APPENDIX 1
Broad survey about graduate student socio-ecological experiences and attitudes in the LTER Network

SURVEY INTRODUCTION
This survey is about graduate student attitudes towards and experiences with socio-ecological research in the LTER Network. This survey should take approximately 10-15 minutes of your time. It will contribute to a research study that a group of LTER graduate students has organized as follow-up to a 2009 ASM working group on this topic. Survey results will be used as data for a research publication and will be presented to LTER leadership. Your responses will be kept confidential. Your name or other personal information will not be publicly linked to your survey responses. Thank you for your time! Should you have any questions about this survey or our work, please contact us.

SECTION 1: SOCIO-ECOLOGICAL RESEARCH in the LTER NETWORK
This first section of this survey asks you about your familiarity with socio-ecological research and your views of it. (Section 1 of 4)

Q1 Since joining the LTER network, how often do you typically hear about socio-ecological research?
- Never (1)
- Rarely (2)
- A few times (3)
- Frequently (4)
- All the time (5)

Q2 How interested are you in socio-ecological research?
- Very disinterested (1)
- Disinterested (2)
- Neither interested or disinterested (3)
- Interested (4)
- Very interested (5)

Q3 What socio-ecological research topics interest you?

Q4 What other kinds of research topics interest you?
Q5 Please indicate how much you agree or disagree with the following statements:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Neither Agree nor Disagree (3)</th>
<th>Agree (4)</th>
<th>Strongly Agree (5)</th>
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<td>I can clearly define what socio-ecological research is.</td>
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<td>I would like to learn more about what socio-ecological research is.</td>
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<td>I would like to be (more) involved as a researcher in a socio-ecological</td>
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<td>research project.</td>
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<td>I am able to spend as much time studying socio-ecological research topics</td>
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<td>as I would like.</td>
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If the respondent indicates that he or she “disagrees” or “strongly disagrees” with the statement “I am able to spend as much time studying socio-ecological research topics as I would like” in question 5, then ask:

Q5A Why are you not able to spend as much time studying socio-ecological topics as you would like?

Q6 In your own words, how would you define socio-ecological research?
Q7 Please indicate how much you agree or disagree with the following statements:

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Neither Agree nor Disagree (3)</th>
<th>Agree (4)</th>
<th>Strongly Agree (5)</th>
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<tr>
<td>Within the LTER network, socio-ecological research has an agreed-upon definition. (1)</td>
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<td>Socio-ecological research is an emerging research area in the LTER network. (5)</td>
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<td>Socio-ecological research is important to the future of the LTER network. (6)</td>
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<td>The LTER Network provides adequate support for socio-ecological research. (7)</td>
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SECTION 2. YOUR RESEARCH
We are next going to ask you some questions about the research projects you are involved with. (Section 2 of 4)

Q8 My research takes place at (check the option that best describes your situation):
- One LTER site (1)
- Multiple LTER sites (2)
- LTER site(s) and ULTRA site(s) (3)
- LTER site(s) and NEON site(s) (4)
- LTER site(s) and National Park Service site(s) (5)
- LTER site(s) and field sites or stations affiliated with another organization (e.g. US Forest Service, a University. Please specify) (6) ____________________
- LTER site(s) and other sites (please specify) (7) ____________________

Q9 Is your research collaborative? Collaborative research typically involves actively working with other colleagues as part of a larger research team to answer a research question. Researchers work within their own disciplines to make a contribution to group data collection and analysis.
- Yes (1)
- No (2)
- Not sure (3)

Q10 Is your research interdisciplinary? Interdisciplinary research synthesizes the theories and methods of multiple academic disciplines (e.g. anthropology and biology) to answer a research question.
- Yes (1)
- No (2)
- Not sure (3)

Q11 How many of the following types of research projects are you involved with?
- Socio-Ecological (1)
- Social Science (2)
- Ecological science (3)
- Other (4)

If the respondent indicates that they are involved in one or more socio-ecological research projects in their response to Q11, then ask him/her these questions:

Q11A What statement best describes the socio-ecological project(s) you are currently working on?
- This project is for my Master's thesis. (1)
- This project is for my dissertation research. (2)
- This is an LTER-related side project (3)
- This is a non-LTER side project. (5)
- Other (please specify:) (4) ____________________

Q11B What agencies or entities provide the funding for the socio-ecological research you are involved in?
Because you are working on a socio-ecological research project, we would like to ask you some addition questions about your experiences at a later date. Would you be willing to participate in a follow-up interview?

- Yes (1)
- No (2)

If the respondent selects “yes” to Question 11B, then ask them:

Q11C-1 Please include your contact information (name, email and phone number) so that we may get in touch with you:

About what percentage of your research time is spent on (total should add up to 100%):

- Socio-ecological research projects (1)
- Social science research projects (2)
- Ecological research projects (3)
- Other research projects (please specify): (4)

Ideally, how would you like to spend your research time? (Total should add up to 100%)

- Socio-ecological research projects (1)
- Social science research projects (2)
- Ecological research projects (3)
- Other research projects (please specify): (4)

Please indicate how much you agree or disagree with the following statements:

<table>
<thead>
<tr>
<th>Graduate students benefit from conducting socio-ecological research. (1)</th>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Neither Agree nor Disagree (3)</th>
<th>Agree (4)</th>
<th>Strongly Agree (5)</th>
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<td>Graduate students face challenges when conducting</td>
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If the respondent indicates that he or she “agrees” or “strongly agrees” with the statement “Graduate students face challenges when conducting socio-ecological research” in question 14, then ask:

Q14A Select the challenges related to socio-ecological research that you think are the most difficult.

- Funding (1)
- Institutional support (2)
- Advisor support (3)
- Peer support (4)
- Theoretical issues (5)
- Methodological issues (6)
- Finding collaborators (7)
- Bridging disciplines (8)
- Time (10)
- Other (please specify) (9) ____________________

SECTION 3: OPPORTUNITIES
This next set of questions asks about the kinds of opportunities available at your institution, your LTER site and through the LTER network to learn more about socio-ecological topics. (Section 3 of 4)

Q15 Have you ever taken a class on socio-ecological research (either theory or methods)?

- Yes (1)
- No (2)
- Not sure (3)

If respondent answers “no” or “not sure” to question 15, then ask:

Q15A How interested would you be in taking a course on socio-ecological research?

- Very disinterested (1)
- Disinterested (2)
- Neither interested or disinterested (3)
- Interested (4)
- Very interested (5)

If respondent answers “yes” to question 15, then ask:

Q15B Did your home academic institution host this course on socio-ecological research?

- Yes (1)
- No (2)
- Not sure (3)

Q15C Did you take the "From Yardstick to Gyroscope" class offered through the LTER
Network?
- Yes (1)
- No (2)
- Not sure (3)
- I am not familiar with this course. (4)

Q16 Please indicate how much you agree or disagree with the following statements:

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<tr>
<th></th>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Neither Agree nor Disagree (3)</th>
<th>Agree (4)</th>
<th>Strongly Agree (5)</th>
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<td>The LTER network should periodically</td>
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<td>offer a graduate course on socio-</td>
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<td>ecological research methods. (1)</td>
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<td>The LTER network should periodically</td>
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<td>offer a graduate course on socio-</td>
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<td>ecological theory. (2)</td>
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<td>I would be interested in a summer</td>
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<td>workshop that would expose me to</td>
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<td>socio-ecological research at other</td>
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<td>LTER sites. (3)</td>
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<td>I would be interested in a short</td>
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<td>workshop that would expose me to</td>
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<td>socio-ecological research at other</td>
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<td>LTER sites.</td>
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fellowship-in-residence at another LTER site, so I could learn how to carry out a specific socio-ecological method or to collect specific data. 

Q17 Do you participate in a reading group on socio-ecological research?
○ Yes (1)
○ No (3)
○ Not sure (2)

If respondent answers “yes” to question 17, then ask:
Q17A Is this reading group offered through your LTER site?
○ Yes (1)
○ No (2)
○ Unsure (3)

If respondent answers “no” or “not sure” to question 17 or “no” to question 17A, then ask:
Q17B Do you think your LTER site should offer a reading group on socio-ecological research?
○ Yes (1)
○ No (2)
○ Not sure (3)

Q18 Does your LTER site bring in speakers to discuss socio-ecological research topics?
○ Yes (1)
○ No (2)
○ Not sure (3)

If respondent answers “yes” to question 18, then ask:
Q18A Approximately how often does your site bring in these speakers?
○ Once a Week (1)
○ Once a Month (2)
○ Every 4 Months (3)
○ Every 6 Months (4)
○ Once a Year (5)

If respondent answers “no” or “not sure” to question 18, then ask:
Q18B Do you think your LTER site should offer a speaker series on socio-ecological research?
○ Yes (1)
○ No (2)
○ Not sure (3)

Q19 Does your academic institution bring in speakers to discuss socio-ecological topics?
○ Yes (1)
○ No (3)
○ Not sure (2)

Q20 Do you know of any socio-ecological research projects currently being conducted at your LTER site?
○ Yes (1)
○ No (2)
○ Not sure (3)

SECTION 4: DEMOGRAPHIC QUESTIONS
In this last set of questions, we are going to ask you some questions about yourself. (Section 4 of 4)

Q21 I am currently a:
○ Masters student (professional program) (1)
○ Masters student (thesis-based program) (2)
○ PhD student (3)
○ Post-doctoral researcher (4)
○ Other (please specify): (5) ____________________

If respondent answers “Masters student (professional program)” or “Masters student (thesis-based)” to question 21, then ask:
    Q21A What year are you in your Master's program?
       ○ First year (1)
       ○ Second year (2)
       ○ Third year (3)
       ○ Fourth year (4)
       ○ Other (5) ____________________

If respondent answers “PhD Student” to question 21, then ask:
    Q21B What year are you in your PhD program?
       ○ First year (1)
       ○ Second year (2)
       ○ Third year (3)
       ○ Fourth year (4)
       ○ Fifth year (5)
       ○ Sixth year (6)
If respondent answers “Post-doctoral researcher” to question 21, then ask:

Q21C How many years ago did you get your PhD?
- One year (1)
- Two years (2)
- Three years (3)
- Four years (4)
- Five years (5)
- More than five years (6)

Q22 What is your age?
- Under 18 (1)
- 18-22 (2)
- 23-27 (3)
- 28-32 (4)
- 33-37 (5)
- 38-42 (6)
- 43-47 (7)
- 48-54 (8)
- Over 55 (9)

Q23 What is your gender?

Q24 Are you currently affiliated with the Long Term Ecological Research Network (LTER)?
- Yes (1)
- No (2)
- Not sure (3)

Q25 Are you listed in the LTER directory? (Search at http://search.lternet.edu/dir.php)
- Yes (1)
- No (2)

If respondent answers “Yes” to question 25, then ask:

Q25A How long have you been a member of the LTER Network?
- 1 year (1)
- 2 years (2)
- 3 years (3)
- 4 years (4)
- 5 years (5)
- 6 years (6)
- More than 6 years (7)

If respondent answers “No” to question 25, then ask:

Q25B Even though you are not an official member of the LTER Network, do you
consider your research related to LTER research questions?
- Yes (1)
- No (2)

Q26 What LTER site(s) are you affiliated with?

Q27 Is your University within 50 miles of your LTER research site(s)?
- Yes (1)
- No (2)
- Not sure (3)

Q28 Have you read the The Decadal Plan for LTER: Integrative Science for Society and the Environment, published in 2007?
- Yes (1)
- No (3)
- Not sure (2)

Q29 What academic discipline(s) do you most closely identify with?

Q30 What academic conferences, workshops, and professional meetings have you attended, if any?

Q31 Do you have anything else you would like to say about socio-ecological research in the LTER network?

SURVEY CLOSING: You are now finished with the survey! Thank you for your time. Your answers are very valuable.