

# Citizen Science: Participation in the National Geographic Society/National Park Service Bioblitz at Saguaro National Park

Conducted by the U.S. National Park Service in cooperation with Texas A&M University



**Section A: Past Bioblitz Involvement**

1. Have you participated in other Bioblitzes prior to your participation in the National Geographic Society/National Park Service (NPS) Bioblitz? **[TOPIC AREA 3: Individual Activities and Uses of Park Resources]**

\_\_\_\_\_ No → Continue to Question 2

\_\_\_\_\_ Yes → Go to Question 5

2. How many Bioblitzes have you participated in within the last 12 months, including the Saguaro Bioblitz? \_\_\_\_\_  
**[TOPIC AREA 1: Individual Characteristics]**

3. On average, how many hours each month do you commit to Bioblitz activities? **[TOPIC AREA 1: Individual Characteristics]**

\_\_\_\_\_ Hours

4. Which Bioblitzes have you participated in over the past three years? (*list*)

**[TOPIC AREA 1: Individual Characteristics]**

a. \_\_\_\_\_ Saguaro National Park \_\_\_\_\_

b. \_\_\_\_\_

c. \_\_\_\_\_

5. Do you participate in other National Park Service presentations or programs at Saguaro NP? (*check one*)

**[TOPIC AREA 3: Individual Activities and Uses of Park Resources]**

\_\_\_\_\_ No → Go to question 6

\_\_\_\_\_ Yes → Go to question 5a.

5a. If "yes", what are these s? (List)

a. \_\_\_\_\_

b. \_\_\_\_\_

c. \_\_\_\_\_

5b. On average, how many hours each month do you spend on NPS activities at Saguaro NP? \_\_\_\_\_  
\_\_\_\_\_ Hours **[TOPIC AREA 3: Individual Activities and Uses of Park Resources]**

6. How did you first learn about the Saguaro Bioblitz? (*check all that apply*) **[TOPIC AREA 1: Individual Characteristics]**

• Previous Bioblitz participation

• Previous visit to Saguaro NP

• Friends/relatives/word of mouth

• Videos/Television/Radio

• Newspaper/Magazine article

• Internet – Saguaro NP homepage

• Internet – Other sites (List: \_\_\_\_\_ )

• Chamber of Commerce

• Convention/Visitors' Bureau

- Local businesses
- Other organization(s) I belong to (List: \_\_\_\_\_)
- Other: \_\_\_\_\_

7. Did you come to the Saguaro Bioblitz as part of an organization? **[TOPIC AREA 1: Individual Characteristics]**  
 \_\_\_\_\_ No If "No", please proceed to question 8

\_\_\_\_\_ Yes If "Yes," which organization: \_\_\_\_\_

8. Do you have friends, family or colleagues that are also participating in the in Saguaro Bioblitz? **[TOPIC AREA 1: GROUP CHARACTERISTICS]**

\_\_\_\_\_ No

\_\_\_\_\_ Yes

9. Below is a list of possible reasons for participating in the Saguaro Bioblitz. For each item, please indicate how important the reason is to you ~~as a reason~~ for your participation in the Saguaro Bioblitz. **[TOPIC AREA4: PEF1]**

	Not important	Somewhat important	Moderately important	Very important	Extremely important
a. Be in a quiet peaceful spot	1	2	3	4	5
b. Be alone with my thoughts	1	2	3	4	5
c. Apply my scientific skills	1	2	3	4	5
d. Refine my understanding of science	1	2	3	4	5
e. Make life better for the coming generation	1	2	3	4	5
f. Feel I am doing something useful	1	2	3	4	5
g. Be of benefit to society or the community	1	2	3	4	5
h. Feel I can play a role in the conservation of nature	1	2	3	4	5
i. Work with different age groups	1	2	3	4	5
j. Meet friendly and interesting people	1	2	3	4	5
k. Opportunity to try new things	1	2	3	4	5
l. Involve myself in something meaningful	1	2	3	4	5
m. I like to support the park					
n. Help build my self-confidence	1	2	3	4	5
o. Help me with my personal growth	1	2	3	4	5
p. Help me to stay healthy	1	2	3	4	5
q. Help me to be optimistic about nature's future	1	2	3	4	5
r. Learn how nature works	1	2	3	4	5
s. Learn about different species of flora and fauna					
t. Seek out and enjoying the wonders of nature	1	2	3	4	5

u. Learn about the practice of science

v. Other

1

2

3

4

5

Describe:

---

10. We'd like to know how strongly you consider yourself to be involved with the Saguaro NP Bioblitz. Please indicate your level of agreement or disagreement with each of the following statements. Please circle only one response for each item. **[TOPIC AREA 4: PA1]**

Strongly  
disagree

Disagree

Neither  
agree nor  
disagree

Agree

Strongly  
agree

a. Participating in the Saguaro Bioblitz has been one of the most enjoyable things I've done

1

2

3

4

5

b. My involvement with the Saguaro Bioblitz was important to me

1

2

3

4

5

c. Participating in the Saguaro Bioblitz was exciting

1

2

3

4

5

d. A lot of my life was organized around the Saguaro Bioblitz

1

2

3

4

5

e. The Saguaro Bioblitz occupied a central role in my life

1

2

3

4

5

f. I consider myself to be somewhat of a Bioblitz expert

1

2

3

4

5

g. I coordinate my schedule around Bioblitz activities

1

2

3

4

5

h. I enjoyed discussing the Saguaro Bioblitz with my friends

1

2

3

4

5

i. Most of my friends were in some way connected with the Saguaro Bioblitz

1

2

3

4

5

j. Participating in the Saguaro Bioblitz provided me with an opportunity to be with friends

1

2

3

4

5

k. My involvement with the Saguaro Bioblitz allowed me to be myself

1

2

3

4

5

l. I identified with the people associated with the Saguaro Bioblitz

1

2

3

4

5

m. I could tell a lot about a person by their involvement with the Saguaro Bioblitz

1

2

3

4

5

n. Participating in the Saguaro Bioblitz says a lot about who I am

1

2

3

4

5

11. We would like to know what, if any, impact your participation in the Saguaro Bioblitz has had on your thoughts about science and nature. Please circle a number that captures your feelings about each statement.

**[TOPIC AREA 6: Individual Perceptions of their Park Experiences]**

Strongly  
disagree

Disagree

Neither agree  
nor disagree

Agree

Strongly  
agree

a. The Saguaro Bioblitz has taught me a lot about a variety of species of plants and animals living in the park

1

2

3

4

5

b. The Saguaro Bioblitz has provided me with an opportunity to learn about science

1

2

3

4

5

c. The Saguaro Bioblitz has allowed me to experience the park in a new way

1

2

3

4

5

d. The Saguaro Bioblitz has provided with a unique opportunity to learn from professionals

1

2

3

4

5

12. The following statements examine potential outcomes associated with your participation in the National Geographic Society/National Park Service Bioblitz at Saguaro National Park. Please circle the number that best represents your level of agreement with each statement. [TOPIC AREA 1: Knowledge]

Participation in the Saguaro Bioblitz has...	Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree
a. Increased my knowledge of Saguaro National Park's ecosystems and lifeforms	1	2	3	4	5
b. Improved my understanding of the work undertaken by scientists	1	2	3	4	5
c. Improved my understanding of biodiversity at Saguaro National Park	1	2	3	4	5
d. Improved my understanding of scientific methods	1	2	3	4	5
e. Contributed to the scientific knowledge base of Saguaro National Park	1	2	3	4	5
f. Increased my interest in natural resource stewardship	1	2	3	4	5
g. Increased my desire to spend time in natural areas	1	2	3	4	5
h. Increased my desire to be involved in natural area stewardship	1	2	3	4	5

13. The following statements examine potential implications associated with Bioblitzes for the National Park Service. Please circle the number that best represents your level of agreement with each statement. [TOPIC AREA 1: Knowledge]

Bioblitzes in our national parks will help the National Park Service...	Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree
a. Manage the park's natural resources	1	2	3	4	5
b. Acquire science-based knowledge about resources in the parks	1	2	3	4	5
c. Understand biodiversity within the parks	1	2	3	4	5
d. Inform the public about park resources	1	2	3	4	5

**Section B: Your Experience with Saguaro NP**

1. What year did you first visit the Saguaro NP? \_\_\_\_\_ Year [TOPIC AREA 1: Individual Characteristics]
2. In the last 12 months, how many times have you visited Saguaro NP? \_\_\_\_\_ [TOPIC AREA 1: VISITHIS3]
3. Do you have a favorite or special place within Saguaro NP? [TOPIC AREA 4: PA2variation]

\_\_\_ NO → Skip to question Section C below

\_\_\_ YES (If YES, please answer 3a and 3b below)

↳ 3a. What is the name of this place? \_\_\_\_\_

↳ 3b. Why is it your favorite? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4. Please indicate your level of agreement or disagreement with each of the following statements. Please circle only one response for each item.

**[TOPIC AREA 4: PA1]**

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
a. Saguaro NP is the best place for the recreation activities that I enjoy	1	2	3	4	5
b. Compared to Saguaro NP, there are few satisfactory alternatives	1	2	3	4	5
c. I have a lot of fond memories of past experiences with family and friends in Saguaro NP	1	2	3	4	5
d. I have a strong emotional bond to Saguaro NP	1	2	3	4	5
e. I can't imagine a better place for what I like to do than Saguaro NP	1	2	3	4	5
f. I feel Saguaro NP is a part of me	1	2	3	4	5
g. I feel a strong sense of belonging to Saguaro NP	1	2	3	4	5
h. I identify with Saguaro NP	1	2	3	4	5
i. I really enjoy Saguaro NP	1	2	3	4	5
j. Saguaro NP means a lot to me	1	2	3	4	5
k. Visiting Saguaro NP says a lot about who I am	1	2	3	4	5
l. I am happiest when I get to visit Saguaro NP	1	2	3	4	5
m. I associate special people in my life with Saguaro NP	1	2	3	4	5
n. Visiting Saguaro NP allows me to spend time with my family and friends	1	2	3	4	5

**Section C: Feelings about the Natural Environment**

1. When I hear the term "natural resource stewardship" in relation to Saguaro NP, I think of... (circle one number for each statement that best reflects your opinion) **[TOPIC AREA 1: Individual Characteristics]**

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
a. Managing our natural resources wisely to provide for human needs	1	2	3	4	5
b. Sustainably and responsibly using our natural resources	1	2	3	4	5
c. Protecting all species because we may find a use for them later (for example, curing diseases)	1	2	3	4	5

d. Trying to reduce my negative impact on the environment	1	2	3	4	5
e. All animals' and plants' right to exist	1	2	3	4	5
f. Considering how others in society are affected when we use natural resources	1	2	3	4	5
g. Preserving the environment in its natural state	1	2	3	4	5
h. A religious obligation to protect the environment	1	2	3	4	5
i. An ethical responsibility to care for the environment	1	2	3	4	5
j. Protecting the environment for future generations	1	2	3	4	5
k. Nothing at all; the term "natural resource stewardship" has no meaning for me	1	2	3	4	5

2. We are interested in understanding how you feel about ways to protect the Saguaro NP. Please indicate the extent to which you agree or disagree with the following statements. (Circle one number for each statement that best reflects your opinion). **[TOPIC AREA 1: Individual Characteristics]**

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
a. I am willing to volunteer my time to help the environment of Saguaro NP	1	2	3	4	5
b. I do not feel I have any control over whether or not my daily activities harm Saguaro NP	1	2	3	4	5
c. I am willing to pay more for the products I buy or services I use if it improves the environment of Saguaro NP	1	2	3	4	5
d. It is important for me to reduce my negative personal impacts on the environment of Saguaro NP	1	2	3	4	5
e. The efforts of one person to conserve the resources of Saguaro NP are insignificant as long as other people refuse to conserve	1	2	3	4	5
f. It is primarily the responsibility of individuals, not the government, to protect the environment of Saguaro NP	1	2	3	4	5
g. Because my contribution to environmental problems at Saguaro is very small, I do not feel responsible for causing environmental problems in the park today	1	2	3	4	5

3. To what extent do you consider yourself a natural resource steward? (circle one number that best reflects your opinion) **[TOPIC AREA 1: Individual Characteristics]**

Not at all		Somewhat			Very much	
1	2	3	4	5	6	7

4. We are interested in the types of activities you participate in at Saguaro NP. Please mark ALL of the activities you have participated in at Saguaro over the last 12 months. **[TOPIC AREA 3: Individual Activities and Uses of Park Resources]**

- Camping
- Hiking
- Biking
- Running/Walking for exercise
- Visiting the Visitor Center/Nature Center
- Nature/landscape photography
- Picnicking
- Wildlife watching or Birdwatching
- Horseback riding
- Motor boating
- Research

**Section E: Information About You**

1. What is your gender? (*circle one*)      1. Female      2. Male **[TOPIC AREA 1: GEND2]**

What year were you born? \_\_\_\_\_ **[TOPIC AREA 1: AGE1]**

2. What is the highest level of formal education you have completed? (*circle one of the following*) **[TOPIC AREA 1: ED2]**

- |  |                                  |
|--|----------------------------------|
| 1. Less than high school               | 6. Two-year college degree       |
| 2. Some high school                    | 7. Four-year college degree      |
| 3. High school graduate                | 8. Master's degree               |
| 4. Vocational/trade school certificate | 9. Ph.D. M.D. J.D. or equivalent |
| 5. Some college                        |                                  |

3. What was your total household income (before taxes) in 2005? (*circle one of the following*) **[TOPIC AREA 1: INCOM]**

- |                         |                           |
|-------------------------|---------------------------|
| 1. Less than \$24,999   | 5. \$75,000 to \$99,999   |
| 2. \$25,000 to \$34,999 | 6. \$100,000 to \$149,999 |
| 3. \$35,000 to \$49,999 | 7. \$150,000 to \$199,999 |
| 4. \$50,000 to \$74,999 | 8. \$200,000 or more      |

4. Are you presently: (*circle one*) **[TOPIC AREA 1: Individual Characteristics]**

1. Employed outside the home → 1. full time 2. part time → Occupation: \_\_\_\_\_
2. Unemployed
3. Retired → Previous occupation: \_\_\_\_\_
4. Full-time homemaker
5. Student → 1. full time 2. part time



5. Are you Hispanic or Latino? (Circle only one) **[TOPIC AREA 1: RACE/ETH2]**

- 1. Hispanic or Latino
- 2. Not Hispanic or Latino

6.. What is your race? Please circle one or more. **[TOPIC AREA 1: RACE/ETH3]**

- 1. American Indian or Alaska Native, Specify affiliation \_\_\_\_\_
- 2. Asian
- 3. Black or African American
- 4. Native Hawaiian or other Pacific Islander
- 5. White

If you have any other comments about Saguaro NP's Bioblitz, please feel to write them below. **[TOPIC AREA 6: Individual Perceptions of their Park Experiences]**

**THANK YOU FOR YOUR TIME AND INPUT**

**PAPERWORK REDUCTION ACT STATEMENT:**

16 U.S.C. 1a-7 authorizes collection of this information. This information will be used by park managers to better understand the public's participation in the Bioblitz at Saguaro National Park. The information you provided will be protected to the extent possible by the researchers and the managers at Saguaro National Park. Your response to this request is voluntary. The data collected will remain anonymous and there will be no way to connect you to the responses you provide. No action may be taken against you for refusing to supply the information requested. According to the Paperwork Reduction Act a federal 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 number.

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