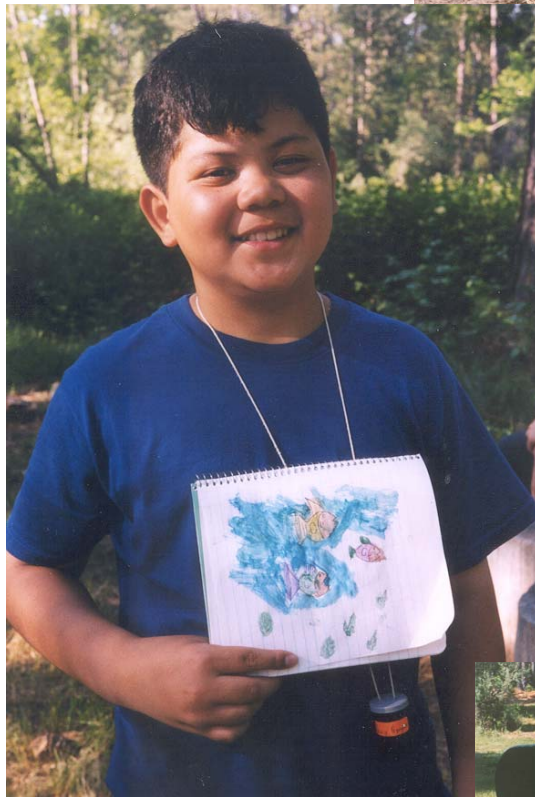


University of California 4-H Youth Development Program
Sacramento START ● Sierra Club Youth in Wilderness ● Camp Fire USA



On the Wild Side 2003 Program Evaluation

October 31, 2003

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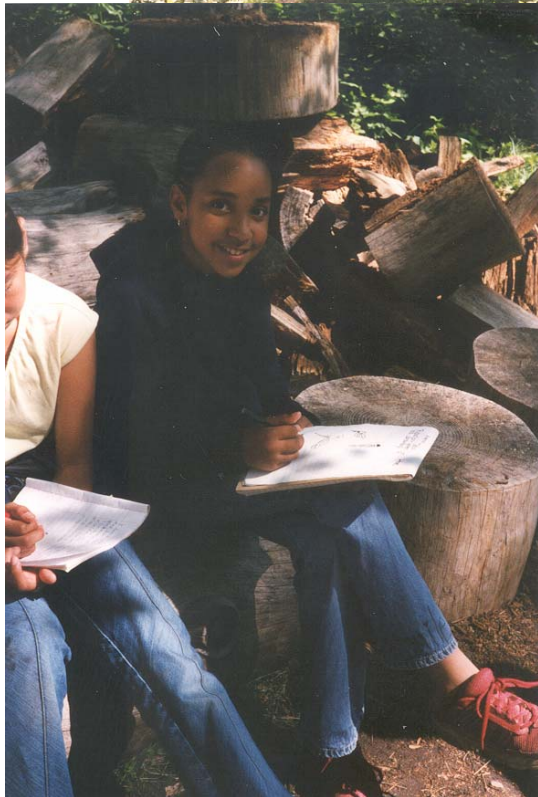


Participant Reflections

“I love the sound of nature in this forest. It’s so beautiful out here. I feel that I can share all my secrets with the forest that I’m in right now. I like this place a lot. It’s a lot of fun. I feel very calm.”



“We learned the four components of habitat—food, water, shelter, space.”



“We looked through this big telescope and we saw the craters in the moon and we saw Jupiter.”



“I’ll never forget camping out in the stars with my friends.”

“Today we looked through microscopes and found tiny, tiny, tiny bugs or germs in the water.”



“I had some fun hiking and learned that when a tree is leaned over, it is trying to get more sunlight so it could grow.”



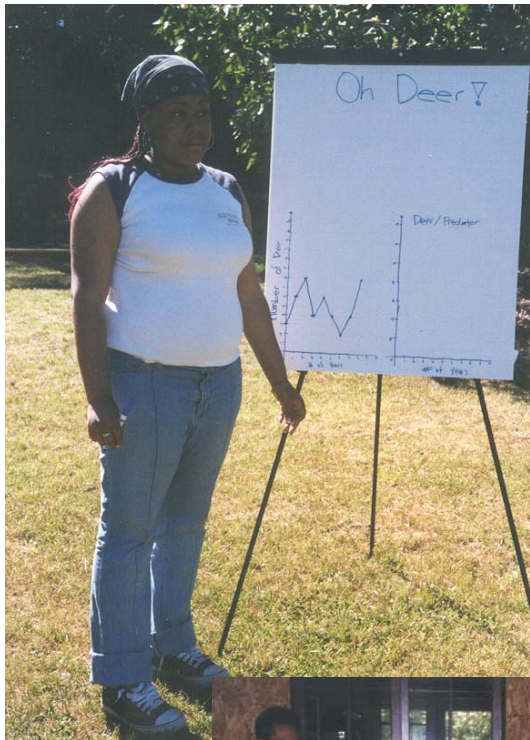
“I learned that mosquitoes were born in water.”



I learned about amphibians, that a frog can be on land and on water.”



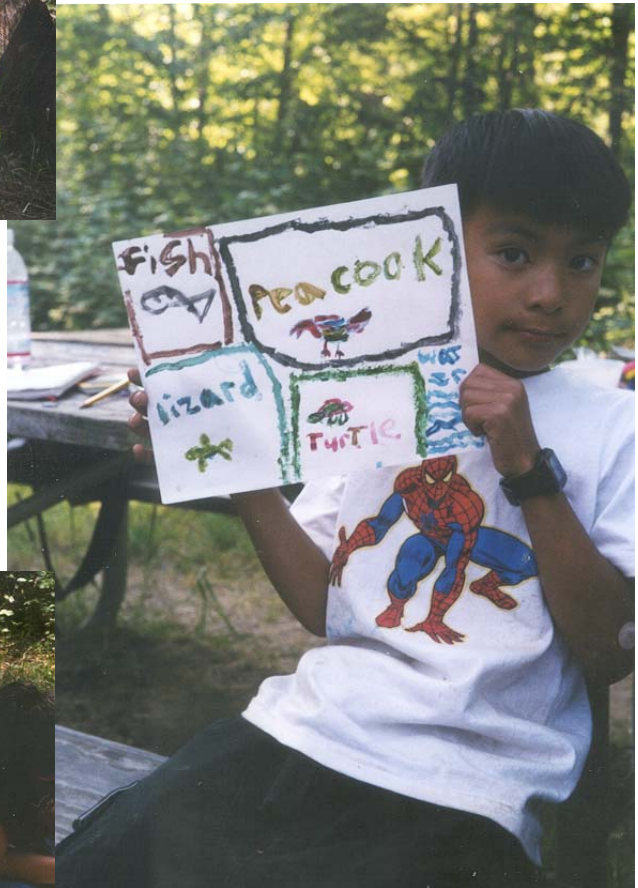
“On The Wild Side has allowed me to generate a strong love for nature as well as an intimate bond with the children I interact with during that weekend. From planning the activities to sleeping under the stars with the kids, this program has been somewhat of an enlightening experience for me... the connection I made with the kids and the companionship I formed with the staff will stay with me throughout my lifetime.”



“I loved the canoeing the most. I also like how we ate family style because I don’t get to do that at home.”



“In the wild, animals, like butterflies, have bright colors on their wings to scare predators away or to blend in with objects around them.”



“The best part of camp was spending time with our friends and learning a lot of things.”

“I saw the moon; it was so pretty, it looked like a huge pearl with bumps.”

On the Wild Side 2003 Narrative Report

Having completed its fourth successful season, On the Wild Side continues to produce consistent, positive results for participants, planners and programs involved. The collaborative project—which unites the 4-H Youth Development program, Sacramento START after school program, Camp Fire USA, and Sierra Club Youth in Wilderness funding—has fostered learning, engaged teens in meaningful service, and developed an enthusiasm for the outdoors in children and program staff. This report summarizes the program outcomes and the insights we’ve gained while developing, managing and delivering the project.

Project Goals

Goals for the program have not changed since its inception. For children, they include:

- Expanded knowledge of the natural world and systems within it.
- The development of an enthusiasm for nature and outdoor living experiences.
- An appreciation for the importance of conservation and environmental stewardship.
- A fun, positive experience with peers and staff in the outdoor setting.

Teens involved as project planners and leaders were also expected to gain:

- Increased awareness of the value and importance of civic engagement.
- Skills and confidence in program planning and delivery.

Project Implementation and Accomplishments

Population Served: Eight Sacramento START sites participated in the project. It was the first year for three sites (Bannon Creek, Peter Burnett, Elder Creek), the second year for two sites (American Lakes, Tahoe), the third year for one site (Father Keith B. Kenney), and two sites participated all four years (Fruit Ridge, Bret Harte). In the original plan, sites would attend the program for three year then rotate out allowing other START sites to participate. Interestingly, we had a difficult time identifying new sites that were able and interested in joining the program, thus some schools returned for a fourth year. Sites that had previously participated were eager to come back.

Twelve teenagers and 13 adults served as Wild Side staff. Twenty-three chaperones accompanied the children from their START sites.

Table 1: Profile of On the Wild Side 2003 Participants

Ethnicity	Elementary Students (n=143)		Teen Teachers (n=12)		Adult Staff & Chaperones (n=37)	
African American	53	37%	2	17%	5	14%
Asian/Pacific Islander	31	22%	7	58%	4	11%
American Indian	2	1%	0	0%	1	3%
Caucasian	20	14%	3	25%	16	43%
Hispanic	37	26%	0	0%	11	39%
Gender						
Female	80	56%	8	67%	28	76%
Male	63	44%	4	33%	9	24%

Program Components: Volunteers from the California Department of Fish and Game trained the staff in *Project Wild*, *Project Aquatic Wild*, and *Project Learning Tree* curricula. Teenagers then worked side-by-side with adults to plan the camp program based on activities from the curricula. Teens and adults participated in a weekend retreat at the Clair Tappaan Lodge for additional planning and training. Children rotated through the following teen-led activities:

Trees in Trouble: Understanding factors that can cause trees to become unhealthy.

Microtrek Treasure Hunt: Students look for evidence of wildlife.

Micro Odyssey: Identifying various life forms that live in water.

Color Crazy: Art project emphasizing the role of color in wildlife.

Oh, Deer: A game introducing habitat components and populations dynamics.

Canoeing: A favorite activity that includes learning parts of canoe and paddle.

During the second session, members of the Sacramento Astronomical Society led a star party and brought telescopes, knowledge, stories and enthusiasm, all of which they shared with the children. Prior to camp, a graduate student from UC Davis led ten environmental education lessons at two START sites.

Project Impact: This evaluation utilized data from separate focus group interviews with teens and adult participants, excerpts from children's journals, participant surveys, and pre-and post-tests measuring knowledge gain for young participants.

The participants are learning. In all four years, pre-and post-test data indicate that children learn and retain information the teens present in their sessions (See Appendix: On the Wild Side Test Results). The children's journal entries reinforce that participants learn vocabulary, the plants and animals of the foothill ecosystem, and important environmental concepts. One of the most telling examples of this learning came when a classroom teacher from one of the elementary schools visited the program. In teaching a reading unit on the environment to her sixth graders, she realized that some students shared experiences and comments uncommon to her classroom discussion. When asked, they told her about On the Wild Side, and curiosity led her to visit. She praised the program and the impact it made on her students, citing examples of information they retained and applied from their camp experience during class discussions.

Teens take the lead, are effective teachers, and grow through the experience. In the adult focus group, staff members discussed the initiative and responsibility teen staff undertook, and commented on the excellent job they did teaching. "It's so rewarding to watch teens take (a lesson) from the book and make it real," stated one coach. "I saw growth in the teens throughout the weekend as they took on more responsibility." Teenagers, in their focus group, spoke about their own growth, the confidence they gained, and the satisfaction they felt in bringing their ideas to successful completion.

Youth and adults work in successful partnership. This was perhaps the strongest theme in the focus group sessions: adults and young people respect, appreciate and enjoy working with each other. Youth expressed true appreciation for the youth-adult team and complimented their senior counterparts. They stated that they were well supported in delivering the program, and never felt as though the adults tried to "take over" their territory. They spoke of mutual respect, clearly felt

valued, and knew that their contribution was important. Adults echoed their praise for their young partners. “Teens are the facilitators. It’s sometimes hard for me (as a professional teacher) to step back. But, they do a fabulous job. They’re the core; we’re the support.”

Most everyone who participates enjoys the experience. If fun is an important component in non-formal education, On the Wild Side more than meets the standard. Sixty-seven percent of participants rated the program as excellent, and 25% rated it as good. Canoeing and swimming were favorite activities, but campers listed other highlights too: sleeping outside, the campfire, playing games, being with friends, the nighttime.

Insights Gained

It was difficult to recruit new sites into the project. Sites were already committed to various other enrichment activities. This, combined with little pre-established enthusiasm for outdoor programs in urban settings and difficulties matching school and camp schedules, meant we had a hard time attracting new sites. Yet the program is successful in building enthusiasm for the experience, for sites were eager to return and even expressed a willingness to pay out of their site budget for the program. *Recommendations:* Secure sites early, charge sites a small fee (to help insure sustainability), and create a venue for sharing about the On the Wild Side experience between Sacramento START site directors.

We need to remember to recruit new staff into the program and to find ways to offer new growth experiences for returning staff members. This year our teen staff was smaller. In the past, we spent little time recruiting teenagers since past participants brought their friends. Adding other outdoor experiences throughout the year will help keep teens connected and excited and should help with retention. *Recommendations:* Conduct dedicated recruitment effort for new staff, create additional outdoor experiences for teens, and explore opportunities for On the Wild Side teens to present about their program and lead in other venues.

Program success is all about relationship. Strong relationships are central in youth-adult partnership, recruiting and retaining site participation, and stabilizing and growing funding sources. As adult chaperones and START staff discovered, relationships change through the program as kids and adults live and work and play together. Focus group comments clearly emphasize this: “The same people want to come back; they remember you,” “People know each other better,” “Schools try to build a sense of community. That’s what this does. Parents see that you care.”

Unanticipated Problems

We had major maintenance problems the first session of camp. The property was not prepared, and we were the first rental group of the season. As a result, we did not pay for use of the facility the first session.

On the Wild Side 2003 Financial Report

Category	Description	Funding Source	Budgeted	Actual
Personnel	Program development, delivery and evaluation (165 hrs)	UCCE 4-H Program	\$4,000	\$3,750
	Program staff and chaperones (21 @ \$176 plus 1@ \$660)	Sacramento START	4,600	3,695
	Adult program volunteers (581 hr. @ \$9-\$20 per hour)	In-Kind	8,000	7,000
	Graduate Intern	Calif. Comm. Project	3,000	1,810
	Lifeguards for camp sessions	Sierra Club	200	150
Program Supplies	Materials for Wild Side weekend	Sierra Club	500	395
	Star Party	In-Kind		300
Training	For teens, coaches, adult volunteers	Sierra Club		550
Facility	Facility rental	Sierra Club	3,000	**1,200
Food	Meals for camp sessions	Sierra Club	3,500	*1,600
Transportation	2 buses and 1 car for two camp sessions	Sierra Club	2,600	2,160
		UCCE 4-H Program		130
Program Evaluation	Both summative and formative	UCCE 4-H Program	1,500	***280
		Sierra Club		450
Total			\$30,900	\$23,470

Because of camp availability, this year's program was one day shorter than anticipated, resulting in savings for facility rental, staff time, and food.

* New cooks and a simpler menu significantly reduced food costs.

** We did not pay camp rental for one weekend because the property was in such poor condition.

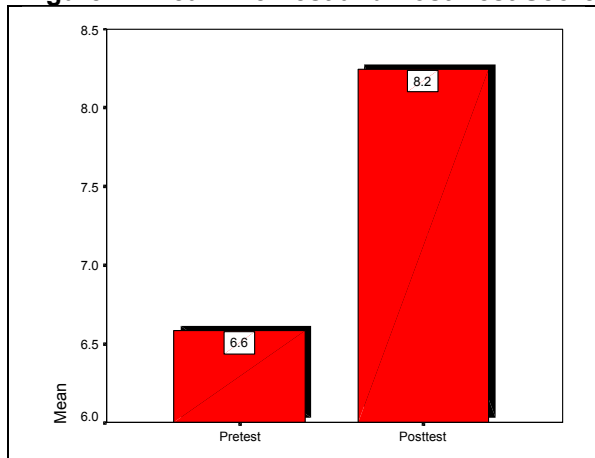
*** While focus groups took place for teen and adult staff, tapes were not transcribed as anticipated.

Funds remaining from Youth in Wilderness grant: \$995.

Appendix: On the Wild Side 2003 Test Results

Knowledge Gain: For the fourth consecutive year, On the Wild Side participants took a pre- and post-test to help measure what they learned through the outdoor experience. Each participant was given a total score for both the pre-test and post-test, and we compared mean (average) scores between the two. One Hundred Thirteen children took both tests. We conducted a t-test to determine whether there was a significant difference between total pre- and post-test scores. It revealed significant differences ($p < .01$) for the entire sample. With confidence, we can say that the participants grew in their knowledge and understanding about nature as a result of participating in On the Wild Side, a finding consistent all four years.

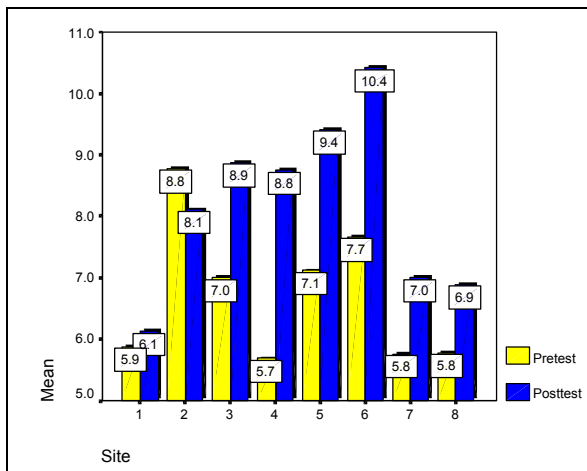
Figure 1: Mean Pre-Test and Post-Test Scores Difference



	Pre-Test	Post-Test
Mean	6.58	8.25
Std. Deviation	2.03	2.05
n	113	113

Site Comparisons: Site analysis for differences in pre-test post-test scores found significant differences in sites 3, 4, 5, 6, 7 ($p < .01$) and site 8 ($p < .05$). The only sites that did not have a significant change in test scores were sites 1 and 2, both of which benefited from the UC Davis intern who taught environmental education for several weeks prior to the camp experience. One of these sites had the highest pre-test level, likely due to intern's work with a consistent group of children prior to the program. At the other site, participants receiving the intern's lessons varied from week to week.

Figure 2: Test Score Differences by Site



Site	N	Mean Pre-Test	Mean Post-Test	Difference
1	8	5.88	6.13	0.25
2	9	8.78	8.11	-0.67
3	16	7.00	8.88	1.88
4	16	5.69	8.75	3.06
5	17	7.12	9.41	2.29
6	12	7.67	10.42	2.75
7	17	5.76	7.00	1.24
8	18	5.78	6.89	1.11

Grade Level and Session: Both session 1 and session 2 scores showed significant differences between the pre-test and post-test ($p < .01$). By grade level, significant differences were found in grade 4, but not grades 5 and 6. This is likely because only 22 fifth graders and 16 sixth graders participated in On the Wild Side 2003, making the test for significance difficult for these grades.

Figure 3: Test Score Differences by Session

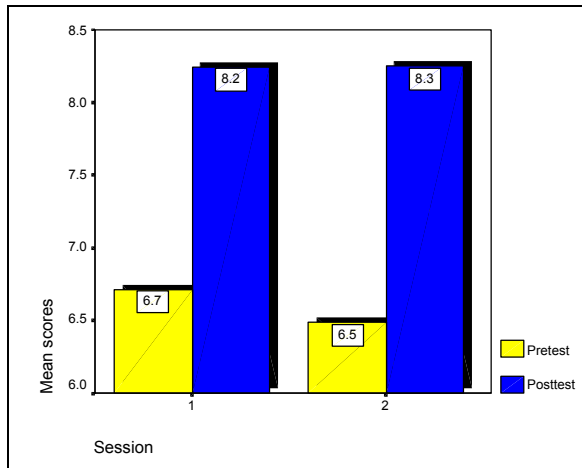
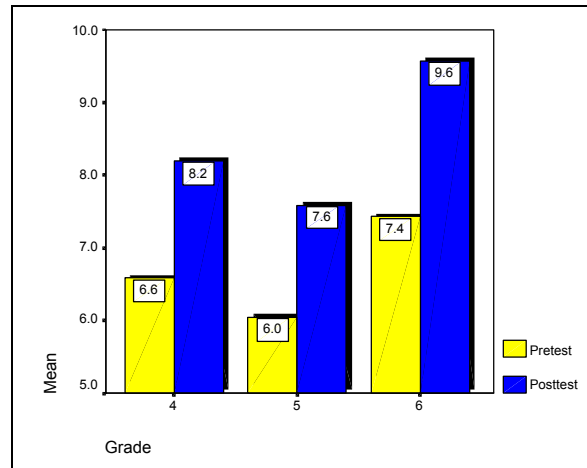
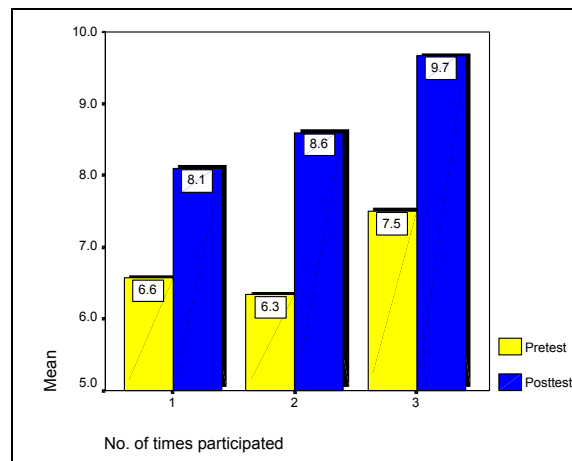


Figure 4: Test Score Differences by Grade



Time in Program: Analysis with one-way anova showed that there were no significant effects on pre- and post-test scores for the number of years youth participated in the program. This may be due to the low numbers of participants appearing for the second ($n=15$) and third ($n=6$) times. Last year showed a significant difference for children returning their second year, but the number of second year participants was larger ($n=28$). It is interesting to note that, as a group, children participating for their first time had slightly higher initial scores than those returning for their second year. Last year's data did not reflect this.

Figure 5: Test Score Differences by Number of Times Participated



(Statistical analysis prepared with help from Aarti Subramaniam and the 4-H Center for Youth Development, Davis, California)

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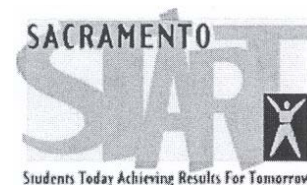
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