



University of California

Agriculture and Natural Resources | 4-H Youth Development Program

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4-H On the Wild Side 2015-16 Final Report

Prepared for Arata Bros. Trust

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4-H On the Wild Side has provided avenues to learning and appreciation of the outdoor world for young people for 17 years. The program's well-documented impacts speak to the power of the experience to enhance knowledge, build skills, and provide a meaningful sense of service. We are grateful for the important support Arata Bros. Trust, whose ongoing provision provides the 4-H On the Wild Side experience to youth from communities where, for economic reasons, opportunities are often lacking.



"The more I do OTWS, the better I get around kids and the more comfortable I am in leadership positions."

--OTWS Teen Staff

Nevada City—where they rotated through teen-led activities to learn about the natural world and systems within it. This year's two camps took place May 20-23 and June 3-5. Evaluations revealed positive outcomes including significant knowledge gain for participants, growth in leadership skills for teen presenters, and a sense of community contribution.

Project Overview

4-H On the Wild Side (OTWS) aims to enthuse and engage elementary school children in doing science and exploring and appreciating the outdoors while encouraging community involvement and developing leadership skills in teenagers. The project is both a service learning experience for teens who plan and lead the programs, and a science education experience for elementary school-age participants.

Teenagers and their adult coaches receive training in curricula and how to teach inquiry-based science, then work in partnership to plan and deliver weekend camp programs to students attending schools in low-income neighborhoods. In 2015-16, 147 fourth through sixth grade students attended the program—held at Camp Gold Hollow in

Population Served

4-H On the Wild Side serves Sacramento’s lowest-income communities at schools where at least 50% of students qualify for free or reduced lunches. Elementary school students attended schools in south Sacramento, Rosemont, Rio Linda and Rancho Cordova, and 71% of youth were non-white. Teen volunteers reflect the diversity of the children they work with.

Table 1: Participant demographics for 2015-16 4-H On the Wild Side Project

Ethnicity	Elementary Students (n=147)	Teen Teachers (n=27)	Adult Support (n=22)	Total	Percent
Caucasian	33	9	16	58	29%
African American	31	0	1	32	16%
American Indian	3	0	0	3	2%
Asian	17	7	2	26	13%
Pacific Islander	6	0	0	6	3%
Hispanic	46	6	3	55	28%
Other	11	5	2	18	9%
Total	147	27	24	198	100%
Gender					
Female	97	21	15	133	67%
Male	50	6	9	65	33%

Evaluation Results

The evaluation measured knowledge gain and attitudes about science and the environment in elementary school-aged children. It also measured leadership skills and confidence in teen teachers, and enjoyment and satisfaction with the experience. Assessment included:

- Pre- and post-test given to elementary school students to measure subject specific knowledge.
- End of camp survey for elementary school students and their adult chaperones to assess the student and chaperone experience.
- Staff survey, given at the end of camp, to assess skill development (in teens) and youth-adult partnership. Adult coaches who worked with the teens also completed the staff survey
- A verbal group project reflection—akin to a focus group—conducted at conclusion of the experience.



Learning about the natural world: Pre- and post-test
Graph 1 illustrates the average pre- and post-test scores for

participants before and after attending 4-H OTWS camp. The significant difference in these scores ($p=.00$) indicate students learned important information about the natural world and systems within it. Comments from student journals support this finding as well. The increased scores indicate growth in vocabulary (e.g. habitat, circumference), knowledge of scientific tools (e.g. compass), and understanding environmental concepts (e.g. population dynamics, noise pollution).

Graph 1: Mean pre-test and post-test scores for 2016 4-H On the Wild Side participants

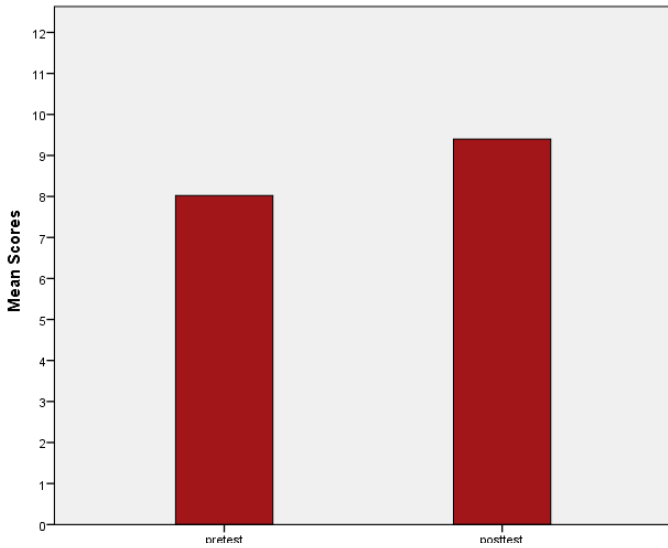


Table 1: Means, standard deviation, and number of students for 2016 4-H On the Wild Side pre- and post-test scores

	Pretest	Posttest
Means	8.02	9.40
Std. Deviations	1.84	1.72
N	141	141

$P=.00$

All six schools attending the program recognized these gains. Graph 2 illustrates the pre- and post-test scores by school. Changes in scores were significant at the $p=.00$ level for all sites except site 1 ($p=.068$) and site 2 ($p=.15$).

Graph 2: Mean pre-test and post-test scores for 2016 On the Wild Side by school site.

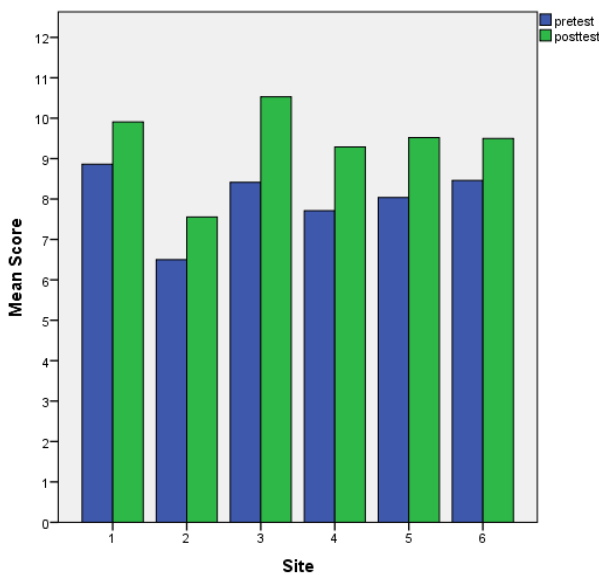
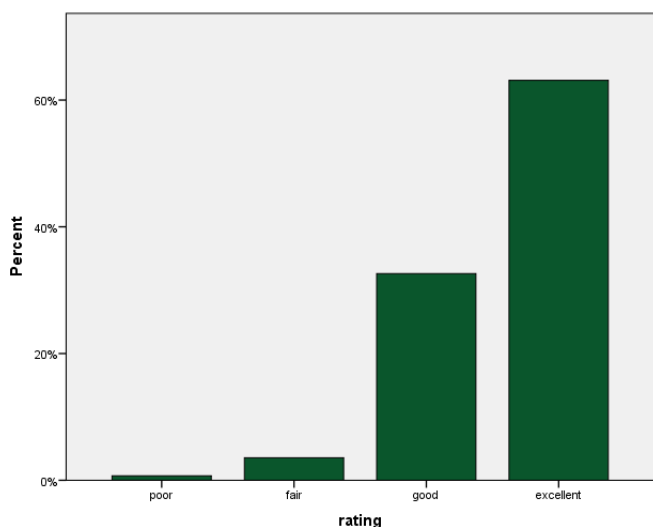


Table 2: Means of pre and post-test scores by site

	N	Pretest	Posttest	Δ
Site 1	22	8.86	9.10	.24
Site 2	18	6.50	7.56	1.06
Site 3	17	8.41	10.53	2.12
Site 4	31	7.71	9.29	1.58
Site 5	27	8.04	9.52	1.48
Site 6	26	8.46	9.50	1.04

Graph 2: Student ratings of the 2016 4-H On the Wild Side program.



“We made a compass and used a real compass...We went on a scavenger hunt.” --On the Wild Side camper

Creating positive feelings about science and the environment:

Enjoying nature and science are goals in 4-H On the Wild Side, and the program is popular with youth. Almost all campers indicated a positive experience as 63% rated camp as excellent and 34% said it was good. While 97% of youth reported a positive experience, 3% rated the experience as fair or poor. This may be a result of the outdoor or community living experience that required sleeping outside and more primitive facilities than what students feel comfortable with.

“The aspect of the program that meant the most to me was bonding with everyone—the kids, other teens, the adults...everyone I met here is so special.”

--OTWS Teen Staff



Developing skills in teens: Speaking in front of a group, organizing time and materials, knowing what is expected in the workplace...all these are central to success as teens grow into adulthood. The project-based work in 4-H naturally leads to developing important skills for life. Besides their work planning for and making camp happen, 4-H On the Wild Side teens work in partnership with adults on the Program Development Committee to meet the funding, training, and recruitment needs of the program. Teens are seen as resources in all aspects of program development and played key roles in recruiting volunteers, securing funding, and presenting at project meetings and training sessions.

The teen survey asks teens to assess their growth in a number of areas including public speaking, sharing their ideas with adults or other teens, and organizational skills. Teens in OTWS reported increased skills and confidence in making presentations, and all teens (100%) strongly agreed that the project gave them the chance to work with people of different backgrounds, cultures and abilities.

Developing a sense of service: Helping young people understand issues in their community—and their responsibility to contribute to solutions—is central to the 4-H mission. As teens feel a sense of responsibility and empowerment in their jobs, their sense of contribution to community grows. Many teens come to OTWS seeking service hours to fulfill high school graduation requirements. Others are looking for ways to be involved in activities outside school, or participate because they care about the environment or want to work with children. Regardless of their reason for joining, all teens (100%) felt as though they had made an important contribution to their community through the project. The high retention rate of teens returning to the program from one year to the next indicates they feel their role is meaningful and that they enjoy the experience.

“I feel like I have done my job in getting the kids to understand nature.”

--OTWS Teen Staff



Community Partnerships

Healthy community partnerships provide people-power, community resources, and connection to students critical to 4-H On the Wild Side success. The Program Development Board that provides leadership to OTWS includes many of our program partners. Partnerships include California State University, Sacramento (program leadership; student volunteers and mentors; facilities); Sacramento City, Twin Rivers and Folsom Cordova school districts (students and teachers who attend camp); and our financial partners: Arata Brothers Trust, State Street,

the California 4-H Foundation, and the Sacramento Community Regional Foundation’s Grants Advisory Board for Youth (GABY).



In 2015, a youth film team supported by GABY made a short video of 4-H On the Wild Side. The crew interviewed teens and school teachers who brought their students. It is available to view at <https://youtu.be/G7FP9sjFmJA>. Take a look!

“Today I went on a boat and felt alive and happy.”

--On the Wild Side Camper

4-H On the Wild Side 2016 Financial Report

Category	Description	Budgeted 2016	Actual
REVENUE			
Grants	Grants Advisory Board for Youth (GABY)	500	500.00
	Arata Bros. Trust	5,000	5,000.00
	State Street	5,000	5,000.00
Fees	School sites (4 @ \$600; 2 @ \$300)	3,000	3,000.00
Donations		0	0
	Total Revenue	\$13,500	\$13,500
EXPENSES			
Personnel	Lifeguard for camp sessions	150	0*
Program Supplies	Program materials	500	237.28
Member Fee Offset	25 youth x \$20 (fee = \$34.00; youth will pay \$15; additional \$ for scholarship)	500	513.00
Facility	Facility rentals (Camp weekends \$2,520; retreat \$1,260)	3,800	3,955.00
Food	Camp weekends \$2,000 Retreat \$ 400	2,400	1,888.31 481.86
Transportation	2 buses for each camp session Vehicle mileage (2 per weekend and retreat)	4,000 400	4,168.86
Staff t-shirts	40 x \$8 (offset by \$5/shirt charge)	320	350.29
Recognition	Adult volunteers and teens	400	180.29
Program Evaluation	Both summative and formative	750	0**
	Total Expenses	\$13,220	\$11,774.89
	Total	\$580	\$1,725.11

*We secured a volunteer lifeguards for both sessions.

** The University covered the cost of our evaluation this year