## **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?
O Never (1)
O Rarely (2)
O A few times (3)
O Frequently (4)
O All the time (5)
Q2 How interested are you in socio-ecological research?
O Very disinterested (1)
O Disinterested (2)
O Neither interested or disinterested (3)
O Interested (4)
O Very interested (5)
Q3 What socio-ecological research topics interest you?
Committee of the second of the
O4 What other kinds of research topics interest you?

Q5 Please indicate how much you agree or disagree with the following statements:

Q3 I lease mule	Strongly	Disagree (2)	Neither Agree	Agree (4)	Strongly
	Disagree (1)	Disagree (2)	nor Disagree (3)	Agree (4)	Agree (5)
I can clearly define what socioecological research is.	0	0	0	0	•
I would like to learn more about what socio- ecological research is. (3)	•	•	0	•	•
I would like to be (more) involved as a researcher in a socio- ecological research project. (4)	•	•	0	•	•
I am able to spend as much time studying socioecological research topics as I would like.	•	•	0	0	•

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:

Q7 Trease mare	Strongly	Disagree (2)	Neither Agree	Agree (4)	Strongly
	Disagree (1)		nor Disagree (3)		Agree (5)
Within the LTER network, socio-ecological research has an agreed-upon definition. (1)	•	•	•	•	•
Socio- ecological research is an emerging research area in the LTER network. (5)	•	•	•	•	•
Socio- ecological research is important to the future of the LTER network. (6)	•	O	O	•	0
The LTER Network provides adequate support for socio- ecological research. (7)	0	0	0	0	0

## **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. Researcher work within their own disciplines to make a contribution to group data collection and analysis.  O Yes (1) O No (2) O Not sure (3)	rs
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.  O Yes (1) O No (2) O 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?  O This project is for my Master's thesis. (1)  O This project is for my dissertation research. (2)  O This is an LTER-related side project (3)  O This is a non-LTER side project. (5)  O Other (please specify:) (4)	

Q11B What agencies or entities provide the funding for the socio-ecological research you are involved in?

	Environmental Protection Agency (EPA) (1)
	National Science Foundation (NSF) (2)
	National Oceanic and Atmospheric Administration (NOAA) (3)
	My university (4)
	Private foundation (please specify) (5)
	Other (please specify) (6)
ask you willing <b>O</b>	Because you are working on a socio-ecological research project, we would like to a some addition questions about your experiences at a later date. Would you be to participate in a follow-up interview?  Yes (1)  No (2)
If the	he 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:
	nat percentage of your research time is spent on (total should add up to 100%): ecological research projects (1)
	science research projects (2)
	gical research projects (3)
	research projects (please specify): (4)
Q13 Ideally, h	ow would you like to spend your research time? (Total should add up to 100%)
Socio-	ecological research projects (1)
Social	science research projects (2)
Ecolog	gical research projects (3)
Other	research projects (please specify): (4)

Q14 Please indicate how much you agree or disagree with the following statements:

	Strongly Disagree (1)	Disagree (2)	Neither Agree nor Disagree (3)	Agree (4)	Strongly Agree (5)
Graduate students benefit from conducting socioecological research. (1)	•	0	0	0	•
Graduate students face challenges when conducting	0	0	0	O	•

socio- ecological research. (2)							
-	ent indicates tha lents face challe	_	_			14,	
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)							
<b>SECTION 3: OPPORTUNITIES</b> 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)?  O Yes (1) O No (2) O Not sure (3)							
Q15A 1 O O O	Neither interested (4) Very interested (5) Very disinterested (6) Very interested (7) Very interested	would you be inted (1) 2) ted or disinteres	n taking a cours		ogical research'	?	
Q15B I O O	nnswers "yes" to Did your home a Yes (1) No (2) Not sure (3)			ourse on socio-	ecological resea	arch?	

Q15C Did you take the "From Yardstick to Gyroscope" class offered through the LTER

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1		ı. vv	•		•	- /

- **O** Yes (1)
- O No (2)
- O Not sure (3)
- O I am not familiar with this course. (4)

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

QTO TICUSO INC	Strongly Disagree (1)	Disagree (2)	Neither Agree nor Disagree (3)	Agree (4)	Strongly Agree (5)
The LTER network should periodically offer a graduate course on socio- ecological research methods. (1)	0	O	O	•	•
The LTER network should periodically offer a graduate course on socio- ecological theory. (2)	0	•	•	•	0
I would be interested in a summer workshop that would expose me to socioecological research at other LTER sites. (3)	•	•	•	•	•
I would be interested in a short	•	0	0	0	0

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.					
(4)					
( )					
O17 Do you na	rticinata in a reac	ding group on so	cio-ecological re	saarah?	
O Yes (1)	incipate in a reac	anig group on so	cio-ccological ic	scarcii!	
O No (3)					
O Not sure (2)					
O Not sure (2)					
Q17A Is O Y O Y	nswers "yes" to constant this reading grows (1) No (2) Unsure (3)	•	ask: gh your LTER si	ite?	
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?  Q Yes (1) Q No (2) Q Not sure (3)					
O18 Dogs vour	I TER cita bring	in engalvare to d	iscuss socio-ecol	ogical research to	onics?
	Yes (1)	in speakers to u	150055 50010-5001	ogicai iestaicii u	opics:
	No (2)				
	Not sure (3)				
<b>J</b> 1	(5)				
Q18A A Q ( Q ( Q I	nswers "yes" to comproximately hor Once a Week (1) Once a Month (2) Every 4 Months (2) Every 6 Months (2)	ow often does you (3)	ask: ur site bring in th	nese speakers?	
O (	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?  O Yes (1) O No (2) O Not sure (3)
Q19 Does your academic institution bring in speakers to discuss socio-ecological topics?  O Yes (1) O No (3) O 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)
<b>SECTION 4: DEMOGRAPHIC QUESTIONS</b> 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:  O Masters student (professional program) (1)  O Masters student (thesis-based program) (2)  O PhD student (3)  O Post-doctoral researcher (4)  O Other (please specify): (5)
If respondent answers "Masters student (professional program)" or "Masters student (thesisbased)" 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)

	th year (7)
Other .	(8)
	s "Post-doctoral researcher" to question 21, then ask:
	nany years ago did you get your PhD?
O One yo	
O Three	
O Four y	
O Five y	
O More	than five years (6)
Q22 What is your age	e?
O Under 18 (1)	
O 18-22 (2)	
O 23-27 (3)	
O 28-32 (4)	
O 33-37 (5) O 38-42 (6)	
<b>O</b> 43-47 (7)	
O 48-54 (8)	
O Over 55 (9)	
Q23 What is your gen	nder?
Q24 Are you currentl • Yes (1) • No (2) • Not sure (3)	ly affiliated with the Long Term Ecological Research Network (LTER)?
Q25 Are you listed in • Yes (1) • No (2)	the LTER directory? (Search at http://search.lternet.edu/dir.php)
Q25A How lo	s (2) s (3) s (4) s (5)

If respondent answers "No" to question 25, then ask:

Q25B Even though you are not an official member of the LTER Network, do you

<ul> <li>consider your research related to LTER research questions?</li> <li>Yes (1)</li> <li>No (2)</li> </ul>
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.