
G. LEDYARD STEBBINS, JR.

1906-2000

by Phyllis M. Faber

ON JANUARY 19, 2000, Dr. G. Ledyard Stebbins, Jr. died in his home in Davis at age 94. Ledyard, as he was known to one and all, was president of the California Native Plant Society from 1966 to 1972 and the founder of its rare plant program. He was also a generous teacher, counselor, and contributor to the Society and its members. According to the *New York Times*, Ledyard was “. . . one of the leading evolutionary biologists and foremost botanists of the twentieth century.” Dr. Stephen Jay Gould, evolutionary biologist at Harvard, describes Stebbin’s evolutionary synthesis as “. . . one of the half-dozen major scientific achievements of our century.”

Scientific Contributions

Ledyard’s scientific contributions are vast. According to Dr. Vassiliki Betty Smocovitis, a historian of science at the University of Florida, “Ledyard is the founder of evolutionary botany.” Through his studies of fossil plants and his encyclopedic knowledge of living plant species, Ledyard provided convincing arguments that plants were subject to the same evolutionary processes as animals, a theory that prevails today. Dr. Francisco Ayala, an evolutionary biologist at the University of California in Irvine, claims that Ledyard seemed to know every plant in the world not only scientifically but personally. Of his book, *Variation and Evolution of Plants* (1950), his colleague Dr. Theodosius Dobzhansky, a foremost geneticist at Columbia University in New York, wrote: “Your book will mark a turning point in evolutionary thought and, of course, in botany as well. Of course this is not to say I agree with all you say, but science progresses because contradictions are resolved by more work and thinking.” In the early 1950s, Ledyard persuaded “Doby” to join him at the University of California in Davis where they continued to challenge each other intellectually and scientifically. They played an important role in transforming what was then an agricultural school into a leading academic university. Ledyard wrote six books in all, including the influential *Flowering Plants: Evolution above the Species Level* (1974), and the more popular *Darwin to DNA, Molecules to Humanity* (1982).

Contributions to CNPS

In the 25th Anniversary issue of *Fremontia* (October 1990), Ledyard wrote the lead article (“The California

Native Plant Society, Then and Now”), describing his early involvement in the directions and growth of CNPS. When he first learned of a society dedicated to plants that had formed around the threat to the Tilden Garden in East Bay Regional Park, he quickly joined and founded a chapter in Sacramento. There he organized an active field trip program that continues today. He was elected president of the state organization in 1966. Jenny Fleming, a founding member, credits Ledyard with bringing many botanists into the organization because “. . . if Ledyard was going to head it, it must be a worthwhile society and so they joined.” Ledyard continued his enthusiastic support of the Society for the remainder of his life through his field trips, lectures, and writings. He expanded the field trip program to increase statewide interest in the native flora, and also to document the presence of rare plants. From the information in Munz’s *A California Flora*, Ledyard compiled a list of plants with limited distributional ranges of less than one hundred miles. Next came the field trips to check out this information. The program since has grown into the Rare Plant Program that maintains and publishes the CNPS *Inventory of Rare and Endangered Vascular Plants of California*, a document relied on by state and federal agencies, other decision makers, and the public.

Ledyard’s summation of CNPS in 1990 after 25 years seems relevant today:

“We are well-established and growing at a rate that is commensurate with our needs. No matter how big we become, we must maintain the intimacy, friendliness, and capacity for doing things ourselves that we have nurtured in the past. Continuous field experience, supplemented by exchange of opinions, has been and will be our life-blood. As we grow, these qualities can be directed toward ever-expanding



Ledyard Stebbins in 1963. Photograph courtesy of the Stebbins family.

goals and prospects of conservation. We should welcome visitors, nurture alliances, and do everything possible to promote our role as a relatively small but effective unit in a worldwide federation of societies dedicated to the cause of saving the beauties of plant life from destruction.”

Over the years Ledyard generously contributed numerous articles to *Fremontia*. Some favorites include: “A California Botanist in Chile” (October 1974); “Ecological Islands and Vernal Pools,” in a special issue about vernal pools (April 1976); “The Northern Sierra Nevada” in a special issue on serpentine (April 1984); “Rare Plants in California’s National Forests: Their Scientific Value and Conservation” in a special issue on forests (January 1986); and with Mark Skinner, “Why Is California’s Flora So Rich?” (October 1979). His last published article in *Fremontia* was “San Francisco Bay Excursions” (April 1998), in which he provided interesting insights into several plant excursions around the Bay Area.

Recollections of Ledyard

CNPS associations with Ledyard have all occurred in the last third of his life. Many of us remember remarkable field trips, some arduous that lasted beyond nightfall and seemed to go only uphill, some in more recent years that were more limited in scope but were highly inspirational. A trip in the field with Ledyard always led to close scrutiny of trees and plants as he sought clues to speciation. Conjectures and hypotheses were the themes of the day, making one and all better observers along the way. Was the variation of cone size between two trees meaningful? Why was a species dioecious, what benefit? What did a range extension signify? *Pickeringia* has been in chaparral for 30 million years and hasn’t changed or speciated. It rarely sets seed. Has it lost its pollinator? And who could forget the “sloppy phalarop-e” (rhymes) as a potential agent for bringing *Fragaria chiloensis* to California? Ledyard’s observations were endless and fascinating. The University Natural Reserve in Cold Canyon near Lake Berryessa was named for Ledyard, and for years he led frequent trips there, even after a terrible fall that severely

injured his back. He loved the canyon and always included it in his northern California cross-section field trips. The last of these trips was in 1994, co-led with Fred Hrusa who did the legwork for Ledyard. When walking became too difficult for field trips, Ledyard gave lectures and spoke to several chapters over the next couple of years. When that became difficult because of his decreasing mobility and failing eyesight, he continued to write and contributed articles to various journals. Ledyard was not only a great teacher and scientist, he was fun. Who could forget his joy in the Australian patois, Strine, or his tales of past adventures? Who could forget his 80th birthday party where he told stories to amuse and then led group singing of his rewritten versions of familiar tunes? He loved a party and made it a point right up to his 93rd year to attend the annual CNPS banquet to cheer on the Society.

For many CNPS members Wright’s Lake in the Sierra Nevada will remain a source of nostalgic memories. Ledyard led many walks up the trails behind the lake where his stepson maintains a cabin. He knew every trail, every plant, and the variations different seasons would bring. He was the proud co-author of *A Flora of Wright’s Lake* with Judy Hutchinson. Evenings would bring great conversations, stories, and often song, many of his own creation.

Ledyard’s ashes have been scattered in Cold Canyon, a place he loved and was proud to have bear his name. A fitting resting-place for a giant in our midst. CNPS has been fortunate indeed to have been able to count G. Ledyard Stebbins, Jr. as one of its own.

*Oh, chromosomes, my chromosomes
We’ve learned to know you better
We know the code of DNA.
We can recite each letter.
Our thymine must have adenine.
Our guanine must have cytosine.
Its messenger pure RNA
Puts our proteins together.*

(Words by G. Ledyard Stebbins;
to the tune of “O Tannenbaum”)

Phyllis M. Faber, 212 Del Casa Drive, Mill Valley, CA 94941

NOTES AND COMMENTS

Letters to the Editor

Dear Editor:

The Orange County Chapter of the California Native Plant Society wishes to acknowledge the vision, dedication, hard work, and yes, even the single-mindedness Phyllis Faber has

brought to Publications. She has guided, pushed, and carried it from a producer of a few pamphlets to the growing and respected publisher it is today.

We are so fortunate to have had Phyllis weathering the various storms, staying at that post, searching out suitable authors (and, perhaps, tactfully discouraging the less talented),

while giving countless telephone calls prompting, pleading, imploring. It is obvious that she has given more than time and energy (although those are precious enough), but has also lent intelligence and good taste to this successful venture.

On behalf of the entire membership of the Orange County Chapter of the California Native Plant Society, this Board wishes to thank Phyllis Faber for prompting, producing, and promoting quality publications, well suited to the mission of CNPS.

Daniel Songster, President
Celia Kutcher, Vice-President
Elizabeth Songster, Treasurer
Sarah Jayne, Education
Ron Huwe, Publications
Sandra Huwe, Secretary

Dear Editor:

What an incredible run Phyllis Faber has had as editor of *Fremontia*!

The consistent quality of the publication over these many years, up to and including the most recent issue, is extraordinary. Selection of material to appeal to an audience with diverse interests, concentration on matters of real concern (the oak issue was a standout), wonderful photography resulting in a publication that the reader does not want to put down.

Seventeen years of quality will be a hard act to follow. Phyllis Faber, many thanks.

Sincerely,

A. Crawford Cooley

Announcement

The University of California Press is pleased to announce the appointment of Phyllis Faber, past CNPS publications V.P., and Robert Ornduff, professor emeritus, U.C. Berkeley, as general editors of the California Natural History Series. Phyllis and Bob have both worked for many years to produce *Fremontia* and to develop the CNPS book publications and are now looking forward to expanding the U.C. Press series. The series will include three types of books: short introductions to all aspects of California natural history for the lay public, natural history field guides, and more comprehensive books such as the *Natural History of California* by Schoenherr. Potential authors with ideas or manuscripts should contact Bob (510-642-2089) or Phyllis (415-388-6002).

Doris Kretschmer
Executive Editor, University of California Press

In Memoriam—Gary Matson 1949-1999

It is with deep sorrow that we note the tragic death of Gary Matson. On July 1, 1999, Gary and his partner, Winfield Mowder, were murdered in an apparent hate crime. They are survived by their daughter Clea Lily Howe Matson, co-parent Marcia Howe, their fathers, siblings, and many, many dear friends.

Gary was a charter member of the Shasta Chapter, joining CNPS in 1983. He was a visionary whose energy and enthusiasm were inspired by a deep knowledge and love of nature, especially the plant kingdom. He was an insightful observer of the world

around him, and he continually questioned and tested to understand its natural processes and interrelationships. Long before it was popular to do so, Gary enthusiastically promoted the horticultural use of native plants and sought protection of rare plants and their habitats as a teacher and a community activist.

Gary was born in Madera, California, in 1949, and moved to the Redding area in 1960. Early in life Gary exhibited a love of nature. His father says that even as a child he “could make plants perform for him.” After graduating from Shasta High School, he attended U.C. Santa Cruz, graduating in 1971 with a BA in biology. In 1984 he received an MA in environmental horticulture from U.C. Davis.

Few people have had a more progressive vision for the Redding community. In the late 1970s Gary and his wife Marcia Howe helped to organize People of Progress (POP), a local nonprofit organization that began as a food buyers’ club and evolved into a co-op and a service organization to aid low-income community members. The couple initiated the first Certified Organic Growers Market, growing a variety of organic produce for the market and becoming one of the mainstays of Shasta Growers. They also grew hot-weather produce such as eggplants, bell peppers, melons, and okra to ship to the Arcata Co-op on the cool north coast. During this time, Gary taught horticulture classes at Shasta College and began learning to grow more native plants. He spent many days hiking and exploring the foothills and mountains, and he knew just where to find exemplary populations of his favorite flowers, shrubs, and trees. When developers brought bulldozers to scrape away the foothill plants that Gary loved, he was there to collect them, grow them, and always to share them with friends. In this way he saved thousands of brodiaeas, firecracker flowers (the Shasta Chapter flower), shooting stars, and other beautiful native plants from destruction.

One of Redding’s major attractions today is the Redding Museum/Caldwell Park complex and the Carter House Children’s Science Museum. Few people realize that this was another of Gary’s contributions to the community. He began this project after visiting the Exploratorium in San Francisco and recognizing that Redding children could benefit from a museum that taught hands-on science. He interested a small group of people who began to help him put it together. Eventually the little museum found a home in the former art and history museum and began its development into what is today a major community institution. Carter House is a treasure of natural science education, not only for children, but for anyone with a love of nature.

Another of POP’s projects that Gary was involved in while director of the organization was the community garden. He sought to get the garden moved to what he knew was the “best soil in town,” a beautiful area on the Sacramento River, right in the middle of Redding, owned by the city but leased for grazing a few cows. Not everyone liked the idea, but Gary and his supporters managed to gain control of part of this area for use as a community garden. Today the garden is a local landmark and has helped many people to provide fresh food for their families.

On his return to Redding after attending U.C. Davis, Gary and his partner Winfield Mowder established Matson Horticulture and started a nursery in Redding that specialized in native and drought-tolerant plants. In 1984 Gary began to plant the seeds of another contribution to the Redding area: the Redding Arboretum. Representing the Shasta Chapter of CNPS,

he approached the City of Redding and obtained authorization to develop an arboretum on ten acres of city-owned land at Turtle Bay. The arboretum became a reality in 1991 under the sponsorship of the Shasta Natural Science Association/Carter House Science Museum.

After many years of volunteer labor, Gary was employed as the first horticulturist at this beautiful riverside arboretum at Turtle Bay. By 1997 he had moved on to create Plantsogo.com, an online nursery specializing in plants for hot climates.

Throughout his life Gary was a teacher. Besides his popular classes at Shasta College, he led hundreds of field trips and nature walks. As a volunteer and as a staff member at the arboretum, he taught numerous plant classes in identification, uses of plants, and native plant culture. Just being with Gary was a learning experience. Working alongside arboretum volunteers, he would teach them the nuances of plant propagation. Going on a casual hike with him was an adventure; inevitably one would learn something new. He was a teacher at all levels. For many years he made time to roam the Trinity Alps with a noted Dutch botanist. He maintained correspondence with plant specialists all over the world, and his expertise was sought by many horticultural and botanical professionals in the region. One of his unfinished projects was a field guide to the native flora of the area. The wealth of knowledge that Gary brought to our chapter plant sales is irreplaceable.

His family and friends now find themselves often saying "Gary would know." And it is true; Gary's mind was wide-ranging; he read technical books and periodicals voraciously. But in addition to his vision and sharp mind, he had a warm-hearted, humorous, and down-to-earth quality that made him a natural teacher. He had a gift for making the love of plants accessible to all. Gary's community activities and accomplishments are immense. His roots ran deep in the Redding area, and his actions have made this a better place to live. Gary, we will forever miss you and your boundless enthusiasm, your vision, your community spirit, and your friendship.

Marcia Howe, Don Burk, and Vivian Parker
CNPS Shasta Chapter, Redding

[Editor's note: The Gary Matson virtual memorial garden can be visited at <http://www.garysgarden.com>.]

BOOKS RECEIVED

Natural History of the Islands of California by A. Schoenherr, R. Feldmeth, and M. Emerson. 1999. 491 pages with 51 color photos, maps and b/w illustrations. A comprehensive account of the plants, animals, and early inhabitants found on the islands of California ranging from the islands in San Francisco Bay to the Farallon Islands just outside the Bay, to Año Nuevo off the Monterey Coast, down to the Channel Islands off the Santa Barbara Coast and to Santa Catalina to the south. For island explorers it's a must. Available from the University of California Press, 2120 Berkeley Way, Berkeley, CA 94720. \$45 hardcover.

The California Landscape Garden: Ecology, Culture, and Design by M. Francis and A. Reimann. 1999. 234 pages with color and b/w illustrations. This book presents a thoughtful

discussion of the relationship between gardens and social and ecological convictions. It directs attention to the development of environmentally sound gardening. It connects the unique landscape of California to our own backyards. This book is informative, not preachy, with all manner of tidbits such as the appropriate sizes for bird houses, gardens for children, and plants for butterfly gardens. It is beautifully produced and interesting to read. Available from the University of California Press, 2120 Berkeley Way, Berkeley, CA 94720. \$29.95 softcover, \$50 hardcover.

Atlas of Oregon Carex, Occasional Paper No. 1 by B. Wilson, R. Brainerd, M. Huso, K. Kuykendall, D. Lytjen, B. Newhouse, N. Otting, S. Sundberg, and P. Zika. 1999. 29 pages. This is a project of the Oregon Native Plant Society, the culmination of seven years of sedging in Oregon. It includes 128 location maps for each *Carex* taxon in the state, some fun facts about sedges, a history of the project, Oregon geography maps, and a table of synonymy. Available from Keli Kuykendall, 4550 S. W. Nash Ave, Corvallis, OR 97333-9301. \$5 (check payable to NPSO).

Picturing California's Other Landscape: The Great Central Valley edited by Heath Schenker. 1999. 200 pages, color. This stunning book is a collaborative project between the editor, a professor at U.C. Davis, and the Haggin Museum in Stockton. It chronicles an exhibition of paintings, photographs, commercial art, and maps to demonstrate and explain the many ways California's Great Central Valley has been depicted over the past 150 years. The exhibit included works by Alfred Bierstadt, William Keith, and Julian Wallbridge Rix, and on to Wayne Thiebaud. It is a treasure for those interested in the Great Valley. Available from the Haggin Museum in Stockton or from Heyday Books, Box 9145, Berkeley, CA 94709. Heyday@heydaybooks.com.

BOOK REVIEWS

The Redwood Forest by Reed F. Noss, editor. 1999. Island Press, Covelo, CA. xxvii, 339 pp., ill., \$30 softcover, \$60 hardcover.

The Redwood Forest is a welcome addition to the literature on coast redwoods. Commissioned by the Save the Redwoods League and designed for use by professionals and amateurs alike, this book offers the first comprehensive treatment of redwoods across their natural range. Thirty-two contributing authors bring a wide array of expertise to this effort, incorporating many new research findings that are not otherwise readily available. This alone is enough to recommend the book. Editor Reed Noss describes the book as a "case book on the redwood ecosystem" and that is an apt description, although there are some gaps. Nine chapters provide coverage of such redwood-related topics as paleoecology, human history, flora, fauna, forest ecology, stream ecology, conservation planning, and forest management. Since no one reviewer could do a comprehensive review of a work of this scope, I will focus on the last four topics that encompass my own areas of interest and expertise.

This book presents a plethora of redwood facts and figures and the Literature Cited section is a wonderful resource for professionals. Regrettably, the index is too incomplete to

allow quick retrieval of information on many topics. For example there are no entries for “erosion” or “snags” even though these are discussed in the book. A bigger problem is the meager coverage given to the southern redwood region (the East Bay, Santa Cruz Mountains, and the Monterey Coast). This is a significant oversight since the Santa Cruz Mountain region alone contains over 250,000 acres of redwood forest, contains redwoods of a size and stature nearly equal to that found in the Humboldt/Del Norte County area, and supports a commercially viable timber harvest industry. It is a major part of the redwood region and deserves more attention.

The flora and fauna of the redwood region varies considerably from north to south, with the San Francisco Bay acting as a distributional barrier for many species. Unfortunately, this is not elaborated in the book, which uses examples from the northern and central regions almost entirely. For instance, the book uses a plant checklist from Van Damme State Park as an example of a redwood flora. Of course, this is not representative of the redwood range. It would have helped to include a plant checklist from Big Basin Redwoods State Park in the southern part of the region for comparative purposes. Similarly, breeding bird census data was included only from Mendocino County despite that fact that more extensive data are available from redwood forests in Santa Cruz County.

Considering the large number of redwood-related topics covered by the book, it is not surprising that the depth of coverage is highly variable. The authors provide a fairly thorough description of upper tree architecture and the community of epiphytes and small creatures that live in the canopy of old-growth trees. This fascinating area of research is yielding previously undescribed species or subspecies of arthropods and other organisms. Life found in tree canopies is one of two areas of “hidden biodiversity” associated with old-growth redwood forests. The other area of “hidden biodiversity,” life found in the soil, receives less attention here, even though it is more important for ecosystem functioning. For example, only one page is devoted to mycorrhizal fungi, a crucial redwood symbiont. Relevant research findings from Michael Amaranthus, Elaine Ingham, or David Perry should have been included.

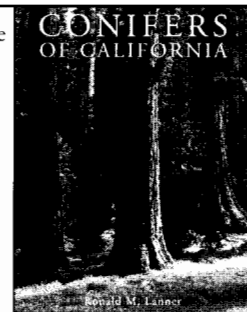
Likewise, the book would have benefited from some discussion of soil physical problems such as erosion from unpaved logging roads and compaction associated with camping and picnicking sites.

Other aspects of soil science were also discussed too briefly, including descriptions of representative soils associated with redwood forests and the important relationship between soil water-holding characteristics and the distribution of redwoods across the landscape. Since no efforts at forest management can be successful without properly managing the soils, it is unfortunate that the reader hasn’t been provided with more guidance in this area.

The book gives a brief account of efforts to thin second-growth stands as a way as to promote old-growth forest conditions. The authors rightly point out that the only old-growth conditions created were in the understory. A more thorough discussion would have explained why thinning is not likely to produce old-growth habitat features in the canopy layer, such as the natural “platforms” needed by Marbled Murrelets for nesting. Important habitat features such as large diameter branches, hollow trunks, broken or deformed branches,

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and damaged tops develop only with age and/or injury. Thinning can produce rapidly growing, large second-growth trees, but it cannot produce trees with such important old-growth attributes. Although the role of dead and dying trees is discussed in the book, more elaboration would have been helpful.

The chapter on aquatic ecosystems is excellent, providing a thorough review of stream ecology in the redwood region. Conservation groups doing stream monitoring or watershed rehabilitation projects will find much useful information here. The authors document the crucial roles played by in-stream large redwood logs and streamside uncut forest buffer zones with citations from numerous scientific studies. The extensive damage to both those resources by timber harvesting is described, along with the inadequacy of the existing California Forest Practice rules.

Ironically, in the Managing Redwoods chapter the book presents the Big Creek Lumber Company as a model of an ecologically-sensitive logging operation, despite Big Creek’s persistent and vigorous opposition to new rules that would give better protection to riparian areas and streams. When Santa Cruz County proposed a 50-foot wide no-cut buffer zone along perennial streams, Big Creek Lumber sued the County. In the past, Big Creek Lumber has filed lawsuits against San Mateo County and against the Sempervirens Fund, the local redwood land conservancy. The book’s statement that “Big Creek works with the County Board of Supervisors to reduce the effects of urbanization and make logging rules more accommodating to the people of the community” is not only questionable but probably offensive to local redwood conservation organizations such as the Sierra Club Forestry Task Force and Citizens for Responsible Forest Management who have been working for many years to minimize logging/residential conflicts and protect functioning redwood ecosystems in the Santa Cruz Mountains. While it is appropriate to commend Big Creek for using certified forestry practices on its own land, its stubborn opposition to needed changes in the California Forest Practices Act deserves close public scrutiny.

The chapter entitled Conservation Planning in the Redwood Region by Reed Noss and others is a “must read” for all employees or citizen directors of land conservancies, land trusts, and other conservation organizations. In short, this chapter offers a systematic approach for selecting and prioritizing redwood land for public acquisition based on biological values and ecological functionality and provides a

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model with ten assessment criteria. Dr. Noss has a worldwide reputation for his expertise on conservation planning and this chapter reflects that expertise.

Despite some shortcomings, publication of this first redwood ecosystem casebook is a great achievement. It is easy to find omissions in a work with such a grand scope, but those in no way detract from the overall value of this volume. Everyone who loves redwoods owes a debt of gratitude to Save the Redwoods League for commissioning the effort, to the authors for undertaking such a challenging task, and to Island Press for publishing the finished product. I hope that this book will be successful—in fact, so successful that there will be demand for a revised edition in five or six years. At that time new data could be included, and the shortcomings I have commented on could be corrected. In the meantime, CNPS members can use this edition to expand their knowledge of redwood ecosystems. Every researcher, naturalist, land manager, and conservationist throughout the Redwood Region should certainly have a copy of this book in his or her library.

Steve Singer, consulting biologist, Santa Cruz, CA

A Voyage to California, the Sandwich Islands, and Around the World in the Years 1826-1829 by Auguste Duhaut-Cilly, edited and translated by August Frugé and Neal Harlow. 1999. 288 pages, illustrated. Available from the University of California Press, 2120 Berkeley Way, Berkeley, CA 94720. \$29.95 hardcover.

In the temple of CNPS Olympians, August Frugé (along with his wife Susan, a CNPS co-founder), ranks among the highest in significant contributions. A CNPS fellow and former president, Frugé also served thirty-five years as director of the University of California Press, which he built into one of the world's great scholarly publishing operations (with special emphasis on the biological sciences). He continues to be a great scholar—among his latest endeavors is this translation of a California history classic, *A Voyage to California, the Sandwich Islands, and Around the World, 1826-1829*. Neal Harlow, whose *Maps of San Francisco Bay* (1950), *Maps and Surveys of the Pueblo Lands of Los Angeles* (1976), and *Maps of the Pueblo Lands of San Diego* (1987) are distinguished examples of scholarship and fine printing, also is the author of *California Conquered: War and Peace on the Pacific*, published by UC Press in 1982.

If one were to compile a list of the 100 most important books on California history, this new publication by Frugé and Harlow would be close to the top of the list. It is certainly one of the best accounts ever published on the California mission system as it existed at the peak of its strength and glory, before

Mexico secularized the missions, sold off the lands, and abandoned the Native Americans who had served as the labor force in the missions for over 100 years.

Duhaut-Cilly was an acute and eloquent observer of nature. A few examples: "But to burn forests simply because there is no one there to oppose it, that is worse than vandalism; it is to scorn divine Providence." Or: "When this bewitching little creature [hummingbird] lights for a moment on a dry branch, you might think it a ruby sphere, or, rather, a little ball of red hot iron, sending our rays of sparks as in a dream from The Thousand and One Nights." Or even: "As we advanced, the mountains on our right, which began at the entrance to San Francisco Bay and were at first barren and sandy, became covered to their summits with forests of conifers. Soon we came to an immense grove of splendid oaks mixed with several other mature trees. A sward of tender green is spread everywhere like a carpet, and the traveler regrets that such a beautiful place is inhabited only by coyotes and bears."

As captain of the trading ship, *Heros*, Duhaut-Cilly wrote vividly about California life, particularly around the missions, which he systematically visits and describes, each and every one. No better description of mission life and the pueblos or towns surrounding the missions has ever been published. San Francisco in 1827, Mission San Jose in Alameda County, and the Russians at Fort Ross are typical topics. Perhaps best of all are Duhaut-Cilly's de Tocquevillesque observations of a budding nation striving to be "free"—a complex ideal to one who had experienced and survived the French Revolution. "Freedom! Freedom!" Duhaut-Cilly writes. "For the past half a century we do nothing but repeat this word. For as one person says he is free, ten others cry out that they are oppressed." At one point, when Duhaut-Cilly is entrusted to transport Native Americans from one mission to another he writes that freedom and injustice have been torn away from the "unhappy slave," but that for the six weeks the Indians were on his ship, the *Heros*, they were on the "soil of France, where there is no slavery." Later, when his captive Indians escape, Duhaut-Cilly does nothing to prevent it or to apprehend them. Instead, he wishes them well in their struggle to escape oppression.

This is an absolutely fascinating book, elegantly translated, beautifully illustrated, sometimes with Duhaut-Cilly's own drawings. He was an educated man, a fine writer and artist, and truly a great adventurer. Not a single life had been lost on his ship by the time he had completed his voyage around the world. But his greatest achievement is this memorable account he left for us. It is a stirring "read." Don't miss it.

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COMMON RIPARIAN Plants of California by P. Faber & R. Holland. 1988. *Common Wetland Plants of Coastal California* by P. Faber. 1982. Available from Pickleweed Press, 212 Del Casa, Mill Valley, CA 94941. \$18 each plus 7.25% tax and \$3 shipping.

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California Native Plant Society

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MATERIALS FOR PUBLICATION

Members and others are invited to submit material for publication in *Fremontia*. Two copies of manuscripts, double-spaced, (plus an IBM-compatible disc in Microsoft Word or ASCII file) should be submitted to *Fremontia* with name, address, phone number, an identification line for Notes on Contributors, and black-and-white photographs, preferably 8x10 or accompanied by negatives, or original 35mm color slides. Botanical nomenclature should conform to *The Jepson Manual* (1993), with common name followed by botanical name.

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NOTES ON CONTRIBUTORS

Phyllis Faber is a CNPS Fellow, and editor of *Fremontia* for sixteen years. During her six years' tenure as VP of Publications Phyllis published nineteen books for CNPS.

Tom Griggs is now Adjunct Professor at California State University, Chico where he is developing an ecological restoration field studies program.

Bob Holland practices geobotanical phenomonology from his ranch in the oak woodlands in Placer County.

Marcia Howe is Gary Matson's former mate, mother of their daughter, and coparent with Gary's life partner, the late Winfield Mowder. She is a planning and fund-raising consultant in Davis, California.

Kate Mawdsley has been volunteer coordinator of the docent program at Jepson Prairie since 1992. She was formerly a librarian at UC Davis.

Joe Medeiros teaches at Sierra College in Rocklin. His articles have appeared occasionally in *Fremontia*, and he served as vice-president of CNPS from 1979-1982.

Vivian Parker is conservation chair for the Shasta Chapter. She is a biologist, and resource protection associate with the California Indian Basketweavers Association.

Rich Reiner supervises research, restoration, and conservation planning for the Nature Conservancy's Lassen Foothills Project.

Diane Renshaw is an ecologist with a private consulting practice. She has been guest editor of *Fremontia* several times in the past.

Ramona Swenson provides oversight for the restoration and research of riparian systems and vernal pools at the Nature Conservancy's Cosumnes River Project.

Joe Silveira is a wildlife biologist at Sacramento NWR in Willows, where he practices wetland and riparian habitat restoration and management. He has a particular interest in vernal pool ecosystems.

Steve Singer does research in the old-growth redwood forests of the Santa Cruz Mountains and is the Coordinator for the Santa Cruz Mountains Bioregional Council.

Tim Vendlinski is Chief of the Wetlands Regulatory Office for USEPA's Region IX. His article does not necessarily reflect the official positions of USEPA.

EDITORIAL

In October 1976, a special issue of *Fremontia* brought California's vernal pools to the attention of its readership, while fairly screaming with alarm at their rapidly increasing rate of destruction. This special issue revisits that topic, describing the current status of many of the major vernal pool landscapes that have appeared in the pages of *Fremontia* over the past 23 years. Tom Griggs had the vision for this current issue, and encouraged most of the authors to contribute. Tom, Bob Holland, and Joe Medeiros all wrote articles for that early issue, and for this one as well. They are joined by other authors equally passionate about vernal pools.

Since 1976 much has happened to protect vernal pools, and we have learned a great deal. These articles tell of the acquisitions, preservation strategies, and management challenges, and recount the glories of the pools themselves. Phyllis Faber, who has stepped down after 18 years at the helm of *Fremontia*, has written a tribute to some of the heroes of this vernal pool saga, and in return many of Phyllis' associates have written a tribute to her.

This double issue combines the October 1999 and January 2000 issues, and is numbered accordingly.

Diane L. Renshaw, Acting Editor



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