



Isle Royale National Park Visitor perceptions of human-moose (*Alces alces*) interactions

You are being invited to participate in a research study about visitor perceptions of human-moose interactions in Isle Royale National park. There are no known risks if you decide to participate in this research study. There are no costs to you for participating in the study. The information you provide will be used to better understand how people view and interact with moose on the island so that the park staff can better serve and protect their visitors and moose population. The questionnaire takes on average 6 minutes to complete. The information collected may not benefit you directly, but the information learned in this study should provide more general benefits.

Your responses are anonymous. Do not write your name on the survey. No one will be able to identify you or your answers, and no one will know whether or not you participated in the study. Individuals from the Institutional Review Board may inspect these records. Should the data be published, no individual information will be disclosed.

Your participation in this study is voluntary. By completing and submitting the survey back to the researcher, you are voluntarily agreeing to participate. You are free to decline to answer any particular question you do not wish to answer for any reason.

If you have any questions about the study, please contact:

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The Michigan Tech Institutional Review Board has reviewed my request to conduct this project. If you have any concerns about your rights in this study, please contact the Michigan Tech-IRB at 906-487-2902 or email irb@mtu.edu.

PAPERWORK REDUCTION and PRIVACY ACT STATEMENT: The Paperwork Reduction Act requires us to tell you why we are collecting this information, how we will use it, and whether or not you have to respond. We are authorized by the National Park Service Protection Interpretation and research in System (54 USC §100702) to collect this information. The routine uses of this information will be for the benefit of NPS Managers and Planning staff Isle Royale National Park (ISRO) in future initiatives related to the visitor use and resource management related to human - wildlife interactions. The data collected will be summarized to describe visitor uses and experiences during their visit at ISRO. Your responses to this collection are completely voluntary and will remain anonymous. You can end the process at any time and will not be penalized in any way for choosing to do so. Data collected will only be reported in aggregates and no individually identifiable responses will be reported. A Federal agency may not conduct or sponsor, and you are not required to respond to, a collection of information unless it displays a currently valid OMB Control Number (1024-0224). We estimate that it will take about 7 minutes to complete and return this on-site questionnaire. You may send comments concerning the burden estimates or any aspect of this information collection to: Phadrea Ponds NPS Information Collection Coordinator at pponds@nps.gov (email).

1. On this trip, what type of accommodations did you use? (Please check all that apply)

- In Park concession lodging (i.e. Rock Harbor Lodge)
- Designated campground
- Cross-country camping
- Residence of friends or relatives
- No overnight lodging (i.e. day trip)
- OTHER accommodations (Please specify): _____

2. How long did you spend on the island? _____ (# of days or hours, please specify unit)

3. What activities did you participate in during your trip to Isle Royale National Park?
(Please check all that apply)

- Boating – motorized
- Boating – non-motorized
- Fishing
- Wildlife viewing
- Hiking
- Wildlife photography
- Backpacking
- Other (Please write response)

4. Prior to this visit, how many visits have you made to Isle Royale National Park?

- 0 (first trip)
- 1 – 4
- 5 – 10
- 10+

5. In this section, we'd like to know how you feel in general about wildlife issues. Below are statements representing different ways that people might think about wildlife. Even if you don't know or care much about wildlife, we are interested in your opinions. (Select one number for each statement.)

	Strongly Disapprove	Moderately Disapprove	Slightly Disapprove	Neither	Slightly Approve	Moderately Approve	Strongly Approve
Humans should manage wildlife populations so that humans benefit.	1	2	3	4	5	6	7
I view all living things as part of one big family.	1	2	3	4	5	6	7

	Strongly Disapprove	Moderately Disapprove	Slightly Disapprove	Neither	Slightly Approve	Moderately Approve	Strongly Approve
The needs of humans should take priority over wildlife protection.	1	2	3	4	5	6	7
Animals should have rights similar to the rights of humans.	1	2	3	4	5	6	7
Wildlife is on earth primarily for people to use.	1	2	3	4	5	6	7
Wildlife is like my family and I want to protect them.	1	2	3	4	5	6	7

6. Please rate your overall level of approval of visitors taking “selfies” with wildlife in Isle Royale National Park:

Strongly Disapprove	Moderately Disapprove	Slightly Disapprove	Neither	Slightly Approve	Moderately Approve	Strongly Approve
1	2	3	4	5	6	7

7. Which of the following animals would you consider to be safe to take a selfie with? (select all that apply)

- | | |
|---------------------------------|--|
| <input type="checkbox"/> Moose | <input type="checkbox"/> Rabbit |
| <input type="checkbox"/> Fox | <input type="checkbox"/> Squirrel |
| <input type="checkbox"/> Wolf | <input type="checkbox"/> All of these animals |
| <input type="checkbox"/> Beaver | <input type="checkbox"/> None of these animals |

8. Generally, how do you feel about moose in Isle Royale National Park? Please check one.

- I have no particular feelings about moose in Isle Royale National Park
- I enjoy moose AND I do Not worry about moose-related impacts
- I enjoy moose BUT I worry about moose-related impacts
- I do Not enjoy moose in Isle Royale National Park

9. Please indicate your level of agreement with the following statements. (Select one number for each statement.)

	Strongly Disagree	Slightly Disagree	Neither	Slightly Agree	Strongly Agree
I enjoy knowing that there are moose in Isle Royale NP even if I never see one.	1	2	3	4	5
There are no benefits to having moose in Isle Royale NP.	1	2	3	4	5
Moose are an important part of the natural ecosystem in Isle Royale NP.	1	2	3	4	5
Moose seriously damage plants and vegetation in Isle Royale NP.	1	2	3	4	5
Moose presents a serious safety risk in Isle Royale NP.	1	2	3	4	5
Moose pose a threat to people in Isle Royale NP.	1	2	3	4	5
Having moose in Isle Royale NP is an inconvenience.	1	2	3	4	5
In general, I do not care about the welfare of moose in Isle Royale NP.	1	2	3	4	5
Preserving moose should be part of management in Isle Royale NP.	1	2	3	4	5
I would like to learn more about helping to protect moose in Isle Royale NP.	1	2	3	4	5
It is okay to hand-feed moose in Isle Royale NP.	1	2	3	4	5
Overall, I am interested in wildlife issues in Isle Royale NP.	1	2	3	4	5

10. Did you encounter a moose on your trip? (an encounter is defined from the moment you see a moose or multiple moose to the moment you no longer see the moose. An encounter may be brief or extended)

- NO – jump to question #15
- YES – please indicate the number of encounters you had here: _____ then continue on to question #11.

11. Which of the following animals did you encounter during your trip? (select all that apply)

- Cow (female)
- Calf
- Bull (male)

Unsure

12. How would you categorize your moose encounter(s)?

- Positive
- Negative
- Neutral/Neither

13. During your encounter(s) with moose, what was the CLOSEST distance you were to the animal(s)?

- <15ft
- 15-30ft (about half the length of a school bus)
- 10-15 yards (length of a full-sized school bus)
- 15-30 yards (length of two school buses)
- 30-50 yards (3-4 school buses)
- 50-100 yards (over 4 or 5 school bus lengths)
- Unsure/Don't remember

14. Where did your moose interaction occur?

- At a campground
- In a developed area (i.e Rock Harbor or Windigo)
- At a cross-country camping site
- On the trail
- Off the trail away from campsites
- At a lake (moose was in the water)
- Other (Please write response): _____

Please provide any other details about your moose encounter in the box below. If extra space is needed, please continue on the back of the survey.

15. Approximately, how far away should individuals stay from moose?

- 100 yards (length of 5-6 full-sized school buses)
- 45 yards (length of 3 school buses)
- 25 yards (length of 2 school buses)
- 10 yards (length of a 1 school bus)
- 10 feet (1/3 a school bus length)
- Unsure

16. Are moose dangerous to people?

- Only bulls (males) are dangerous
- Only cows (females) are dangerous

- Only cows with calves are dangerous
- All moose are dangerous to people
- Moose are NOT dangerous to people

17. Moose are dangerous.

Strongly Disagree	Slightly Disagree	Neither	Slightly Agree	Strongly Agree
1	2	3	4	5

18. What is the best response to avoid injury if charged by a moose? Check all that apply.

- | | |
|--|--|
| <input type="checkbox"/> Run away from the moose | <input type="checkbox"/> Mace the moose |
| <input type="checkbox"/> Run toward the moose | <input type="checkbox"/> Throw rocks or sticks at the moose |
| <input type="checkbox"/> Play dead | <input type="checkbox"/> Get in the water |
| <input type="checkbox"/> Make yourself “big”, wave your arms | <input type="checkbox"/> Get on the ground and cover your head |
| <input type="checkbox"/> Make a lot of noise | <input type="checkbox"/> Take a picture |
| <input type="checkbox"/> Hide behind a tree | <input type="checkbox"/> Unsure |
| <input type="checkbox"/> Climb a tree | <input type="checkbox"/> Other:_____ |

19. There are many ways that Isle Royale National park could try to keep people from disturbing moose and risking conflict. Which of the following methods do you think would work best for visitors like you? Please mark all that apply.

- Continue to include moose interaction messages in the Leave – no – Trace orientations. (Current method in practice)
- Put up signs explaining why disturbing moose is discouraged
- Have offenders receive a ticket
- Have a volunteer speak with visitors about the risks associated with human-wildlife interactions when they arrive at Isle Royale National Park.
- Put in place educational programs at Isle Royale National Park.
- None would impact efficiently
- Other_____

20. Should all moose-human interactions be reported to the National Park?

- Yes
- No
- Unsure

21. If Isle Royale National Park had a reporting system to report wildlife interactions, would you use it?

- Yes
- No
- Unsure

22. What is your age?

- 18-24 years old
- 25-34 years old
- 35-44 years old
- 45-54 years old
- 55-64 years old
- 65-74 years old
- 75 years or old

23. What is the highest level of formal education you have completed? Please select only one response.

- Less than high school
- Some high school
- High school graduate
- Vocational/trade school certificate
- Some college
- Two-year college degree
- Four-year college degree [or Bachelor's degree]
- Master's Degree [or Graduate degree]
- Ph.D., M.D., J.D., or equivalent

24. What is your gender? Please select one.

- Male
- Female
- Prefer not to answer

25. Which of the following best describes the area you currently live in?

- Urban
- Suburban
- Rural