



VISITOR SUN PROTECTION IN THE NATIONAL PARKS

Thank you for visiting [Kaloko-Honokōhau National Historical Park/Cape Lookout National Seashore] today! The National Park Service (NPS) conserves natural resources within the parks and provides for their enjoyment by visitors. In order to do so, we sometimes partner with research organizations to better understand our visitors' needs. Park visitors commonly make decisions about whether to protect themselves from the sun, and if so, how. In order to understand the decisions that NPS visitors make about sun protection, we are partnering with George Mason University in a study. The researchers are conducting a short survey that should take approximately 5 minutes. We thank you for your help and please enjoy your visit today.



STUDY INFORMED CONSENT

RESEARCH PROCEDURES: This research is being conducted to understand National Park Service (NPS) visitors' views on sun protection. If you agree to participate, you will be asked to fill out a brief survey that will take approximately 10 minutes.

RISKS AND BENEFITS: There are no foreseeable risks for participating in this research, or benefits other than to increase NPS information about visitor views and preferences and further research on decision-making about sun protection.

CONFIDENTIALITY: This study is anonymous. The data will be stored on password protected George Mason University computers and databases. The Institutional Review Board (IRB) committee that monitors research on human subjects may inspect study records during internal auditing procedures and are required to keep all information confidential.

PARTICIPATION: Participants must be 18 years or older. Your participation is voluntary, and you may withdraw from the study at any time and for any reason. If you decide not to participate or if you withdraw from the study, there is no penalty or loss of benefits to which you are otherwise entitled

CONTACT: This research is being conducted by Prof. Karen Akerlof, Department of Environmental Science and Policy, George Mason University. She may be reached at (703) 282-1289 or kakerlof@gmu.edu for questions or to report a research-related problem. You may contact the George Mason University Institutional Review Board office at (703) 993-4121 or IRB@gmu.edu if you have questions or comments regarding your rights as a participant in the research. This research has been reviewed according to George Mason University and National Park Service procedures governing your participation in this research.

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 to better understand the decisions park visitors commonly make about whether to protect themselves from the sun. Your responses to this collection are completely voluntary and will remain anonymous. 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).

Burden Estimate Statement: We estimate that it will take about 10 minutes to complete this on-site questionnaire. You may send comments concerning the burden estimates or any aspect of this information collection to: Dr. Karen Akerlof at kakerlof@gmu.edu or Phadrea Ponds, NPS Information Collection Clearance Officer, at pponds@nps.gov.

1. Why did you choose to visit this National Park Service site today? (PLEASE WRITE)

2. How frequently do you spend time recreating...?

<i>Please circle your response</i>	Weekly (one or more times a week)	Monthly (at least once a month)	Yearly (at least once a year)	On occasion (every few years)	This is my first visit
On beaches or in other shoreline areas	1	2	3	4	5
On this specific beach or shoreline site	1	2	3	4	5

3. Which activities ... (CHECK ONE OR MORE)

	a. do you USUALLY engage in on the beach or shore?	b. do you plan on engaging in TODAY at this site?
Swimming or wading	☐	☐
Sunbathing	☐	☐
Snorkeling	☐	☐
Beach walking or hiking	☐	☐
Surfing	☐	☐
SCUBA diving	☐	☐
Fishing	☐	☐
Other (WRITE): _____	☐	☐
*Kaloko-Honokōhau National Historical Park Survey (only)		
*Boating (e.g., kayak, motorboat)	☐	☐
*Windsurfing or kitesurfing	☐	☐

4. When you go to the beach or the shore, how likely are you to...

<i>Please circle your response</i>	Very likely	Somewhat likely	Neither likely nor unlikely	Somewhat unlikely	Very unlikely	Don't know
a. stay in the shade?	1	2	3	4	5	9
b. wear a baseball cap or sun visor?	1	2	3	4	5	9
c. wear a hat that shades your face, ears, and neck?	1	2	3	4	5	9
d. wear a long-sleeved shirt?	1	2	3	4	5	9
e. wear long pants or other clothing that reaches your ankles?	1	2	3	4	5	9
f. use sunscreen (any type)?	1	2	3	4	5	9
g. use "reef safe," "reef friendly" or "coral safe" sunscreen?	1	2	3	4	5	9
h. use mineral-based sunscreen?	1	2	3	4	5	9

i. not use any form of sun protection?	1	2	3	4	5	9
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5. Do you plan on using any of these methods to protect yourself from the sun during your visit today? (CHECK ALL THAT APPLY)

- | | |
|---|---|
| ☐ Stay in the shade | ☐ Wear long pants or other long clothing |
| ☐ Wear a baseball cap or sun visor | ☐ Use sunscreen |
| ☐ Wear a hat that shades my face, ears, and neck | ☐ Other (WRITE): _____ |
| ☐ Wear a long-sleeved shirt | ☐ I do not plan on using sun protection |

6. If you are—or will be—using sunscreen at this site today ...

a. What is the brand and SPF number? (PLEASE WRITE)

Sunscreen brand name: _____ SPF number: _____

b. Does the sunscreen you are using today contain one or more of the following chemicals listed under “active ingredients”? (CHECK ALL THAT APPLY)

- | | | |
|--|--------------------------------------|---------------------------------------|
| ☐ Titanium dioxide | ☐ Octocrylene | ☐ Homosalate |
| ☐ Non-nano titanium dioxide | ☐ Octisalate | Other (WRITE): _____ |
| ☐ Zinc oxide | ☐ Oxybenzone | ☐ I don't know |
| ☐ Non-nano zinc oxide | ☐ Octinoxate | |
| | ☐ Avobenzone | |

c. How is the sunscreen applied? (CHECK ONE)

- ☐ Spray ☐ Cream ☐ Other (WRITE): _____

d. Who purchased the sunscreen? (CHECK ONE)

- | | |
|--|---|
| ☐ I purchased it | ☐ A parent |
| ☐ A spouse or partner | ☐ Other (WRITE): _____ |
| ☐ A friend | ☐ I don't know |

7. To what extent do you agree or disagree with the following statements?

<i>Please circle your response</i>	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
Human activities have little effect on ocean life.	1	2	3	4	5
Sunscreen chemicals are unlikely to contribute to water pollution.	1	2	3	4	5
Sunscreen chemicals likely harm corals.	1	2	3	4	5
Sunscreen chemicals likely affect the health of a wide array of ocean life, such as fish, shellfish, and dolphins.	1	2	3	4	5

8. The National Park Service provides information on sun protection to visitors. Before or during your visit to this park, have you encountered any of the following? (CHECK ONE)

- ☐ Park website information on sun protection
- ☐ Sunscreen trade-in program
- ☐ Park signs describing reef friendly sun protection
- ☐ Park concession selling reef friendly sunscreen and protective clothing
- ☐ Environmentally friendly sun protection pledge
- ☐ Online environmentally friendly sun protection pledge
- ☐ Social media sites (Facebook or Instagram)
- ☐ Other _____

b. Sunscreen containing certain types of chemicals has been banned in some areas of the United States. How aware are you of these bans? (CHECK ONE)

Not at all aware Slightly aware Somewhat aware Moderately aware Extremely aware

☐ ☐ ☐ ☐ ☐

c. The National Academies is currently reviewing the environmental impacts of marketed sunscreens. How aware are you of potential concerns about sunscreen environmental impacts? (CHECK ONE)

Not at all aware Slightly aware Somewhat aware Moderately aware Extremely aware

☐ ☐ ☐ ☐ ☐

9. If you were to visit this park again, how likely would you be to take these actions?

<i>Please circle your response</i>	Very likely	Somewhat likely	Neither likely nor unlikely	Somewhat unlikely	Very unlikely	Don't know
Wear sun-protective clothing	1	2	3	4	5	9
Use mineral-based sunscreen (<i>Non-nano titanium dioxide; non-nano zinc oxide</i>)	1	2	3	4	5	9

10. The next time you go to a beach *other than this park*, how likely would you be to take these actions?

<i>Please circle your response</i>	Very likely	Somewhat likely	Neither likely nor unlikely	Somewhat unlikely	Very unlikely	Don't know
Wear sun-protective clothing	1	2	3	4	5	9
Use mineral-based sunscreen (<i>Non-nano titanium dioxide; non-nano zinc oxide</i>)	1	2	3	4	5	9

Thank you for your help today! Lastly, please tell us a bit about yourself. The information will be used to evaluate how representative the survey is of park visitors.

11. Besides yourself, how many other people are you here with today? (PLEASE WRITE) _____

12. If there are other people with you visiting the site today ...

Are they ... (CHECK ALL THAT APPLY)

- ☐ Friends
☐ A spouse or partner
☒ Other family members, including children or extended family
☐ Other (WRITE): _____

If there are children in your group, which ages are they? (CHECK ALL THAT APPLY)

- ☐ Infant (Less than 1 year old) ☐ School-aged child (6-12 years)
☐ Toddler (1-2 years) ☐ Young adolescent (13-19 years)
☐ Preschooler (3-5 years) ☐ No children are in our group

13. What is the location of your primary residence? (PLEASE WRITE)

City: _____ State: _____ Country: _____

14. Are you... (CHECK ONE)

- ☐ Female ☐ Male ☐ Other: _____

15. What is your age? (PLEASE WRITE) _____

16. What your race? (CHECK ALL THAT APPLY)

- ☐ Asian
☐ American Indian or Alaska Native
☐ Black or African American
☐ Native Hawaiian or other Pacific Islander
☐ White

17. Are you of Hispanic, Latino, or Spanish descent? (CHECK ONE)

- ☐ Yes ☐ No

18. What is the highest degree or level of school that you have completed? (CHECK ONE)

- ☐ Less than high school ☐ Associate degree ☐ Other (WRITE): _____
☐ High school or GED ☐ Bachelor's degree
☐ Some college, no degree ☐ Advanced degree beyond a bachelor's degree

19. Do you have any final comments for us about this survey or visitor sun protection at the National Parks? (PLEASE WRITE)

Please enjoy your visit today.