

## **Supplementary Material (S1)**

### **Interview Guide (1-2 hours) [July & August, 2019]**

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The research assistant and field assistant will introduce themselves and thank the participant for meeting them for an interview.

The interviewers will give the participant time to settle in, offering a few minutes if meeting at a coffee shop or other space offering refreshments for the participant to make any purchase and feel comfortable. Once both interviewers and interviewee are settled in, the researchers will re-summarize the study and data collection methods, review the informed consent form, answer any questions, and seek consent, obtained by signing the consent form. With the participant's permission, the audio recording device will then be switched on.

Key questions for the semi-structured interview are provided in the template, below. These questions are meant as prompts to be used if the topics do not naturally arise in conversation. They will not necessarily be asked in any order in particular or asked at all if the participant leads the conversation toward the topic(s) themselves. The base maps will be displayed between participant and researchers (if there is a table or other object; if not, the researcher will invite the participant to look at the maps before beginning the interview and proceed to either hold the maps or allow the participant to hold the maps for the duration of the interview portion, depending on participant preference). The researcher will use the base study maps of the Chignecto Isthmus region to help the participant visualize the region(s) being spoken of during the interview by pointing to regions identified by the participant and asking questions, if deemed necessary or beneficial by the researcher.

Before launching into core topics pertinent to the study, contextual and rapport-building questions will be asked. The researchers will ask the participant about themselves, such as where the participant lives, how they came to live in the area, how long they have lived there, where they have traveled to within the region, and in which kinds of activities they participate on the land (Topic 1). Researchers will keep track of which of the topic areas and questions arise and are addressed naturally, and then prompt around those not yet addressed prior to ending the interview. Researchers should use the following template to keep track of what is addressed, and to make any other relevant notations, such as key words or phrases, observations or interpretations, clarifications needed, etc.

The conversation, questioning and participatory mapping will take place together, with notations being made on the map as spatially relevant topics arise.

**To begin:** *Just to be clear, there are no right or wrong answers to any of my questions. I am looking to understand your experience and views. If there is any question you don't want to answer, that is OK, just let me know and we can move on...*

Topic 1: Time and types of experience in the Chignecto Isthmus region	
<p><b>Pointing to the map:</b></p> <p><i>Let's begin by speaking about which area would you refer to as being the Chignecto isthmus and your experiences in this region.</i></p> <ul style="list-style-type: none"><li>• How far does it extend, based on your own personal experience?</li></ul> <p>What parts of this region are you familiar with? Most familiar with?</p> <p>How do you spend your time on the land in the Chignecto Isthmus region?</p> <ul style="list-style-type: none"><li>• How often do you find yourself spending time out on the land, in nature, in the Chignecto Isthmus region?</li><li>• Are there specific seasons during which you spend more or less time out on the land? If so, what are they and why?</li></ul> <p><b>If participant indicates they live in the area:</b></p> <p>Have you always lived in the region/ how long have you lived here?</p> <p>How did you come to live in the area?</p> <p><b>If participant indicates they do not live in the area:</b></p> <p>What prompts you to travel to this region specifically?</p> <p>Where do you usually travel to in the region?</p> <p>How often, and for how long? How long have you been doing this?</p> <p><b>For all:</b></p> <p>Where have you traveled [how extensively] within the region?</p> <p>What kinds of activities do you do out on the land? [hunt, fish, trap, hike, snowmobile, etc]. Tell me more about</p>	

<p>these activities; would you say these activities are more of a necessity or more recreational [more fun] for you?</p> <ul style="list-style-type: none"> <li>• How long have you been participating in these activities? Do you participate in them often?</li> <li>• Do you tend to participate in these activities individually or in a group?</li> </ul>	
<p><b>Topic 2: Participatory mapping</b></p> <p>Note: Mapping is not to be conceived as a separate topic or portion of the interview, but rather as an integral part of the interview, as a means of recording their responses in a spatial and geo-referenced way.</p>	
<p><i>Let's take another look at the maps we have brought. One is larger, showing the entire region. The second one focuses on the border area between Nova Scotia and New Brunswick. Which map or maps would you feel most comfortable using to talk about where you see wildlife?</i></p> <p><i>...Is there a reason you are most comfortable with the chosen map(s)?</i></p> <p><i>I'd like you to draw on the maps areas where you have seen various species of wildlife. You can use whichever colours you like.</i></p> <p><i>As you are making these markings on the map(s), I would like you to speak your thoughts out loud so we can understand what you are showing us.</i></p> <p><i>There are no right or wrong answers, we are interested in seeing your experiences visualized on this/these map(s).</i></p> <p>Where you have seen various species of wildlife? Which species? (Wildlife includes animals, birds, fish, etc.)</p> <p>Are there particular areas where you see wildlife moving, from place to place? Where are they? Which species?</p> <ul style="list-style-type: none"> <li>• Are there wildlife movement 'pathways' or trails that you are aware of?</li> </ul> <p><i>We are interested in hearing about any wildlife you have seen or interacted with in the region, but we also have an interest in specific species that live in the region.</i></p> <p>Do you ever see ... (name the 12 species for which NCC modeled movement corridors)? Where?</p>	

<p>Do you think there is more wildlife present in these areas that you have marked than in other areas? Why/why not?</p>	
<p><b>Topic 3: Wildlife in the Chignecto Isthmus Region</b></p> <p>[There is overlap among these topics and those addressed in the mapping. Responses will be noted spatially/geographically on the map, and other relevant responses will be noted here.]</p>	
<p>While spending time in the region, have you come across many species of wildlife?</p> <p>What species have you noticed the most during your time spent in this/these region(s)?</p> <ul style="list-style-type: none"> <li>Are there some species that stand out or are more important to you than others? Why?</li> </ul> <p>In which areas do you most often notice these species, or the lack of them?</p> <ul style="list-style-type: none"> <li>Have you noticed the same species in multiple areas of the Chignecto Isthmus? Where?</li> <li>Why do you think you notice these species? (Do you think this has anything to do with the activity you participate in)?</li> </ul>	
<p>Over the time you have spent in this region, have you noticed any difference in how often or how much of this species you've seen?</p> <p>Are there any thoughts you have as to why there might be these differences?</p> <p>During your time in this/these region(s), have you noticed any wildlife mortality (death)?</p> <ul style="list-style-type: none"> <li>Do you notice this dead wildlife in any specific areas you have come across? Are there areas where you have noticed more of this dead wildlife?</li> <li>Where have you noticed dead wildlife, such as road kill? Are there areas where you see more roadkill? What species? Are there particular times of year when you see more roadkill?</li> </ul>	

<b>Topic 4: Conversations around conservation [and wildlife-road mitigation]</b>	
<p><i>I'd like to move the conversation now to ideas around conserving wildlife.</i></p> <p>Can you think of/Do you think there are any specific things that are happening in this region that may be interfering with the ability of wildlife individuals to thrive?</p> <ul style="list-style-type: none"> <li>• What about the ability to support healthy populations of wildlife?</li> </ul> <p>What things might be contributing to the death or injury of wildlife, not including hunting, trapping, fishing, etc?</p> <p>Have you noticed injured or dead wildlife on or around roads in the regions? Where? Which species?</p> <p>Have you noticed any species avoiding roads (e.g., coming up to a road but then moving away)?</p> <ul style="list-style-type: none"> <li>• Or not being able to get across roads or other barriers (e.g., fish at roads, culverts, dams, etc; wildlife at fences)?</li> <li>• Are there [specific] areas where you think animals (including fish) would like to move but can't, or where it is harder for them to move because of human activities or developments? What about roads? Dams?</li> </ul> <p>Can you think of any strategies for reducing the death of wildlife on or around roads?</p> <ul style="list-style-type: none"> <li>• Any ideas for how to make roads safer for wildlife passage (and people)?</li> </ul>	

<p>[Researcher may prompt by speaking about the idea of underpasses and overpasses, as an example, if there is confusion/hesitation when referring to strategies]</p> <p>Do you think the reduction of wildlife injury and death due to vehicle collisions would be beneficial to you and others who use this region?</p> <ul style="list-style-type: none"> <li>• Why or why not?</li> </ul>	
<p><b>Topic 5: Other/conclusion</b></p> <p><i>Is there anything else we did not cover that you'd like to share or elaborate on?</i></p>	

The participatory mapping will conclude when the participant makes it clear that they are finished plotting data onto the provided map(s). The concluding discussion between researcher and participant will include speaking about how the participant felt about the experience and if they were comfortable marking on the provided map(s).

The researcher will ask if they have any final questions or concerns.

The research assistant will reiterate that the participant may contact them or Dr. Karen Beazley at any point with any questions or concerns through the provided contact information in the consent form.

**At the conclusion of the interview (or when the participant chooses to end the session) the participant will be given a \$25 gas or grocery card (their choice) as a token of appreciation for their time.**