

Survey Instrument
Version Date: 20220316

This document includes the questions and the text that will be included on the CRU-Cooperator Network Survey. Blue italicized text will not be shown to respondents in the survey. This includes statements regarding the justification of questions, question design descriptions, and skip logic.

Consent and Instructions

In survey text: Welcome! This study is sponsored by the United States Geological Survey (USGS) Cooperative Fish and Wildlife Research Units Program (CRU). The purpose of this survey is to collect information to help the CRU understand the needs of collaborators and to understand how well existing CRU partnerships meet those needs. This work is being undertaken by Sarah Vogel, a PhD student at the University of Maine and co-advisors Joe Zydlewski (Unit Leader, Maine CRU) and Cyndy Loftin (Supervisor, Northeast Region CRU).

We estimate it will take an average of 30 minutes to complete this survey. If you need to stop at any time during the survey, you can exit and re-enter the survey to finish it at another time. Please use the save button to save your progress if you cannot complete the entire survey in one sitting.

This survey is adaptive - the questions you are asked are based on your answers as you go. Therefore, some questions must be answered, and the survey software will prompt you to enter your responses.

In any public release of survey results, no data will be disclosed that could be used to match your responses with your identity.

Providing this information is completely voluntary and there is no penalty if you choose not to respond. However, maximum participation is encouraged so that the data will be complete and representative.

Privacy Act Statement: submit your survey response. However, if you do not provide contact information, we may not be able to contact you for additional information to verify your responses. If you do provide contact information, this information will not be shared with any other organization and will only be used to initiate follow-up communication about this project if needed. The records for this collection will be maintained in the appropriate Privacy Act System of Records identified as [DOI Social Networks (Interior/USGS-8) published at 76 FR 44033, 7/22/2011]. Paperwork Reduction Act statements: [16 U.S.C. 1a7] authorized collection of this information. This information will be used by the U.S. Geological Survey to better serve the public. Response to this request is voluntary. We estimate that it will take in order to You are not required to provide your contact information 30 minutes to prepare and respond to this collection. We will not distribute responses associated with you as an individual. We ask you for some basic contact information to help us interpret the results and, if needed, to contact you for clarification.

PAPERWORK REDUCTION ACT STATEMENT: The Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et. seq.) requires us to inform you that this information is being collected to further the mission of the United States Geological Survey (USGS) Cooperative Fish and Wildlife Research Units Program (CRU). Reporting burden for this collection of information is estimated to average 30 minutes per response, including time for reviewing instructions and completing the survey. Please direct any comments regarding this collection to the USGS Information Collection Officer, U.S. Geological Survey, 12201 Sunrise Valley Drive, MS 807, Reston, VA, 20192. Under the Paperwork Reduction Act, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Question #	Question
CON.1	Please indicate your consent to complete this survey below. <ul style="list-style-type: none"> • Yes (<i>proceed to survey</i>) • No (<i>skip to end of survey</i>)

Introduction

In survey text:

ABOUT THE COOPERATIVE FISH AND WILDLIFE RESEARCH UNITS PROGRAM

Established in 1935 to meet the need for trained professionals in the growing field of wildlife management, the program currently consists of 41 Cooperative Fish and Wildlife Research Units located on university campuses in 39 States and supports 119 research scientist positions when fully funded.

The threefold mission of the CRU program is to:

- Conduct scientific research for the management of fish, wildlife, and other natural resources;
- Provide technical assistance to natural resource managers in the application of scientific information to natural resource policy and management; and
- Train future natural resource professionals.

Each unit is a unique partnership among the U.S. Geological Survey, the U.S. Fish and Wildlife Service, a host university, one or more state agencies, and the Wildlife Management Institute. They are called Coop Units because each cooperator plays a role in the staffing, funding, and directing of the units.

Together, the CRU program comprises a vast network of people and organizations linked by shared conservation, education, and research goals. You have received this survey because you are a part of this network. Knowing about your role and relationships within the network will help us assess the efficiency, impact, and needs of the program.

Question #	Question
	<i>INT.1 and INT.2 are designed to gather information about the respondents' current employment, level of leadership, and responsibilities within their organization. These questions are important for assessing and contextualizing the universe of respondents and attributing responses to different leadership strata.</i>

INT.1	<p>First, help us get to know you and the work you do. How many years have you been in your current role, organization, and the natural resources field in general? (<i>Matrix-style table with options: <1, 1-2, 3-4, 5-6, 10-19, 20-29, and >30</i>)</p> <ul style="list-style-type: none"> • Current role of position • Current organization • Natural resources field
INT.2	<p>What best describes the level of supervisory responsibility you hold in your organization? <i>The levels of management in this question are based on The Essentials of Management (DuBrin, 2009).</i></p> <ul style="list-style-type: none"> • Top-level management (set organizational/program objectives, scan environment, plan and make decisions that affect the organization) • Middle-level management (oversee first-line managers, implement policies and plans, allocate resources) • Lower-level management (supervise employees, coordinate activities, involved in day-to-day operations) • Non-supervisory employee (day-to-day operations)
<p><i>INT.3 – INT.6 are designed to gather information about how frequently decision-making falls to different management levels within the respondent’s organization. Here, “research” has been divided into four sections (i.e., identification of need, planning, funding, and execution). These questions are important for identifying the amount of agency regarding research decisions that CRU Cooperators may hold.</i></p>	
INT.3	<p>In your organization how often are the following personnel responsible for identifying knowledge gaps which may be in need of research? (<i>Matrix-style table with Likert choices: 1=Never, 2=Sometimes, 3>About half the time, 4=Most of the time, 5=Always</i>)</p> <ul style="list-style-type: none"> • Top-level management • Middle-level management • Lower-level management • Non-supervisory employees • Self • Other (<i>fill in</i>)
INT.4	<p>How often are the following personnel responsible for planning research projects? (<i>Matrix-style table with Likert choices: 1=Never, 2=Sometimes, 3>About half the time, 4=Most of the time, 5=Always</i>)</p> <ul style="list-style-type: none"> • Top-level management • Middle-level management • Lower-level management • Non-supervisory employees • Self • Other (<i>fill in</i>)
INT.5	<p>How often are the following personnel responsible for allocating funding to support research projects? (<i>Matrix-style table with Likert choices: 1=Never, 2=Sometimes, 3>About half the time, 4=Most of the time, 5=Always</i>)</p> <ul style="list-style-type: none"> • Top-level management • Middle-level management

	<ul style="list-style-type: none"> • Lower-level management • Non-supervisory employees • Self • Other (<i>fill in</i>)
INT.6	<p>How often are the following personnel responsible for managing the execution of research projects? (<i>Matrix-style table with Likert choices: 1=Never, 2=Sometimes, 3>About half the time, 4=Most of the time, 5=Always</i>)</p> <ul style="list-style-type: none"> • Top-level management • Middle-level management • Lower-level management • Non-supervisory employees • Self • Other (<i>fill in</i>)
<p><i>INT.7 and INT.8 are designed to gather information about the respondent's past work history and the flow of human capital from one organization to another. This is important for gauging trends in the sources of employment within the network and to gauge prior knowledge of the CRU program.</i></p>	
INT.7	<p>Not including your current position, which other natural resource-based sectors/organizations have you worked in? Select all that apply.</p> <ul style="list-style-type: none"> • Academia • Consulting firm • Federal agency • For-profit industry • Non-profit organization • State agency • Other (<i>fill in</i>) • No prior work experience
INT.8	<p>As a student were you affiliated with a Cooperative Research Unit in any capacity? Select all that apply.</p> <ul style="list-style-type: none"> • No knowledge of the program • Knowledge of the program, but no direct affiliation • Worked with the program, but was not a member • Undergraduate technician • Master's student • Doctoral student • Post-doc assignment
INT.9	<p>How familiar are you with the U.S. Geological Survey's Cooperative Fish and Wildlife Research Units program? (<i>Matrix-style table with Likert choices: 1=Not at all familiar, 2=Slightly familiar, 3=Moderately familiar, 4=Very familiar, 5=Extremely familiar</i>)</p>
INT.10	<p>Are you a federal employee of the U.S. Geological Survey's Cooperative Fish and Wildlife Research Units program (i.e., unit scientist, headquarters personnel, etc.)?</p> <ul style="list-style-type: none"> • Yes (<i>branch to Organizational Affiliation: CRU</i>) • No (<i>branch to Organizational Affiliation: Non-CRU</i>)

Organizational Affiliation: CRU Employees

This section will be available to self-identified CRU employees only.

Question #	Question
	<i>OA.CRU.1 and OA.CRU.2 are designed to identify the home Coop Unit of the CRU scientist.</i>
OA.CRU.1	Which best describes your position with the CRU? <ul style="list-style-type: none"> • Assistant Unit Leader • Unit Leader • Headquarters • Student/Post Doc • Other <i>(fill in)</i>
OA.CRU.2	Which Coop Unit do you consider your home Unit? <i>(Drop down list of 41 Coop Units and headquarters)</i>
	<i>OA.CRU.3 – OA.CRU.13 are designed to determine how respondents perceive their relationships with official and unofficial cooperator groups and to identify strengths and challenges within their Coop Unit. These data will be linked to information from the CRU-Cooperator network analysis to determine trends and mismatches in perceptions.</i>
OA.CRU.3	In general, how do you characterize the relationships between your Coop Unit and the OFFICIAL Cooperator groups? If you do not interact with a Cooperator, please select "Not applicable." <i>(Slider from “One of the worst” to “One of the best” with a “Not applicable” choice)</i> <ul style="list-style-type: none"> • University • State agency • U.S. Fish and Wildlife Service • Wildlife Management Institute
OA.CRU.4	From your perspective, how effective is your Coop Unit at meeting the needs of your OFFICIAL Cooperators? If you do not interact with a Cooperator, please select "Not applicable." <i>(Slider from “Not effective at all” to “Extremely effective” with a “Not applicable” choice)</i> <ul style="list-style-type: none"> • University • State agency • U.S. Fish and Wildlife Service • Wildlife Management Institute
OA.CRU.5	How often do you MEET IN PERSON with personnel from your OFFICIAL Cooperator groups? If you do not meet with a Cooperator in person, please select "Not applicable." <i>(Matrix-style table with Likert choices: 1=Once a year, 2=Several times a year, 3=Every 1-2 months, 4=Every 1-2 weeks, 5=Several times a week, 99=Not applicable)</i> <ul style="list-style-type: none"> • University • State agency • U.S. Fish and Wildlife Service • Wildlife Management Institute
OA.CRU.6	How often do you MEET VIA PHONE OR VIDEOCONFERENCE with personnel from your OFFICIAL Cooperator groups? If you do not meet with a Cooperator in this way, please select "Not applicable." <i>(Matrix-style table with</i>

	<p><i>Likert choices: 1=Once a year, 2=Several times a year, 3=Every 1-2 months, 4=Every 1-2 weeks, 5=Several times a week, 99=Not applicable)</i></p> <ul style="list-style-type: none"> • University • State agency • U.S. Fish and Wildlife Service • Wildlife Management Institute
OA.CRU.7	<p>In general, how do you characterize the relationships between your Coop Unit and the UNOFFICIAL cooperators? Please list any other categories that were not included. If you do not interact with a cooperator, please select "Not applicable." (<i>Slider from "One of the worst" to "One of the best" with a "Not applicable" choice</i>)</p> <ul style="list-style-type: none"> • Native American Tribes • Non-governmental organizations • Other universities • Other state agencies • Other Federal agencies • <i>(fill in)</i> • <i>(fill in)</i> • <i>(fill in)</i> • <i>(fill in)</i> • <i>(fill in)</i>
OA.CRU.8	<p>In general, how effective is your Coop Unit at meeting the needs of your UNOFFICIAL cooperators? Please list any other categories that were not included. If you do not interact with a cooperator, please select "Not applicable." (<i>Slider from "One of the worst" to "One of the best" with a "Not applicable" choice</i>)</p> <ul style="list-style-type: none"> • Native American Tribes • Non-profit organizations • Other universities • Other state agencies • Other Federal agencies • <i>(piped from OA.CRU.4)</i> • <i>(piped from OA.CRU.4)</i> • <i>(piped from OA.CRU.4)</i> • <i>(piped from OA.CRU.4)</i> • <i>(piped from OA.CRU.4)</i>
OA.CRU.9	<p>How often do you MEET IN PERSON with personnel from your UNOFFICIAL Cooperator groups? If you do not meet with a Cooperator in person, please select "Not applicable." (<i>Matrix-style table with Likert choices: 1=Once a year, 2=Several times a year, 3=Every 1-2 months, 4=Every 1-2 weeks, 5=Several times a week, 99=Not applicable)</i>)</p> <ul style="list-style-type: none"> • Native American Tribes • Non-profit organizations • Other universities • Other state agencies • Other Federal agencies

	<ul style="list-style-type: none"> • <i>(piped from OA.CRU.4)</i> • <i>(piped from OA.CRU.4)</i> • <i>(piped from OA.CRU.4)</i> • <i>(piped from OA.CRU.4)</i> • <i>(piped from OA.CRU.4)</i>
OA.CRU.10	<p>How often do you MEET VIA PHONE OR VIDEOCONFERENCE with personnel from your UNOFFICIAL Cooperator groups? If you do not meet with a Cooperator in this way, please select "Not applicable." <i>(Matrix-style table with Likert choices: 1=Once a year, 2=Several times a year, 3=Every 1-2 months, 4=Every 1-2 weeks, 5=Several times a week, 99=Not applicable)</i></p> <ul style="list-style-type: none"> • Native American Tribes • Non-profit organizations • Other universities • Other state agencies • Other Federal agencies • <i>(piped from OA.CRU.4)</i> • <i>(piped from OA.CRU.4)</i> • <i>(piped from OA.CRU.4)</i> • <i>(piped from OA.CRU.4)</i> • <i>(piped from OA.CRU.4)</i>
OA.CRU.11	<p>What do you consider the biggest strengths of your Coop Unit? In other words, what is your Coop Unit doing well? <i>(fill in)</i></p>
OA.CRU.12	<p>What do you consider the biggest challenges for your Coop Unit? In other words, what would you like to see your Coop Unit doing better on? <i>(fill in)</i></p>
OA.CRU.13	<p>What do you consider the biggest obstacles preventing your Coop Unit from achieving your goals relative to the previous question? <i>(fill in)</i></p>

Organizational Affiliation: Non-CRU Employees

This section will be available to non-CRU employees only.

Question #	Question
	<i>OA.NON.1 and the linked drill down questions are designed to identify respondents' organizational positions.</i>
OA.NON.1	Which broad group best describes the organization you are employed by? <ul style="list-style-type: none"> • State agency <i>(include drill down question OA.ST.1)</i> • University <i>(include drill down questions OA.UNI.1-2)</i> • U.S. Fish and Wildlife Service <i>(include drill down question OA.FWS.1)</i> • Wildlife Management Institute • Other <i>(fill in)</i>
	<i>OA.NON.2 – OA.NON.6 are designed to determine respondents' perceptions of their organization in terms of its priorities, the effort they put into different pursuits, and the types of species they manage.</i>
OA.NON.2	What do you consider your organization's top five priorities to be within the next five years? <i>(five short answer fill in options)</i>
OA.NON.3	From your perspective, how much effort does your organization put towards the following broad themes? <i>(Slider from "Far too little" to "Far too much" with a "Not applicable" choice)</i> <ul style="list-style-type: none"> • Boating • Climate science • Decision science • Ecosystem services • Educational programs • Fisheries management • Fish/wildlife disease • Habitat management • Human dimensions • Hunting and fishing • Landscape ecology • Law enforcement • Policy review • Wildlife management
OA.NON.4	From your perspective, how much focus does your organization put on the following species categories? <i>(Slider from "Far too little" to "Far too much" with a "Not applicable" choice)</i> <ul style="list-style-type: none"> • Game species • Invasive species • Species of greatest conservation need • Threatened and endangered species
OA.NON.5	To the best of your knowledge, how many state agencies within the state where you work are responsible for managing wildlife and fisheries resources? <i>(fill in)</i>
OA.NON.6	To the best of your knowledge, how many people conduct wildlife or fisheries research within your organization? <i>(fill in)</i>

The following questions (OA.ST, OA.UNI, OA.FWS) drill down into respondent organizational affiliation.

OA.ST.1	Which state natural resource agency are you employed by? Select other if your agency is not listed. <i>(Drop down list of 120 state natural resource agencies with “other” fill in option)</i> <i>There are 41 official CRU-state agency cooperators and 79 potential unofficial state agency cooperators according to the USFWS.</i>
OA.UNI.1	The following list includes universities which host Coop Units. Please select your university affiliation. Select other if your university is not listed. <i>(Drop down list of 41 CRU-host universities with fill in other option)</i>
OA.UNI.2	Which department do you consider to be your main home department? <i>(fill in)</i>
OA.FWS.1	Which program or office are you a member of within the USFWS? <i>(fill in)</i> <i>May be used for other federal organizations as well.</i>

Effectiveness of Meeting CRU Objectives

In survey text: The following section is based on the objectives of the CRU which are outlined in the Cooperative Agreements for each Coop Unit. The agreements outline the purpose, objectives, and responsibilities of the partners.

Please reflect on your experiences with the CRU in the past several years. On average, please rank how effective you feel the program is at meeting its objectives.

Question #	Question
	<p><i>EMO.1 – EMO.6 address objectives which are outlined in the CRU Cooperative Agreements. This section is meant to be taken by all cooperators and CRU members to determine trends in meeting the objectives and possible mismatches in expectations and perception among cooperators.</i></p>
EMO.1	<p>Providing technical and professional education in the fields of natural resource sciences? (<i>Slider from “Not effective at all” to “Extremely effective” with a “Not applicable” choice</i>)</p> <ul style="list-style-type: none"> • Graduate student level • Professional level (continuing education, workshops, etc.)
EMO.2	<p>Making information (i.e., facts, methods, literature, and findings) available to the following? (<i>Slider from “Not effective at all” to “Extremely effective” with a “Not applicable” choice</i>)</p> <ul style="list-style-type: none"> • Resource managers • Land owners • Other researchers • Interested public
EMO.3	<p>Disseminating research findings in the following ways? (<i>Slider from “Not effective at all” to “Extremely effective” with a “Not applicable” choice</i>)</p> <ul style="list-style-type: none"> • Scientific publications • Technical reports • Semi-popular media • Popular media
EMO.4	<p>Conducting research into the ecology, biology and management of fish, wildlife, and other renewable natural resources? (<i>Slider from “Not effective at all” to “Extremely effective” with a “Not applicable” choice</i>)</p> <ul style="list-style-type: none"> • Ecology • Biology • Management
EMO.5	<p>Addressing information needs of the cooperators? (<i>Slider from “Not effective at all” to “Extremely effective” with a “Not applicable” choice</i>)</p> <ul style="list-style-type: none"> • Capitalizing on overlapping interests of different organizations • Balancing interests among organizations
EMO.6	<p>Meeting research expectations at different spatial scales? (<i>Slider from “Not effective at all” to “Extremely effective” with a “Not applicable” choice</i>)</p> <ul style="list-style-type: none"> • Town/city

	<ul style="list-style-type: none"> • State • Multi-state • National • International
<p><i>EMO.7 – EMO.10 are meant to be answered by Cooperators of the CRU program and will not be shown to CRU personnel. They are designed to gauge collaboration likelihood and the perceived value of CRU outputs. This information is important for identifying inconsistencies among user groups, gaps in how well the CRU fulfills its mission, and opportunities for improvement.</i></p>	
EMO.7	<p>Please indicate how likely you are to collaborate with a CRU scientist in the next two years? <i>(Matrix-style table with Likert choices: 1=Very unlikely, 2=Unlikely, 3=Neither, 4=Likely, 5=Very likely, 98=Do not know)</i></p>
EMO.8	<p>What is your main reason for this response? <i>(short answer)</i></p> <p>Please indicate how strongly you agree or disagree with the following statements. <i>(Matrix-style table with Likert choices: 1=Strongly disagree, 2=Disagree, 3=Neither, 4=Agree, 5=Strongly agree, 98=Do not know)</i></p> <ul style="list-style-type: none"> • My supervisors encourage the development of new research projects with the CRU. • Research done by the CRU program... <ul style="list-style-type: none"> ○ Is high quality. ○ Makes effective use of funding from my organization. ○ Is relevant to my organization’s current needs. • Students that graduate from the CRU program... <ul style="list-style-type: none"> ○ Are well suited to manage wildlife, fisheries, and other natural resources. ○ Have the qualities I look for when hiring for new positions. ○ Have the appropriate skills needed to enter the workforce. • The technical assistance the CRU program provides... <ul style="list-style-type: none"> ○ Gives me resources that I would not have access to elsewhere. ○ Is a source of continuing education. ○ Addresses knowledge gaps within my organization.

Research Collaborations Network

Questions in this section are specifically intended to be used to build a CRU-Cooperator network using Social Network Analysis to draw inferences about how relationships drive outcomes. With this analysis it is necessary to know who the network actors are (i.e., the Cooperators) and the relationships between them (i.e., research planning, funding, and execution). Results will be used to examine the relationship structure of the CRU program at different management levels (e.g., federal, state, and unit management) as well as among cooperators (e.g., USFWS, USGS, WMI, universities, and state agencies; Eisenberg & Swanson, 1996; Cummings & Kiesler, 2005). This is the longest section in the survey because respondents are asked to self-identify the people with whom they form research collaborations (up to five per organization).

In survey text: In this section we would like to know more about how you address research needs within your own organization. We consider research to be investigations into the ecology, biology and management of fish, wildlife, and other renewable natural resources. We are specifically interested in who you enter research collaborations with, in terms of research planning, funding, and execution. Please answer these questions from the perspective of your current role and responsibilities.

Question #	Question
	<p><i>RCN.1 gauges the respondent's preference for addressing research needs internally or externally. RCN.2 is meant to filter the respondent to particular questions in the network survey depending on their answers.</i></p>
RCN.1	<p>When you identify research needs in your organization, how do you typically address those needs? <i>(Matrix-style table with Likert choices: 1=Do not prefer, 2=Prefer slightly, 3=Prefer a moderate amount, 4=Prefer a lot, 5=Prefer a great deal, 99=Not applicable)</i></p> <ul style="list-style-type: none"> • Do it myself (little, to no, assistance needed) • Seek out experts within my organization • Hire contractors • Seek out external collaborations • Other <i>(fill in)</i>
RCN.2	<p>When you collaborate (internally or externally), how often do you seek research collaborations with people from the following broad groups? If a choice is not available to you, please choose "Not applicable." <i>(Matrix-style table with Likert choices: 1=Never, 2=Sometimes, 3=About half the time, 4=Most of the time, 5=Always, 99=Not applicable)</i></p> <ul style="list-style-type: none"> • Hired contractor • Native American Tribe • Non-profit conservation organization • State resource agency <i>(display RCN.5a-e)</i> • University <i>(display RCN.6a-e)</i> • U.S. Fish and Wildlife Service <i>(display RCN.7a-d)</i> • U.S. Geological Survey (CRU) <i>(display RCN.4a-d)</i> • U.S. Geological Survey (non-CRU) <i>(display RCN.8)</i> • Wildlife Management Institute <i>(display RCN.9a-d)</i>

	<ul style="list-style-type: none"> • Other <i>(fill in)</i>
RCN.3	If you indicated you would never collaborate with someone from the CRU, please provide a brief summary of why you chose your response. <i>(short answer)</i>
<p><i>The following questions are designed to capture information about research collaborations in terms of planning, funding, and execution. The inclusion of these questions will be reliant on how respondents answer RCN.2, self-reported collaborations with the CRU (RCN.4a-d), state agencies (RCN.5a-e), universities (RCN.6a-e), USFWS (RCN.7a-d), USGS (RCN.8), and the WMI (RCN.9a-d).</i></p>	
RCN.4a	You indicated that you collaborate with personnel from the CRU to meet your research needs. The following list includes CRU scientists and CRU headquarter personnel. Please select the people you collaborate with. If a person is not listed, please select other. <i>(Drop down list of unit and headquarters personnel with multiple selections possible)</i>
RCN.4b	How often do you collaborate in planning research with the people you selected? <i>(Choices carried forward from RCN.4a: Matrix-style table with Likert choices: 1=Never, 2=Sometimes, 3=About half the time, 4=Most of the time, 5=Always, 99=Not applicable)</i>
RCN.4c	How often do you collaborate in funding research with the people you selected? <i>(Choices carried forward from RCN.4a: Matrix-style table with Likert choices: 1=Never, 2=Sometimes, 3=About half the time, 4=Most of the time, 5=Always, 99=Not applicable)</i>
RCN.4d	How often do you collaborate in executing research with from the people you selected? <i>(Choices carried forward from RCN.4a: Matrix-style table with Likert choices: 1=Never, 2=Sometimes, 3=About half the time, 4=Most of the time, 5=Always, 99=Not applicable)</i>
RCN.5a	You indicated that you collaborate with personnel from state agencies to meet your research needs. The following list includes state natural resources agencies. Please select all agencies you collaborate with. If an agency is not listed, please select "Other." <i>(Drop down list of state agencies with multiple selections possible)</i>
RCN.5b	How often do you seek research collaborations with people from the agencies you selected? <i>(Choices carried forward from RCN.4a; Matrix-style table with Likert choices: 1=Never, 2=Sometimes, 3=About half the time, 4=Most of the time, 5=Always, 99=Not applicable)</i>
RCN.5c	In the past several years, which state agency personnel have you worked with to fulfil your research needs? Please list them below (up to 5) and indicate how often you collaborate in planning research with them. <i>(Fill in options; Matrix-style table with Likert choices: 1=Never, 2=Sometimes, 3=About half the time, 4=Most of the time, 5=Always, 99=Not applicable)</i>
RCN.5d	How often do you collaborate in funding research with the people you selected? <i>(Choices carried forward from RCN.5c: Matrix-style table with Likert choices: 1=Never, 2=Sometimes, 3=About half the time, 4=Most of the time, 5=Always, 99=Not applicable)</i>
RCN.5e	How often do you collaborate in executing research with from the people you selected? <i>(Choices carried forward from RCN.5c: Matrix-style table with</i>

	<i>Likert choices: 1=Never, 2=Sometimes, 3=About half the time, 4=Most of the time, 5=Always, 99=Not applicable)</i>
RCN.6a	You indicated that you collaborate with personnel from universities to meet your research needs. The following list includes universities which host Cooperative Research Units. Please select all universities you collaborate with. If a university is not listed, please select "Other." <i>(Drop down list of universities with multiple selections possible)</i>
RCN.6b	How often do you seek research collaborations with the people from the universities you selected? <i>(Choices carried forward from RCN.4a; Matrix-style table with Likert choices: 1=Never, 2=Sometimes, 3=About half the time, 4=Most of the time, 5=Always, 99=Not applicable)</i>
RCN.6c	In the past several years, which university personnel have you worked with to fulfil your research needs? Please list them below (up to 5) and indicate how often you collaborate in planning research with them. <i>(Fill in options; Matrix-style table with Likert choices: 1=Never, 2=Sometimes, 3=About half the time, 4=Most of the time, 5=Always, 99=Not applicable)</i>
RCN.6d	How often do you collaborate in funding research with the people you selected? <i>(Choices carried forward from RCN.6c: Matrix-style table with Likert choices: 1=Never, 2=Sometimes, 3=About half the time, 4=Most of the time, 5=Always, 99=Not applicable)</i>
RCN.6e	How often do you collaborate in executing research with from the people you selected? <i>(Choices carried forward from RCN.6c: Matrix-style table with Likert choices: 1=Never, 2=Sometimes, 3=About half the time, 4=Most of the time, 5=Always, 99=Not applicable)</i>
RCN.7a	You indicated that you collaborate with personnel from the U.S. Fish and Wildlife Service to meet your research needs. Please indicate how often you seek research collaborations with people from the following offices? If collaborations with an office are not relevant to your work, please select "Not applicable." <i>(Matrix-style table with Likert choices: 1=Never, 2=Sometimes, 3=About half the time, 4=Most of the time, 5=Always, 99=Not applicable)</i> <ul style="list-style-type: none"> • Ecological Services Field Office • Fish and Wildlife Conservation Office • Joint Venture Office • Law Enforcement • Migratory Bird Coordinator Office • National Fish Hatchery • National Wildlife Refuge • Private Lands Office • Science Applications Office • Special Agent Office • Other <i>(Fill in)</i>
RCN.7b	In the past several years, which U.S. Fish and Wildlife Service personnel have you worked with to fulfil your research needs? Please list them below (up to 5) and indicate how often you collaborate in planning research with them. <i>(Fill in options; Matrix-style table with Likert choices: 1=Never, 2=Sometimes, 3=About half the time, 4=Most of the time, 5=Always, 99=Not applicable)</i>

RCN.7c	How often do you collaborate in funding research with the people you selected? <i>(Choices carried forward from RCN.7b: Matrix-style table with Likert choices: 1=Never, 2=Sometimes, 3>About half the time, 4=Most of the time, 5=Always, 99=Not applicable)</i>
RCN.7d	How often do you collaborate in executing research with from the people you selected? <i>(Choices carried forward from RCN.7b: Matrix-style table with Likert choices: 1=Never, 2=Sometimes, 3>About half the time, 4=Most of the time, 5=Always, 99=Not applicable)</i>
RCN.8	You indicated that you collaborate with personnel from the U.S. Geological Survey to meet your research needs. Please indicate how often you seek research collaborations with people from the following programs or centers? If collaborations with an office are not relevant to your work, please select "Not applicable." <i>(Fill in options; Matrix-style table with Likert choices: 1=Never, 2=Sometimes, 3>About half the time, 4=Most of the time, 5=Always, 99=Not applicable)</i> <ul style="list-style-type: none"> • Climate Adaptation Science Centers • Ecosystem Science Centers and Field Stations • Laboratories • Other <i>(Fill in)</i>
RCN.9a	You indicated that you collaborate with personnel from the Wildlife Management Institute to meet your research needs. The following list includes WMI personnel. Please select all the people you collaborate with. If a person is not listed, please select "Other." <i>(Drop down list of universities with multiple selections possible)</i>
RCN.9b	How often do you collaborate in planning research with the people you selected? <i>(Choices carried forward from RCN.9a; Matrix-style table with Likert choices: 1=Never, 2=Sometimes, 3>About half the time, 4=Most of the time, 5=Always, 99=Not applicable)</i>
RCN.9c	How often do you collaborate in funding research with the people you selected? <i>(Choices carried forward from RCN.7b: Matrix-style table with Likert choices: 1=Never, 2=Sometimes, 3>About half the time, 4=Most of the time, 5=Always, 99=Not applicable)</i>
RCN.9d	How often do you collaborate in executing research with from the people you selected? <i>(Choices carried forward from RCN.7b: Matrix-style table with Likert choices: 1=Never, 2=Sometimes, 3>About half the time, 4=Most of the time, 5=Always, 99=Not applicable)</i>

Diversity, Equity, and Inclusion

The following questions are designed to assess perceptions of diversity, equity, and inclusion within the organizations and agencies that compose the CRU network. Addressing this issue is an ongoing challenge and has been highlighted as an administrative goal by most organizations in the network. Answers supplied here are important for understanding the current perceptions of DEI, characterizing differences among groups, and identifying areas for improvement. Questions in this section have been informed by the Federal Organizational Assessment Survey (OPM).

In survey text: The following questions are designed to assess perceptions of diversity, equity, and inclusion within your organization.

Question #	Question
DEI.1	<p>Please indicate the importance you place on different types of diversity within your organization. <i>(Continuous slider from “Not important at all” to “Extremely important”)</i></p> <ul style="list-style-type: none"> • Age • Disability status • Education • Gender identity • Political views • Race/Ethnicity • Sexual orientation • Social class
DEI.2	<p>How useful are the following policies/programs in addressing diversity in your organization? If you are unsure or the statement does not apply, please select "Do not know" or "Not applicable." <i>(Matrix-style table in standard Likert format for each statement: 1=“Not at all useful,” 2=“Slightly useful,” 3=“Moderately useful,” 4=“Very useful,” 5=“Extremely useful,” “Do not know,” and “Not applicable”)</i></p> <ul style="list-style-type: none"> • Demographic reporting • Diversity training (mandated) • Diversity training (optional) • Educational materials • Focused recruitment efforts • Mentoring • Non-retaliation reporting
DEI.3	<p>How strongly you agree or disagree with the following statements? If you are unsure, please select "Do not know." <i>(Matrix-style table in standard Likert format for each statement: 1=“Not at all useful,” 2=“Slightly useful,” 3=“Moderately useful,” 4=“Very useful,” 5=“Extremely useful,” “Do not know,” and “Not applicable”)</i></p> <ul style="list-style-type: none"> • Prejudice, discrimination, and harassment is a problem in my organization. • My organization should be doing more to increase the diversity of its

	<p>workforce.</p> <ul style="list-style-type: none"> • I can disclose a suspected violation of any law, rule, or regulation without fear of reprisal. • Managers and supervisors work well with employees of different backgrounds. • At my organization, employees appreciate others whose backgrounds, beliefs, and experiences are different from their own. • My organization takes active measures to seek a diverse candidate pool when hiring. • Employees of different backgrounds are treated fairly in the internal promotion process. • Racial, ethnic, sexual, and gender-based jokes or slurs are not tolerated at my organization. • My organization does a good job providing educational programs, materials, and resources that promote diversity, equity, and inclusion in my workplace.
DEI.4	What diversity, equity, and inclusion efforts are working well at your organization or agency? <i>(Short answer)</i>
DEI.5	What diversity, equity, and inclusion efforts are NOT working well at your organization or agency? <i>(Short answer)</i>

Demographics

The following questions are intended to gather information about respondents' demographic data. This information is important for contextualizing the representativeness of the sample and weighting for variation in demographic features. This information also directly informs specific inquiries into the demographic conditions of the units, cooperators, and the program as a whole.

In survey text: The following demographic questions are important for contextualizing the survey data and assessing the representativeness of responses. Your responses will be kept confidential and combined with other responses when reporting any results.

Question #	Question
	<p><i>Dem.1-5) The collection of this data is necessary for three reasons: 1) to characterize the demographic composition of the CRU-Cooperator network, an important step in benchmarking current diversity metrics and assessing progress; 2) to ensure that responses do not assume representativeness for any demographic group; and 3) to relate demographic characteristics to trends in network building and information sharing with in the CRU.</i></p>
<p><i>Dem.1</i></p>	<p>What sex do you most identify with?</p> <ul style="list-style-type: none"> • Female • Male • Intersex • Not listed (<i>fill in</i>) • Prefer not to answer
<p><i>Dem.2</i></p>	<p>What is your age?</p> <ul style="list-style-type: none"> • 18-24 • 25-34 • 35-44 • 45-54 • 55-64 • 65 or older • Prefer not to answer
<p><i>Dem.3</i></p>	<p>What race do you identify with? (Select one or more) <i>Responses for this question include the five minimum categories required by OMB (U.S. Census Bureau, 2021).</i></p> <ul style="list-style-type: none"> • American Indian or Alaska Native • Asian • Black or African American • Hispanic or Latino • Native Hawaiian or Other Pacific Islander • White • Not listed (<i>fill in</i>) • Prefer not to answer
<p><i>Dem.4</i></p>	<p>What is the highest level of school you have completed or the highest degree you have received?</p>

	<ul style="list-style-type: none"> • Some high school • High school diploma or equivalent (e.g., GED) • Technical, vocational, or business school • Associate degree • Bachelor’s degree • Master’s degree • Doctoral degree • Prefer not to answer
<i>Dem.5</i>	<p>How much do you earn annually?</p> <ul style="list-style-type: none"> • Less than \$10,000 • \$10,000 - \$19,999 • \$20,000 - \$29,999 • \$30,000 - \$39,999 • \$40,000 - \$49,999 • \$50,000 - \$59,999 • \$60,000 - \$69,999 • \$70,000 - \$79,999 • \$80,000 - \$89,999 • \$90,000 - \$99,999 • \$100,000 - \$149,999 • More than \$150,000 • Prefer not to answer
<i>Dem.6</i>	<p>Would you be willing to participate in future surveys, interviews, or workshops?</p> <ul style="list-style-type: none"> • Yes • No (<i>end survey if “no” is selected</i>) • Maybe
<i>Dem.7</i>	Please provide your name and preferred contact information. (<i>short answer</i>)

End of the survey

End of the survey

In survey text: Thank you for taking the time to complete this survey. Your answers, along with other respondents', will be used to help understand the needs of CRU collaborators and to understand how well existing CRU partnerships meet those needs. In any public release of survey results, no data will be disclosed that could be used to match your responses with your identity. This work is being undertaken by Sarah Vogel, a PhD student at the University of Maine and co-advisors Joe Zydlewski (Unit Leader, Maine CRU) and Cyndy Loftin (Supervisor, Northeast Region CRU). For additional information or questions, please contact sarah.vogel@maine.edu.

References

Cummings, J.N. and S. Kiesler. 2005. Collaborative research across disciplinary and organizational boundaries. *Social Studies of Science* 35:703-722.

DuBrin, Andrew J. (2009). *Essentials of management* (8th ed.). Mason, OH: Thomson Business & Economics. ISBN 978-0-324-35389-1.

Eisenberg, M. and N. Swanson. 1996. Organizational network analysis as a tool for program evaluation. *Evaluation and the Health Professions* 19: 488-507.

U.S. Census Bureau (2021) About the Topic of Race. Web:
<https://www.census.gov/topics/population/race/about.html>

(OPM) U.S. Office of Personnel Management. Services for Agencies: Assessment and Evaluation. Web: <https://www.opm.gov/services-for-agencies/assessment-evaluation/surveys-and-related-services/#url=Organizational-Assessment-Survey>