The Major: Students enrolled in the Wildlife & Conservation Biology major study a combination of the natural sciences and principles of managing wildlife populations and their habitats. This major is one of very few in the United States that fulfills the educational requirements for certification as an Associate Wildlife Biologist by The Wildlife Society, the international organization for professionals in the wildlife field. It also provides an excellent foundation for graduate school. The URI Student Chapter of The Wildlife Society is heavily involved with career-related activities.

Careers: Graduates of this major find employment with various state or federal agencies (such as the U.S. Fish and Wildlife Service, Park Service, or Forest Service, or Rhode Island Department of Environmental Management); with consulting firms; and with organizations like the Audubon Society and the National Wildlife Federation. Wildlife researchers work on habitat requirements of individual wildlife species and analyze the effects of such factors as pesticides, hunting, predation and land use on wildlife populations and their habitats. Wildlife managers operate refuges, regulate hunting and trapping seasons, manage public lands for the benefit of wildlife, and advise private landowners regarding wildlife management. Some wildlife biologists work for consulting firms that assess the environmental impact of proposed developments; others work in regulating land use in wetlands and coastal zones; still others teach in colleges, environmental education centers, and public schools.

Transfer out of UC: Earned a minimum of 30 credits with a 2.0 GPA or better including BIO 101, 102, 103, 104 and NRS 100 with a grade of C or better.

The following is an example of the typical course schedule for the first 4 semesters for a student majoring in Wildlife and Conservation Biology. These are recommended course selections for WCB majors in University College; there will be variation based on course availability and schedule restraints. Some classes are not offered every semester. It is important to plan ahead and consult with your advisor to allow yourself time to enroll in the classes you wish to take.

<table>
<thead>
<tr>
<th>Semester I (Fall)</th>
<th>Semester II (Spring)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRS 100 Natural Resource Conservation.. 3</td>
<td>NRS 223 Conservation Biology .......................... 4</td>
</tr>
<tr>
<td>NRS 101 Freshman in NRS ...................... 1</td>
<td>BIO 102, 104 Principles of Biology II........... 4</td>
</tr>
<tr>
<td>URI 101 Freshman at URI .............................. 1</td>
<td>General Education (S, A, L, or FC) or ...... 3</td>
</tr>
<tr>
<td>BIO 101,103 Principles of Biology I......... 4</td>
<td>WRT 104, 105 or 106 Composition ............ 3</td>
</tr>
<tr>
<td>MTH 111 Precalculus or 131* Calculus.... 3</td>
<td>CHM 103,105 General Chemistry, Lab...... 4</td>
</tr>
<tr>
<td>COM 100 Communication Fundamentals 3</td>
<td>Total credits: 15</td>
</tr>
<tr>
<td>Total credits: 15</td>
<td>Total credits: 15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester III (Fall)</th>
<th>Semester IV (Spring)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRS 200 Seminar in NRS...................... 1</td>
<td>GEN ED (S, A, L, or FC) .................. 3</td>
</tr>
<tr>
<td>NRS 212 Introduction to Soils.............. 4</td>
<td>STA 308 Intro Statistics .................. 3</td>
</tr>
<tr>
<td>BIO 262..................................... 4</td>
<td>CHM 124/126 Intro Organic Chem ............ 3</td>
</tr>
<tr>
<td>GEN ED (S, A, L, or FC)..................... 3</td>
<td>EEC 105 Resource Economics ................ 3</td>
</tr>
<tr>
<td>GEO 103 Understanding the Earth ........... 4</td>
<td>Free Elective........................................ 3</td>
</tr>
<tr>
<td>Total credits: 16</td>
<td>Total credits: 15</td>
</tr>
</tbody>
</table>

Total credits: 16 Total credits: 15

*All students are required to take through MTH 131; some students may need to first take MTH 099 and/or MTH 111. A placement test is available in the math department.
## Wildlife Checksheet

### General Education (36 credits)
- EC(D): COM 100 ___ (3)
- ECw: WRT 104, 105 or 106 ____ (3)
- MQ: (3 cr. from Basic Sciences below)
- S: _____ (3) (3 cr. from Intro. Prof. below)
- L: _____ (3) _____ (3)
- A: _____ (3) _____ (3)
- FC: _____ (3) _____ (3)

(‘Note: 15 cr. from L, A and FC)

### Intro. to URI and NRS (2 credits)
- URI 101 ____ (1)
- NRS 101 ____ (1)

### Intro. Professional Courses (19 credits)
- NRS 100 ____ (3)
- EEC 105 ____ (3)
- NRS 212 ____ (4)
- NRS 200 ____ (1)
- EEC 104 ____ (1)
- NRS 223 ____ (4)
- BIO 262 ____ (4)

### Basic Sciences (22-23 credits; 9 applicable to General Education requirements)*
- BIO 101 ____ (3) and BIO 103 ____ (1)
- BIO 102 ____ (3) and BIO 104 ____ (1)
- CHM 103 ____ (3) and CHM 105 ____ (1)
- CHM 124 ____ (3) and CHM 126 ____ (1)
- MTH 131 ____ (3)
- STA 308 ____ (3) or STA 409 ____ (4)

*Six credits apply to Division N and three credits apply to Division MQ above.

### Concentration (23-25 credits; must include at least 12 credits from NRS).
- NRS 305 ____ (3)
- NRS 309 ____ (3)
- NRS 406 ____ (4) or NRS 407 ____ (4)
- BIO 323 ____ (4)

(‘Note: If seeking certification by The Wildlife Society, you must complete 9-11 credits of other Concentration courses in these two categories: Vertebrate Biology (6-8 credits):
- NRS 304 ____ (3) BIO 366 ____ (3)
- NRS 324 ____ (4) NRS 417 ____ (4)

Note: Must take NRS 304, NRS 324, and/or NRS 417 if seeking certification.

Biometrics/other Quantitative Science (3):
- NRS 402 ____ (3) or computer science (200-level or above), or calculus (beyond MTH 131), or other approved quantitative science courses (e.g., NRS 516, 522, 533)

Other Concentration Courses (9-11 credits):

### Supporting Electives (24-26 credits; at least 6 credits must be NRS courses). Courses may be selected from the Concentration categories or from an approved list (see back). Up to 12 credits of Letter Grade or S/U Experiential Learning Courses may be taken as Supporting Electives. Senior Colloquium (NRS 480, 2 cr.) is strongly recommended.

(‘Note: if you are seeking certification by The Wildlife Society, categories below must be completed (see back).

**Botany (1+):**

________ ( )

**Zoology (5):**

________ ( )

**Policy (6):**

________ ( )

**Communications (6):**

________ ( )

Other Supporting Elective Courses:

________ ( )

________ ( )

Free Electives (6 credits)

________ ( )

### Experiential Learning Courses

Up to 15 credits of Experiential Learning Courses may be taken. A maximum of 10 credits of Letter Grade courses (in italics below) may be taken for Concentration credit; up to 12 credits of Letter Grade courses or S/U courses may be used as Supporting Electives.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NRS 395</td>
<td>Research Apprenticeship (1-3 credits)</td>
</tr>
<tr>
<td>NRS 397</td>
<td>Internship (1-6 credits)</td>
</tr>
<tr>
<td>NRS 491/492</td>
<td>Special Projects (1-3 credits)</td>
</tr>
<tr>
<td>NRS 495</td>
<td>Advanced Apprenticeship (3 credits)</td>
</tr>
<tr>
<td>NRS 497</td>
<td>Cooperative Internship (6 or 12 credits)</td>
</tr>
<tr>
<td>NRS 498</td>
<td>Teaching Practicum (1-3 credits)</td>
</tr>
</tbody>
</table>

(‘Note: Concentration and Supporting Electives must total at least 49 credits and total credits at least 120; see next page for transfer requirements from UC)
## Wildlife and Conservation Biology

### Freshman, Fall (15)
- NRS 100: Natural Resource Conservation
- NRS 101: Freshman Inquiry into NRS
- URI 101: Traditions and Transformations: Freshman Seminar
- BIO 101, 103: Principles of Biology I
- COM 100: Communication Fundamentals
- MTH 111/131: Precalculus/ Applied Calculus

### Freshman, Spring (15)
- NRS 223: Conservation Biology
- WRT 104: Writing to Inform and Explain or WRT 105: Forms of College Writing or WRT 106: Intro to Research Writing or MTH 131: Applied Calculus
- WRT 104: Writing to Inform and Explain or WRT 105: Forms of College Writing or WRT 106: Intro to Research Writing or MTH 131: Applied Calculus

### Sophomore, Fall (15)
- NRS 200: Seminar in Natural Resources
- BIO 262: Ecology
- GEO 103: Understanding the Earth
- GEN ED (S, A, L, or FC)
- Free Elective

### Sophomore, Spring (15)
- CHM 124,126: Introduction to Organic Chemistry/ Lab
- GEN ED (A, L, or FC)
- EEC 105: Intro to Resource Economics
- STA 308: Introductory Statistics
- Free Elective

### Junior, Fall (15)
- BIO 323: Field Botany and Taxonomy
- GEN ED (A, L, or FC)
- Free elective
- NRS 304 or BIO 366: Field Ornithology or Vertebrate Biology
- NRS Supporting Elective

### Junior, Spring (15)
- NRS 305: Principles of Wildlife Ecology and Management
- NRS 309: Wildlife Management Techniques Lab
- NRS 324 or 402/403: Biology of Mammals or Wildlife Biometrics/Wildlife Biometrics Field Investigations
- NRS Supporting Electives
- GEN ED (S, A, L, or FC)

### Senior, Fall (15)
- NRS 304 or BIO 366: Field Ornithology or Vertebrate Biology
- NRS Supporting Elective
- NRS Supporting Elective
- Free Elective

### Senior, Spring (15)
- NRS 406 or 407: Wetland Wildlife or Nongame and Endangered Species Management
- NRS 324 or 402/403: Biology of Mammals or Wildlife Biometrics/Wildlife Biometrics Field Investigations
- NRS 417: Herpetology
- NRS Supporting Elective
- NRS Supporting Elective
- NRS Internship
WILDLIFE & CONSERVATION BIOLOGY

APPROVED SUPPORTING ELECTIVE COURSES

Fall 2013

A total of 24-26 credits may be taken from the following categories, with at least 6 credits must be NRS courses. The requirements in various categories are based on certification guidelines established by The Wildlife Society and federal government. These approved courses may change with availability. Other courses may be taken with approval of your advisor.

Botany (3 credits)
- NRS 423 Wetland Ecology 4
- NRS 445 Invasive Species 3
- NRS 485 Salt Marsh Ecology 3
- BIO 311 Plant Structure & Development 4
- BIO 321 Plant Diversity 3
- BIO 346 Plant Physiology 3
- BIO 418 Ecology of Marine Plants 4
- BIO 432 Mycology: Intro. to the Fungi 4
- BIO 454 Genetics Laboratory 3
- BIO 465 Biology of Algae 4

Zoology (6 credits)
- AFS 352 General Genetics (= PLS 352) 3
- AFS 355 Genetics Lab (= PLS 355) 2
- NRS 304 Field Ornithology 3
- NRS 324 Mammalogy 4
- NRS 417 Herpetology 4
- NRS 505 Biology and Mange. of Mig. Birds 2
- NRS 534 Ecol. Fragmented Landscapes 2
- NRS 538 Physiological Ecology 3
- BIO 201 General Animal Physiology 3
- BIO 262 Intro Ecology 4
- BIO 272 Intro Evolution 4
- BIO 286 Humans, Insects, and Disease 3
- BIO 302 Animal Development 3
- BIO 354 Invert. Zoology 3
- BIO 355 Marine Invert. of Southern N.E. 3
- BIO 360 Marine Biology 3
- BIO 366 Vertebrate Biology 3
- BIO 385 Introductory Entomology 3
- BIO 386 Introductory Entomology Lab 1
- BIO 404 Comparative Vertebrate Anatomy 4
- BIO 455 Marine Ecology 3
- BIO 457 Marine Ecology Lab 1
- BIO 458 Freshwater Ecology 4
- BIO 467 Animal Behavior 3

Communications (6 credits- in addition to General Education requirements)
- JOR 110 Introduction to Mass Media 3
- JOR 220 Media Writing 3
- JOR 230 Intro. Radio & TV News 3
- JOR 340 Public Relations 3
- COM 202 Public Speaking 3
- COM 208 Debate 3
- COM 210 Persuasion: The Rhetoric of Influ. 3
- COM 251 Small Group Communication 3
- COM 310 Contemp. Oral Communication 3
- WRT 201 Argument. & Persuasive Texts 3
- WRT 235 Writing in Electronic Env. 3
- WRT 333 Scientific & Technical Writing 3
- WRT 533 Grad. Writing in Life Sciences 3

Other Supporting Electives:
- NRS 409 Concepts in GIS and Remote Sens. 3
- NRS410 Fundamental of GIS lab 3
- NRS 415 Remote Sensing of the Environ. 3

Courses may be selected from any of the above categories, from Concentration electives, or from other 300- or 400-level NRS courses.