DEDICATED TO THE PRESERVATION OF THE CALIFORNIA NATIVE FLORA

The California Native Plant Society



Volume 24 No. 5 September/October 2004

NEXT CHAPTER BOARD MEETING

The next Chapter board meeting will be at 7:00 PM on Wednesday, September 22 at the home of Sally Manning, 401 E. Yaney St., Bishop. Call Sally for directions, 873-3790. All are welcome to attend.

PRESIDENT'S MESSAGE

Introducing the Bristlecone Chapter Introductory Newsletter! With new members in mind, the Bristlecone Board has published a special newsletter with chapter history, a description of chapter programs and projects and suggestions for ways to get involved. We hope it will enable new members to more quickly become active in our chapter and find those projects or programs that might especially interest you. We think old members will enjoy reading about our chapter's rich history and might learn something new about our activities. We suggest that you pass the newsletter on to a new prospective member and help our membership grow. Thanks to our Board Members for writing the newsletter and especially Sally Manning, Daniel Pritchett and Anne Halford for creating, compiling and producing it. We will be eager to hear what you think about it!

September is Plant Sale Month. Don't miss the Plant Sale on Saturday, September 25th and the Plant Sale Preview on Tuesday, September 21st. (See the article inside this newsletter.) Thanks to Karen Ferrell Ingram for hours and hours collecting seeds and growing them for our gardens. See you at the Plant Sale!

...... Sherryl Taylor

UPCOMING BRISTLECONE CHAPTER ACTIVITIES – FALL 2004

Native Plant Sale News

The big selection offered at this year's plant sale on September 25 will give gardeners the chance to rejuvenate their gardens with some tried and true species while spicing up the place with some new chlorophyll. We will be offering about 75 different species at the 8th annual native plant sale with selections for many different habitats, including sagebrush scrub, pinyon juniper woodlands, meadows and wetlands, and mountain pine forests. Special emphasis is given to plants that are important to wildlife and pollinators.

At the Preview we will view slides of the plants offered at the sale and discuss native plant gardening tips and guidelines. Gardeners are encouraged to come with their questions and gardening experiences. Try your luck in the free plant raffle and enjoy the refreshments.

Preview: Tuesday, September 21, 7:00 PM at White Mountain Research Station, 3000 East Line Street.

Plant Sale: Saturday, September 25, 9:00 AM at White Mountain Research Station, 3000 East Line Street. Don't be late!

Contact Karen at <u>ingram@telis.org</u> or 387-2913 for a plant list or more information.

New Plant Species at the 8th Annual Native Plant Sale

Achnatherum nevadense - Nevada needlegrass
Ageratina occidentalis - Western eupatorium
Arnica mollis - Soft arnica
Artemisia arbuscula - Low sagebrush
Ceanothus leucodermis - Chaparral whitethorn
Ephedra nevadensis - Desert ephedra
Ephedra viridis - Green ephedra
Eriogonum caespitosum - Matted buckwheat
Eriogonum latens - Inyo buckwheat

Eriophyllum confertiflora - Wooly sunflower
Helianthus nuttallii - Nuttall sunflower
Holodiscus discolor - Ocean spray
Keckiella breviflora - Bush beardtongue
Mirabilis allipes - Rose four o'clock
Penstemon heterodoxus - Sierra penstemon
Senecio flaccidus - Mono ragwort
Solidago spectabilis - Basin goldenrod
Stanleya elata - Prince's plume

FIELD TRIPS

-Please note changes in schedule from last newsletter-

September 11, Saturday, Blackrock. Leader: Daniel Pritchett. Meet at the Blackrock Fish Hatchery raceway parking lot at 8:30 AM. Take the Owens Valley challenge: learn about native alkali meadow vegetation south of Blackrock; learn what trout have to do with dying meadows, look at hydrographs and monitoring results; learn about relationships between meadows and water table depth; learn about exempt wells and the Inyo-LA Long Term Water Agreement and EIR. 4x4 not required but high clearance will help. Temperatures may be high. Bring water, snacks, hat, sunscreen. Trip will end by noon. Contact Daniel at 873-8943 or skypilots@telis.org.

September 21, Tuesday, Plant Sale Preview. 7PM at White Mountain Research Station at 3000 East Line St. in Bishop. Slide show of plants that will be available at the plant sale along with information about growing them. Free plant raffle and refreshments will be offered. Contact Karen at 387-2913 or at ingram@telis.org.

September 25, Saturday, 8th Annual Native Plant Sale 9AM at White Mountain Research Station on East Line St. in Bishop. Native wildflowers, perennials, shrubs, and grasses will be ready to plant in the garden. Plant lists and more info will be available in mid-summer. Contact Karen at 387-2913 or at ingram@telis.org.

October 2, Saturday, Buckwheats of Red Rock Canyon, leader: Scott Hetzler. We'll check out the various annual and perennial buckwheats to be found on the northern tablelands and the beautiful rock formations in Red Rock Canyon. Meet at the Y (intersection of HWY 395 and HWY 6) in Bishop at 9:00AM. Bring a high-clearance vehicle and lunch. Call Scott at 873-3892 for more information.

October 16, Saturday. Mary DeDecker Native Plant Garden planting and cleaning. Leader: Jerry Zatorski. Fall is the best time to plant native plants, and we will be enhancing the Mary DeDecker Garden with some new plants. We will be planting a few new areas and filling in some existing areas. We will also install rabbitproof cages around the new plantings to help them escape the many hungry bunnies that also live there. There will also be some general cleaning to do. We'll meet at the garden at the Eastern California Museum in Independence at 9:00 AM, bring garden gloves, trowels, hand pruners, fluids and snacks, and wear sturdy work clothes. For more information contact Jerry Zatorski at 872-3818 or jerryzat@yahoo.com.

November 7, Sunday. Bristlecone Chapter Adopt-a-Highway Cleanup. Leader: Scott Hetzler. Please join the intrepid "trash busters" for a half-day trip to keep our Scenic Byway scenic. Meet at 9:00 am at the Round Valley/Paradise turn-off off of U.S. Hwy. 395.

Field Trip Policies

For all field trips, be sure to bring plenty of water, good walking shoes or boots, hat, and appropriate clothing for hot sun or inclement weather. Also useful would be a hand lens, binoculars, camera, floras, and plant lists. Trips will leave at the time listed, so please arrive at the meeting site a few minutes early. Carpooling is encouraged. Everyone is welcome, but please no pets unless otherwise indicated. Do not hesitate to contact the trip leader for more details about each trip. If you would like to lead a field trip please contact Karen Ferrell-Ingram at 387-2913 or ingram@telis.org.

Mary DeDecker Botanical Grant Program

The Bristlecone Chapter is requesting applications for its small grants program in memory of renowned local botanist, Mary DeDecker. This program is a fitting way to remember Mary's many contributions to the people and plants of the Eastern Sierra. The program will award up to two grants of not more than \$500 each.

The purpose of these grants is to facilitate research and projects that increase the understanding and appreciation of our region's native flora and ecosystems. There are a wide range of appropriate possible subjects for funding, from basic taxonomic or ecological research to a school garden featuring native plants and their pollinators. The only requirement is that the project be relevant to the native plants of the northern Mojave Desert, Sierra Nevada, and Great Basin portions of eastern California.

The deadline for submission of grant proposals is December 10, 2004. To receive guidelines for the grant application or for more information, contact Karen Ferrell-Ingram at (760) 387-2913 or at ingram@telis.org.

CONSERVATION Bad Day for Fish Slough

In the July Issue of the newsletter, I wrote about the potential threat to the Fish Slough endemic Astragalus lentiginosus var. piscinensis (Fish Slough Milkvetch) posed by the proposed expansion of the Desert Aggregates gravel quarry at the mouth of Fish Slough. On July 28, 2004, the threat became a reality as the Inyo County Planning Commission unanimously approved the EIR for the project.

The Bristlecone chapter had identified deficiencies in the Draft EIR and the deficiencies were not remedied in the final EIR. One notable deficiency is that the EIR didn't acknowledge the

destruction of proposed critical habitat for the Fish Slough Milkvetch as a potentially significant impact! Rather than analyzing project impacts to the proposed critical habitat, the EIR, instead, attacked the critical habitat proposal itself!

The EIR also determined that groundwater pumping for the gravel pit in conjunction with DWP's ongoing pumping will not create cumulatively significant impacts. This is because the Inyo-LA Long Term Water Agreement (LTWA) acts "...to preserve and enhance native plant communities and habitat in the area." and that "no effects to Alkali Meadows are expected to occur..." with the LTWA in effect. If you believe this, please contact me about a bridge I'd like to sell you...

And we can all sleep better knowing that the project's highly questionable revegetation plan is stated to be feasible "based on revegetation efforts in the Valley by the Inyo County Water Department (ICWD) and DWP." Not a single example of a successful revegetation effort on a comparable scale by either ICWD or DWP is cited, but certainly this was just an oversight!

Even with these (and other) deficiencies, the EIR still couldn't avoid finding that the destruction of over 100 acres of rare Alkali Meadow vegetation was a significant and unmitigatable impact. When Inyo County wants a project to happen, however, significant unmitigatable impacts don't stand in the way.

Though the project is inconsistent with policy MER 1-1 of the county General Plan, (which supports resource extraction "where it would not significantly impact sensitive resources as defined by CEQA...") the Planning Department simply declared that the project is consistent with the General Plan.

Because a project with a significant unmitigatable impact could not otherwise be approved, the Planning Department wrote a "Statement of overriding considerations," (SOC) which states that the project's economic benefit (i.e. low-cost gravel for CalTrans projects) outweighs the project's destruction of rare alkali meadow vegetation. That the implications of this SOC might extend far beyond this project and help undermine the LTWA had apparently not occurred to the Planning Department.

Now that Inyo County has agreed to sacrifice rare Alkali Meadow vegetation to secure lowpriced gravel, how will the County be able to defend Alkali Meadow vegetation elsewhere in the valley when DWP wants to sacrifice it to secure low-priced water for its rate-payers? This question is not academic - Inyo County supervisors voted this summer to authorize LTWA Dispute Resolution proceedings over DWP's excessive groundwater pumping. Impacts to rare Alkali Meadow vegetation will be central to the case. When I raised this issue at the July 28th meeting, the chairman of the Planning Commission interrupted me and stated that the commission was not interested in the LTWA.

......Daniel Pritchett, Conservation Chair

Who's in a Name

Twinberry Honeysuckle, *Lonicera involucrata* (Richardson) Banks (Caprifoliaceae)

I first encountered this delicate and lovely native shrub a decade ago, at 9100 feet elevation along Mammoth Creek, near the entrance to the Mammoth Consolidated Mine ghost town. I learned then, from my year-old Jepson Manual, that it grows over much of North America. I did not react at that time to "Banks", the namer. (This plant, which ranges over much of North America, is usually designated var. *involucrata* to distinguish it from a variety of limited range, var. *ledebourii*, which occurs in coastal regions of northern California and southern Oregon)

This little essay started out to be a book review of a biography of Joseph Banks (1743-1820), a botanist of considerable historical interest for botanical science. But then I happened to rediscover the nomenclature connection between Sir Joseph and the Eastern Sierra, in the form of this species of honeysuckle, which indeed was

named by him. I thus decided to switch genres. By the way, the 1987 biography, Joseph Banks: A Life, by Patrick O'Brian, is a remarkably enjoyable read. O'Brian is the brilliant author of the Master and Commander series of 'tall ship' sailing novels set in the time of Banks' life.

Though this essay is about Banks, let it be noted that the genus Lonicera was named for German herbalist Adam Lonitzer (1528-1586), by Linnaeus. Mention will be made below of Richardson (and a few other historical figures). The rest of the scientific name is accounted for by an involucre which expands and reddens in fruit, highlighting the pair of dark purple berries.

Joseph Banks inherited considerable wealth while quite young, his father having died when he was 18. A prodigious income and extensive properties became his when he turned 21. Some young men in those circumstances might have become self-indulgent and profligate, but Joseph, throughout his long life, not only used his fortune in numerous worthy pursuits, but, by good management, actually increased his wealth. And he became a giant in the history of modern botany.

A lifelong passionate interest in botany began at age 14. With his wealth and considerable influence, he became a major player, largely by supporting and fostering the careers of others, in those heady decades of botanical exploration which occurred during the latter half of the 18th and first half of the 19th centuries. Especially with regard to botanical exploration, think: Linnaeus, then Banks, then Everybody Else. Generally, Banks left to others the naming of the great many plants he collected, or whose collection he fostered.

He personally engaged in worldwide exploration in his early adulthood. His greatest achievement, which firmly established his reputation, was the role he so successfully played as chief naturalist aboard the *Endeavour*, on the first round-theworld voyage commanded by Captain James Cook, during the years 1768-1771. You can join the members of that remarkable expedition,

vicariously that is, through the medium of Banks' journal, made available in its entirety by an Australian government website. The Australian connection is understandable, as that voyage resulted in the rediscovery and early mapping of the island continent. Major botanical discoveries came during a stop at what Cook named 'Botany Bay'. (It was Banks who later promoted Botany Bay as a destination for transportation of criminals.) The genus name Banksia was coined by Linnaeus' son for an unusual plant Banks collected there.

Linnaeus himself sang Banks' praises to the highest degree, and regretted that his age would probably prevent him from seeing the publication of Banks' collections. He proclaimed Banks an immortal - having seen more plant species than any earlier botanist. Many of Linnaeus' students were among the first botanical explorers. Daniel Solander, who accompanied Banks on the *Endeavour*, was one of Linnaeus' students. Solander became Banks' right hand man, and continued to serve him for many years after the return of the Endeavour.

David Nelson was a 'gardener' (sort of an apprentice botanist at that time) at Kew when Banks urged Cook to take him along as botanist on Cook's fatal (for Cook) third voyage of discovery. Banks later included him as botanist among the company he assembled for a mission to Tahiti to collect breadfruit seedlings, employing the ship the Bounty, commanded by another of those he helped professionally, William Bligh. Nelson stayed with Bligh after the famous mutiny, and, though he survived the thousands of miles in an open boat, tragically died not long after safe harbor was reached. Banks later secured the governorship of an Australian province for Bligh. (Bligh's story was briefly noted in another of these essays, the one on Layia glandulosa.)

One of Banks' more famous proteges, as least insofar as North American botany goes, was the Scottish botanist Archibald Menzies. He was botanist on two voyages from England, around the Horn, to the shores of western North America, where he made extensive collections. Many California plants bear his name, most famously the Douglas fir, *Pseudotsuga menziesii*, collected in 1792 during the voyage of Captain Vancouver. Menzies' journal and his extensive correspondence with Banks make fascinating historical reading. Thanks to the wonders of the world wide web, they are now, at least in part, easily available for all to read.

With Banks' botanical fame spread far and wide, it was no wonder that he had many supplicants for help in finding botanical employment. He told one of them that botany was the most unprofitable trade he knew, but the brave young fellow was not to be deterred, and Banks found him a job.

Banks' fame and influence garnered him the presidency of the prestigious Royal Society, England's major scientific society, in 1778, a post he held until his death 42 years later. He had been a member since before the voyage of the Endeavor. Membership in the Royal Society was aspired to by all scientists of the time. (This remains so even now; among all the letters following his name, my professor at Cornell was proudest of his FRS, 'Fellow of the Royal Society'.) No saintly dandies, these top luminaries of science; an eyewitness account of one of their meetings, given by a visiting European scientist ca. 1780, has principle members, including Banks who presided, and their guests, sharing a pre-meeting feast featuring multiple courses of variously cooked beef, lamb, and vegetables washed down with numerous rounds of strong beer, wine (everyone present, along with absent notables, had to be individually toasted), champagne, and brandy, capping off the meal with several cups of both tea and coffee. At the following meeting, the visitor noted, "We were all pretty much enlivened but our gaiety was decorous."

Another of Banks' many botanical accomplishments was the establishment of the famous Royal Botanic Gardens at Kew, near London. This was accomplished in partnership with his friend King George III - yes, one and the

same as the nemesis of the embryonic USA. The King had his good and bad points, and times, like everybody else. During bad times - sometimes a result of periodic mental health lapses - he even turned the genial Banks off. It was during good times that he and Banks planned and developed the national botanical treasury of dried and living specimens, garnered from explorations all over the world.

Banks was a supporter and mentor of international science, thoroughly apolitical in times of European upheaval. He was a friend of Ben Franklin before and after the Revolutionary War, and of French scientists during the Napoleonic Wars. Franklin was in England for several years prior to the Revolutionary War, and one day, ca. 1773, he (nearly 70) and Banks (about 30), accompanied by Solander, got together to carry out a field experiment to test one of Franklin's theories. Franklin had been elected to membership in the Royal Society in 1756, in recognition of his experiments on electricity. Later, when peace had been established between England and the US. Franklin, still in France, reported to Banks on the first hot-air balloon flights. In one of his replies, Banks apologized for "the illiberal treatment towards you, with which I fear this country may too justly be accused." Franklin had instructed the US government, during the Revolutionary War, not to interfere with the scientific voyages of Captain Cook, a gesture for which Franklin was honored, in 1784, by the English; had he not left England in 1774, to evade an arrest warrant, the same English probably would have hanged him then.

A year prior to leaving with Cook aboard the *Endeavour*, Banks sailed to Labrador and Newfoundland, where he did his first serious collecting on foreign shores. That was to be his only direct contact with North America. But he did not collect the honeysuckle on that trip. So how did he come to name *Lonicera involucrata*?

Following is the story, with the facts and some conjecture. English naturalist John Richardson (the 'Richardson' in the full name of the plant)

traveled with John Franklin, leader of an eventually disastrous expedition (their hairraising journal is online) to explore the North American shores of the Arctic Ocean, during the years 1819-1822. They arrived, by ship, from England at York Factory in Hudson Bay on August 30, 1819, and left to proceed overland on September 19. Richardson's notes say he collected the honeysuckle in "wooded country between 54 and 64 degrees latitude", but exactly when and where is, apparently, not recorded. Prior to arriving at York Factory their ship made a landfall for fresh water after entering Hudson Strait; both Richardson and Franklin eagerly explored the shore, and Richardson collected specimens of thirty plant species. Perhaps the honeysuckle was among this collection, which may have been taken back to England - and Kew Gardens - by the ship which dropped the explorers off at York Factory.

Banks was in ill health during much of the latter part of his life, and he was so incapacitated by gout and other ailments during the last year of his life that he asked to be relieved of the Royal Society presidency. But his colleagues would have none of it, and he withdrew the request in a letter written about three weeks before he died, which came on June 19, 1820. It seems clear from his involvement with the honeysuckle that even in his poor health he retained the ardor he had held over his entire adult life for arrivals of new plant specimens from distant shores.

Somehow he managed to examine Richardson's shipment; he either forced himself to go see them at Kew, or perhaps had them sent to his home.

Richardson published names for his North American collections in 1823, giving the name *Xylosteum* (or *Xylosteon*) involucratum to the honeysuckle. But when Banks was examining Richardson's first collection, in late 1819 or early 1820, and came to the honeysuckle, perhaps he wrote "Lonicera" on the herbarium sheet, or in some other way made it be known what genus he thought it belonged to. Whatever the circumstances, Banks' name *Lonicera involucrata* did not appear in a publication until 1825, 5 years after his death. Richardson is

recognized for first naming the plant and coining the specific epithet. Banks is recognized as the one responsible for the correct genus, and hence the scientific name by which the pretty shrub, widespread in Nature, including the Eastern Sierra, and widely cultivated, is still known.

.....Larry Blakely

Field Trip Reports

McGee Creek - June 26, 2004

McGee Creek Outing, June 26, 2004 One of summer's most reliable and colorful Sierran gardens can be found along McGee Creek west of Crowley Lake. On June 26, broadly-knowledgeable Jerry Zatorski guided eighteen enthusiasts up the popular trail. The creek roared below. Sulfur flower (Eriogonum umbellatum) and mule's ears (Wyethia mollis) lent considerable gold and yellow to the slopes. Other buckwheat such as Eriogonum microthecum was ready to blossom. Sierra soda straw (Angelica lineariloba) grew high and widely. Penstemon rostriflorus and Penstemon floridus var. floridus couldn't be ignored, nor Astragalus whitneyi. A large clump of spreading dogbane (Apocynum androsaemifolium) merited the admiration of all, but the unpretentious slender bird's beak (Cordylanthus tenuis) had to be pointed out to me. Many bushy species added flavor or aroma to the outing; examples being cream bush (Holodiscus microphyllus), blue elderberry (Sambucus mexicana), wax current (Ribes cereum), coffeeberry (Rhamnus rubra), and mountain snowberry (Symphoricarpos rotundifolius).

Birders among us recorded active red-breasted sapsuckers and singing green-tailed towhees and thrushes. Shortly following our creekside lunch thunderheads yielded their rain. Down we sped a couple of miles to the parking lot, some of us no doubt thinking as did John Muir, "How deeply with beauty is beauty overlaid!"

.....Larry Nahm

Next Newsletter Deadline: October 28th

CALIFORNIA NATIVE PLANT SOCIETY - Membership Application

The California Native Plant Society is an organization of lay persons and professionals united by an interest in the plants of California. It is open to all. The society, working through its local chapters, seeks to increase the understanding of California's native flora and to preserve this rich resource for future generations. Varied interests are represented.

City					
NameState		Zip Code		Phone	
I wish to be affiliated v	vith the Bristlecone		Other		
				Bristlecone Chapter Directory (Partial List)	
Membership Category				The state of the s	
Student/Retired/Lin	nited Income	\$2	20.00	President - Sherryl Taylor (760) 924-8742	
Individual or Libra	ry	\$3	35.00	Vice President - Sue Weis (760) 387-2349	
International		\$3	35.00	Secretary - Sally Manning (760) 873-3790	
Family or Group		\$4	15.00	Treasurer - Rosanne Higley (760) 387-2803	
Supporting		\$7	75.00	Membership - Kathy Duvall - (760) 387-2122	
Plant Lover		\$1	100.00	Newsletter Editor - Anne Halford - (760) 873-6714	
Patron		\$2	250.00	Conservation - Daniel Pritchett - (760) 873-8943	
Life		\$ 1	1,000.00	Plant Communities - Sally Manning - (760) 873-3790	
Benefactor		\$1	1,000.00	Invasive Exotics - Brian Cashore - (760) 387-2789	
Corporate		\$]	1,000.00	Legislation - VACANT	
			•	Education - Edyth Irvine (760) 924-5778	
Please make membership checks payable to:		to:		Programs - Sue Weis (760) 387-2349	
				Field Trips - Karen Ferrell-Ingram (760) 387-2913	
The California Native	Plant Society.			Native Plant Sales - Karen Ferrell-Ingram - (760) 387-2913	
-Mail to: Bristlecone	Chapter, CNPS			DeDecker Native Plant Garden – Jerry Zatorski (760) 872- 3818	
P.O. Box 364, Bishop, CA 93515-0364			1	Publicity - Cheryl Chipman - (760) 872-7636	
•				Historian Ann Fulton (760) 873-9261	
			1	Librarian - EvelynMae Nikolaus - (760) 878-2149	
			ı	Rare Plant Committee - 2004 Chair Anne Halford	
		-	1	(760) 873-6714 hm., (760) 872-5022 wk.	
				Book Sales - Sue Weis (760) 387-2349	

THE CALIFORNIA NATIVE PLANT SOCIETY (www.bristleconecnps.org) Bristlecone Chapter Newsletter comes out bimonthly. It is mailed free to members of the Bristlecone Chapter, CNPS. The subscription is \$5.00 per year for non-members and can be obtained by sending newsletter subscriptions to CNPS. P.O. Box 364, Bishop, CA 93515-0364. Send newsletter articles not memberships to Newsletter Editor Anne Halford at 312 Shepard Lane, Bishop, CA 93514 - or email to: fkhalford@earthlink.net

The California Native Plant Society Non-Profit Org. Bristlecone Chapter U.S. Postage P.O. Box 364 BISHOP, CA Bishop, CA 93515-0364 93515-0364 PERMIT NO. 47