and Wildlife Ecology

19MAY08

Dear Vice Provost Havidán,

Dr. Pablo Huq and myself have completed the review of the Ph.D. program in Entomology and Wildlife Ecology. Overall we find the program to be academically robust and well administered, with an important and and unique niche within the UD community.

We strongly recommend that this Ph.D. program be given permanent status. The academic and career preparation that the program provides for its students reflects positively upon the graduate education mission of the University of Delaware.

Our attached review follows the outline that was provided as a model.

Don't hesitate to contact us if you have any further questions or clarifications.

Sincerely,

A handwritten signature in black ink that reads "Adam G. Marsh".

Adam Marsh, PhD
Associate Professor
Marine Biological Sciences

PH.D. Program Review: Entomology & Wildlife Ecology

Submitted by:

Adam Marsh & Pablo Huq

College of Marine and Earth Studies

Objectives, Strengths, and Weaknesses

1. Does the major/program meet its originally stated goals and objectives?

The Ph.D. program in the department of Entomology and Wildlife Ecology (ENWE) was initiated in 1999 as the ENWE program was developing a conceptual shift from their previous moniker of “Applied” ecology to one of “Wildlife” ecology. The distinction was enacted to reflect the changing field of ecology in general, and more specifically to address a concomitant de-emphasis on organismal biology within the Biology Department. To this end, the Ph.D. program in ENWE plays a unique and vital role at UD in both basic and applied research on animal populations and ecosystems. The vision with which the program was founded has been maintained and now serves a graduate student body that could not be supported by any other department(s).

2. Is the major/program compatible with the Academic Priorities of the University?

This program adheres to the graduate education standards set forth by UD’s RGS Office. The policy statement is up to date and consistent with UD requirements. The level of scholarship required for Ph.D. candidates is consistent with graduate benchmarks enforced by other departments and programs across UD. The faculty evidence a balance of teaching and research activities to maintain a vigorous and intellectually engaging graduate program. The Ph.D. students produced by this program are highly likely to reflect very positively upon UD as an institution of higher learning.

3. What are the strengths and weaknesses of this major/program?

The primary strength is that ENWE functions as a defacto department of Zoology at UD. Our own Biology Department has chosen to focus on developing its molecular and biochemical strengths, while de-emphasizing organismal-level research and education. This is not to criticize the Biology program, but rather to emphasize that ENWE fills a void that is missing at UD in terms of understanding how animal populations “work” whether in natural ecosystems, human-managed parks/forrests, or agricultural plots.

A secondary strength is the “applied” linkage that the department has to the areas of managing parklands/forrests and insect pest control in agriculture. The faculty have numerous regional resources that provide them access to and integration within these applied arenas of research, giving their students a strong working knowledge (and initial connections) of these career paths outside the ivory academic tower.

Overall, the program is well grounded to provide their students both academic and applied research and education experiences. These students will have a strong foundation from which to begin their professional careers.

Impact and Demand

1. Describe any significant impact the proposed curricula might have on other instructional, research, or service programs of the University.

Given the unique niche that the program has developed, the perceived impacts to other programs can only be described as beneficial. Linkages to other departments and programs with interests in organismal biology serve to better diversify the course offerings and research opportunities for students in this program.

2. Are the admissions requirements for this major/program clearly stated and fairly implemented?

The policy document for this program is exemplary. The process from admission to graduation is clearly written, well organized, and succinctly transparent.

3. Is there sufficient demand for this major/program to warrant granting it permanent status? Are enrollments strong?

The program is growing and developing momentum. The well established M.S. program within ENWE serves as the primary recruitment vehicle, with many of these students likely to remain at UD to pursue a ENWE Ph.D. degree. As the program matures and produces more successful graduates, enrollment/recruitment for the program is likely to expand. It is important to note that the Ph.D. program was not created de novo. An existing M.S. program dating back to 1949 has developed the solid reputation of this department and the Ph.D. is building on that reputation.

4. Do the students in the major/program receive appropriate advising and mentoring?

Faculty experience is well balanced between teaching and research. Upcoming retirements will add new assistant professors to the ranks. The program has an impressive list of adjunct faculty to further provide broad and diverse experiences for the students.

5. Does the major/program require additional student expenses beyond the traditional books and supplies, such that additional need for financial aid can be expected?

No.

6. Does the program have the support of departmental and affiliated faculty?

The commitment among faculty is strong given that this degree is the focus towards which both of the M.S. programs are building. So all faculty within the department are best served by maintaining a vigorous Ph.D. program.

7. Are resources available to support and maintain the program/major?

The graduate program has been very successful at supporting graduate students through a variety of funding mechanisms. As with any program at UD, the biggest hurdle is not in enrolling students, but in supporting them. At present, the support base appears to be stable as the program continues its course. The large undergraduate enrollment within ENWE should become a strong asset for them in the new UD budget formulations.

Evaluation

1. Does the major/program address any of the ten goals of General Education at the University (question for undergraduate programs only)?

NA.

2. Has the major/program clearly delineated the knowledge, values, skills, and other learning outcomes that their graduates will be expected to have acquired?

The ENWE Ph.D. program maintains the academic standards of other graduate programs in the natural sciences at UD. The expectations on graduate performance, the experience of the faculty, and the success they have had mentoring students for future careers utilizing their degree knowledge clearly establish this program as a viable and robust program at UD.

3. Has the major/program implemented a plan to evaluate and assess the learning outcomes of its students?

The standard academic achievements of individual research and dissertation preparation serve as the benchmarks of scholarship in this program consistent with other natural sciences.

4. Please comment on completion and job placement of students who completed the program/major.

Because of the length of time involved to complete a Ph.D. degree, the program has at present graduated 3 students, all of whom are in careers actively applying their Ph.D. skills/knowledge. At present, there are 7 Ph.D. students enrolled. It takes a few years to build up the reputation and student body to fill out a full program.

Additional Comments. Please add any observations or comments you may have about this major/program.

1. The program could consider developing/offering a few more 800-level courses to fill out the upper level of their curriculum.