Range Science

Department Information

- **Director, School of Natural Resource Sciences:**
  Frank Casey, Ph.D.
- **Interim Program Leader:**
  Ryan Limb, Ph.D.
- **Department Location:**
  201 Morrill Hall
- **Department Phone:**
  (701) 231-7582
- **Department Web Site:**
  www.ndsu.edu/range/
- **Application Deadline:**
  International applications are due May 1 for fall semester and August 1 for spring and summer semesters. Domestic applicants should apply at least one month prior to the start of classes.
- **Degrees Offered:**
  Ph.D., M.S.
- **English Proficiency Requirements:**
  TOEFL iBT 71, IELTS 6

Program Description

The Range Science program in the School of Natural Resource Sciences offers graduate study leading to M.S. and Ph.D. degrees. Advanced work may involve specialized training in the following areas: rangeland ecology, fire ecology, plant community dynamics, restoration of ecosystem services, ecosystem reclamation, and wildlife population dynamics in rangelands.

Student research and academic programs are tailored to individual student needs and interests. Interdisciplinary approaches to range science programs are fostered.

The Range Science graduate program is open to all qualified graduates of universities and colleges of recognized standing that meet the Graduate School requirements (http://bulletin.ndsu.edu/graduate/admission-information).

Financial Assistance

Research assistantships are available. Applicants are considered on the basis of scholarship and potential to undertake advanced study and research. To be considered for an assistantship, a completed Graduate School application, official transcripts, three letters of reference, and a TOEFL score for international applicants must be submitted to the Graduate School no later than April 15.

Each student must choose an adviser, usually based upon area of academic and research interest, within the first program year. By the end of the first year of residence, the student must have selected an advisory/Supervisory committee and have an approved graduate plan of study, including a research proposal. The advisory/Supervisory committee advises the student and administers the graduate exams to the student. Students are referred to the Range Science Graduate Student Handbook for information regarding additional requirements.

Master of Science Program

The range science program has two options for the M.S. degree: the thesis option and the comprehensive study option. The M.S. program requires completion of 30 semester credits of approved graduate and letter-graded course work with an overall GPA of 3.0 or better. The M.S. candidates are required to take an oral examination which covers both the research and academic subject matter covered in their program.

Candidates for the M.S. normally complete their degree requirements in two years.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan A - Thesis Option</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Didactic Courses (numbered 601-689, 691; 700-789, 791; 800-889, 891)</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Additional Credits</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>RNG 798</td>
<td>Master’s Thesis</td>
<td>6-10</td>
</tr>
</tbody>
</table>
Plan B - Comprehensive Study Option
Didactic Courses (numbered 601-689, 691; 700-789, 791; 800-889, 891)  21
Additional Credits  6-8
RNG 797 Master’s Paper  1-3

Doctoral Program

The Ph.D. program requires the completion of 90 semester credits (or the equivalent) of graduate approved and letter graded course work with an overall GPA of 3.0 or better. Candidates for the Ph.D. are required to take a preliminary written and oral examination directed toward the academic subject matter of their chosen discipline and a final defense of a research based thesis.

Candidates for the Ph.D. generally complete their degree requirements in three to four years.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master’s to Ph.D.</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Didactic coursework (numbered 601-689, 691; 700-789,791; 800-889, 891)</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Additional courses</td>
<td>30-44</td>
<td></td>
</tr>
<tr>
<td>RNG 899 Doctoral Dissertation</td>
<td>1-15</td>
<td></td>
</tr>
</tbody>
</table>

Bachelor’s to Ph.D.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Didactic coursework (numbered 601-689, 691; 700-789,791; 800-889, 891)</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>Additional courses</td>
<td>48-62</td>
<td></td>
</tr>
<tr>
<td>RNG 899 Doctoral Dissertation</td>
<td>1-15</td>
<td></td>
</tr>
</tbody>
</table>

Torre J. Hovick, Ph.D.
Oklahoma State University, 2014
Research Interests: Global change, Avian Ecology, Fire Ecology, Rangeland Management

Ryan F. Limb, Ph.D.
Oklahoma State University, 2008

Devan A. McGranahan, Ph.D.
Iowa State University, 2011
Research Interests: Fire behavior and ecology, plant community ecology, fire and grazing management, and effects of global environmental change in rangeland ecosystems worldwide

Kevin K. Sedivec, Ph.D.
North Dakota State University, 1994
Research Interests: Plant Community Ecology, Grazing and Wildlife Interaction, Reclamation of Energy Developed Lands, Range Nutrition, Range Monitoring

Adjunct Faculty

Benjamin Geaumont, Ph.D.
North Dakota State University, 2009
Hettinger Research and Extension Center
Research Area/Activity: Interactions Between Agriculture, Wildlife, and the Environment

John Hendrickson, Ph.D.
Texas A&M University, 1996
USDA, Mandan, ND
Research Area/Activity: Rangeland Ecology and Management

Chris Schauer, Ph.D.
Oregon State University, 2003
Hettinger Research Extension Center
Research Area/Activity: Nutritional Management of Grazing Livestock

Lance Vermeire, Ph.D.
Texas Tech University, 2002
USDA-ARS Fort Keogh, Miles City, MT
Research Area/Activity: Grazing Ecology, Prescribed Fire, Drought Effects on Rangelands