Appendix A – BAC Program Review Self-Study
INTRODUCTORY QUESTIONS

OVERALL MISSION: The overall mission of the Biological Aspects of Conservation (BAC) undergraduate major program is to provide undergraduate students broad training in the biological and related disciplines most relevant to conservation biology and policy. This science-based program emphasizes basic knowledge of natural history, whole organism biology, ecological interactions and conservation biology. Thus empowered, our students are able to act as informed citizens, and to enter careers in environmental education, environmental resources management, and/or endangered species research and recovery efforts. They are prepared for graduate study in a wide range of conservation biology programs.

"Whenever the people are well-informed, they can be trusted with their own government."
--Thomas Jefferson to Dr. Price, 1789.

Aldo Leopold and Norman Fassett first initiated this major in the 1940s to prepare individuals for careers as game wardens, ranger naturalists, and museum workers. These opportunities continue and have expanded to include work in environmental education; forest, game and park management; endangered species research and recovery efforts; and work with private conservation organizations. The major is also recommended for those seeking a liberal education in the intrinsic values of natural resources and those preparing for graduate study in the rapidly developing field of conservation biology (e.g., our M.S. program in Conservation Biology and Sustainable Development).

The BAC program is characterized by flexibility with a broad range of opportunities. Our curriculum requires students to complete a series of basic science courses, courses focused on the ecology of at least one group of organisms, and to supplement their core courses with a variety of courses in ecology, environmental sciences, environmental studies, and/or social sciences from among offerings of 23 University departments and programs. Our program has a unique appeal to students passionate about conservation biology, from the social scientist to the theoretical ecologist.
RESPONSES TO THE LAST REVIEW:

The last L&S review of the BAC program was completed by a committee headed by Professor John Magnuson on 26 May 1995. The review includes the following —

EXECUTIVE SUMMARY AND RECOMMENDATIONS OF THE LAST REVIEW:

"Biological Aspects of Conservation (BAC) is a popular major in Letters and Sciences (L&S) that has grown rapidly since 1989 from essentially inactive to 150 declared majors in the fall semester of 1994. It is a broad biological major across departments and colleges and has considerable flexibility in selection of courses. It has minimum quantitative requirements and does not specify that depth be achieved in any area. Thus, the major is on the breadth side of any breadth and depth debate in the learning experience. It is coordinated by a group of volunteer faculty across the campus and has had a voluntary chair.

The majority of our committee believes that the major should continue. The major must be able to stand on its own intellectually, that is, a second major should not be necessary to achieve "rigor" and "depth. The challenge is to retain its strength of breadth while increasing strengths in its quantitative and depth areas. When this major is tuned, it should remain broader than any departmental degree related to conservation biology but have increased strengths in quantitative skills and depth within the major.

Advising must be strengthened and be more evenly distributed among the BAC Chair and the BAC Committee of Advisors. Rotation of advisors from a broader number of faculty committed to BAC is needed. Career advising is needed to meet the desired and realistic futures of the students. A greater sense of identity is needed among students in the major. This is especially true given the interdepartmental nature of the major and the breadth of the degree. Greater access is needed to internships and research experiences with faculty, research scientists and graduate students.

The major must have a stronger and better supported institutional structure. The committee recommends that the position of the BAC Chair and BAC Committee of Advisors be enhanced and that support be provided for supplies and staff assistance. The greater involvement of the faculty and courses in College of Agriculture and Life Science (ALS) would enhance many aspects of the major. Integration of the major across L&S and ALS is encouraged; a number of specific institutional changes would be required by these Colleges."

Here, we will outline the BAC responses during the last 10 years to the specific recommendations of the review committee.

Specific Recommendations

GENERAL RECOMMENDATION (1995): The review committee recommended that the Biological Aspects of Conservation major be continued and strengthened to provide a broad interdepartmental and intercollege major in conservation biology...contingent on:
a. Increase in Rigor: In response to the 1995 recommendations, the BAC program has increased rigor by recommending the Biology 151/152 introductory courses, and by including additional quantitative course work options in the list required and elective courses. We are currently discussing the desirability of adding a math requirement, such as statistics, to our core requirements (Statistics 301/302 and 571/572 are already accepted for elective credit by the program).

b. Intercollegiate Integration: A serious attempt is being made to integrate the BAC major across L&S and ALS, by incorporating the program’s administration into the newly formed (2005) Institute for Cross-College Biology Education (ICBE). In addition, the BAC Program currently has 4 CALS advisors and one advisor from the Gaylord Nelson Institute for Environmental Studies (compared to only 3 CALS advisors in 1995).

c. BAC Chair and Faculty: The role of the BAC Chair was strengthened at the time of the appointment, by then Dean Philip Certain, of Dr. Stanley Dodson as chair of the BAC program in May of 1999. At that time, the Dean offered $1200 in supplies and one semester of teaching relief, as well as encouraging the Zoology department to provide advising help and clerical support. In subsequent years, the Dean’s office has provided annually to the chair $1000 in supplies support and one month of summer salary. Advising shifted first to CBE and then in 2005 to the ICBE advising staff.

The BAC Committee of Advisors has been strengthened by replacing retiring members after discussion with the Committee, by increasing the number of advisors from 9 to 11.

The review Committee also made recommendations concerning the BAC curriculum, advising, and institutional structure.

CURRICULUM

A Strengthened Curriculum: As recommended by the 1995 review, the BAC curriculum has been reviewed by the BAC Committee of Advisors on an annual basis, since 1999, at an annual faculty meeting. We have discussed and in many cases implemented strategies for increasing the quantitative requirements and range of courses available to our students. We have yet to add additional quantitative requirements, such as statistics, because of concern that, by so doing, we would discourage the natural history and liberal arts portion of your majors. While our major is appropriate for students interested in either environmental science or environmental studies, our curriculum focuses on aspects of conservation biology lying between these two specialties.

We have increased the number of potential courses from outside L&S in all three curriculum areas core courses, species and field biology, and electives). Environmental studies courses were added to our core courses. The number of courses acceptable as species and field biology courses has increased from 42 to 50. Some of these courses are in programs new to BAC, including courses in two CALS departments (Agronomy and Horticulture), and courses in Environmental Studies and Animal Health and Biomedical Sciences (Veterinary School). Courses automatically accepted for elective credit have increased from 67 in 1995 to 87 today. We have added elective courses in Agronomy and Animal Health and Biomedical Sciences.
Since 1995 we have added the recommendation of Biology 151/152 and removed introductory ecology courses while retaining General Ecology. We have added several departmental directed studies, senior thesis, and honors courses to our curriculum.

In February, 2006, the BAC faculty moved to reinstate the DARS check for three credits of social sciences.

We continue to struggle with the issues surrounding the development of specifically BAC courses, such as a Directed Studies or Senior Thesis. The major block to the development is that BAC is staffed by faculty whose appointment and primary responsibilities are in other departments and programs. Thus, any BAC courses are easily cross-listed with other departments, but a unique BAC course would be an overload for the instructor.

**IMPROVED ADVISING:** Based on the very welcome recommendation that resources for improved advising be made available, we have gratefully expanded the BAC advising program. The ICBE office staff and the Biology Advisor provide outstanding advising assistance concerning the advisability of the BAC major, the desirability of multiple majors, and the intricacies of the DARS reports. (Since about 2004, the DARS report has become the students official record of progress.) The ICBE staff have also developed an excellent web page for the major, with all the required forms, information, and links to other programs. Faculty advisors are able to focus on curriculum strategies, upper-level courses, career consultation, and dealing with unusual problems that require use of our newly-revised exceptions form.

The ICBE staff now assist the program by advising and signing up students with an advisor at the time the major is declared. This new procedure has led to a more equitable and appropriate distribution of students among advisors.

**INSTITUTIONAL IMPROVEMENTS:** As recommended in 1995, the L&S Dean now appoints the BAC Chair annually in consultation with the BAC Committee of Advisors. In this time of transition, the BAC chair still reports directly to the Dean and Associate Dean and participates in the L&S Chairs and Directors meetings when invited. However, as the ICBE evolves, some administration of the BAC chair may be assumed by the Director of that program.

The program is most grateful for ability to attract a BAC chair with the current level of clerical and advising assistance, the supplies supplement, and the month of summer salary. We have found ways for BAC students to major in CALS departments, and we continue to recruit faculty from CALS and other non-L&S programs, to enrich our program.
BAC AND THE FIVE GOALS OF THE UW-MADISON’S STRATEGIC PLAN

GOAL ONE: PROMOTE RESEARCH

- **Research program goals, priorities and challenges:** We encourage our students to participate in research -- directed studies, senior theses, study abroad. Service learning opportunities provide an even wider range of possibilities for experiencing research and application of knowledge in society.

- **Comparative standing of department, sub-areas, individual faculty & staff:** This is the only program of its kind in the US.

- **Benefits to society, including local, state, national & international communities:** The breadth of the BAC program produces well-educated students with experience in the liberal arts, natural history, whole organism biology, ecology, and conservation biology. Our goal is to nurture citizens with the tools necessary to make informed decisions when faced with environmental issues and to participate in conservation biology careers.

- **Faculty recruitment & retention:** We rely on the commitment of our faculty to contribute to conservation education. This commitment is above and beyond responsibilities to home departments. At this time, recruitment & retention is a minor issue for the program. The supplies and summer salary arrangement for the chair make recruitment of a chair at least feasible.

- **Strategies for encouraging & enhancing research:** The faculty advisors, our website and the excellent ICBE and Biology advisors all inform and encourage students to participate in directed studies, senior theses, internships, and study abroad programs focused on research opportunities. The ICBE staff also e-publish a monthly newsletter containing the latest research opportunities.

- **Interdisciplinary/cluster impacts on research:** The BAC program benefits from quality hiring in the many home departments from which we draw our faculty.

- **Resources:** The most important BAC resources are the good will of the faculty and the enthusiasm of students for conservation biology. The resources made available to the chair (supplies allocation, summer salary) are key to recruiting new chairs over time. Also crucial to the BAC program is the advising provided by the ICBE office staff and the Biology advisor. BAC resources include a chair’s office in the ICBE complex (Old Genetics Building), access to the ICBE Director, and clerical assistance from the ICBE office staff.

- **Strategies for periodic evaluation & planning for the future:** With the assistance of the ICBE office staff, the BAC faculty meets annually to evaluate the BAC program and to plan for the future. Research has a relatively low priority in these discussions, below curriculum and recruitment of new advisors.

GOAL TWO: ADVANCE LEARNING

**Goals priorities & challenges for the BAC degree program:** The Biological Aspects of Conservation (BAC) program is a popular L&S baccalaureate major in which students gain
broad experience in biological and social sciences related to environmental and ecological disciplines, with a central focus on applied and theoretical aspects of conservation biology. Our students are typically committed to conservation of natural resources or environmental policy development, and who prefer an overview of theoretical ecology. This is the major for students who love conservation topics, without calculus, organic chemistry, or physics. In our program, students learn the languages of environmental studies, conservation biology, and natural history; they gain expertise with the biology of at least one major group of organisms, and many of them gain hands-on experience through Directed Studies, Senior Thesis, and/or study abroad at biological field stations.

Upon graduating, a BAC major will be able to speak and write intelligently about:

- General principles of biology, chemistry, the physical environment, ecology, and evolution.
- The biology of at least one group of organisms.
- The role of human society in conservation.
- Principles of conservation biology.

Beginning in May 2005, we asked our graduating seniors to respond to an exit survey. Results of this survey were discussed at our annual faculty meeting in March 2006, and will be used on a continuing basis to redesign the faculty’s offerings, expectations, and program assessments.

**Assessment of student learning in the major:** In general, BAC relies on individual host departments to assess student learning, via course grades. In the last two years, the ICBE staff have performed a survey of graduates. Although the number of responses is still low, this survey provides an indication of student satisfaction with the BAC program.

**Size, completion rates & time to degree:** See Table in the Supplementary Material. The average time to degree from Fall 1999-Summer 2004 for students who entered as first year undergrads is 4.39 years (http://apa.wisc.edu/JLM/TimeToDegree_Majors.pdf).

**Credits taught for general education requirements or other service:** BAC does not teach any of its own courses.

**Teaching load & course assignment policies:** The level of BAC advising responsibilities are assigned by the ICBE staff, based on feedback from the chair and the advisors. The staff are sensitive to requests from the advisors for more or fewer advisees.

**Policies for deployment of faculty, academic staff, & TAs to meet departmental teaching responsibilities:** When students declare their intent to major in BAC, they have the right to choose their faculty advisor. However, most students are guided by the ICBE staff and then assigned to an advisor, based on student interest and faculty expertise and availability.

**Procedures for evaluating curricula & improving the degree program & instruction:** Throughout the year, the chair collects suggestions from BAC faculty and the advising staff as to new opportunities or problems with the existing curriculum. Appropriate changes are then brought to the faculty for their approval by the faculty or chair at the annual meeting.

**Criteria for admission to the major:** Declaration of intention by a student enrolled in at the UW-Madison.
Effectiveness of student advising & mentoring: This is a good idea. We will explore how to find out how well we are advising and mentoring.

Measures of student quality (e.g., placement in professional positions in the major): Since 2005, we have used results of the exit (graduation) survey as our guide. As data accumulates, we will have an indication of our student quality. At this time, we see that at least some students go on to graduate programs or desirable professional positions.

Faculty & staff teaching evaluations, awards, & honors: We rely on the home departments deal with faculty & staff evaluations.

Graduate Student Support: None.

Training, mentoring & evaluation of TAs: None.

Instructional innovation (residential learning programs, out-of-classroom learning, service learning, technology-enhanced teaching):

Although BAC does not teach courses of its own, we do encourage students to participate in a research, service-learning, and study-abroad programs. For example, of the Fall 2005 graduates, there were 4 students who had participated in 699 Directed Studies courses (in Botany, Geology, Zoology). In the Spring of 2006, expected graduates participated in 3 Senior Thesis (Botany, Zoology), 3 Senior Honors Thesis (Zoology), and in 17 699's (Animal Science, Anthropology, Botany, Comparative Bioscience, Environmental Studies, Zoology).

From the Fall of 1990 to the summer of 2006, there were 156 BAC Majors who participated on a UW-Madison study abroad program. The most popular destination was Costa Rica, followed by Australia (according to Kelly Haslam, Study Abroad Advisor, International Academic Programs). We encourage our Majors to participate in these field study programs.

Curricular development (Credit Outreach & other Extended Day Timetable; Honors, Capstone and/or Certificate Programs: first-year Interest Groups; Small Course Initiative): Students have been requesting a specific BAC seminar-like course, in which they would be exposed to the broad outline of conservation biology, be given guidance as to the possibilities of the major, and develop a bond with other BAC students. A plan for this course will be discussed during the next year and at our annual faculty meeting.

The BAC capstone seminar will potentially be case-based, focused on a particular practical conservation problem. Of course, the issue here is finding the faculty willing to take responsibility for the course – because ours is a program in which faculty participate in addition to their regular departmental duties. One possibility is to enlist 1-2 of the Conservation Biology/Sustainable Development students to run it, with a titular BAC faculty person overseeing it.

We have also failed to offer the Bot/Zool 639-640 capstone course these past several years, both for lack of students (one year) and lack of faculty availability, since the retirement of Professor Baylis.

GOAL THREE: ACCELERATE INTERNATIONALIZATION

Goals, priorities, & challenges in this area: It is sometimes difficult for students to get appropriate credit for international courses when the credits are transferred to the UW Madison.
The BAC chair is working with ICBE, the International Studies office, and host departments, to facilitate these transfers of credit.

**Integration of international issues within courses:** Our mission statement, and the personal preferences of many of the BAC advisors (faculty and staff), directs our students toward international research and/or field stations or courses.

**Involvement with the International Institute, area and/or international studies activities and program development.**

**Recruitment and retention of international students, faculty, & staff:** BAC currently depends on the home departments for this recruitment and retention.

**Integration of international students, faculty & staff into departmental activities and access to services:** BAC students meet with our excellent staff and faculty advisors to discuss their degree requirements, curriculum, and their plans for the future.

**International partnerships and collaborations with educational institutions, and public or private sector entities:** BAC students make use of international partnerships and research collaborations, but the program does not have a formal relationship with such organizations.

**GOAL FOUR: AMPLIFY THE WISCONSIN IDEA**

Members of BAC:

1. **Participate in non-credit outreach activities (e.g. workshops, continuing education programs, reading groups, public lectures, and participation in the Speakers Bureau).**
   Responses from faculty included:
   Consult regularly with government officials and DNR staff on issues of climate change, and give public and public school lectures on climate change. Work with citizen's groups and agencies regarding the Badger Army Ammunition Plant decommissioning. Did the Conversations in Science lectures run through the Science-is-Fun program (including a lecture at Edgewood College and an educational segment on local TV). Field questions from homeowners about controlling yellow jackets and bees, and get media exposure on bee & wasp control every year in late summer, when the populations peak. This year, bee & wasp control was featured on the front page of the WSJ and had a segment on channel 27. Several faculty participate in the Speakers' Bureau, and others give an occasional lecture at the Arboretum. Several give one or more (up to 8 in one case) public talks and/or workshops per year to Middle School & High School teachers (e.g., at the Geography Summer Institute, UW Eau Claire), and to non-academic audiences.

2. **Cooperate with School of Education teacher training programs or other K-12 educational partners.** Responses included:
   Speak annually in a Madison West High School classroom on issues of evolution and religion. Give 6-8 public lectures and workshop participation opportunities per year, on environmental topics, to Middle School and High School teachers through the Geography Summer Institute (at UW Eau Claire), as well as giving 2-3 presentations per year in Madison Schools. Established
and taught 2 new courses specifically aimed at IIS science teachers: Bot / Zool 450 - Ecological case studies: A Midwestern approach (a web-based e-course), and Bot Zool 459 - Ecological field techniques (an Arboretum based field course). At least two of the BAC faculty have had their graduate students participate in the NSF-KTI education training program. One student developed a behavior lab using crickets and took it around to dozens of schools in southern WI; another developed materials for teaching environmental topics for a semester at sea program.

3. **Encourage student participation, via service learning or internships.** Don Waller successfully inserted the recommendation of participation in intern programs into the BAC curriculum, and has connected innumerable students over the years to internships & service learning opportunities. Dodson has developed an extensive service learning program, focused on community-based directed studies in environmental and ecological areas: Zoology 699 and Z677. This program gives college credit to roughly 50 undergraduates per year, many of the BAC majors. Zedler also arranges for students to get college credit for internships, by directing undergraduates to internship possibilities with environmental groups, and especially to opportunities in field ecology in conjunction with his own research projects. Several BAC faculty regularly mentor students during participation in internship programs.

4. **Contribute to Wisconsin's educational, economic, social and cultural development.** All BAC faculty contribute to society by teaching WI students and doing research that reflects well on campus. In addition, faculty responded that they: participant in a research project that is in support of an eco-label program and write books focusing on Wisconsin and international environmental issues.

5. **Communicate and consult with government, business, and industry.** BAC faculty have variously consulted with the WI assistant attorney general, DNR staff, WI legislators and other politicians, and the US Fish & Wildlife Service on issues related to climate change and on issues related to endangered plant habitat designations, recovery plans, and wildland fire, and consulted with companies such as S.C. Johnson and Hamischfeger. BAC faculty serve on NSF panels and work with NSF policy makers, and on special committees, such as the US National Committee of the IUBS. We regularly work with government agencies and policymakers through NSF and BAC faculty make active contributions to NGOs (e.g., The Nature Conservancy, Conservation International, Defenders of Wildlife, Sierra Club, Habitat Education Center, Environmental Law and Policy Center, the Rewilding Institute, Midwest Invasive Plant Network etc.). BAC faculty give testimony as expert witnesses in environmental court cases and before the WI State legislative committees, governor task forces, DNR committees, U.S. Senate & House of Reps. We often give informal talks to restoration ecology businesses and citizen groups.

6. **Connect with alumni.** Responses from BAC faculty included: regular invitations to alumni to speak to classes on topics within their expertise, participation in an interview for the archival project UW is doing about faculty, and opportunistic interaction with alumni, including with donors to the UW Foundation, but nothing organized or regular. BAC from at least two home departments have a newsletter that goes out to our alumni. We hear regularly from former students, and always encourage them to stay in touch (both before & after they graduate – we are working with the BAC staff to find a way to formalize these contacts.
GOAL FIVE: NURTURE HUMAN RESOURCES

Communicates its mission, policies and procedures to all department members: Welcomes and orients newcomers to the department and to the University:
Exhibits respect for all faculty, staff and students: In the past 2-3 years, our excellent staff have developed and maintained an excellent web page at:
http://www.biology.wisc.edu/Academic_Programs/BAC/index.asp. The staff also produce a weekly email newsletter, and we all meet at our annual BAC meeting. The BAC staff and some faculty are active in welcoming and orienting newcomers to the department and to the University. The office staff is available for campus visitors/advising, there is an ICBE Majors Welcoming social event that is advertised as part of campus Welcome Week activities, and the BAC major is represented at L&S/CALS Majors Fairs on campus.

We have no formal means to assess our success in this area. Suggestions? We keep open office hours (7:30 to 4:30) to allow faculty and students ready access to the office.

Encourages participation by all concerned groups in departmental governance: processes and structures: We have no formal process for encouraging this participation. All faculty and staff are invited to the annual meeting, and to any other program meetings held during the year.

Evaluates and enhances the effectiveness of its policies and procedures: We have no formal procedure for this evaluation. On the other hand, we have little in the way of policies and procedures.

Aligns the budget with its goals and objectives: Our budget is quite small, and any alignment is accomplished at the annual meeting, or by the chair, via email consensus with the BAC staff and faculty.

Aligns merit and review processes with its goals and objectives: NA.

Recruits and retains members of under-represented groups: We believe ICBE would provide some travel funds, should an advisor wish to help recruit targeted undergrads.

Responds to challenges in hiring and retaining faculty and staff: BAC does not hire. Although we have risen to retention challenges (concerning volunteers in our program) in the past, we seem to be a fairly static group at present.

Facilitates collegial relationships: We depend on our annual meeting, and the fact that BAC is a program run by volunteers.

Encourages professional development:
Faculty: The home departments provide mentoring and evaluation-from assistant professor through post-tenure review.

Academic Staff participate in the monthly L&S Advisors Consortium. The staff represent BAC at biology advisors meetings. Staff are strongly encourage to attend campus seminars/informational meetings (i.e., Query Library, Wiscape, etc.) that enhance our ability to serve our faculty and students. This year the two
BAC staff were promoted, based on years of service, to the next title in their pay series.

**Classified Staff:** BAC has none.

**Students:** BAC has recently been given permission to use the Maude and Roland Becker Scholarship to fund environmental education. We are still working on how to best use his scholarship. BAC faculty and staff are strong advocates of the career centers on campus, and often direct students to those specialists.

**Allocates resources for professional development:** BAC's "parent" ICBE has provided some funds to enhance professional development of office staff, and this assistance would probably also be available to staff, who have yet to request it.
OTHER QUESTIONS

Baccalaureate Degree Program.

1. Program mission, goals, and assessment.

The BAC response to these questions are given above, in the introductory statements of the
Internal Review document.

2. Program Administration.

Internal management: The BAC internal management is the responsibility of ICBE. The
current staff is excellent. If we had a concern about internal management, I assume we would
ask the BAC chair to talk to either the staff person or to the ICBE Director.

Assessment: Our 2006 Annual Assessment report to L&S is attached as SUPPLEMENTAL
MATERIAL at the end of this Internal Review.

Budget and Resource Management: Aside from the one month of summer salary for the BAC
chair, and the supplies contribution to the BAC chair, the program does not have a budget. The
summer salary and the supplies allocation are now managed by ICBE.

The relationship with ICBE and with L&S continues to develop. Until this year, the BAC
chair did not realize that he was invited to the Dean’s meetings for chairs and program chairs.
The current BAC chair has been involved with the continued evolution of what has turned into
ICBE. We now depend on ICBE for our advising and clerical staff support. If we had additional
needs for the program, we would make them known to the ICBE Director.

Relationships with cooperating Departments and connections to other programs are
handled by individual advisors. Some of the advisors are active in the Madison Ecology Group,
and others have been taking an active role in developing more efficient interactions with
International Studies, IES, the slowly-evolving effort to create an environmental major, and even
with outreach such as the agreement with the College of the Menominee Nation.

3. Challenges.

Curriculum: As described above in the Internal Review document, the BAC advisors review
the curriculum once a year at our annual meeting. This is mainly the responsibility of the chair,
but the advisors have the opportunity to suggest and/or approve changes. The advisors would be
happy to have our Category III requirements evaluated for relevance by an outside review.
These requirements, and the courses that fulfill the requirements, are listed on the BAC web site.
If there is to be a BAC capstone course, then there will probably have to be rewards to
induce someone to teach the course.
Faculty and Staff are identified and recruited in different ways. The Staff are hired and fired by the ICBE Director. The faculty are identified via discussion at our annual meetings. Then, it is a duty of the BAC chair to invite the faculty person to join our program. We currently appear to have a sufficient number of advisors, so we have not added a new member for several years.

Budgets: The current budget is sufficient for encouraging a faculty member to volunteer for the position of chair, and to compensate the chair for time spent on the program. The lack of any support for the chair was a major challenge at one time, but the current policy is working well, at least for the current chair.

If a BAC capstone course is instituted, it is probable that an inducement, such as a month of summer salary, would be needed to encourage the faculty to take on this additional teaching.

Coordination among cooperating departments is a minor challenge for BAC, compared to the serious issues for other programs, such as Biology. This is probably because BAC asks relatively little of its advisors, allowing them to contribute to BAC out of their love for conservation education, without suffering excessive consequences from their home departments.

4. Future Opportunities.

It is difficult to see how BAC resources could be used more effectively. We have few resources, but also few needs, because the program does not hire its own faculty or staff, or have needs for funding courses.

Changes are always a possibility, but at this time, there is not a consensus that major changes are needed in the BAC degree program. This consensus may change if and when an environmental major or program is established.

It would be exciting to have a BAC capstone course.

BAC attracts students from among a cohort that is also attracted to a large number of biological sciences on campus. Some students prefer our major, because it is relatively less quantitative, and it encourages a broader curriculum than do other majors.
SUPPLEMENTAL MATERIALS

L&S BAC ANNUAL ASSESSMENT REPORT

16 October 2006
Size, completion rates & time to degree: The average time to degree from Fall 1999-Summer 2004 for students who entered as first year undergrads is 4.39 years (http://apa.wisc.edu/JLM/TimeToDegree_Majors.pdf).

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<th>Honors in Liberal Arts</th>
<th>Double Majors</th>
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COLLEGE OF LETTERS & SCIENCE
UNIVERSITY OF WISCONSIN

ANNUAL ASSESSMENT REPORT

PROGRAM OVERVIEW: Biological Aspects of Conservation.
23 May 2006
Stanley Dodson, Chair

The Biological Aspects of Conservation (BAC) program is a popular L&S baccalaureate major in which students gain broad experience in biological and social sciences related to environmental and ecological disciplines, with a central focus on applied and theoretical aspects of conservation biology. Our students are typically committed to conservation of natural resources or environmental policy development, and who prefer an overview of theoretical ecology. This is the major for students who love conservation topics, without calculus, organic chemistry, or physics. In our program, students learn the languages of environmental studies, conservation biology, and natural history, they gain expertise with the biology of at least one major group of organisms, and many of them gain hands-on experience through Directed Studies, Senior Thesis, and/or study abroad at biological field stations.

<table>
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<tr>
<th>YEAR</th>
<th>DEGREES CONFERRED</th>
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As BAC becomes integrated into ICBE (starting in 2004-2005), the new and exceptionally qualified staff have made major contributions to the program. For example, the major now has an up-to-date web page linked to other biological majors and resources on campus. We have initiated a majors’ exit survey and we are collecting data in an organized manner. The staff handle most assignments of new majors to advisors, give advice on L&S requirements, assist in transferring and accepting credits from courses taken off campus, and advise students concerning field and lab experiences.

Learning objectives or goals

Upon graduating, a BAC major will be able to speak and write intelligently about:

- General principles of biology, chemistry, the physical environment, ecology, and evolution.
- The biology of at least one group of organisms.
- The role of human society in conservation.
- Principles of conservation biology.
Beginning in May 2005, we asked our graduating seniors to respond to an exit survey. Results of this survey were discussed at our annual faculty meeting in March 2006, and will be used on a continuing basis to redesign the faculty’s offerings, expectations, and program assessments.

**Strategies for measuring students' performance on program-level goals**

The BAC has no courses or faculty of its own, and depends on the host departments for their assessment of the success of their courses, as well as for the faculty to teach the courses. BAC advisors contribute their time and energy to the program over and above their regular departmental responsibilities. The BAC program uses only course grades as a measure of student performance.

Students are required to choose a BAC advisor when they declare the major. Meetings with the advisor provide students with experienced guidance in their areas of interest. These meetings often result in participation in field courses, study abroad, and/or participation in laboratory research or service-learning.

<table>
<thead>
<tr>
<th>Year</th>
<th>Average GPA of Graduates</th>
<th>Number of responses to Graduation Survey</th>
<th>Preparation for next Career Step 1-5 scale</th>
<th>Overall Satisfaction with BAC. 1-5 scale</th>
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**Statement on efforts to measure students' performance on program-level goals**

Students have been requesting a specific BAC seminar-like course, in which they would be exposed to the broad outline of conservation biology, be given guidance as to the possibilities of the major, and develop a bond with other BAC students. A plan for this course will be discussed during the next year and at our annual faculty meeting.

The BAC capstone seminar will potentially be case-based, focused on a particular practical conservation problem. Of course, the issue here is finding the faculty willing to take responsibility for the course – because ours is a program in which faculty participate in addition to their regular departmental duties. One possibility is to enlist 1-2 of the Conservation Biology/Sustainable Development students to run it, with a titular BAC faculty person overseeing it.

We have also failed to offer the Bot / Zool 639-640 capstone course these past several years, both for lack of students (one year) and lack of faculty availability.
Thoughtful discussion:

BAC students who do not meet with their advisors regularly have been receiving little guidance in their major, other than the statement on the web site or in the Undergraduate Catalog. This works well for self-motivated students, but our graduation surveys suggest that some students would benefit from an all-majors BAC annual meeting or course. The ICBE staff have offered to organize such a meeting, and the faculty will, in the next year, be exploring the possibility of a seminar.

All data from student records and the graduation survey are communicated to all BAC advisors. The BAC chair is responsible for an annual meeting of the faculty, at which changes to the program are often discussed and acted on.

The BAC faculty is finding the graduation survey instructive, as the ICBE staff are continuing to find ways to induce greater student participation.

For several years, a group of environmentalists and environmental scientists have explored the possibility of an environmental major. The BAC chair has represented the program in this process. It is obvious that BAC, along with several environmental and ecological majors and programs in L&S and CALS, has a stake in the nature of the new environmental major or program. BAC may see changes in its goals in order to accommodate the new major.

The BAC program has at least one all-faculty meeting each year, and we have recently been meeting in February. This meeting provides the annual deadline for assessment innovations.

If you would like additional information, please contact:

Stanley Dodson
444 Birge Hall
262-6395
sidodson@wisc.edu
Appendix B – Summary of Courses Completed by Recent BAC Graduates
## Biological Aspects of Conservation

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### Physical Environment

| Atm Ocn/Geol | 105 | Survey of Oceanography | 1 | 4 | 5 | 15 |
| Chem | 104 | Gen Chem | | | | |
| Envir St/Geol | 106 | Environmental Geology | 2 | 18 | 17 | 20 |
| Envir St/Geog | 120 | Global Physical Environments | 4 | 12 | 16 | 28 |
| Envir St/Geog | 127 | Physical Systems of the Environment | 13 | | 5 | 9 |
| Geol | 100 | General Geology | 3 | 11 | 6 | 13 |

### Geology

| Geol | 101 | General Geology | 3 | 4 | 2 | |
| Geol | 107 | Life of the Past | 2 | 2 | | |
| Geol | 109 | Geology of the National Parks | 2 | 3 | 1 | |
| Geol | 203 | Earth and Materials | 2 | | | |
| Geol | 304 | Geobiology | | | | |

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♣ Social Science Courses

Notes: Transfer courses not counted. Some students take 699 more than once in a department. In this case, the student was only counted once. Courses in italics indicate exception made.
Appendix C – Surveys of Recent Graduates and Current Majors
BAC Graduation Survey - December 2005

n=6

1. Please select the answer(s) that best describes your future plans after graduation and supply the information requested.

Have applied to:
Grad School (2)

Will not attend professional/graduate school and still seeking employment.
• I plan to travel abroad before seeking employment in U.S. I am currently applying to a program called BUNAC where I would work in Great Britain. I haven't decided what type of work I will be doing there since the opportunities vary. (1)
• Living out of my van in the deserts of the southwest. (1)
• still looking for employment and will go back to Med and/or grad school
• Saving up money working in a kitchen until summer and then traveling in Central and South America.

2. Please indicate how well the BAC major prepared you for your next career step. (Very Well, Well, Moderately, Poor, Very Poorly)

• Well (3)
• Moderately (3)

Comments:
• I found the classes to be interesting and good sources of knowledge, though many that I feel would have been appropriate for my interests were not always offered.
• It depends on my next career step.

3. Please indicate your overall satisfaction with the BAC major. (Very High, High, Moderate, Low, Very Low)

• Very High (1)
• High (4)
• Moderate (1)

Comments:
• The BAC department should have a email newsletter or organization such as other majors do. If there was one, I was never aware of it.
• I probably should have taken more chemistry in order to be a more desirable candidate for multiple graduate school programs. I didn't take ochem because it wasn't a requirement for BAC, but perhaps one semester should be required.
• I really enjoy the inter-department-ness of it. But I wish I had picked more of a focus within the major, instead of just getting a sprinkling of so much.

4. Do you feel you had an adequate opportunity to apply classroom knowledge in settings such as laboratory classes, research, or internships?

• Although I never had an internship through this school or another, I found I used my knowledge from classes for summer jobs. I still feel slightly unprepared for professional job settings but I expect grad school will help me with this.
• Yes (1)
  • Yes, in internships, classes, jobs and research (1)
  • If I had them, I didn't take enough advantage of them.
  • Absolutely. I also majored in geology and anthropology. BAC allowed for me to pin-point my interests and study them in-depth.

5. Was there any subject of interest to you for which there was no lecture and/or laboratory class available?
   • I would be interested in more humanistic conservation courses since I am also anthropology major. The subjects in Env St 339 fall along these lines.
   • Need more classes directly focused on sustainable construction and alternative building methods.
   • I wish there was a specific class geared to local (Wisconsin) environmental issues. As a full-time student, part-time worker, and single mother I was not able to volunteer and as much as I would have liked to, it would be fantastic to have a course that already had specific projects that needed to be worked on locally.

6. Did you read/find the weekly emails useful?
   • Read the weekly emails and found them useful. (4)
   • Read the weekly emails, but did not find them useful.
   • Did not read the weekly emails. (2)

   Comments:
   • I read them sometimes. Pretty indifferent.

7. Did you visit the BAC major website? Did you find the information useful?
   • I visited the website and found it useful. (2)
   • I visited the website, but did not find it useful.
   • I did not visit the website. (4)

8. How often did you meet with your assigned faculty advisor?
   • Once a Semester (1)
   • Once a Year (3)
   • Never
   • Once (1)
   • Once or twice (1)

   Comments:
   • My advisor seemed very busy and had her own lectures and classes to work on. I did not find meeting with her helpful all the time but some of the time.
   • Advising at the University of Wisconsin is sorely lacking in my opinion, not just in this department, but throughout. Most "advisors" (who are actually just professors) don't know who their advisees are and don't really know what is going on. I didn't go to see advisors often because usually what they told me were things that I already knew or could have easily figured out on my own.

9. How might the BAC major be improved?
• Allow GIS courses to fulfill major requirements.
• This was a wonderful major. I did not discover it until my junior year when I had already declared myself as an anthropology and geology major. Had I known about this major earlier I would likely have not pursued anthropology and geology majors as BAC offered many of the courses I was interested in.

The only major improvement (and I realize that it is a big one) is in the biology 151-152 courses. By my junior year I had already taken many upper level biology courses without having taken biology 151 and 152. I still took biology 151 when I added the BAC major my junior year (and I had the bio152 requirement waived) and found it anything but appealing. I realize that the intro biology sequence is meant to give us a broad understanding of the many applications of biology, but I often felt as though these intro courses were meant to be "weeder courses." I have to wonder if I had taken these courses my freshman year (without having taken the other upper level biology courses I had taken) if I would have continued to explore biology. I often found myself telling the freshman and sophomores I took biology 151 with that other biology courses were much better and that I felt 151 & 152 were likely weeder courses. Still though, I believe several of them decided biological sciences just weren't for them. I am not just disgruntled because I received the first and only C of my college career in biology 151, but because the amount of information I learned and the inspiration I gained from other biology-related courses from surpassed anything I was able to take away from biology 151.

10. Any additional comments?
• Thanks for a great major
BAC Graduation Survey Spring 2006
N= 20

1. Please select the answer(s) that best describes your future plans after graduation and supply the information requested.
   Have been accepted to
   Graduate School (3)
   • University of Minnesota Urban Planning
   • Vanderbilt University
   • University of Queensland/Conservation Biology
   Medical School (0)
   Veterinary School (0)
   Other professional school (2)
   • University of Concordia/ Teacher Certification Program
   • UW-Stevens Point Education School
   Have applied to . . . haven’t been accepted, but will attend if accepted.
   Graduate School (0)
   Medical School (0)
   Veterinary School (0)
   Other professional school (0)
   Have accepted job offer. (5)
   • UCLA : Field Assistant
   • BLM-GLasgow field station : Sage Grouse Intern
   • Fellow Mortals Wildlife Rehabilitation : Wildlife Care Intern,
   • Secondary Care YMCA Camp Widjiwagan : Instructor Naturalist
   • Cornell Biological Field Station : Research Assistant
   Will not attend professional/graduate school and still seeking employment. (4)
   Other (6)
   • Working an ecological research internship this summer, taking the GRE, and applying to grad programs
   • i will try to work for a year and then go to graduate school for a PhD in ecology at Indiana University.
   • Will apply to graduate school after a semester off.
   • Moving to Vietnam to either Teach English or work in waste management.
   • Advanced Professional Internship at Walt Disney World''s Animal Kingdom in Reproductive Biology
   • Working for a few years, then going back to graduate school

2. Please rate how well the BAC major prepared you for your next career step.
   Very Well (3)
   Well (9)
   Moderately (6)
Poor (1)
Very Poorly (1)
Comments:
- Not going into a biological field.
- I would have liked more (any) study abroad options through UW-Madison that would allow me to do field biology in a foreign country. (esp. French-speaking)
- The career fairs are pathetic with the employers brought... I don't want to work as a manager at petco. I want to work for things like TNC and other environmental organizations. Thanks for not helping me to find a job AT ALL.
- This is a excellent degree for curious biologists. I believe that inter-disciplinary degrees, such as the BAC, are powerful and have amazing utility in an increasingly interconnected world.
- The integration of science and social issues regarding conservation is very important in the field of environmentally related studies today.
- Base requirements should more closely match prerequisites needed to apply for a graduate program. I don't have the full prerequisites for either the Wildlife Ecology or Conservation Biology Masters programs here at UW.
- There really aren't many jobs out there that don't require tons of experience, so I'm having a really hard time finding a job.

3. Please rate your overall satisfaction with the BAC major.
   Very High (5)
   High (11)
   Moderate (4)
   Low (0)
   Very Low (0)

Comments:
- I got a lot out of the breadth of approaches I could take to understanding the natural world and our relationship with it.
- I felt very restricted to take classes I had no interest in and very few chances to take classes I was.
- Wonderful. If I could have designed my own degree it would not have been much different from the BAC.
- I think more advanced base courses should be required to prepare us for graduate school. I really enjoy the format of the program though, and I definitely appreciate the field/lab course requirements.
- I feel it complemented my zoology major well.

4. Do you feel you had an adequate opportunity to apply classroom knowledge in settings such as laboratory classes, research, or internships?
   Yes (9)
   Yes, mostly, but many of those experiences were when I was a wildlife major. There aren't as many options like field camp, etc. for BAC majors.
• Yes, although I felt that some labs could taught more practical lab techniques to supplement lecture, rather than just exercises to help teach lecture material that have no application professionally.
• somewhat.
• no—I''d like to see more study abroad programs with field biology.
• no, I was unaware of a lot of research opportunities or internships; I just don''t think there are very many available, especially for students who have to work full time in order to pay the bills.
• Based on my own doings, I found jobs and internships to apply those skills. Nothing the department helped me to find or suggested.
• had wonderful classes and opportunities
• All my lab classes were through my zoo major.
• The lab courses were very effective, and I appreciated and enjoyed them. However, I tried my best to find a research job on campus during undergrad and never succeeded.
• I didn''t really pursue those things.

5. Was there any subject of interest to you for which there was no lecture and/or laboratory class available? Please describe.
• No (3)
  • More interdisciplinary courses needed. Only a few (ie, WE360) did not focus only on one subject. IE many classes were just zoology, just botany, etc. More specifically tailored to BAC would be nice.
  • herpetology
  • A herp class would have been nice.
  • Marine biology
  • Indigenous Ecology, or Native American Ecology.
  • Maybe an environmental education type class??
  • I would love to see a class offered, probably within Wildlife Ecology, specifically concerning invasives. That''d probably be a bit too specific to be feasible, but I would have really enjoyed it!
  • Maybe a field class that deals with species of animals and plants of Wisconsin.
  • More Limnology!
  • Some sort of upper level version of oceanography 101 would have been good. As someone interested in oceanography who already had multiple upper level courses under her belt, taking this course was disappointing because it didn''t offer the depth of discussion I wanted.
  • I was disappointed that I could not use my sign language as a foreign language at this university.

6. Did you read/find the weekly emails useful?
  I read the weekly emails and found them useful. (11)
  I read the weekly emails, but did not find them useful. (5)
  I did not read the weekly emails. (3)
Comments:
- Sometimes I gleaned useful information from them, but there was always a lot of information with no action value to me.
- Thanks for including on-campus job and internship offers. I'd love to see more though.
- Weekly emails are definitely something that could help, but many of the opportunities were limited. I think informing students of activities around campus would be helpful, such as volunteering for the gardens on campus.
- zoology is the major I've focused on, and a lot of the information in your newsletter was repeat from the zoology e-mails.

7. Did you visit the BAC major website? Did you find the information useful?
   I visited the website and found it useful. (12)
   I visited the website, but did not find it useful. (1)
   I did not visit the website. (7)

Comments:
- planned my degree--started it late and needed to be efficient
- For scheduling purposes.
- it is sometimes hard to find forms and some other important things.
- I didn't even know there *was* a BAC website.
- The webpage was useful in helping me to decide if I wanted to do BAC. Once in the major I didn't really use it.

8. How often did you meet with your assigned faculty advisor?
   Once a Semester (2)
   Once a Year (7)
   Never (6)
   Other (5)
   - several times a semester
   - We met once
   - Once when I was first assigned
   - Once
   - Only to get things signed

Comments:
- I officially switched from wildlife only last semester, so I had no need for advising at that point.
- I found that meeting with a general undergraduate advisor was more helpful than the faculty advisor bc they were often hard to get a hold of and weren't as able to answer fundamental questions regarding coursework.
- I didn't really have a particular advisor
- It's my third, they kept moving to different schools so finally i just used the ladies in the office.
I found it more useful to speak directly to my own professors rather than an advisor. Getting multiple perspectives is critical!!!

Again, I ended up using my zoology advisor.

I sent emails to my advisor (Tony Ives) after my one initial meeting but never received replies.

Was unneeded, as I joined the major late in the game.

9. How might the BAC major be improved?

- As I said earlier, more courses for BAC majors/interdisciplinary focused courses. Also, some kind of career course would be nice.
- I think that one of my most valuable courses was the IES certificate Capstone class (IES 600). I think that if there could be an integrative BAC capstone course series or seminar series designed for BAC seniors, that would be great, especially to pull all of the broad reaching concepts together in this major.
- Study abroad programs in field biology.
- Make it more of a "real" major, no one seems to take it seriously, its seen as the "lesser" version of a biology degree. Title of conservation biology may help.
- Less restrictions, more options.
- Require internships. People don't realize the utility of internships.
- Make the chemistry requirement final--how many semesters or recommend 108 if there is only a 1 semester requirement. maybe add some more classes to the 2nd section. there are a lot of limnology classes, so i added some other primate and behavior classes that i was interested in, which may be helpful for others.
- For me the BAC major was the fastest way to get to where I wanted to be. Over all I thought the major was good.
- It could be made more specific or more strict about requiring lab classes.
- Expand base class requirements to prepare students for graduate school.
- Allow more classes that count towards the bac major.
- I feel like I learned a lot of textbook information, but am unprepared for a job in conservation. It would have been nice to know about activities that would have provided me with hands-on experience, while allowing me to work 30 hours a week at my job. It would also be nice to have some career advising, so we would know what to expect when we go job hunting. I understand that graduate school helps people get jobs in these fields, however, grad school is out of the question for me right now because I can't afford it.

10. Any additional comments?

- I do not feel like I have a bond with other BAC majors. Something to combat that feeling would be nice, and I think a course just for BAC majors could help that.
- More career advice and where to find it is needed. CANNOT STRESS THAT ENOUGH.
• it should be more clear what is needed for honors in the major. The website said 2 classes up upper level seminar, but the DARS said 6 credits--this was confusing because the zoo honors thesis seminar is only 1 credit. I luckily got another seminar I was taking added for that requirement, but others may end up getting stuck.

• The skills and experience that helped me get my job mostly came through my zoology major. Many of them counted for BAC as well but without the extra major I may not have taken them and would''ve ended up with really general courses that wouldn''t have helped me much.

• Thank you very much!

• I liked how the BAC major required classes from an array of different departments, it provided broader knowledge.

• Not great, nor horrible. Better than zoology, which is just a cover for pre-med.
Program Review Questionnaire for current BAC majors - Spring 2007

n = 33

General

1. When do you expect to graduate?
   - Spring 07 6
   - Summer 07
   - Fall 07 4
   - Spring 08 13
   - Summer 08 2
   - Fall 08 2
   - Spring 09 5
   - Later than Spring 09 1

2. Are you pursuing another major in addition to BAC?  Yes (25)  No (8)
   If yes, what is the other major?
   - Biology (2)
   - Zoology, and a Certificate in Environmental Studies
   - Molecular Biology
   - French (3)
   - Psychology
   - Geography, IES Certificate
   - Geography
   - Anthropology (2)
   - International studies
   - Theatre and Drama
   - Geography (Physical)
   - maybe zoology
   - art
   - Political Science (3)
   - Botany and Zoology
   - Botany
   - French, IES certificate
   - Economics
   - Genetics, Bacteriology
   - Zoology

3. Why did you choose BAC as a major?
   - Interesting topic and applicable to future career goals
   - Freedom of class choices, conservation spin
   - I originally wanted to major in something like environmental studies or environmental science, but found out that those are not offered as majors here at UW. Then when I found out about BAC, it seemed to fit my needs just as well.
   - it's easier than biology, and more along what i want to do when i grow up
   - interest in ecology, environmental sciences
   - i liked that i could take courses in a variety of disciplines. i enjoy science, but liked that i could take courses in all areas to determine where i want to focus for further studies. i took a class with one of the bac major advisors.
• I am interested in biology, but not pre-med. The Biology and Zoology majors seem to be filled with pre med students, and BAC was good alternative that integrated classes from many departments and allows a students to learn about many factors in conservation biology.
• I love biology, but I didn't want to spend my time stressing over organic chemistry and physics. BAC was the perfect combination of biological science and social science. I felt like this major was more applicable to what I actually want to do with my life.
• Design/Practices major.
• because i like field biology, and the wildlife department didn't offer quite what i wanted
• t gave me a good science background without requiring a lot of classes -- like chemistry, for example -- that I wasn't interested in. Also, it was flexible so I could pursue what I wanted.
• it was one of the most environmental since you don't have it as a major and just a certificate
• I am very interested in the fields of conservation and wildlife ecology, but I did not decide this until my junior year. Up until then I was not taking any science classes. As my other major is french, I wanted something else in L&S, which would make it possible for me to graduate closer to on time.
• I was always interested in environmental studies, and I was so disappointed when I started at the University and found that they only offered a certificate in that program. I didn't even know there was a BAC program until my Junior, when I discovered it was exactly what I wanted. I just wish I would have found it sooner.
• Because I want to get into a career that involves the environment. I felt that this program was more tailored towards my needs than the program in biology.
• I want to go into a career in Conservation Biology, and the courses are interesting
• It seemed to be the most flexible to learn what I wanted to learn. Biology major was too constricting and the BAC had a good mix of classes in different fields.
• I am interested in going into ecological restoration, and felt that a BAC major was the best fit for my current interests and the requirements for what I want to do in my future.
• diversity of required classes
• because it involved a lot of classes that sounded interesting, and was also one of the only science majors i could double up with my Art major.
• Good combination of hard science and social science, which is necessary for an understanding of conservation in a human-dominated world.
• I wanted to do a biological science degree, but was afraid of a lot of chemistry (but then I took chem 108 and started to like it, which is why I added Botany and Zoology to by degree).
• he inter-disciplinary aspect of it appealed to me. It also seemed like the closest thing to a general ecology major.
• Have always been interested in the environment and conservation, and I fulfilled most of the requirements.
• I plan to eventually go to law school for environmental law and get a ms in environmental studies. I was originally majoring in biology to understand the science aspect of this educational and career plan, but the BAC major allows me to take more environmental studies classes and gives me more electives to take the philosophy and other pre-law classes that I need for law school and the LSAT.
• I didn't want to take organic chemistry to get a biology major and I liked the emphasis on the environment in this major which I felt was lacking in the biology major
• Interested in the coursework
• I am interested in Ecology and conservation
• a good mix of biology and social policy focus.
• It seemed the best combination or compromise between my interests (environmental studies, wildlife studies, and conservation) and fitting into my academic time frame. It is also a very comprehensive major that gives some elbow room for specialization in specific topics.
Because I enjoy nature and would like to do my part in preserving it
Interdisciplinary, Open so I can create an almost 'individual' major
I wanted something involving natural sciences, but not something that required extensive math (such as calculus). I knew I wanted to double major.

4. What advantages do you see for yourself in BAC compared to other majors in the biological sciences?
- Makes one well rounded in many parts of biology: fish, plant, insect, bird, and animal ecology.
- No O-Chem!
- i don't have to deal with the bad physics dept here and i don't need to take chemistry
- greater ecological focus
- i have gained skills in different areas, so i am more marketable to a variety of employers. on the other hand, i haven't had the opportunity to develop any of these skills as most of the skills are gained in courses which are only offered one semester.
- The BAC major gives students a broad overview of aspects of conservation biology and biology in general that's more useable. I hope that being a BAC major will allow me to focus on resource management instead of just working in a lab as most bio majors that aren't pre med seem to do.
- Instead of spending my time wrapped up in difficult chemistry and physics courses, I have learned real world applications of the material. I feel like I am prepared to go out and work in the conservation field and actually have a broad, diverse perspectives on ecology problems and strategies to solve them
- Flexibility to take the courses that interest me.
- i think the biggest advantage is that it is broad and allows you to overlap and double major quite easily
- I have more varied and well-rounded education, including a lot of hard science, but it also gave me the chance to take environmental studies, history, and social science classes.
- I am very interested in the fields of conservation and wildlife ecology, but I did not decide this until my junior year. Up until then I was not taking any science classes. As my other major is french, I wanted something else in L&S, which would make it possible for me to graduate closer to on time.
- I am interested in working in the environment, so I think this major is ideal for what I'd like to do. However I may be considering med-school in the distant future, and with this degree I will also be equipped to do that.
- I feel like it gives me more experience working in the field than other majors and does a good job of integrating multiple aspects in order to form a coherent curricular basis for my future career goals.
- We receive a broader base of knowledge, since conservation biology is such a synthetic field of study.
- I feel that the BAC major has offered me a more "well-rounded" education, in that I am knowledgeable in lots of fields rather "very knowledgeable" in just one field.
- A broader background
- I think I will have a better understanding of how different subjects fit together. How does soil affect animals for instance.
- less useless classes like o-chem.
- More social science!
- I got to take both botany and zoology courses, instead of just one or the other...so I developed a love for both (without BAC I don't think I would have gotten so into plants).
- fewer math requirements, fewer chemistry requirements, more social science incorporated
- It brings management and social aspects to the biological science, and will be useful for integrating my knowledge of botany to restoration and conservation practices.
• I have more freedom to tailor my classes to my goals and focus on conservation.
• It seems more directed, it has a narrower focus than many of the other majors. I feel that I learn technical aspects and things that will be helpful in an actual career (especially in the field) which I feel lacks in many other degrees.
• More problem solving training for broad conservation issues
• I had more freedom in choosing the courses that I like to take. I take courses in a wide variety of disciplines
• I have a broader biology background and have taken more courses that challenge me to ask "why" and consider the moral, economic, and global impact of practices.
• The widespread course selections that fulfill the requirements of the major give the ability to specialize in one area or learn a whole bunch of general things. It also helps incorporate from several different areas of 'conservationesque' topics.
• Conservation is in high need right now
• Not as structured, I'm not forced to take as many classes that I'm not necessarily interested in.
• The biggest advantage to me is the ability to choose exactly which courses I wish to follow. I can get a broad perspective of conservation biology and/or I can focus on a specific interest or field.

5. If you were not majoring in BAC, what would be your major?
• Biology (4)
• Physical Geography
• Zoology, since that is my second major. Or Landscape Architecture
• wildlife ecology, wildlife management, forestry
• Molecular Biology and Environmental Studies Certificate
• Dietetics? French with a certificate in Business?
• Probably Zoology.
• I don't know! Geography, maybe Rural Sociology. I would miss taking the biology courses, but I wouldn't be a straight biology major because I don't want all of the courses that I feel aren't applicable to what I actually want to learn
• Wildlife Management, or Urban and Regional Design.
• geography or wildlife ecology or both
• Anthropology + Geography OR Life Science Communications
• history
• If I had planned things differently....Wild life Ecology.
• International Studies, maybe Political Science or Wildlife Ecology
• I would probably major in botany or horticulture if I were not majoring in BAC
• Environmental Studies, ecology, biology
• Horticulture
• Botany (2)
• Zoology or biology
• then I would just have zoology and botany. Or maybe botany and horticulture.
• One of the Natural Resources majors in CALS
• Either Biology, Zoology, Botany or a combination of them.
• Biology or Zoology
• just genetics and bact.
• biology or international studies
• Anthropology and Zoology, possibly Anthropology and another field related to ecology
• Biology/Zoology/Marine Biology
• Biology, Landscape Architecture w/ Environmental Science focus
• French
6. Which of the following are you considering as options following your undergraduate degree (mark all that apply)

- a) graduate school (24)
- b) medical school (2)
- c) veterinary school (2)
- d) other professional school (4)
- e) Peace Corps, Teach for America or other limited term volunteer program (16)
- f) getting a job (26)

If you answered “f”, what are your interests and plans for employment immediately after graduation?

- ecological restoration
- I plan to work for an outdoor school program for 4th and 5th graders called the Mosaic Project that focuses on teaching about diversity, community, tolerance, conflict resolution, empathy, etc. Basically Peace Camp.
- something in nature
  - i have applied to work for the french embassy, teaching english. i have also explored options such as working at the monterey bay aquarium, at new belgium brewery, Google, etc.
- community resource management
- Working for a non-profit, such as National Wildlife Federation, Habitat for Humanity, etc.
- I want to get into the field of sustainable design and possibly work for a city planning board or consulting firm.
- i need to work for a while in different areas to figure out what to go to grad school for.
- Some menial job in Science Communication or Public Health.
- National Parks or traveling for a while doing odd jobs.
- Unfortunately I have some complications, that require me to get a job with insurance coverage immediately after I graduate, so I will be applying for any and all jobs I am qualified for that offer insurance.
- Depends on what the job market is like.
- unsure
- I already have a full-time job at Whole Foods Market and just got a job working for an educational non-profit called Hidden Villa in Los Altos Hills, California. I will be working on community programming there.
- a private contracting firm that has an ecological restoration department
- I plan to start a CSA
- job that's conservation-related
- work in government or non-profit land conservation
- I would like to work abroad
- Internships to get established and see what's out there
- actuarial science
- biotechnology companies
- doing field work, perhaps abroad to get the experience, to travel, publish work, and possibly boost my graduate school application

- any conservation work I can get into, internships dealing in environmental studies
- Private Restoration Firm, NRCS
- Not sure....something hopefully directed toward how conservation of natural resources directly helps people (e.g. drinking water, ag soil).
7. What are your long term career goals?

- wildlife veterinary medicine
- to work outdoors
- I would either like to go into environmental education at an elementary school level, or become a professor of environmental ed. Another idea has been to go into green building or work for a nonprofit.
- something that i enjoy doing
- physician/ pediatrician
- i hope to change careers as many times as i need to stay happy - i hope to be involved in research, human resources, french, teaching, experiential education, etc
- working in a public relations position working with resource management
- To make a change. I feel that the BAC major, especially paired with Geography, has given me a very broadbased backgrounds in so many different areas of environmental studies that I feel prepared to enter any of them and work on problems. I want to find a job that I can educate people about these issues and find solutions to the problems that are/will be facing us in the future because of climate change, deforestation, pollution, etc.
- To work for the United Nations Environmental Programme, and maybe do some teaching as well.
- phd
- I could see myself as a science writer, documentarian, or advisor to businesses/government.
- I am really open to a lot of things right now, and I think that the BAC major is a background for many things.
- I would like to go into ecological restoration or sustainable urban planning.
- something that makes me happy and involved being outside frequently
- I would like to start my own non-profit educational facility, specifically on a sustainable homestead with a shared natural surrounding, similar to the one I will be working at: Hidden Villa.
- To find and work a private contracting firm that has an ecological restoration department
- I hope to run a peice of land with diverse uses.(farming,forest protection etc)
- work to help save species and just biodiversity in general in a way that also supports human life (not poverty)
- ??
- I know for sure I want to get my masters - then I will either look for a job with the DNR or Fish and Wildlife service. The other option I am toying with is becoming a professor, since I love teaching and research.
- I would like a job where I can influence metropolitan area land use decisions
- unsure
- Environmental Lawyer
- I don't know.
- perhaps working for an NGO or the government to promote sustainable development and practice conservation biology in the US and aboard. helping people and nature coexist in a healthier, more sustainable way that improves everything’s quality of life.
- hard, physical conservation work followed by more schooling and then either government work (dept of interior, dept of natural resources, park services), NGO work, or educational work (professor).
- Marine Biology
- Continue to improve the practice of restoration as a science while connecting to landowners by giving them a net benefit for encouraging restoration on their properties
- I want my career to effect the quality of life for people. I want to practice conservation, but ultimately my reason for doing so is to help people.
Curriculum

8. Please comment on the degree to which the required and elective courses you have taken so far in the BAC major been

a) interesting
- Very (3)
- Quite
- Ornithology, Environmental Ethics
- 112, 339, there were more, but can't think of them at the moment
- yes, I have discovered an unknown interest in geology
- i have enjoyed most of my classes - it was nice that i had the flexibility to choose my courses to suit my interests - i wish there would have been more ornithology courses
- for the most part, very much so.
- Very! That's the best part about being a BAC major. I am excited to sign up for the classes and I always end up learning so much more than I expect to.
- Very wide range of concepts that were all interesting. It's good to study more than just one thing, that's a real benefit of this major.
- environmental history, ecological anthropology, plants, people, and parasites,
- 112 and 113
- There are a lot of very interesting courses in this program, but I am very interested in the topic, so I am probably biased.
- I have found all my classes to be interesting.
- for the most part. most professors seem to be passionate about their subjects, which makes them compelling and interesting
- Most have been somewhat interesting, a few more than others.
- yes!
- overall pretty interesting
- i've found almost all my course to be very interesting.
- Biocore 301, 302, 303, and 304
- Botany 455 -- Best class I ever took. Soil Science 301
- There are a lot of interesting courses available, but I wish more of courses provided by UW were applicable to the major.
- The social science classes, such as Environmental Conservation and Environmental Law, have been most interesting.
- For the most part. Some of them (especially lower level ones) can be very boring and don't seem to be extremely in depth to be applicable.
- usually very interesting
- yes, it is interesting, because i mostly can choose what course i would like to take
- i find most classes interesting and the social science requirements within the 50 credit list incredibly interesting
- extremely
- Bio 151/152, linguistics...I have been covering basics, next year I will concentrate more on my major courses
- Intro Biology focused on a lot of topics I was not interested in.
- All the courses have been very engaging.

b) sufficiently challenging
- Sufficient
- Chemistry 103, Botany 130
112, there were more, but can't think of them at the moment
usually less work and easier to comprehend than my Molecular Biolgy courses, but probably because I have other biology background outside of these BAC courses, challenging enough to keep my interest and be entertaining, I have learned a lot of new information from BAC courses not taught in other courses outside of the major
some courses were challenging, and others were quite easy. it depends on the instructor
again, mostly yes.
Definitely. I have gotten the lowest grades in my BAC courses because mixing biological sciences and social sciences can definitely have it's challenges and makes you think in multiple ways.
Unfortunately there is a lot of repetition of material, so that makes it not as challenging.
zoology 151 and 152 (especially the independent project in 152),
Dodson-460
for the most part.
A lot of the courses are very challenging, and I think that that is important to making a well rounded student.
Every class has a challenging aspect to it.
most certainly
Most were indeed challenging especially going into intermediate classes in a field you haven't taken a basic level class in. For example, I took an intermediate class in horticulture without any background knowledge of the subject.
some a lot, others a good level
about right.
some of them--yes.
Biocore 301, 302, 303, and 304; Statistics 371
Botany 455, Zoology 302
moderately
All of my classes have been challenging, particularly chem 109.
Good in this regard, except for some of the summer courses. However, I almost liked the laid back feel in the summer. I think I learned better in that sort of environment.
very difficult to get As unless you are a naturally gifted writer
it really depends on what courses you choose
the ecology 460 class i'm in right now is a lot of work for four credits and just coming out of zoology 151/152.
the incorporate a large amount of challenging science while giving scope to the more dramatic social and observational continuum of the world and its environment
Bio 151/152
I suppose, could possibly challenged slightly more
Most courses have been properly challenging for the credits earned. They suited my expectations. However, a couple have required far more work and effort for the number of credits earned.

c) well taught
mainly
Chemistry 103, Botany 130
112, there were more, but can't think of them at the moment
most of the courses were well-taught.
yes
• Very. I have found that the professors have been very interesting and have done so much in the 
conservation field. Everyone has been very open-minded. Also, I found that because they are so 
interested and passionate about conservation, they have been better teachers because of that.
• Very well taught! Almost all of my teachers have been fantastic. They're well educated in their 
fields, good at communicating the concepts, and in general they're very approachable people. The 
only teacher I really didn't like was Tim Allen. I feel like I wasted time taking his class.
• chemistry
• History 460
• yes, as most classes at this university are.
• Provided that the professors aren't distracted by other things in their lives, I have found that most 
of the professors in this program are very dedicated and love teaching their topics.
• Most of the classes are very well taught.
• very (2)
• Most classes were well taught, some could use some work.
• not so much, but I don't like most professors
• Some of these courses need to have more time spent on actual discussion, instead of having 
lectures only, or discussion sections where other projects are the priority.
• for the most part.
• Biocore 301, 302, 303, and 304
• Botany 455, Zoology 302 (with Dan Young), Chem 108 (Clark Landis)
• haven't taken enough, but I wish there was more field work. Ecology labs need improvement.
• All of my classes except for Oceanography 105 have been well taught. My professor in this 
course has a very heavy accent and tends to go over the same information many times without 
really explaining anything.
• Decent
• good professor enthusiasm
• Environmental Conservation 339 is an amazing class that I'd recommend to everyone. Other 
courses have been generally well run. Zoology 151/152 had a mix of professors good at teaching 
and others who were not strong or clear teachers.
• Yeah, they've been great. Travis Tennessen is a great professor.
• Bio 151/152, linguistics
• Hit or Miss, There are great professors and there are very poor professors. You can tell when a 
professor has a passion for both their subject and teaching.
• All my professors have been experts in their fields, and I feel confident that I received a high-
quality education from them.

9. What, if any, additional types of courses should be included in the curriculum as

a) required
  • none (2)
  • Environmental Studies 112
  • maybe an econ class, i think it would be very useful, especially since it may become the 
easiest way to "help" the environment in the future
  • Economics or Statistics. I want to take more of these courses, but because it is not a 
requirement, I don't get around to it. I think that Econ and Stats are imperative in 
understanding the whole picture of conservation
  • Sustainable business courses. I think most people don't learn much about how to do business 
while they are in school, so when they hit the work place they just stuck in the "profit is key" 
type mentality. If a sustainable business course were required then graduating students would
have a better idea of how they can improve the business model of where they end up working so that it's more efficient and sustainable.

- more interesting to everyone, not just primates and insects and fungi and algae. Something I will actually use later in life.
- I don't have any specific recommendations, but more topics and courses offered is always good.
- I feel that there is a sufficient amount of required classes already
- Horticulture, Conservation Biology, more field classes, Statistics
- more ecology!
- I think it would be good to have required soil science courses, as well as water related courses.
- environmental conservation should be a required course for everyone to take
- More environmental studies courses
- Statistics. Some type of internship -- ie Zoo 699 or 677 (internships in ecology). I think that is important for us to experience for this type of major.
- More classes that require experimental design and field data collection.
- No additional courses needed.
- More field work.
- Economics
- I feel that Geo/IES 339: Environmental Conservation should be a required course. It's been my favorite so far and gives a firm foundation to everything I'm working towards.
- I believe students should be required to take Chemistry 104 in addition to 103 (if they choose this option).
- Even more important, I think students need more and better education in writing scientific papers.

b) electives

- ?
- Rural Sociology (##?) - Environment, Natural Resources, and Society
- take out the ethnic studies, it just gets in the way of the classes that I find interesting and will help me in my life/career.
- more ornithology
- Political Science courses. I would like to know more about policy and its effects on conservation. It would be helpful to know more about this because that politics will play a huge role in the future of conservation
- Sustainable design/practice courses. These are courses I wish were offered here
- It would be nice if some urban planning and native landscaping classes could be included in the curriculum. I believe that it would be nice to have classes which would teach students how to apply their knowledge of conservation biology in a way that would help to alleviate the problems between the natural landscape and human development.
- more sociology and some types of education classes for learning about community-based ed.
- Environmental Studies courses (ones that have a strong biological tie)
- More environmental studies courses, more "hard science" courses
- No suggestions
- Hort 375: Tropical Horticulture
- More field electives. Some sort of internship or doing something that has more real world experience. A career course where you can learn what types of careers are out there for this type of major.
- Any addition of courses abroad would be great. Getting the chance to study abroad, especially in this field that is continuing to gain global attention, helps students in so many ways. There are so
many areas of the world that are undertaking conservation projects that students could be learning from.

- Include more courses in Landscape Architecture, Agronomy, Horticulture. There are many overlaps that can't be taken advantage of. I don't like being restricted to L & S courses, include some CALS courses too.

10. Have you taken a course is statistics?
   Yes (15) No (18)

   If yes, which course did you take?
   - 301 maybe
   - 224
   - stats 210 for psychology
   - Geography 360
   - Stats for Geographers
   - Stats 301 2
   - Did not take it at this University
   - 371 (7)

   If yes, have you found the statistics you learned useful to other courses?
   Yes (5)
   - I think if I had taken it earlier in my college career, then it could have helped me in other courses. But it would have mostly only helped for my independent studies 699 credit, when I needed to do statistical analyses of my own.
   - no
   - sometimes, helpful in Bio 152 IP project and other Bio 152 lab reports
   - Kinda
   - Somewhat, but I do not like the statistics class itself. It would be good if we could have a specific stats class for popn biology and something that seems more relevant.
   - Definitely
   - somewhat
   - It has been somewhat helpful in Biology 151. I'm glad I took it.
   - possibly

   If no, has your lack of training in statistics been a problem for you in other courses?
   - not so far
   - no (2)
   - It would have been helpful to know more, especially when reading scientific papers and writing my own research papers
   - It really hasn't come up at all in my studies, but I would've liked to take a course in statistics. I'll probably end up buying the book and learning it on my own time.
   - Somewhat
   - 460 ecology yes
   - Not really, I have found that most students don't have experience with stats.
   - Not at all, though I still plan on taking statistics next semester since math or statistics is required for a BS in L&S.
   - Definitely (before I took it)
   - no, but I might take statistics any way
• nope.
• Yes, I believe it should be a prerequisite for Zoo 460 -- the semester I took had a statistic-intensive lab. (I am in Genetics 466 now and I should have had statistics first.)
• Moderately and I plan on taking 371, but it seems to fill up quickly. Some sort of Freshman/Sophmore-only stats course might be helpful.
• I wish courses taught more about statistics inorder to help with lab analysis.
• No, I took through second semester calculus, so it was pretty easy to pick up on statistics. For more research intensive courses, it was a little difficult, but I know that they really focus on helping you there (e.g. Biocore).
• no, but it would help, and i do plan on taking one next year.
• It hasn't been a problem but I can see where it would be helpful. I've had enough basis in math to get me by.
• No, I am capable of learning statistics as I need them. As long as you have a sufficient math background, you should be able to learn statistics on the fly. An introductory stats course is only useful if you have a particular project during or immediately following taking a stats course.
• Possibly, but I have always managed to keep up good grades. I have not had major problems in any courses I took. However, I feel that if I had taken a stats course, it probably would have helped when I needed to analyze large amounts of data for writing scientific papers.

11. Would you be in favor of a more focused core of required courses? (Please comment)
• no, but maybe a few suggested paths of focus would be helpful. Say if you want to go into fish ecology you could lay out a plan to take limno, ecology of fishes, and some others. To lay out different possible focuses to possibly make one more marketable in the job community. I wouldn't make any more requirements though.
• I don't understand what is meant by "more focused core." If you're considering adding statistics to the required courses, I really don't think that's necessary.
• yes, i still don't knwo what i want to do when i graduate, more specific classes may have helped me out
• no, I think there are enough required courses within the major, I enjoy the freedom of picking within the electives to find the courses and specific topics I would be most interested in taking, being able to have more freedom in choosing our courses allows us to focus in on the specific topics we find most interesting
• no- i think that is the best part of this major. students are able to elect if they want to focus on a certain discipline or not. more required courses would limit this. especially if they are double majors and have other required classes
• probably yes, or maybe there could be different paths that you could pick to focus on, after finishing the core classes.
• No, I enjoy that it is open-ended for people to design their own path. I loved the flexibility and I have been able to take classes in the areas that I was interested in.
• No. I think that is one of the things that makes this major so effective is that students can guide their own studies in the direction they are interested in. If students aren't focused enough to do that on their own then they should be taking a different, more directed, major.
• No, it allows people to transfer from other majors that don't have the highschool background to take biocore or 151...etc
• No. I liked the flexibility of the major.
• no
• It is nice to have a more open major, but I think more guidance is needed if the major is going to stay this way. It's really easy to get side tracked and take a bunch of classes that don't relate to each other, giving a degree that is much less useful.
• No, being able to pick and choose from a wide range of courses suits individual needs very well. There is such a wide range of things people in this program are going into after graduation, that making the core courses more focused may be detrimental.
• It would be nice if there was a core of required courses for each area of conservation biology a person might want to go into, such as research vs. restoration, but limiting the curriculum to one or the other may deture people from switching focus if they realize they prefer one over the other.
• no, I think there should however, be examples of ways to focus on certain things, rather than one large list of electives
• Yes, perhaps then it would be easier to meet people in the major, considering I didn't until my senior year.
• no, because this major is an alternative to bio or botany or other very focused science majors, and it allows for a more diverse background
• no, I feel that the diversity is very important. If it were not there the connections required to make sense of conservation would fall out.
• nope. leave it how it is please.
• Not especially. I enjoy the freedom to work with my interests and my advisor to design the best combination of courses for me.
• No, I like being able to select what classes I can take. I find that especially important because conservation biology can be applied to so many areas. Here, students can take a series of classes they are interested in and that can help in the future (ex - student was interested in aquatic ecosystems and could take classes pertaining to that...then get a job in that field and be well-equipped going into that).
• Not necessarily. I think the breadth is good.
• I like the broad range of options.
• No, I believe the freedom of course selection is an important part of this major.
• Perhaps. I think that might alienate some people a bit, but maybe having different suggested courses or series of courses for different interests could be helpful so that on a resume one could say "BAC major with a focus on . . ."
• not necessarily. the freedom is good sometimes because in my case it allowed me to work towards my environmental studies certificate at the same time by picking crosslisted classes.
• Yes, I think the courses in BAC is a bit too broad. And sometimes I just don't have the feeling that I am a BAC student. If would be nice if there is a core curriculum like other majors. It also useful to include some courses from which students can learn hands-on techniques
• perhaps a more focused core of the 12-credit requirement would be helpful in helping me get an overall depth in zoology/botany/limnology/etc. but otherwise, what i do love about this major is the choices we have about class selection. requiring some sort of environmental history class (like Geography/IES 339) would be helpful for all BAC majors.
• You could add a few more if you'd like, but giving freedom in the requirements is great for the students since this is a very broad field. It allows them to take the courses that they think would be more beneficial to their goals.
• No, I feel it would be more difficult for students to double major and it gives students more freedom to choose classes which interest them.
• No, I think the current set provides a sufficient background prior to taking any higher level courses. In my opinion, the fewer required courses, the better (To a point, of course)
• It depends on the courses and the degree of "focused". I think I would generally not be in favor of more focus for required courses (other than for writing skills). I feel that it limits the student's ability to follow whatever path within conservation really interests him/her.
Advising

12. How often have you met with your faculty advisor?
   a) once (11)
   b) once/year (7)
   c) once/semester (8)
   d) more often than once/semester
   e) never (7)

13. Do you feel you have received adequate advising from your faculty advisor and/or the BAC program in general with respect to
   a) selection of courses
      • na (2)
      • I've mostly only received advising from my advisor for my Zoology major.
      • just fine
      • I was debating between two courses for this semester that would fulfill the same requirement. My advisor leaned heavily toward one course over the other, mainly because it would be more difficult and more advanced material. When I thought about the choice again after my advisor appointment, I ended up selecting the other "easier" course. I am very happy with the choice I made and have a lot of interest in the class. The hardest course is not always the best choice, especially with a schedule full of other advanced courses and labs.
      • she helped me choose courses based on gpa, interest, and gaining skills
      • it's hard to know what classes are actually offered each semester out of the huge list of classes that count for the major. it's also hard to figure out which ones you'll need pre reqs for, in order to plan your semesters ahead of time.
      • Kinda
      • I never needed help with that, but I'm sure I would have gotten it if I had asked.
      • No. My advisor(s) didn't really know a lot about other BAC courses, only courses in their own departments. I ended up having to figure out a lot on my own.
      • NO-Dodson is completely clueless
      • I have met with a few of the secretary's there that helped me with my classes a lot! They were very helpful.
      • yes (7)
      • So far I have found that with the use of the DARs report and the undergraduate online catalogue, I have been able to efficiently plan out my own curriculum.
      • i choose them myself.
      • I've mapped my own way through
      • No
      • No, I sort of took what was available. A lot of the courses that would've been best for me weren't offered when I wanted or needed them or they conflicted time wise with each other. A lot of the classes I wanted to take haven't been offered since I can remember. It's really disappointing.
      • the advisor for my BAC major on the student center page is incorrect...i don't know who my current advisor is
      • relatively, because i realise it's hard for an advisor to give direction when you yourself don't know what you want to focus on.
      • Moderately helpful. They've let me know where there has been too much overlap which is all the guidance I've really needed.
      • No, but I haven't pursued it.
      • Yes, very helpful.
b) career planning

- n/a (2)
- not especially
- no, but my career goals fall outside of the field of BAC, my advisor almost seemed disappointed when I told him I my plans to go to medical school
- no (3)
- i would like to have more info on internships, possible jobs/ career paths that past BAC majors have done.
- I never needed help with that, but I'm sure I would have gotten it if I had asked.
- i wish there were more of this...i don't feel as though many job opportunitie sin the field are expressed through the advisors
- No, although I didn't really know what I wanted to do. So I didn't have specifici questions, but it would have been nice to find more professors willing to sit and chat with me.
- NO also, he told me i might have a learning disorder. thanks
- maybe not
- I have received no advising in career planning from my advisor or the BAC program.
- yes (3)
- i do this myself.
- not really
- i havent asked -- we discussed grad school more.
- I haven't sought advice
- I went to office hours to talk to a professor I admire about planning what to do after college. But, I think I don't really know what's out there for me to do.
- i would like to be given more information about the types of jobs out there, a clearer list of what to take if thinking about graduate school, and honest opinions about the likelyhood of getting in to grad school/careers with a major that's kind of broad like this one is.
- I haven't really asked for assistance in this yet.
- Have not discussed
- Not from my faculty advisor, but again I haven't pursued it.
- Um, no, but it's my fault because I couldn't decide on what I wanted to do.

c) research and internship opportunities

- No (2)
- n/a
- we get the emails everyweek, which i suppose is sufficient
- never asked
- not really.
- Yes, definitely
- I never needed help with that, but I'm sure I would have gotten it if I had asked.
- it would be nice to hear about these types of things as well.
- Yes, especially in Zoology 152 and when I asked the professors of my classes (not my various advisors). The email was helpful here too.
- he [Dodson] does provide this 699 course
- yes, but mostly through individual courses
- I have found many research and internship opportunities outside of the BAC program. The websites of the Gaylord Nelson Institute have been done in a way that has helped me out the most in these areas.
- yes (6)
• I didn't know what the point of meeting with them at all was supposed to be so I've never bothered... this questionnaire told me more than the people at the office I talked to!
• i do this myself.
• not so much, I had to go to an outside source.
• Perhaps I have missed it, but if there was a single website listing of research opportunities, that would be great.
• internship opportunities are well presented, especially through the BAC e-mails, but research opportunities could be a little bit better publicized.
• Great help for research ideas and possibilities.
• Have not discussed
• Yes, when I met about an internship I had set up, my advisor was happy to arrange getting credit for it.
• Some help, but not much.

BAC community

14. Do you feel you have had enough opportunities to meet and interact with other BAC majors?
• Yes (5)
• yes and no. Many of my friends ended up taking up the BAC major. Besides those I already knew, I have not met many.
• I've met plenty of BAC majors in my classes, I think one interesting phenomenon of this major is that there is a wide variety of people who sign up for the same classes that are required for BAC. It's nice to meet Zoology majors, Wildlife Ecology majors and Biology majors too.
• a little within my chosen classes
• No (5)
• there's sucha large range of classes that you don't really know who else is in the major.
• I think that BAC majors are drawn to each other through other student organizations. I have quite a few friends that are BAC majors, but I would appreciate more opportunities to meet others because it would make large lecture classes a lot more fun and educational to know people to study with.
• Not at all. I don't even know who they are. I only know 3 other BAC students, and I met them in classes. I think a more organized community would be a great idea.
• No. I end up meeting a lot of them randomly, but there was no real community.
• I haven't really had any...
• maybe
• I don't feel that I have had many opportunities to meet with other BAC majors. Most of the opportunities I have been made aware of are events for people in the biological sciences in general.
• haven't had any, but don't really care
• i guess. does it matter? not to me.
• some
• I met them here in there, in random classes. Is that really so important though?
• I've only met other BAC majors on accident in my classes
• I would like a few more opportunities, such as the pizza party at the beginning of the year.
• Just met them in classes.
• no, again because there is no core curriculum and aren't much required courses. So everyone is like taking different courses.
• i haven't met any BAC majors through BAC programming, just on my own and through classes.
• They're everywhere!
• Somewhat, but its difficult when the number of possible courses to take is so great.
15. Do you have suggestions for ways the program could make it easier for BAC majors to interact with each other?

- not really, college is suppose to make one independent.
- food night?
- social events (with free food), major nights with everyone who wants to come from the major and some BAC advisors so students can ask questions, etc.
- no
- more core classes, even a core conservation biology that all in the major have to take.
- BAC social activities or meetings, maybe some sort of student organization to get together, talk about classes, internships, and jobs
- Have meetings or group activities. Picnics, kickball, symposiums, discussions, anything that would help us meet each other.
- Maybe have a couple core, BAC majors only, courses. Or have some social things (with food).
- message boards
- Outdoor type meetings, at picnic point or something. Meetings like this would probably draw much of the BAC crowd.
- Maybe an optional Semester-ly get together (monthly). Featuring lecturers, and career advising, food...
- They could set up social events for BAC majors. Or, such as the horticulture department does, they could set up a page which lists students in the program and a small profile of career goals or areas of focus.
- I think we all tend to have class together, which is enough of an opportunity if people choose to make the effort
- make the program have more core classes that are smaller (it's so easy to be just a number in intro. bio classes and intro. chemistry classes..etc.)
- It might be usefull to have a course specifically set up for BAC majors. This would give more opportunity to network with each other as well as helping to stablize the understanding of the connections between subjects.
- nope (2)
- none that I can think of
- Have a class especially designed for BAC majors (and make it a requirement). I don't know how necessary that is though. But many departments have a class or 2 that only the majors can take and must take to get the degree.
- More social programs.
- Don't know.
- maybe set up a BAC student organization
- maybe a social event at the beginning of the semester. i like the study room idea for the end of exams, and will think about going to it.
- If there was a BAC related group specifically that would be great. Like a campus organization. However, that is one drawback to the BAC major being so comprehensive: all the 'group potential' is filled by a multitude of other groups. Still, one specific BAC group could be beneficial and give networking that wouldn't otherwise be available.
- Perhaps, set aside a specific BAC discussion section for one of the early required courses. The problems with this are 1. Not everyone who finishes in BAC declares BAC early on 2. Limits the number of alternative viewpoints in such a discussion section
- Ah, I guess having some sort of get-together where BAC majors could come and informally ask questions of professors and advisors. The hard part about this major is not meeting others in the
major, it is discovering 1) what you want to pursue for a career 2) finding a good fit for an advisor 3) finding internships/job opportunities for the career you choose.

Overall
16. Please comment on any strengths or weaknesses of the BAC program.
   • enjoy it quite a bit
   • the "field work" courses need to be scheduled better, it is very hard to take more than two a semester, which is obnoxious when students have other things or classes to attend to, i personally would have liked to be able to take more general labs early on so that i could take more specific classes in my sr year.
   • strength: only major with a strong ecological focus
   • i enjoy the flexibility of the program, but i think there needs to be more intentional advising about students purposefully choosing courses to gain skills for the next step in their lives.
   • Strengths-overall curriculum and classes offered. Internship and job opportunities
   • Weakness-advising and social opportunities
   • I really enjoyed being able to have a major that allowed me to take the courses that I wanted. I also like that fact that many of the courses included in this major overlapped with course that allowed me to get a certificate in environmental studies. I would however like to see a major dealing with sustainability issues in the future, because I would have chosen that over the BAC if was available.
   • Strengths: It's interesting and flexible, and I like the people in it.
   • Weaknesses: There's not much of a community or a lot of places to get advising.
   • more interesting courses for species and field
   • I really love it! The wide range of courses is the best to me.
   • I feel that the biggest weakness of the BAC program lies in the advisors. When I applied for this major, I was given a list of advisors to choose from. However, none of the advisors were listed as handling people in the school of BAC. Most of the advisors were interested in other programs, thus, I was told to pick whoever I thought would be best. I felt like this was a very poor way of assigning advisors because there was no way of knowing if an advisor would be able to give me advise in reaching my particular career goals based solely on their name and wether they were intersted in zoology or botany. And to be honest, the lady in the office where I signed up for my advisor actually told me that since there aren't any advisors who focus on BAC, many students picked advisors based on how many floors they had to walk up in order to get to their advisor's office. Needless to say, within a few email correspondences with my advisor, I realized that he had no knowledge of my major or how to advise people in my program. Though I must say, he did atleast attempt to give me the email address of other people who he thought may be able to help me. I feel the best way to remedy this problem is to have people who are applying for this major fill out a form which discusses their career goals, interests, and what they expect to learn in this program. Then, based off of this questionnaire, I feel that someone in the program who has a better knowledge of the interests, strengths and weaknesses of the advisors should assign an advisor who would be the best fit for the student.
   • it's lovely
   • I like that this program offers flexibility, but it is also important that people in the same major know each other and network with each other and share ideas. I feel that the way BAC is set up it is hard to meet people in the major and that contributes negatively to the experience and learning within the major.
   • I like the newsletter, but an introduction to the system when I signed up might've helped
   • the only weakness that i can see is in # 15. because of the importance of these connections they cannot be ignored.
• a lot of the courses are only offered one semester a year. there's a bunch of classes i'm not going to get to take before i graduate (that i would have liked to take) because of this.
• it would be nice if Chem 344 and 345 counted towards some requirement.
• Overall, I have really enjoyed this major. BUT, I must point out 1 very large flaw, which I hope is appropriate to comment on here: Zoology 360 is not only an embarrassment to this major, but also the entire university. I can understand why it is a requirement -- i think the basic principles are important for BAC majors to know. However, when I took it with Prof. Vaughn, the class was a joke -- classes like this make BAC seem like "not a true degree" or "an easy degree". I could summarize the entire semester in about 4 classes. His approach to teaching was absurd: lecture consisted of him reciting definition after definition (i may as well read the book and forget class), his research (okay, i like the experiment, but I don't need to know who ate the most chocolate that night and other pointless stories EVERY lecture), or a guest speaker (stan temple was great, but the rest -- I wish they were screened first -- ex -- one was purely a political rant, which really is NOT appropriate at a public university during class time). Discussion was just as bad, with the same activity nearly every class. This is really too bad because there is SO much someone could do to make this class monumental (especially for BAC majors). My suggestion is keep the class, remove the professor so that "Extinction of Species" is not looked at as a joke, but rather a devastating event we need to take action against.
• The worst part was that Z360 made me loose interest in conservation, doubt the people in that career field, and change my focus - I was more determined than ever to add in Botany/Zoology so that my college career didn't look like a waste of time - I felt embarrassed of only having a BAC degree. If I wasn't so far into the major (with all of its personal requirements fulfilled), I would have dropped it. Sorry this was so negative, I really loved the rest of the major; the class was just so souring. Please put that professor into review. I can only think of one person in that class that I knew or sat by that actually liked it.
• I'm generally happy with it. I hate the name, however. Why not Conservation Biology? Ecology?
• Not a very well known major. I think that there could be a bigger breadth of classes and that classes could be offered more often to make it easier to meet requirements.
• It could be better publicized, because I feel like a lot of people still don't know what it is. Also, I'd like more real answers from the BAC staff about the majors strengths and weaknesses. But overall, everyone I've interacted with concerning this major has been very friendly and mostly helpful. I'm just very excited I discovered this major...
• Muah! I'm loving this stuff!
• I appreciate the interdisciplinary nature of the major, but I think it needs to be broadened to include more CALS courses. I also encourage more effort to bring BAC students together. There is little sense of camaraderie amongst the major, which is unfortunate
• Weakness = lack of writing course. Strength = variety and freedom of choices for courses given to students.