



# SAN DIEGO CHILDREN AND NATURE COLLABORATIVE

## Third-year Accomplishments

January 1, 2011 to December 31, 2011

Founded in 2009, the San Diego Children and Nature Collaborative (SDCaN) is a regional collaborative of organizations, individuals and businesses. Its' vision is a world in which all children play, learn and grow with nature in their everyday lives. The mission is to inspire communities to nurture, empower, and engage youth in cultivating their relationship with nature. Accomplishments were completed in 2011, related to five of the six strategic goals.

### **Goal 1. Increase public awareness of the value of nature and outdoor experiences.**

**Lecture by Richard Louv.** To highlight his new book, *The Nature Principle*, Richard Louv gave a lecture at Point Loma Nazarene University on May 6, co-sponsored by the Collaborative and San Diego Audubon Society, and 500 attended. "The future will belong to the nature-smart—those individuals, families, businesses, and political leaders who develop a deeper understanding of the transformative power of the natural world and who balance the virtual with the real. The more high-tech we become, the more nature we need." (from highlights posted at <http://richardlouv.com/books/nature-principle/>)

**Family Nature Days in April** were sponsored by SDCaN to publicize and draw attention to a wealth of family-centered nature events. Both collaborating partners and families will utilize the then-newly-launched [www.sdchildrenandnature.org](http://www.sdchildrenandnature.org) as a source of information pertaining to Family Nature Days and local places and activities for families to spend time in nature. Kick-off Family Nature Days event at San Dieguito Lagoon sponsored by SD Audubon and San Diego Gas and Electric (SDG&E) had over 300 in attendance. Radio campaign on KyXy 96.5 and Sophie 103.7 brought over 3,500 unique visits to the SDCaN website. Online advertising campaign on SignonSanDiego brought 500 visits to the SDCaN website. Social media campaign using Facebook and Twitter increased the fan base, and posts were viewed by over 4,000 individuals on Facebook during April.

**Website.** The website, [www.sdchildrenandnature.org](http://www.sdchildrenandnature.org), was launched in March and includes an inventory of local nature places, outdoor nature-based events, and general information about the Collaborative. As the initial web developer was unable to support the website, efforts were made to increase functionality and transfer it to a local web developer in early 2012.

**Pocket Naturalist Guide for Chaparral Shrublands of Southern California** was revised and a second edition printed by Waterford Press. Copies are now sold at local stores and nature centers, and used by students on local nature field trips.

#### **Articles and Interviews.**

- EarthTimes, program publication for San Diego's EarthFair on April 17, article on "Nature – Awesome, Affordable, and Accessible!" pages 4-5 at <http://www.sdearthtimes.com/ET11-04.pdf>.
- San Diego Horticultural Society magazine in April, "Let's Talk Plants!," April article on "Nature is Nearby, Affordable and Awesome!"
- "Writing in Nature," Lilian Cooper, journal of San Diego Area Writing Project, [http://sdawp.ucsd.edu/\\_files/dialogue/Dialogue-Spring2011.pdf](http://sdawp.ucsd.edu/_files/dialogue/Dialogue-Spring2011.pdf), pages 1-4
- "Canyon as Classroom," Spring 2011 issue of Unboxed, a journal of adult learning in schools, at [http://www.hightechhigh.org/unboxed/issue7/canyon\\_as\\_classroom/](http://www.hightechhigh.org/unboxed/issue7/canyon_as_classroom/), article by Cindy Jenson-

Elliott, science teacher at *The Child's Primary School, San Diego, CA*

[http://www.hightechhigh.org/unboxed/issue7/canyon\\_as\\_classroom/](http://www.hightechhigh.org/unboxed/issue7/canyon_as_classroom/)

- "Kids get back to Nature at San Dieguito Lagoon," feature article in the Union-Tribune with press coverage for Family Nature Days kick-off event, <http://www.signonsandiego.com/news/2011/apr/02/getting-kids-back-nature/>
- "Nature Adventures," by Linda Hawley, in September 2011 issue of Family Magazine, pages 66-67, posted at <http://www.smpdigitaledition.com/publication/?i=79448>
- "Nature's Classroom," Fox News-Channel 5 in San Diego, March 9, 2011, Janice Swaisgood
- "Reconnecting Children to the Outdoors," Treehuggers International Radio, May 5, with host Tommy Hough, Janice Swaisgood, Anne Fege, and David McDonald of Donate-a-pack Foundation, posted at <http://treehuggersintl.com/2011/reconnecting-children-to-the-outdoors/> .

### **Presentations.**

- Western Section of The Wildlife Society, February 10, Riverside, CA, "Connections between Childhood Nature Experiences and Adult Environmental Values and Careers," Anne Fege
- Volcan Mountain Preserve Foundation, Julian, CA, May 22, 2011, Cindy Moore
- Mediterranean Ecosystems Conference (MedEcos XII), September 7, UC-Los Angeles, CA, Anne Fege, "Linking Social Science to Conservation Education for Chaparral Ecosystems"
- San Diego Urban Forestry Coalition, October 5, 2011, Anne Fege, "Urban Forests and Urban Children: The Case for Community-Wide Collaboration"
- Community Campership Council, October 18, Anne Fege, "The Natural Gifts of Camp"
- "Growing Your Own Nearby Nature Program," at Healthy Behaviors Conference, December 9, San Diego, by Crystal De Soto and Kathy Wilder

## **Goal 2. Enhance schools' ability to connect children to nearby nature**

**Local Nature Curriculum.** To enhance schools' abilities to provide opportunities for outdoor nature-based learning, the Education Committee completed, posted, and printed a five-lesson curriculum on *San Diego's Native Habitats: Shrublands* for fourth-grade teachers that is aligned with California standards for science and literacy, links to textbooks, and features hands-on nature-based activities. The Nearby Nature School Field Trip Guidebook for educators and naturalists was also completed and posted, both posted at <http://www.mastergardenerssandiego.org/schools/shrubland/index.php> and <http://sandiegoaudubon.org/edu.htm>. Two hundred copies were printed and distributed, with a donation from the California Chaparral Institute. San Diego Audubon Society is offering **naturalist-led lessons** based on this curriculum, for schools in East County. They are followed by field trips to the Silverwood Audubon Sanctuary in Lakeside. Earth Discovery Institute is working with teachers to complete some of the lessons before their field trips to Crestridge Ecological Reserve in El Cajon.

**Project-based Learning.** Working with the Classroom for the Future Foundation based in San Diego, the Collaborative is supporting Santee Unified School District teachers and students to organize project-based learning with nature. An inventory of online sources was completed for San Diego's natural history, nature areas in East County, and citizen science program. In the UCSD ScienceBridge program that enhances college preparedness, six teachers in four high schools are doing nature-based projects on canyons and wetlands within walking distance of their schools. Participating high schools and their nearby canyons are Serra HS in Shepard Canyon, Kearny HS in Tecolote Canyon, and Mission HS at Rose Creek and Kendall-Frost Marsh-UCSD Reserve.

**Educator Conferences.** Information about the Collaborative was distributed at several educator conferences. The 28th Annual Technology Conference (SDCUE, SD Computer-Using Educators)

Technology Conference and SD Science Educators Association-SDSEA conference was held on November 5 and attended by 1000 teachers at CSU-San Marcos. Collaborative members gave presentations on Learning in Nature's Classrooms, Citizen Science, Project Wild, NatureBytes videos, and the Education and the Environment Initiative.

**Schoolyard Habitat Guide.** This new guide was published by the US Fish and Wildlife Service, with clear steps, rationale, worksheets, examples, and inspiration to plan, design, install, maintain, and communicate about schoolyard habitats. The Collaborative featured this guide at two meetings, and referred educators to the online version, posted at <http://www.fws.gov/cno/pdf/HabitatGuideColor.pdf> (132 pages, 2011) and the Schoolyard Habitat program information at <http://www.fws.gov/cno/conservation/schoolyard.cfm>. This program allows teachers and school children to build habitat for wildlife, and learn about the outdoors through interdisciplinary learning in a broad context involving math, reading and writing skills, and science.

### **Goal 3. Partner with community groups to value, promote and provide opportunities for outdoor experiences.**

**Family Nature Clubs** were continued and more than 700 families participated in over 150 family nature activities over the past two years. The Family Adventures in Nature (FAN) helps families get nature back on their calendars with a variety of opportunities each month. In addition to the overall FAN group that usually meets on the weekends, there are five "Nearby Nature Community Networks" that meet within the same geographical regions each week. A weekly email is sent to outline the upcoming events and adventures. More information at [www.FamilyAdventuresinNature.org](http://www.FamilyAdventuresinNature.org)

**Family Nature Days** were organized in April by Collaborative Partners. Family-centered nature activities were specifically designed to be age-appropriate for one or more age ranges (0-5, 6-9, 10-14, or 15+ years old, and older generations), and often include periods of unstructured time to play and explore. Events held by partners with family centered activities were posted on the website. Training was offered on how to conduct family-friendly nature programs that engage children of all ages, including setting realistic expectations of families with small children, hands-on and multi-sensory experiences in nature, and safety provisions for outings/walks.

**Healthy by Nature.** Now in its second year, the second phase was launched with NatureRx. For NatureRx, pediatric health providers give patients prescriptions to visit nature and to limit screen time, as a way of developing providers as health champions and encouraging families to get off the couch and into nature. A pediatrician with Sharp Healthcare in La Mesa and a pediatric nurse practitioner in a private La Jolla office distributed SDCaN's own NatureRx prescription. It suggests that suggests families take nature walks at Mission Trails Regional Park and/or visit the children's garden at San Diego Botanic Garden, where they receive free one-day admission and discounted memberships.

This NatureRx project follows the Collaborative's pilot project in 2010 with a pediatrician in Oceanside. For that project, the doctor gave patients the National Environmental Education Foundation's Children and Health brochure (in Spanish or English), featuring a sticker with local nature walks led by Health committee chair Jennifer Douglas, accompanied by the pediatrician. The health providers have described favorable reactions by families to their encouragement of outdoor play and their own increased motivation to educate families about the benefits of unstructured outdoor experiences.

**Naturalist Guide Fund.** This fund is established for naturalists to lead school classes and youth groups in nature-centered curriculum and nature walks. The first \$1,000 was contributed for nature walks with five classes in North County. Naturalists associated with different organizations convened in



October and December to discuss common interests and opportunities for continuing education, interpretive skills, and participation in the new California Master Naturalist program.

**Research Project.** A project was undertaken for the USDA Forest Service, on **Factors Affecting Decision-making About Children's Nature Experiences**, focused on after-school programs and families. As adults make most of the decisions about whether a child's time is spent in nature activities, they have great influence over nature and environmental educational programs and the successful outcomes from these programs. Phone interviews with staff and administrators for after-school programs showed that activities are more likely to be offered if they directly support the agency's mission, if the on-site supervisor and/or a staff person has interest or knowledge in that area, and if the children "like" the activity. Phone interviews and online surveys showed that participation in family-centered nature experiences may be increased by communicating the values of nature activities for child development, promoting the relatively low cost of nature experiences compared with other family activities, and offering more organized and scheduled nature activities for families.

**Youth Programs.** Collaborative members attended a discussion of Cultural Relevancy of youth outdoor programs on October 19 at The San Diego Foundation, organized by the Stewardship Council of Sacramento, California.

#### **Goal 4. Drive change in attitudes, skills and behaviors that lead to positive relationships with nature.**

(No activities were completed for this goal in 2011.)

#### **Goal 5. Promote learning, sharing and networking**

**Collaborative Partners.** The Collaborative welcomed 25 organizations as Collaborative Partners and featured them on the new website. In April, telephone interviews were conducted with 16 partners about their perceptions of and suggestions for the Collaborative. Leaders were asked to relate their mission to the Collaborative, identify assets of their own organizations that could be shared with others, and "what will it take to get more nature into children's programs and schools in San Diego?" Twelve partners met with the Board on June 7 to identify ways to enhance benefits of the Collaborative. Twenty-three completed surveys on local activities in October, that were summarized in San Diego's response to the bi-annual national Children & Nature Network survey.

**Meetings.** More than 200 attended the six bi-monthly meetings. Meetings were held prior to lectures at the SD Natural History Museum on place-based learning (January 25) and designing of outdoor spaces for children on March 8. The May 25 meeting followed Richard Louv's *The Nature Principle* book launch event, and focused on how local interests and skills can contribute to the children and nature movement. The San Diego Botanic Garden hosted the July 26 meeting, with a tour of the Hamilton Children's Garden. Mission Trails Regional park hosted the September 27 meeting, focused on "nearby nature" products developed by the Collaborative and docent-led tours featuring different ages of children. News about trainings, jobs, nature education events, and other items were shared in periodic email messages to members.

**Children & Nature Network.** Thirty local members attended the national Children & Nature Network meeting in San Diego on September 20-22. Speakers ranged from youth leaders to engaged grandparents, pediatricians to business leaders, early childhood educators to university faculty. Key insights of local attendees were the value of stories about the impact of nature on lives and careers; experiences of collaboratives in other regions that have similar challenges and obstacles; the value of



engaging 16- to 25-year-old youth, with their hope and spirit; and the essential work of advocacy on keeping access to public lands, expecting schools to each in nature, promoting healthy lifestyles, and making nature accessible and affordable for all families.

**Awards.** The Collaborative was recognized by the San Diego Science Alliance, with the **Innovator in Education award** given to Anne Fege as chair of the Collaborative. Also at their annual celebration on May 3, the Sustainable Program Award was given to Project SWELL (Stewardship: Water Education for Lifelong Leadership) and received by Jennifer Nichols Kearns and Alicia Glassco. Anne Fege was one of ten nominees for the Educator Award by the Athena Foundation, that promotes professional growth for women executives and rising managers in science and technology in San Diego.

### **Goal 6. Build sustainable organization to support mission**

**Governance.** A fiscal sponsorship agreement was signed with the San Diego Audubon Society (Audubon). A Governing Document was developed to outline the mission, goals, organizational structure, and decision-making processes. The Working Board met monthly to plan and implement the Collaborative's programs. An Advisory Board was established with seven Board members that will reflect the interests of Collaborative Partners and community members.

**Grants.** Grants were received from Sempra Energy Foundation for Family Nature Days and media coverage for the website launch. The USDA Forest Service funded the research project on factors affecting decision-making for children's nature experiences. Proposals were developed and submitted to several organizations, individuals, and programs.

**Administration.** The contact list was maintained, and members were sent periodic email messages about meetings and resources. Audubon provided administrative support for the grants received.

### **Selected success stories from Collaborating Partners**

1. **Habitat Helpers** are getting their hands dirty and contributing to the restoration of City of San Diego open spaces by planting and caring for native plants. These Habitat Helpers are organized in collaboration with the City of San Diego Parks and Recreation Department, within the OutdoorExplore! after-school nature education program that is offered by the San Diego Audubon Society. Information at <http://www.sandiegoaudubon.org/habitat-helpers>.
2. **School Garden and Classroom Lessons**, at Paul Ecke Central Elementary School in Encinitas. Science coordinator Darcy Lyons has coached teachers to use the gardens as a catalyst for science instruction and to bring in other learning activities, such as math and the visual and literary arts. For younger grades, a science supports science and garden-based education. More information on pages 36-38 at <http://onlinedigeditions.com/publication/?i=62466>.
3. **Canyon as Classroom**, at The Child's Primary School, outstanding article by *Cindy Jenson-Elliott, science teacher at The Child's Primary School, San Diego, CA* [http://www.hightechhigh.org/unboxed/issue7/canyon\\_as\\_classroom/](http://www.hightechhigh.org/unboxed/issue7/canyon_as_classroom/) . For students, parents and teacher, Tecolote Canyon became more than a place to learn science. It became a place to directly experience earth's amazing capacity for renewal—and to renew ourselves in the process. It became a place to measure our own impact on the world. It became the place where many students developed their first relationship with a healthy planet....
4. **Habitat Heroes** is a new education/restoration and GIS mapping program that targets invasive plant species and pollution at the South Bay refuge. Sponsored by the Friends of the San Diego Wildlife Refuges, the program brings together elementary, secondary, and post secondary

students, volunteer groups and members of the community to understand and address the growing threat of invasive species to the South San Diego Bay National Wildlife Refuge. Based on GIS technology, traditional and internet-based instruction, cross-age student mentoring, and habitat-based investigations, students and volunteers collect and disseminate information about this significant threat to the diversity of San Diego's ecosystem. They work with Refuge volunteer groups, habitat restoration experts, U.S. Fish and Wildlife staff, and environmental educators to remove non-native species and cultivate and plant native species.

<http://www.fws.gov/sandiegorefuges/education.htm>

5. **Nature Restoration and Youth Programs.** San Diego Canyonlands and the Jackie Robinson YMCA to create a nature-based education and stewardship program on a section of Chollas Creek that flows through the YMCA property (near Imperial Avenue and I-805). Youth participating in the after-school programs and community volunteers are restoring natural habitats on this section of the creek and establish a "Nature Classroom" to serve a sustainable program that, if successful, can be exported to other YMCA locations. More than 150 students from after-school programs at King Chavez Elementary will participate in nature activities in the OutdoorExplore! program offered by San Diego Audubon Society. More information at <http://www.sdcanyonlands.org/programs/youth-programs/ymca-youth-program>.
6. **Third Grade Academy for Environmental Stewardship** was funded by the Carlsbad Charitable Foundation and Carlsbad Educational Foundation, granting \$60,000 for every third grader in the Carlsbad Unified School District to learn at the Agua Hedionda Lagoon Foundation. Eight hundred students will experience "hands-on" demonstration classes that stress responsible interaction with the natural surroundings and create an awareness of the impact of day-to-day human activities. It includes hands-on learning experiences for small groups of students, eight hours of instruction at the Lagoon's Discovery Center, and professional "edu-tainers" to enhance the curriculum, along with games, props, and outdoor activities to engage the students in lagoon resources. More info at <http://www.carlsbaded.org/press-releases/carlsbad-students-engage-with-local-environmental-%E2%80%98gem%E2%80%99.aspx>.
7. **Nature-based Science Projects at High Schools.** The UCSD ScienceBridge program, San Diego Canyonlands, Audubon Society, and local naturalists are working together with high school teachers at Kearney, Lincoln, Mission, and Serra High Schools this school year. As part of the UCSD ScienceBridge program that enhances college preparedness, six teachers in four high schools are doing nature-based projects on canyons and wetlands within walking distance of their schools. Field orientation days were held with Serra HS in Shepard Canyon, Kearny HS in Tecolote Canyon, and Mission HS at Rose Creek and Kendall-Frost Marsh-UCSD Reserve.

From an article in Tierrasanta's community newspaper: "On a warm summer morning in October approximately ninety Serra High sophomores met in Shepherd Canyon to study the natural environment. It was the first time in the canyon for some, and it proved to be a memorable learning experience. Jan Eby, Tierrasanta's Maintenance Assessment District Open Space Inspector, led each of the three groups along the greenbelt to Dishwasher Pond, explaining the canyon's geography, including the water sources, wetlands, planting history, and maintenance. Tierrasanta resident and naturalist John Hopper selected key native plants to show how various species survive and reproduce, how the Kumeyaay used them, and how non-native vegetation that has encroached on them. Chris Kopp, UCSD biology graduate student, taught students how to conduct a plant transect as well as set out bee collection bowls for their class research project."

For more information, contact Anne Fege at [fege@sandiegoaudubon.org](mailto:fege@sandiegoaudubon.org) or 858-472-1293