San Francisco Children & Nature is a cross-sector collaborative that works to address the disparities in nature access along socioeconomic and racial lines to ensure all children have the opportunity to play, learn and grow in the outdoors.

**Member Organizations:** California Academy of Science | DCYF | First 5 of San Francisco | Golden Gate National Parks Conservancy | Golden Gate National Recreation Area | Green Schoolyards America | Literacy for Environmental Justice | Mayor’s Office/OCOF | Office of Early Childhood Education | Presidio Trust | SF Botanical Gardens | SF Department of Public Health | SF Department of the Environment | SF Parks Alliance | SF Planning | SF Public Libraries | SF Public Utilities Commission | SF Public Works | SF Recreation & Parks Department | SFUSD Early Education Department | SFUSD Science Department | SFUSD Sustainability | YMCA of San Francisco | Youth Outside
San Francisco Youth Nature Survey – Introduction

This Report
- Highlights the process and survey findings of the San Francisco Youth Nature Survey conducted February - April 2019 by San Francisco Children & Nature (SFCN) work group members
- Please see the Appendix for a complete list of survey questions.

Survey Goals
- To hear directly from youth
- To establish a baseline understanding of youth connection to nature in SF
- To learn about opportunities and barriers to the youth-nature connection
- To assess equity issues related to nature attitudes and access by comparing responses from equity and non-equity neighborhoods. (see next slide)
- To inform key policy and decision-makers.

Contents
- Demographics
- Concepts of Nature
- Accessing Nature
- Visiting Nature
- Activities in Nature
- Expanding Nature Access and Activities
- Attitudes About Nature
- Addendum
- Acknowledgements

Who
- Members of the SFCN Community & Youth Engagement team collaborated to create, pilot test and conduct the survey, and interpret the data.
- Final sample...
  ➢ 660 youth survey responses total
  ➢ 626 live in San Francisco
  ➢ 371 live in SF Equity Neighborhoods
  ➢ 255 live in SF Non-Equity Neighborhoods

How
- We chose to use an on-line survey for practical issues with distribution, data collection, and data entry.
- We used our team members' access to public and private schools, and after school programming to reach youth for a substantial convenience sample.
- In the next iteration we will trim the survey and expand outreach efforts. See slide 15 for more information.
San Francisco Youth Nature Survey – Results – Respondent Demographics

Demographics Overview (n=626)

- **83%** of responses from SF Unified School District classes
- **17%** of the responses from youth served by Literacy for Environmental Justice, Cal Academy, SF Recreation & Parks, the Crissy Field Center and other youth-serving organizations.
- **93%** Middle & High School Students
- **59%** of respondents live in Equity Neighborhoods (EN)\(^1\)
- **41%** live in Non-Equity Neighborhoods (NEN)
- Ethnicity roughly mirrors SFUSD.

\(^1\) Equity Neighborhoods define the 20% most “disadvantaged” residents and are based on CalEnviroScreen 3.0. Sensitive Population Indicators. 10 characteristics are equally weighted:

**Health Factors**
1. Asthma
2. Cardiovascular Disease
3. Low Birth Weight
4. Age (youth and seniors)
5. Non-White

**Socioeconomic Factors**
1. Linguistic Isolation
2. Poverty
3. Unemployment
4. Educational Attainment
5. Housing Burden
WHAT DOES NATURE MEAN TO YOU?

Physicality: trees & plants (51%), animals (33%), "everything" (19%), fresh air (7%), humans (3%), mud & dirt (3%), water (2%) (61%)

Intangible: peacefulness, calmness & happiness (23%), spiritual connection (20%), beauty (13%), awe or wonder (2%), freedom & independence (2%) (37%)

Stewardship & Science: essential for life (12%), it is in danger and in need of protection (10%), references to eco systems, energy & weather (8%), natural (18%)

Natural: no human influence (19%), wilderness (10%), no buildings (5%), no technology (1%). A few people also define nature has including a complete lack of humans (16%)

Practices: escaping & relaxing (5%), playing & adventuring (5%), health related practices (2%), context for social activities (1%) (7%)

Negative: I don’t like it (2%), “Meh, I don’t care.” (1%), specific complaints (1%) (1%)

What does nature mean to you?

- The survey began with this open-ended question to allow respondents to express their ideas before being influenced by other questions on the instrument. This also helped us understand their other responses.

- After a lengthy coding process, we arrived at the six super-categories shown here. Because respondents could list more than one idea, the totals amount to more than 100%.

- We were impressed by the large amount of “intangible” responses, which evidenced a strong affective reaction to “nature.”

- Many answers to this question in some way touched on the idea that nature is either a part of or apart from the respondent. In the next iteration of the survey we will attempt to address this specifically.
Visiting Nature - How

- Data show a wide discrepancy between EN and NEN youth when it comes to knowing how to get to nature: EN (64%) and NEN (78%).
- Many youth have access to nearby nature.
- 4 out of 5 youth report that they walk to nature. In 2017, San Francisco became the first in the country to have a park within 10-minutes walking distance from every resident.
- The largest difference between EN and NEN respondents in accessing nature was driving: EN 62% and NEN 70%.

How do you usually get there?

<table>
<thead>
<tr>
<th></th>
<th>EN</th>
<th>NEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walk</td>
<td>77%</td>
<td>80%</td>
</tr>
<tr>
<td>Car</td>
<td>62%</td>
<td>70%</td>
</tr>
<tr>
<td>Field Trip</td>
<td>51%</td>
<td>48%</td>
</tr>
<tr>
<td>Public Transportation</td>
<td>43%</td>
<td>43%</td>
</tr>
<tr>
<td>Bike</td>
<td>25%</td>
<td>31%</td>
</tr>
</tbody>
</table>
San Francisco Youth Nature Survey – Results – Visiting Nature

How do you usually experience nature?

<table>
<thead>
<tr>
<th>Experience</th>
<th>Non Equity Neighborhood</th>
<th>Equity Neighborhood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family outings</td>
<td>73%</td>
<td>68%</td>
</tr>
<tr>
<td>School events</td>
<td>52%</td>
<td>59%</td>
</tr>
<tr>
<td>With friends</td>
<td>52%</td>
<td>64%</td>
</tr>
<tr>
<td>Alone</td>
<td>29%</td>
<td>29%</td>
</tr>
<tr>
<td>After-school programs</td>
<td>17%</td>
<td>20%</td>
</tr>
<tr>
<td>Weekend programs</td>
<td>9%</td>
<td>14%</td>
</tr>
</tbody>
</table>

Visiting Nature - How Often

- Community is important for experiencing nature. The top ways youth experience nature are with family 69% and with school 57%.
- Findings underscore the importance of supporting family engagement strategies and events, as well as school outings and programs. There is opportunity for growth supporting through afterschool and weekend programs.

- **1 out of 5** youth rarely visit nature. Among these youth (n=132):
  - 14% are content with the amount of time they currently spend in nature
  - 68% would want to explore nature in SF
  - 30% would want to go camping
  - 13% don’t Feel Welcome
    - EN: 14%
    - NEN: 11%
    - District 10: 24%
  - 19% don’t feel safe in nature
    - EN: 28%
    - NEN: 2%
    - District 10: 32%
  - 17% don’t enjoy being in nature
    - EN: 21%
    - NEN: 11%
    - District 10: 32%
San Francisco Youth Nature Survey – Results – Activities in Nature

**IN THE PAST YEAR:**

- **58%** of youth went camping
  - **30%** of youth did not and would like to
- **86%** of youth took a walk in nature
  - **9%** of youth did not and would like to
- **76%** of youth rode a bike
  - **15%** of youth did not and would like to
- **42%** of youth helped care for a local park
  - **38%** of youth did not and would like to
- **63%** of youth planted a seed
  - **24%** of youth did not and would like to
- **70%** of youth splashed in the ocean or bay
  - **18%** of youth did not and would like to

**Activities in Nature**

- In 2014, The City of San Francisco adopted the San Francisco Children’s Outdoor Bill of Rights (SFCOBR) through a signed resolution, declaring that every child has the right to a nature rich childhood. This question aimed at understanding how well we are doing at realizing the SFCOBR.

- Looking at what students have not done points us to ways in which our collective can step in to support youth. In the past year, a fairly large number of respondents *did not*:
  - **57%** did not care for a local park.
    - Of those, **67%** would like to care for one.
  - **41%** did not go camping.
    - Of those, **71%** would like to care for one.
  - **41%** did not climb a tree
  - **36%** did not plant a seed
  - **33%** did not discover urban wildlife
  - **30%** did not splash in the ocean or bay
  - **27%** did not play in the sand or mud
  - **25%** did not pick and eat a fruit or vegetable
  - **22%** did not ride a bike
  - **14%** did not explore nature
  - **13%** of youth in SF did not take a walk in nature this past year
  - **12%** did not do outdoor sports
  - **8%** did not visit a local park

- When we look at how many children did not do these activities, the largest discrepancy between NEN and EN respondents was planting a seed: **NEN 43%, EN 32%**.

- **NEN 60%** and **EN 56%** went camping
In addition to asking youth about their actual experiences visiting nature and the activities they do there, we asked what would make visiting nature easier, and what activities they would like to do in the coming year.

A majority of youth indicated that “people to go with” would make it easier to visit nature more often. Large numbers also cited programming. These data underscore the importance of the social element of nature visits.

The largest difference between NEN and EN respondents related to transportation. More EN youth cited this as a possible barrier than did other youth:

- **SF overall:** 37%
- **EN:** 41%
- **NEN:** 32%
WHAT OUTDOOR ACTIVITY WOULD YOU LIKE TO TRY?

26% Camp
16% Hike/Trail Run
14% Sports
10% Bike
7% Explore Wildlife

A Closer Look at Camping

• 56% of EN youth have gone camping this past year.
• 59% of NEN youth have gone camping this past year.
• San Francisco does a good job at providing opportunities for youth to camp, but there is a need for more opportunities.

Activities

• After telling us about activities that they do in nature, (previous slide), we asked them what they would like to do.
• This was an open ended question. By far, the most popular desired activity listed was camping.
Attitudes about Nature | Welcome & Safety

- Our team was interested to learn about youth attitudes about experiencing nature, especially feelings of safety and welcoming.

- Overall, youth report that they feel welcomed in nature much more than they feel safe in nature. Further, data suggest that youth living in Equity Neighborhoods (EN) feel substantially less safe in nature than their Non-equity Neighborhoods (NEN) counterparts.

- Within our group of EN’s, two city districts have large enough numbers of responses to consider independently: District 10 (Bayview and Visitacion Valley, n=108), and District 11 (Ingleside and Excelsior, n=109). When we look at those Districts compared with all EN’s, NEN’s or the full sample, the patterns of responses are fairly similar with an interesting exception. The highest and lowest ratings of feeling welcomed in nature come from Districts 11 and 10: 76% and 65%, respectively.
San Francisco Youth Nature Survey – Results – Attitudes About Experiencing Nature

As a teenage girl, nighttime in nature in San Francisco isn’t very appealing.

“I don’t feel safe without my family.”

“I don’t feel welcome because I can’t use technology to express myself.”

Nature is very accepting and doesn’t judge, it just lets you take a "breather."

There are lots of natural disasters since global warming. I am not sure [I feel safe] because of it.

Nature is a place where I feel totally calm and like I can be myself.

I have never gotten seriously hurt in nature.

I’m afraid I’ll get hurt in nature.

I’m afraid I’ll get hurt in nature.

“I feel safe in nature when I am with at least one other person.”

I like nature cause I feel like I am.

Nature is free and is always welcoming. There’s no security guard in nature.
Attitudes about Nature | Highlights

- A majority of respondents like to be in nature 66% - 81%

- A large majority of respondents seem to want to have more time in nature 80% - 90%. Only about 10% of EN youth reported being content with the amount of time they have in nature. Though still a low frequency, at 20%, NEN students are twice as likely to report being content.

- Looking closely at “I enjoy being in nature”, we see that the highest and lowest ratings come from Districts 11 and 10: 81% and 66%, respectively. These are both equity neighborhoods.

I enjoy being in nature.

<table>
<thead>
<tr>
<th></th>
<th>Total SF</th>
<th>Equity Neighborhood</th>
<th>Non Equity Neighborhood</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>10%</td>
<td>20%</td>
<td>30%</td>
</tr>
<tr>
<td>40%</td>
<td>60%</td>
<td>70%</td>
<td>80%</td>
</tr>
<tr>
<td>90%</td>
<td>100%</td>
<td>110%</td>
<td>120%</td>
</tr>
</tbody>
</table>

I am content with amount of time I currently spend in nature.

<table>
<thead>
<tr>
<th></th>
<th>Total SF</th>
<th>Equity Neighborhood</th>
<th>Non Equity Neighborhood</th>
</tr>
</thead>
<tbody>
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<td>90%</td>
<td>100%</td>
<td>110%</td>
<td>120%</td>
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</tbody>
</table>

Districts 11 and 10.
Attitudes about Nature | Highlights

- A large majority of respondents wanted to spend more time in nature (80%-90%, see previous slide). In notably smaller numbers, they reported that they intended to visit nature (56%-71%).

- Here we find a gap: more youth want to increase their time in nature than intend to visit nature. We also know that youth feel strongly that “people to go with” would make visiting nature easier to do, as would free activities and feeling safe.

- These findings, combined with a strong desire for “people to go with” to make visiting nature easier (slide 8), present opportunities for programmatic solutions by our member organizations.
All Survey Questions:
• How did you find out about this survey?
• What does nature mean to you?
• How often do you find yourself in nature?
• Within the past year, how often have you...
• In the next year, what is an outdoor activity that you would like to do, either from the list above or something different?
• How do you usually experience nature?
• How do you usually get to nature?
• If you'd like to connect with nature more often, what would make it easier?
• How strongly do you disagree or agree with these statements?
  - I feel safe in nature.
  - I know how to get to nature in SF.
  - I feel like I can be myself in nature.
  - I feel welcomed in nature.
  - In the future, I plan to go with family and/or friends to nature in SF.
  - I enjoying being in nature.
• If you participate in programs outside of school, please list them here.
• What is your age?
• Your gender identity?
• Which best describes your heritage?
• In which neighborhood do you live? If you have more than one residence, list the neighborhood where you spend the most time.

Equity Neighborhoods:
• Balboa Park
• Balboa Terrace
• Bayview Hunter's Point
• Chinatown
• Civic Center
• Crocker Amazon
• Downtown
• Excelsior
• Fillmore
• Ingleside
• Little Hollywood
• Merced Heights
• Mission District
• Mission Terrace
• Oceanview
• Portola
• South of Market / SOMA
• Sunnydale
• Tenderloin
• Treasure Island
• Visitacion Valley
• Western Addition

Sharing Survey Findings
• In addition to this report, we have an info graphic with discussion guides for use in the classroom. We are providing this to the schools and teachers who administered the survey. It is available for other schools as well.
• Member organizations are sharing these findings with program staff to inform program development individually and in partnership.

Thoughts About Our Next Iteration
• Shorten the survey extensively.
• Target the “what does nature mean” question to get at how youth perceive of themselves in relation to nature: a part of it or apart from it.
• Consider translating the instrument into Spanish, Chinese, and possibly others.
• Lengthen data collection period from 3 months to 6 months.
• Make more thorough use of collaborating organizations’ members and other contacts.
• Reach out to other organizations and events for dissemination.
• Use local press to expand our reach for data collection.
Credits:

This survey is the result of a collaborative effort by the San Francisco Children & Nature - Community & Youth Engagement team with contributions from:

- Anthony Khalil, Literacy for Environmental Justice
- Annie Miller, California Academy of Sciences
- Brenda Cartagena, SF Recreation & Parks
- Charity Maybury, Crissy Field Center
- Cristina Mitra, SF Public Libraries
- Ileana Pulu, SF Public Libraries
- Josie Dominguez-Chand, Department of the Environment
- Katie Strange, SF Parks Alliance
- Kay Wang, National Park Service, GGNRA
- Kayle Barnes, YMCA of San Francisco
- Laura Rodriguez, Youth Outside
- Leslie Parra, ChangeScale
- Lydia Nichols-Russell, SF Recreation & Parks
- Maria Durana, SF Children & Nature/SF Recreation & Parks
- Rebecca Johnson, Cal Academy of Sciences
- Vanessa Carter, SF Unified School District (STEM)
- Wendy Meluch, YMCA of San Francisco

Young people from the following programs provided feedback to our pilot survey:

- San Francisco Recreation & Park Greenagers Program
- California Academy of Sciences TASC and CIS teen groups
- YMCA of San Francisco Earth Service Corps

San Francisco Children & Nature

A City-Wide Collaborative

SF Children & Nature is a cross sector collaborative of youth-serving, health, environmental justice, and nature-focused organizations, that works to ensure all children & youth have the opportunity to PLAY, LEARN and GROW in NATURE.

Together, we make it easier for youth to have frequent and quality experiences in nature by expanding opportunities for nature connection in early education, schools and neighborhoods, and advocating for places, programs and policy that support our mission.

A National Initiative

We were founded in 2017 as part of the national Cities Connecting Children to Nature (CCCN) initiative to inspire and support cities, city leaders, and their partners to prioritize access to natural green space, outdoor recreation and learning opportunities for underrepresented children.

For questions about this survey: maria.durana@sfgov.org