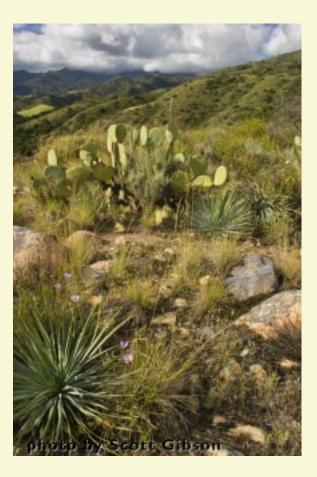


Starr Ranch Field Ecology Programs





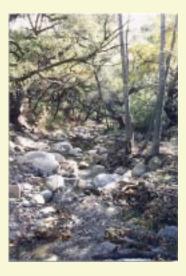


AUDUBON CALIFORNIA MISSION

The Audubon California mission is to conserve and restore California's natural ecosystems, focusing on birds, other wildlife, and their habitats for the benefit of humanity and the earth's biological diversity. By connecting people with nature, Audubon California will be the leader in creating a powerful California voice for the environment, deeply rooted in and broadly drawn from all parts of our population. By informing and involving people with nature where they live, Audubon California will equip the people of California to actively and effectively conserve their ecological heritage.

STARR RANCH FIELD ECOLOGY PROGRAMS

In the rapidly urbanizing southern Californian region, large tracts of native wildlands are rare. The relatively pristine habitats we protect at 4000-acre Starr Ranch Sanctuary, along with the historical Ranch buildings, offer a unique opportunity to experience "old California." Our urban visitors encounter a remarkable contrast as they drive from the crowded development adjacent to the Ranch onto our peaceful canyon road surrounded by oak woodland and scrub-covered hills.



GOALS

Our ultimate goal is to promote a "culture of conservation" to that end, in our programs and walks, when appropriate, we make a link with conservation issues.

To promote the value of wildland conservation and to connect people with nature, we want each person to leave Starr Ranch LOVING something about their experience. With that simple goal in mind, we create exciting programs designed to reach our audience —we adjust every program to specific ages or groups, from elementary school classes to Audubon chapters.

Scientific Goals: to have each participant in our field ecology programs understand

- that ecologists ask questions that can be answered by collecting data
- that ecologists use standardized methods for studying animals, plants, and ecosystems
- that ecological research has applications to conservation issues



STARR RANCH FIELD ECOLOGY PROGRAMS & CAMPS

PHILOSOPHY

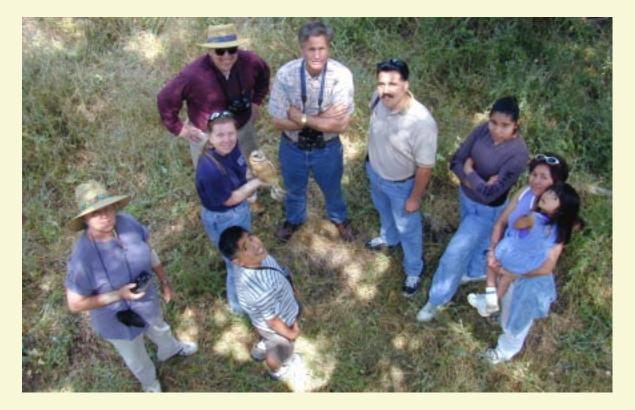
Science-based programs — our approach utilizes two definitions of "science"—1) the rigorous, systematic study of natural events and conditions and 2) the body of knowledge derived from such study. Our intention is that our education staff, all with field biology training and experience, offer programs that not only include fascinating facts about native animals and ecosystems but also participation in simulations or actual research.

"Let nature speak for itself"— on nature walks, our staff use "teachable moments" to explore whatever people are curious about. Nature (and the study of



natural phenomena—see below) is the focus of our walks. We minimize use of signs and other human contrivances so that visitors from the urban environment will be immersed in the sights, sounds and natural history of native wildlands.

"Let field ecology speak for itself"— during programs, we use natural history and exciting research techniques to reach people. We adjust programs to specific group needs. If a group does not seem ready for scientific questions and methods, we switch to exploration and explanation of natural history and habitats (i.e. back to "let nature speak for itself").



STARR RANCH FIELD ECOLOGY PROGRAMS

Field ecology is a branch of biology that focuses on the outdoor study of the relationships among animals, plants and their environment. Our innovative programs were created in 2000 by Research & Education Director, Dr. Sandy DeSimone. We have had great success using the facts and tools of ecological science to inspire a love of nature. Staff are biologists with graduate degrees and their research is integrated into our education programs. Experience the scientific process as wildlife biologists during half day, full day, and overnight ecology programs. Ages 16 and up participate in ongoing research during classes and camps. Minimum group size 15, maximum 150; ages 7 - adult. Most programs can be adjusted for any age and group. **Current offerings are organized into five major program areas:**

ECOLOGY PROGRAMS

One - two hour outdoor simulations of actual research that offer groups of all ages an opportunity to experience nature hands-on as wildlife biologists. Ecology Program descriptions available at http://www.starrranch.org/srfep_description.htm. Dates and times by arrangement - see box below.

BIRDS

Songbird Monitoring: Catch and Release

Hawk Research

Evening Screech-Owl Survey

Predators and their Prey: Owl Diet

STREAM ECOLOGY

Stream Biosurvey (aquatic insects)

Stream Water Chemistry

Stream Water Quality

FEES

PER PERSON

Nature walks (see next page) \$8 & \$10 Half day, 1 – 2 ecology programs \$10 Full day, 3 – 4 ecology programs \$15

Overnight in conjunction with programs: Tent camping \$5/night

Call Sandy or Scott at 949-858-0309

OTHER WILDLIFE

Cougars, Bobcats, and Coyotes!

Reptiles and Amphibians

Evening Wildlife Survey

Insects Magnified

Invertebrate Research

PLANTS

Weed Control and Native Habitat Restoration

Plant Communities of Starr Ranch and Adaptations to Drought and Fire

Plants & Animals of the Rare Coastal Sage Scrub

Native Needlegrass Grasslands of Starr Ranch

Native Plant Identification

Methods in Field Plant Ecology

Succession in Native Ecosystems

RANCH RESEARCH

Adults participate in field research through classes and camps and as volunteers with ongoing scientific studies on wildlife and habitats. For information on classes and long-term research projects call Sandy at 949-858-0309 or see announcements in local newspapers and Starr Ranch Face Book page, e-announcements, and websites

ADULT RESEARCH CLASSES & CAMPS

Classes and camps on field research topics. Learn about research techniques used to study plant and wildlife communities by participating in field studies directed by Ranch and guest biologists.

VOLUNTEER RESEARCH TEAMS

Participate in ongoing research: bird banding; weed control; habitat restoration; stream monitoring; reptile & amphibian, small mammal, & invertebrate studies.

STARR RANCH JUNIOR BIOLOGISTS (SRJB) * *

During our summer camps and spring programs, kids ages 8 - 18 join the Starr Ranch scientific team to help with research and learn how biologists study wild animals and their habitats. The spring program runs for 4-5 Saturdays or school days (for home schoolers) and focuses on a specific wildlife research project. SRJB spring kids have located and mapped hawk nests and learned about the wildlife of oak woodlands through the live trap and release of small mammals, invertebrates, and reptiles and amphibians. During summers, SRJB I kids explore native ecosystems and have fun with some of the techniques scientists use to study wildlife. In SRJB II, children participate in outdoor simulations of ecological research as they identify simple research questions, learn techniques for answering questions, and collect data. SRJB III is offered for older children ages 10 - 13, who camp at the Ranch and do an advanced study of the animals and ecosystems introduced in SRJB II. SRJB IV is for ages 14 - 18 and mentored by Ranch biologists, with focus on wildlife research projects and field trips to parks and preserves in southern California.

FAMILY PROGRAMS * *

Biannual "Family Nature Workshops" on Saturdays are offered free for families who come to the Ranch to participate in workshops that include a sampling of our ecology programs, nature walks, and programs by guest biologists. During week-end "Wildlife Research Camps" families have fun together doing outdoor research with our biologists during day and evening programs.

STARR RANCH BIRD OBSERVATORY (SRBO) * *

Avian research at the Ranch is integrated into education programs that stimulate an interest in birds and conservation of bird habitat. SRBO runs several songbird monitoring studies, assisted by volunteers trained by our ornithologist, that contribute to Starr Ranch land management and national conservation projects. For more information on SRBO, see our website at www.starr-ranch.org.

OTHER STARR RANCH PROGRAMS

WALKS *

Nature Walk 1 - 2 hours, ± 1 mile Long Nature Walk 3 - 4 hours, $\pm 2 - 5$ miles Nature at Night Walk 2 - 3 hours Full Moon Walk 2 - 3 hours

Starr Ranch History Walk Wildflowers of Starr Ranch Woody Plants of Starr Ranch

* Dates and times by arrangement - see box on opposite page

* * Announced in local newspapers and Starr Ranch Face Book page, e-announcements, and websites

STARR RANCH FIELD ECOLOGY CAMPS

"It's so quiet here!" exclaimed students from a Cal State, Long Beach class. The absence of urban sights and sounds is quite amazing to many of our visitors. And there is nothing quite like the sounds of owls and frogs at night. An overnight experience at Starr Ranch is unique since each group has our entire 4000 acres to themselves. All ages and types of groups take advantage of our flexible scheduling and work with the education director to build programs that include an overnight stay. Our bunkhouse, to be expanded someday, currently sleeps ten and we have a large field



for tent camping. We offer camping experiences in conjunction with all five education program areas:

ECOLOGY PROGRAMS (8 through adult)

Groups of any type, ages 8 and up stay for one or more nights and do day and evening Ecology Programs and nature walks. Scouts often come for an overnight stay to fulfill badge requirements with day and evening programs. Home schoolers and high school groups come to study large mammals, creek insects, hawks, and more. See the home page of our website ("Ecology Programs overview" link) for descriptions of our current ecology program offerings.

RANCH RESEARCH (adults)

In spring and fall we offer weekend wildlife research camps for adults. These popular camps offer an opportunity for adults to relax in the peace and beauty of the Ranch, with no other groups around. And they become wildlife biologists for a few days as our own scientists involve them in studies on songbirds, hawks, large mammals, insects, reptiles and amphibians and more.

STARR RANCH JUNIOR BIOLOGISTS (10 - 18)

Our older, more experienced Junior Biologists have overnight experiences during their week long summer wildlife research projects. Kids ages 10 - 13 have examined creek macroinvertebrates and water chemistry, the relationship of weeds and wildlife, and animals of different habitats active during the day and night. At night, biologists show kids how to use a black light to search for scorpions or the call playback method to survey for owls. A summer camp-out also kicks off "srjb4" programs for 14 - 18 year olds.

FAMILY PROGRAMS (8 through adult)

Families with kids ages 8 and older have a hands-on experience in nature together as they do simulations of wildlife research with our biologists. Family groups



of six or more can call to schedule an overnight experience or make reservations for family wildlife research camps announced in local newspapers and on our website.

STARR RANCH BIRD OBSERVATORY (adults)

Our ornithologist trains volunteer bird banders for songbird monitoring projects during intensive six day camps. Other camps that focus on birds have included point count surveys, hawk banding and nest surveys, use of radio telemetry to study hawks, and evening owl call playback surveys.

To plan an overnight stay for your group of six or more, ages 8 - adult, call Sandy or Scott at 949-858-0309.

STARR RANCH SANCTUARY

Ë

ACTIVISM

...working with Audubon Chapters and other conservation groups on local and regional issues.

EDUCATION

...connecting people with nature through participation in ecological research.

PRESERVATION

...protecting rare southern Californian habitats such as coastal sage scrub and native perennial bunchgrass grassland.

RESEARCH

...working to control weeds and restore native ecosystems with a research-based approach.



For information and scheduling, visit our website or call us:

Starr Ranch Sanctuary 100 Bell Canyon Road Trabuco Canyon, California 92679 949-858-0309 Phone 949-858-1013 Fax sdesimone@audubon.org www.starr-ranch.org