

CATEGORY I

Wildlife- This department is one of the great success stories in the University. Their teaching is solid, they manage the largest option in the NR graduate program, they publish more than any other department in CNRS (both absolute numbers and per capita numbers), they bring in more extramural funds than any other department in CNRS (both in absolute numbers and per capita numbers), their students perform magnificently on the national stage and the graduates are in high demand from agencies and graduate schools. This year they have over 300 undergraduate majors (for seven faculty) and over 30 graduate students. The program is nearly saturated and still growing. Dave Kitchen concludes his FERP next year and their capacity to continue to serve the current student population will decline. An additional faculty member would also support the NR Graduate program listed below. They will be submitting a request this year. It is also possible that they could split a position with Biology, although that discussion has not taken place.

Biology-The department has grown over 100 majors in the last three years. Biology programs are on the rise nationally and we have a unique opportunity at HSU to capitalize on that because of our environment. There is probably not a finer place to do field biology in the 48 contiguous states. To their credit that the department has also developed a strong program in cell and molecular biology, which is the sector nationally where one would expect significant growth. In my opinion the department would be stronger still if it reduced the number of options in the Biology degree and made the remaining options more flexible. This issue has been raised repeatedly in the department and has proven to be politically challenging. I think the University might be better served if the marine biology option were elevated to a major and linked with oceanography somehow to create a more recognizable face to outside agencies and to students.

The Biology degree still has low SFRs relative to Botany and Zoology, and lower than peer institutions in the system. My assumption is that the graduate courses (that are all listed as Biology) retard the upward SFR progress of Biology relative to the other degrees. John Filce tells me there is currently no easy way to separate out those undergrad and graduate contributions.

What are the main impediments to growth? Faculty numbers! Some investment in faculty resources is necessary if the department is to continue to grow, however it is not clear now whether the department is willing to reduce options and make the necessary steps to maintain their SFR if TT faculty are added. It is also not clear that they have a strategic plan for the direction they want to grow.

We have maximized large lecture, eliminated electives and nearly saturated the existing seats in labs to serve the nearly 900 majors. The department has already reduced the lab requirements at the lower division in order to increase the SFR. While we could probably recruit some full time lecturers to the department at lower cost than tenure track faculty, such faculty would not contribute to the graduate program or produce new grant revenue.

The two arguments the department makes in their response to the task force are misguided. The first about relative costs is largely irrelevant because the major costs of a program are determined by the demographics of the faculty and comparing departments with different demographics makes for “apples” to “oranges” comparisons, which is why the task force chose not to use that data. The second argument is that there are few cost savings associated with the elimination of options. If we add the modest savings available after restructuring in biology to savings in other disciplines it doesn’t take long to generate enough funds to support new enhancement positions.

Engineering- One of the class programs in the college; ERE is rigorous, high quality and produces students with great opportunities. It is expensive but not compared to other engineering programs and it is a perfect fit with our strengths in natural resources and biological sciences. In fact, they view themselves as more of a natural resource based department than a typical engineering based department. Hopefully the current search will be successful and then the pressure to increase faculty lines will diminish somewhat. A few faculty in the department are very supportive of adding an ENVIS faculty in the area of climate and energy, which would be a cheaper option than recruiting another engineer.

Mathematics- Math is an excellent service program with a moderately sized, good quality major. The unique aspects of the major are in the modeling area and that integrates well with a number of our science and engineering programs. We hope, with the current search completed, Math is OK in the math education area and can experience some growth.

NRPI-It is very important that they restructure options. The argument that they “only have five options” really misses the point. If you divide their 120 majors among four years and five options you virtually guarantee continued low enrollments in the upper division courses. The argument that there is no cost savings associated with dropping the GIS option, for example, is in error. Those upper division courses could be taught less frequently or for cohorts of students in a certificate program. Certainly the program has lost faculty but the decline in student numbers started while the department was fully staffed. NRPI certainly has the potential for growth but it is hard for students to recognize what the program is from the outside. I think the department needs to refocus or rename its degree (perhaps environmental planning and education) and reduce its options. It is clear to me that the GIS option is not viable as a program option but the courses are vitally important to other disciplines and has considerable interest as a certificate program. It is also clear that the program needs more faculty resources for its enrollments to rebound. I wonder if the students would recognize the programs more easily if they were combined and offered as an option in environmental science. I am convinced they need another faculty even if their programs are restructured. The planning option is the strongest in NRPI and a faculty member there would also support one of the new options in ENVIS.

NR-Graduate (Wildlife and Fisheries)-This area is nearly saturated with students as well and the only way it can grow much is with additional faculty. A case could be made that an additional faculty line in Wildlife and one in Fisheries (see below) could enhance the graduate program and both those departments are in the top grouping, however, without increases in FTES the additional faculty could depress SFRs in both departments. The NR program response also points out the decline in the NRPI graduate option as a reflection of the decline in TT faculty in that area. Another hire in planning could help to turn that decline around.

Fisheries- This is one of our premier natural resource programs. Traditionally it has lower levels of student appeal than wildlife but fills a vital role for the state and federal agencies. Its off-campus contacts are actually higher than wildlife and perhaps more similar to forestry. The capacity for growth is obvious and the department has been actively engaged in attracting more students. It is an applied biological science and could benefit from having more biology students take advantage of its courses. The SFRs reported are wrong but even when corrected they are lower than system averages for “agriculture” programs. The major impediment to growth is the lack of a faculty lead in fresh water fish ecology or salmonid biology. This has historically been the largest option in the program. In my opinion fisheries has reduced its flexibility by hiring faculty with narrow areas of expertise. While they have five tenure-track faculty they have no one who has the background to teach some fundamental courses in that option. Clearly, it is hard to argue for another faculty line when your SFR is low, however this position is also important to support the NR Graduate program and could take advantage of the many funding opportunities in our area.

In summary, I support enhancement of faculty resources in Biology and NRPI conditionally. I also support the hybrid ENVIS/Schatz position as assisting with efforts in engineering and ENVIS. I would also support both the Wildlife and Fisheries searches as enhancements for those departments and for the NR Graduate program. In addition to recognizing the highly ranked programs in Category I, these investments are entirely consistent with the vision outlined in our Strategic Plan; “We will be the premier center for the interdisciplinary student of the environment and its natural resources”.