

# Long Island Botanical Society

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## Sierra Bound: Highlights of the LIBS 30th Anniversary Trip to the Sierra Nevada Mountains, California

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[Ed. Note: This article has been substantially abridged to conform to the limitations of this newsletter. The most significant omissions of text have been replaced with ellipses (...) throughout. Only a small selection of beautiful wildflower photographs have been reproduced here. The complete 17-page article, including photographs and extensive plant, bird and insect lists will be available online at [www.libotanical.org](http://www.libotanical.org). Print copies will be available at cost.]

An excited roar from what must surely be a California sea lion pierced the air, startling the group of LIBS botanists. But hold on, we were on the east side of the Sierra Nevada Mountains, nowhere close to the California coast. The unrestrained and spontaneous braying was from LIBS president Eric Lamont, who had just seen a spectacular clump of crimson-flowered **snowplant** (*Sarcodes sanguinea*) in peak bloom. For the author, this species was the most sought after of all of the plants encountered on the trip, but more on this later.

A group of 17 eager botanists met up with two of our trip leaders, Bob Gibbons and Libby Ingalls, at the Reno airport on the afternoon of July 11. Bob is a knowledgeable global botanist and prolific author from England, and Libby is a meticulous, warm and gracious botanist from San Francisco. Soon after meeting, we were en route to our only botanizing stop in Nevada, at the trailhead to Rose Mountain (altitude of 8900 feet).



Figure 1. Purple Mountain Heath (*Phyllodoce breweri*) in masses near Winnemucca Lake in the Sierra Nevada, Carson Pass, California. [Photo by B. Gibbons.]

The flora of the west proved to be mostly unfamiliar to those of us from eastern North America, and every day we encountered dozens of species that most of us had never before seen. The major tree species on Rose Mountain and at most locations elsewhere during our trip were conifers. The dominant conifers at this site were **lodgepole pine** (*Pinus contorta*), with its cornflake-like scaly bark and fascicles of two needles, and **whitebark pine** (*Pinus albicaulis*), with its smooth very pale gray bark and bundles of five needles, and two species of fir, **white fir** (*Abies concolor*) and **California red fir** (*Abies magnifica*), readily distinguished by the arrangement of their needles. The needles of white fir lie flat on the branches and are twisted at the base, while needles of red fir point in all directions and lack the basal twist.

At Rose Mountain, a small patch of pink flowers turned out to be the diminutive **foul odor monkeyflower** (*Mimulus nanus* var. *mephiticus*), which has a skunk-like odor to the foliage. Here, we saw several herbaceous plant species that appeared in abundance on nearly every day of our trip, notably **woolly mule's-ears** (*Wyethia mollis*) and **mountain monardella** (*Monardella odoratissima*). ...

Rose Mountain also provided a good introduction to various species of **beardtongue** (*Penstemon*), **groundsmoke** (*Gayophytum*) and **buckwheat** (*Eriogonum*), genera that we

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## Long Island Botanical Society

Founded: 1986 • Incorporated: 1989

The Long Island Botanical Society is dedicated to the promotion of field botany and a greater understanding of the plants that grow wild on Long Island, New York.

Visit the Society's Web site  
[www.libotanical.org](http://www.libotanical.org)

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## Society News

**The big news of 2016** is the 30<sup>th</sup> anniversary of LIBS and the celebratory 2-week field trip to the Sierra Nevada in California. Carol Johnston called it “the trip of a lifetime” and Vicki Bustamante described it as “a life experience.” The snow-capped mountains were majestic and lush with showy wildflowers; in all, 434 species of plants were recorded. Mountain meadows were splashed with color as colonies of penstemon and lupine mixed with Indian paint brush and dozens of other colorful species. The sky was blue and cloudless every day, the air was thin, and it was exhausting work, but the group survived and ended each day with cold beers and lots of talk about what species had been seen.

LIBS takes this opportunity to thank and acknowledge those who helped make the trip a success. Bob Gibbons, trip leader, has led hundreds of natural history trips throughout the world, so the group was in very capable hands. Libby Ingalls is the gracious and unofficial hostess on Bob's trips and very knowledgeable about nature and conservation topics. Bob Stewart was the local guide and provided expertise on butterflies and birds as well as botany and conservation issues like those at Mono Lake.

LIBS treasurer, Carol Johnston, managed the many financial transactions of the trip, and Vicki Bustamante was a big help as driver of one of the vans. Eric Lamont, LIBS president, originally proposed the trip and oversaw the major details.

LIBS especially thanks member Jim Goltz for writing an excellent article recording the trip highlights. It was delightful being with Jim in the field as he shared lots of natural history information and talked about some of his work and travels. Jim is an interesting guy. A veterinary pathologist by profession, he works for the provincial government in Fredericton, New Brunswick, Canada where he manages an animal diseases diagnostic lab. In his spare time, Jim serves as president of the New Brunswick Botany Club and gives lectures and laboratory sessions at local universities and community colleges. One class on marine mammal physiology includes taking students to coastal Mexico in April to study and work with manatees, dolphins, and sea lions. Jim's previous article published in the LIBS newsletter (2013; Vol. 23, No. 2) was titled “A Canadian botanist unleashed on Long Island.”



## UPCOMING PROGRAMS (cont'd from pg. 40)

**December 13, 2016\***

**Tuesday, 7:30 PM**

**Members Night:** Members are welcome to bring photos, stories, specimens, and tales of peculiar sightings of favorite plants—a great opportunity to show what you have found while exploring on Long Island or elsewhere. However, this year we would like to highlight the “elsewhere” side of things to showcase photos from the wildly successful 30th Anniversary trip to California. Please call Rich Kelly (516-354-6506) in advance to advise as to the approximate number of images/slides that you would like to show and preferred medium of presentation.

Location: Bill Paterson Nature Center,  
Muttontown Preserve, East Norwich

**Reminder - no meetings in January or February. Next meeting March 14, 2017.**

(Sierra Bound, continued from cover)

also encountered every day during our 12 days of botanizing in the Sierra Nevada. The buckwheats are complex, confusing, well represented in the southwest and worthy of at least their own paragraph, if not an entire monograph. Identification of some species is based on whether or not the pubescence on the upper surface of the leaves has persisted or disappeared, a challenging trait to be certain of without monitoring the same plant throughout the growing season.

Our appetites for western plants whetted, we left Nevada for Woodfords, California, the location of our first of four motels. Here we met up with Bob Stewart, one of our co-leaders, a seasoned all-around naturalist with an infectious passion for and avid interest in all living creatures and their environments. Our daily routine for each of the next 11 days was to head out from our motel for an early breakfast, make forays to nearby botanical destinations, have a group rally to compile our lists of biota sightings, go out for dinner, and get rested up for the next day's adventures. ...

On July 12, at an expansive open prairie-like meadow (altitude 7080 feet) near the junction of Blue Lakes Road and Carson Pass Road, we encountered many plant species that were big on form and/or colour but small in stature. Among the showiest plants here were **Rydberg's penstemon** (*Penstemon rydbergii*) and **prairie smoke** or **old man's whiskers** (*Geum triflorum*) with its elongate hairy fruits that move in the wind creating the illusion of smoke. ...

The best was yet to come, as we got to walk along the Pacific Crest Trail at Tamarack trailhead (at about 8000 feet) and added to our trip list over 30 new species. All of the primary colors were well-represented here by flowering plants. Blue flowers, from largest to smallest, included **tall fringed bluebells** (*Mertensia ciliata*), **Sierra stickseed** (*Hackelia nervosa*, endemic to California), **Jessica sticktight** (*Hackelia micrantha*), and **Torrey's blue eyed Mary** (*Collinsia torreyi*).

Yellow was showcased by **prettyface** (*Triteleia ixioides*); **goosefoot violet** (*Viola purpurea*); **muskflower** (*Mimulus moschatus*); and more. Three vibrant red flowers stole the show, **scarlet gilia** (*Ipomopsis aggregata*), **wavyleaf Indian paintbrush** (*Castilleja applegatei*), and **western columbine** (*Aquilegia formosa*). Cries of delight went up at the first sight of **smokey mariposa** (*Calochortus leichtlinii*) (Plate A.3) with its three creamy white petals, each marked at its base with vibrant yellow and a deep purple-black spot.

The site provided good comparisons between species in the same genus, such as two species each of *Hackelia* and *Senecio*, as well as **western sweetroot** (*Osmorhiza occidentalis*) and **sweetcicely** (*Osmorhiza berteroi*), and **longstalk clover** (*Trifolium longipes*) and the diminutive **forest clover** (*Trifolium breweri*). Discussion ensued on the most appropriate terminology for flowers that had passed the peak of their bloom, and the consensus was to call them "gone over." Sadly, the **whiskerbrush** (*Leptosiphon ciliatus*) at this site has done just that. The only fern detected was a small tuft of **fragile fern** (also called **brittle bladderfern**, *Cystopteris fragilis*). ...

The east side of the Sierra Nevada Mountains is in a rain shadow, but the area usually receives ample snowfall, and the melting snow generates water and moisture that are vital for sustaining the flora. The most spectacular wildflower displays tended to be in moist to wet alpine meadows, although exploring a broad range of habitats was essential for capturing the full diversity of plant species.

July 13 was anything but a bad luck day as we hiked up Carson Pass (8573 feet) southward to Frog Lake and Winnemucca Lake. The California red fir trees (*Abies magnifica*) near the start of the trail were indeed magnificent, as their scientific name suggested, creating a cathedral like ambiance. ... In dappled shade along or close to a small mountain stream grew **California false hellebore** or **cornflower** (*Veratrum californicum*) in huge patches. ...

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Figure 2. View from boat on Saddlebag Lake at the edge of Yosemite National Park, elevation ca. 10,099 feet. [Photo by E. Lamont.]

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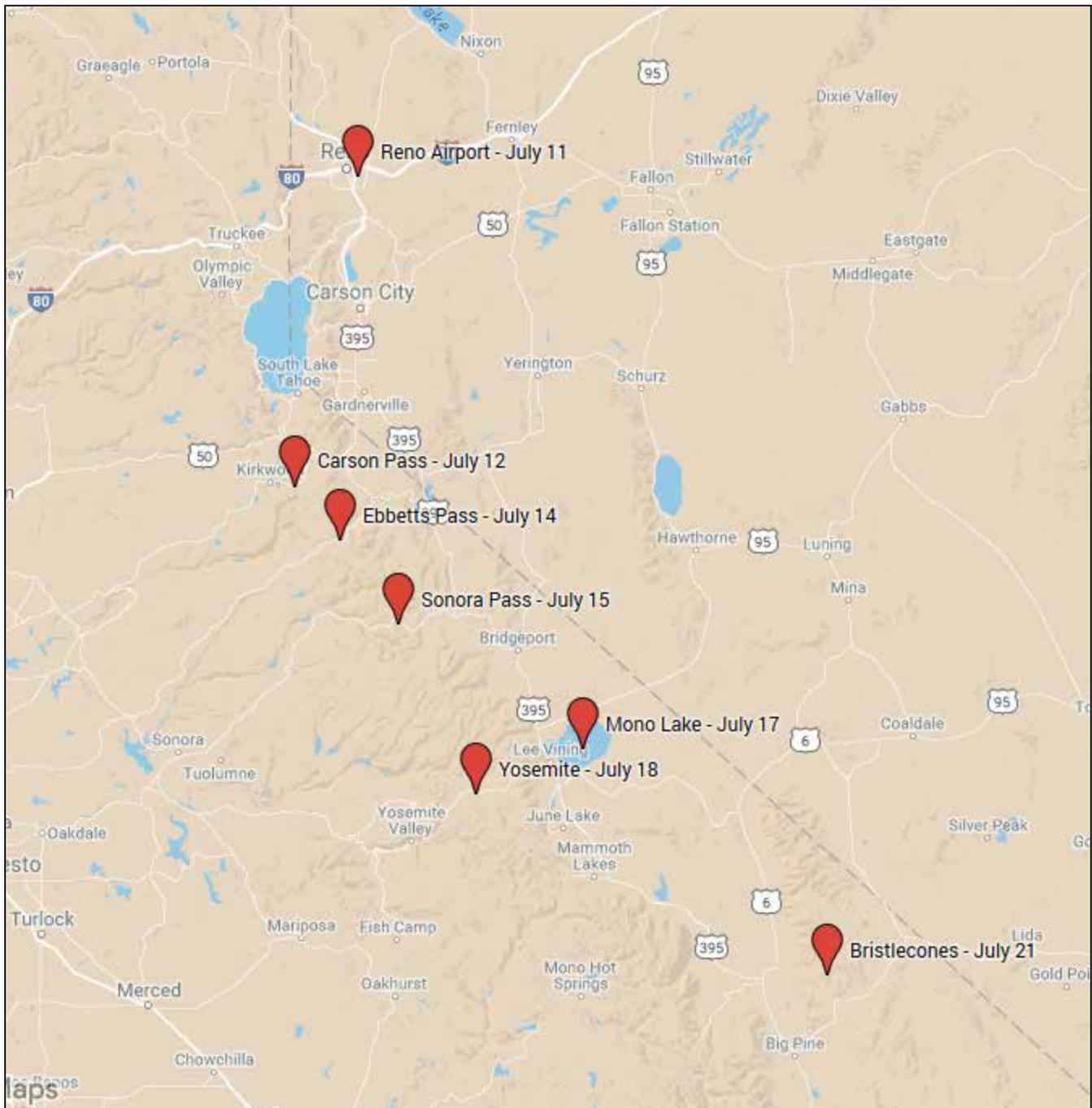


Figure 3. Locations visited on the LIBS 30th Anniversary Trip to the Sierra Nevada Mountains, July 11 to 22, 2016. [Screenshot of a Google Map modified from original provided by B. Gibbons.]

Our first encounter with a lush alpine meadow in peak bloom left many of us speechless and breathless, and it wasn't a result of the altitude but because of the abundance and variety of floral color, form and diversity. Growing together in a very small area were **slendertube skyrocket** (*Ipomopsis tenuituba*), **toothed owl's-clover** (*Orthocarpus cuspidatus*), **Rocky Mountain iris** (*Iris missouriensis*), **slim larkspur** (*Delphinium depauperatum*), *Aquilegia formosa*, *Osmorhiza occidentalis*, **roundleaf snowberry** (*Symphoricarpos*

*rotundifolia*), and *Castilleja applegatei*, the latter with blooms ranging from yellow through red. Many photos were taken!

In contrast, our next stop was a very dry open hilltop with very low vegetation, where we encountered **Woods' rose** (*Rosa woodsii*). ... After lunch at Frog Lake, where at least three species of tiger beetles were encountered but no frogs, we headed toward Lake Winnemucca, with a short detour along the Pacific Crest Trail. Most of our group

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agreed that we would not be ideal candidates for completing the Pacific Crest Trail due to frequent distractions by the amazing diversity of plants to be encountered. Open dry trail edges were adorned with **California valerian** (*Valeriana californica*), **Mount Rose** or **rosy buckwheat** (*Eriogonum roseum*), **woolly groundsel** (*Packera cana*), **whitestem goldenbush** (*Ericameria discoidea*), **wormleaf stonecrop** (*Sedum stenopetalum*), **Utah serviceberry** (*Amelanchier utahensis*), and spectacular clumps of **pygmy fleabane** (*Erigeron pygmaeus*), the latter highly photogenic and irresistible.

Hikers told us that the best floral displays were just ahead in the wet open meadows and streamsides, and they were right. Here, the more conspicuous species included **nettleleaf giant hyssop** (*Agastache urticifolia*), **elephanthead lousewort** (*Pedicularis groenlandica*), **boreal sagebrush** (*Artemisia arctica*, formerly *A. norvegica*), the hoary **Sierra willow** (*Salix orestera*), **Lyall's rockcress** (*Arabis lyallii*, with conspicuous purple-pink blooms), and **alpine shootingstar** (*Dodecatheon alpinum*). ...

With such an abundance of plant diversity and species new to easterners, it was challenging to keep from becoming overwhelmed. However, we encountered some of the species nearly every day and came to remember their names and habitat preferences, and to recognize their various forms at different stages of development.

Our excursion on July 14 was to head up Ebbetts Pass from Markleeville. Our first roadside stop was to admire **smoothstem blazingstar** (*Mentzelia laevicaulis*), its huge bright yellow blooms, up to 3" across, indeed blazing from a steep dry rocky roadside embankment. Good thing we stopped for this species in the morning, since the flowers open at dusk and close in the afternoon.

Now to expand on the first paragraph in this article. The lead van pulled into a roadside parking area (at about 7800 feet), an unplanned stop that proved to be ever so fruitful. Here we spotted a bright red stalk growing in open gravel. This at last was **snowplant** (*Sarcodes sanguinea*), "gone over." This species, like Indian pipe and pinedrops, lacks chlorophyll. Trip participants spread out to explore, and soon a cry



Figure 4. These twenty LIBS members and friends joined the Sierra Nevada trip. Kneeling (left to right): Bob Gibbons, Rich Kelly, Bob Stewart, Sue Avery, Eric Lamont. Standing (left to right): Kristine Wallstrom, Donald House, Becky Hrdy, Andy Greller, Jo Maher, Libby Ingalls, Jim Goltz, Colum Maher, Joanne Schlegel, Kathy Gaffney, Carol Johnston, Ximena Nazal Manzur, Susan Stirn, Vicki Bustamante, and Larry Liddle. [Photo by B. Gibbons.]

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Plate A: A small selection of hundreds of wildflower photos. 1. *Phlox condensata* (dwarf phlox), 2. *Pedicularis groenlandica* (elephanthead lousewort), 3. *Calochortus leichtlinii* (smokey mariposa), 4. *Phyllodoce breweri* (red mountain heather) 5. *Asclepias speciosa* (showy milkweed), 6. *Pinus albicaulis* (whitebark pine), 7. *Lilium kelleyanum* (Kelley's lily), 8. *Valeriana californica* (California valerian), 9. *Eriophyllum lanatum* (Oregon sunshine), 10. *Dodecatheon alpinum* (alpine shootingstar), 11. *Argemone corymbosa* (prickly poppy), 12. *Delphinium nuttallianum* (Nuttall's larkspur). [Photos by S. Avery: 5 & 11; V. Bustamante: 7 & 9; A. Greller: 6; D. House: 8 & 10; C. Johnston: 1; E. Lamont: 2, 4 & 12; K. Wallstrom: 3.]



Plate B. Some botanists in the field: 1. Hiking group, 2. Sue Avery & Kristine Wallstrom, 3. Vicki Bustamante, 4. Donald House, 5. Vicki Bustamante & Larry Liddle, 6. Jim Goltz searching for *Isoetes* in Frog Lake, 7. Kathy Gaffney, 8. Andy Greller, 9. Rich Kelly, 10. Sue Avery, 11. Bob Stewart points something out to the group, 12. Joanne Schlegel, 13. Bob Gibbons & Eric Lamont considering a plant identification, 14. Larry Liddle & Eric Lamont, 15. Carol Johnston, 16. Libby Ingalls. [Photos by S. Avery: 16; V. Bustamante: 12, 13, 14; D. House: 6; E. Lamont: 1, 2, 4, 5, 7, 8, 10, 11, 15; L. Liddle: 3; K. Wallstrom: 9.]

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rang out, followed by Eric's jubilant roar. A large patch of snowplant was in peak bloom in the shaded coniferous woods (Fig. 6). After everyone else had sated their appetites for this species, the author lingered on and had the fortune to watch a **broad-tailed hummingbird** briefly scope out the vibrant red blooms. ...

An expansive meadow at about 8200 feet yielded **sleeping popcornflower** (*Plagiobothrys scouleri*), the diminutive pink **Brewer's monkeyflower** (*Mimulus breweri*), and more. A loop trail from the parking area back to the road revealed **Holboell's rockcress** (*Arabis holboellii*) with its drooping fruits, apparently infected with an orange rust fungus (*Puccinia holboellii*), **Gray's licorice-root** (*Ligusticum grayi*), and **slender hawkweed** (*Hieracium gracile*). ... At Ebbetts Pass, a short foray to the edge of a scree slope revealed **granite prickly phlox** (*Leptodactylon pungens*, its identity confirmed by touch). ...

On July 15, we departed from Woodfords and headed for Bridgeport, stopping en route at Heenan Lake, Monitor pass, Topaz Lake and part-way up Sonora Pass. A brief roadside stop at about 6000 feet was intended to showcase **cobwebby thistle** (*Cirsium occidentale*), a species that has deep red flowers and hoary gray foliage and had been frequently glimpsed along roadsides but not yet examined up close. Of course, other interesting species were encountered. ...

In open dry habitats at Heenan Lake (about 7500 feet) grew **grand collomia** (*Collomia grandiflora*), **grassy tarweed** (*Madia gracilis*), **graygreen thistle** (*Cirsium canovirens*), the annual **manyflower tobacco** (*Nicotiana acuminata*, introduced from South America), **tall tumbledustard** (*Sisymbrium altissimum*), and other plants of such dry habitats. A western juniper laden with **juniper mistletoe** (*Phoradendron juniperinum*) brought the group to a quick halt before the pass. ...

Rich floral displays decorated the open meadow around Sardine Creek (about 8600 feet). **Owl's-claws** (*Hymenoxys hoopesii*, a showy yellow composite) was abundant and

conspicuous. More careful searching was required to find **parrothead Indian paintbrush** (*Castilleja pilosa*, with white margins on the bracts), **Oregon saxifrage** (*Saxifraga oregana*), and **Sierra fringed gentian** (*Gentianopsis holopetala*). ...

We spent our next two nights at Bridgeport. ... A hike northward from Sierra pass (at 9624 feet) on July 16 yielded the following plant species that were new or not previously mentioned in this report: **arrowleaf balsamroot** (*Balsamorhiza sagittata*), **alpine slender buckwheat** (*Eriogonum microthecum* var *alpinum*), **stalked fleabane** (*Erigeron algidus*), **meadow deathcamas** (*Zigadenus venenosus*), **daggerpod** (*Phoenicaulis cheiranthoides*, aptly named for the elongate, flattened, dagger-like shape of its fruits), **alpine lewisia** (*Lewisia pygmaea*), ... Other highlights included watermelon snow (pink-colored snow caused by colonization with *Chlamydomonas nivalis*, a green alga containing a secondary red carotenoid pigment). ...

A roadside stop near the confluence of Wolf Creek and West Walker River to admire a patch of **showy milkweed** (*Asclepias speciosa*) at the base of a slope also led to the discovery of a puzzling tall *Platanthera* with many yellow blooms. Considerable consultation after returning home from the trip was required to conclusively identify this orchid as **intermountain bog orchid** (*Platanthera tescamnis*), a species first described about 10 years ago.

We departed from Bridgeport on July 17 heading for Mono

Lake and Lee Vining, where we would spend the next three nights. ... Explorations in the vicinity of a beaver wetland and stream during a side-trip to Lundy Canyon (at about 7500 feet) provided our first looks at **ranger's buttons** (also called **woollyhead parsnip**, *Sphenosciadium capitellatum*), inspiring one participant to remark that this scientific name seemed to have nearly every letter in the alphabet. ...

We drove to the end of the Lundy Canyon road, had lunch (at about 8000 feet), and then proceeded up to the lower falls on Mill Creek. We had previously only encountered



Figure 5. An array of showy wildflowers, including Sierra bog orchid (*Platanthera dilatata* var. *leucostachys*), Sierra columbine (*Aquilegia pubescens*), Indian paint brush (*Castilleja* sp.), and lupine (*Lupinus* sp.). [Photo by B. Gibbons.]

one species of fern during our trip, but at this site grew **western brackenfern** (more commonly known to us as simply as **bracken**, *Peridium aquilinum*), and three rock dwelling ferns – **Indian's dream** (*Aspidotis densa*), **Bridges' cliffbrake** (*Pellaea bridgesii*), and **lace lipfern** (*Cheliantes gracillima*), along with another peridophyte, **Watson's spikemoss** (*Selaginella watsonii*). Two plants of **singleleaf pinyon pine** (*Pinus monophylla*), a species eagerly awaited by participants, grew on a rocky outcropping at the northern limit of the range for this species.

The lush wet meadows that flanked the waterfalls and adjacent stretches of Mill Creek were the stuff that a botanist's dreams are made of, confounding photographers as to what to take pictures of first. ...

After breakfast on July 18, we headed for Yosemite National Park, stopping at Warren Canyon (at 9000 feet) to explore coniferous forests, dry openings, stream edges and a wet mossy meadow. ... From the Yosemite gate at Tioga Pass (at about 9945 feet) we walked upward along the Gaylor Lakes trail to about 10,000 feet, encountering **alpine sheep sorrel** (*Rumex paucifolius*), **bud saxifrage** (*Saxifraga bryophora*), **Coville's groundsmoke** (*Gayophytum eriospermum*), **Drummond's rockcress** (*Arabis drummondii*), and more. Riverside meadows west of Tioga Pass (at about 8500 feet) provided habitat for **little elephantshead** (*Pedicularis attollens*), **Gordon's ivesia** (*Ivesia gordonii*), **hookedspur violet** (*Viola adunca*), **Lemmon's Indian paintbrush** (*Castilleja lemmonii*), **false deathcap** or **citron amanita** (*Amanita citrina*), and glaucous leaves of **bog blueberry** (*Vaccinium uliginosum*).

At Olmstead Point, we were delighted with a stunning view of Half Dome, a granitic Yosemite icon. For the author, the most intriguing plant of the trip, **huckleberry oak** (*Quercus*



Figure 6. Snow plant (*Sarcodes sanguinea*).  
[Photo by V. Bustamante.]

*vacciniifolia*), was seen here. Its leaves resemble blueberry leaves, but blueberry plants do not bear tiny acorns! Other plant highlights for this site were **pinemat manzanita** (*Arctostaphylos nevadensis*), and **Sierra mousetail** (*Ivesia santolinoides*). ...

On July 19, a ferry shuttled passengers across Saddlebag Lake to hike on the edge of Yosemite, beginning at 10,099 feet. Our plan to complete a five-mile circular hike was thwarted by the many beautiful and intriguing plants that were encountered, so we barely covered one-third of that distance. A small clump of **alpine mountainsorrel** (*Oxyria digyna*) grew along the edge of the trail near the ferry dock. As we followed the trail, other species new for this trip appeared, including **stem raillardella** (*Raillardella scaposa*). ...

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Figure 7. Moonrise over Mono Lake. [Photo by S. Avery.]

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That evening, we dined outdoors at Mono County Park on Mono Lake and walked along a boardwalk, where we enjoyed **softstem bulrush** (*Schoenoplectus tabernaemontani*), **Nevada goldenrod** (*Solidago spectabilis*), two very tame **mule deer**, the rise of a full moon, and more.

On the morning of July 20, the entire group made an early morning foray to see the tufa towers at Mono Lake (at 6400 feet). Deposition of calcium carbonate around mineral springs has created the tufa towers, now protected at Mono Lake Tufa State Natural Reserve. They are unique, spectacular and truly awesome, creating an other-worldly landscape (Fig. 7). The high salinity of Mono Lake, roughly 2.5 times that of the ocean and highly alkaline, provides habitat for halophilic species such as **Pursh seepweed** (*Suaeda calceoliformis*, formerly *S. depressa*), and **alkali buttercup** (*Ranunculus cymbalaria*). ...

We packed up and left our hotel, en route to Bishop, where we would spend the next two nights. A side trip to Rock Creek canyon took us through pinyon pine forest as we headed for Mosquito Flats, stopping briefly (at 9425 feet) to admire a roadside embankment with patches of **Kelley's lily** (*Lilium kelleyanum*) with reflexed orange petals, and **Inyo meadow lupine** (*Lupinus pratensis*), a California endemic that is mostly confined to the Sierra Nevada. Our trip leaders eventually pried us away from here and we reached the trailhead at Mosquito Flats (at 10,200) where familiar floral faces greeted us as we headed up the trail. ...

On July 21, we headed from Bishop to the edge of Death Valley in the upper Eureka Valley, stopping at about 7000 feet. The dry hillsides were speckled with **Joshua tree** (*Yucca brevifolia*)



Figure 8. Sue Avery examining a Joshua tree (*Yucca brevifolia*) on the edge of Death Valley, in the upper Eureka Valley. [Photo by E. Lamont.]

Figure 9. "The Matriarch and the Patriarch." Carol Johnston standing next to the largest known bristlecone pine (*Pinus longaeva*). [Photo by E. Lamont.]



(Fig. 8), the largest of the yuccas, confined to the Mojave Desert, attaining a height of up to 40 feet and a diameter of up to 3 feet, taking 50 to 60 years to mature, and living up to 150 years. ...

At Tollhouse Springs (5950 feet), we hoped to find **giant helleborine** (also known as **stream orchid** and **chatterbox**, *Epipactis gigantea*) in shaded areas along a stream and were successful but were disappointed that it had “gone over.” ...

From here, we headed into the White Mountains, named for the very pale dolomite rock that is abundant in some parts of this range. Along the road we passed tall plants of the pink-flowered **Panamint beardtongue** (*Penstemon floridus*), and stopped briefly at a viewpoint to enjoy the vistas of the Sierra Nevada, along with a few plants.

At Schulman Grove (9916 feet), we studied and admired both **Great Basin bristlecone pine** (*Pinus longaeva*) and **limber pine** (*Pinus flexilis*), with a great opportunity to make a side-by-side comparison of their developing and mature cones, and their needles and bark. Some bristlecone pines are over 4800 years, making them among the oldest living things on the planet. Other highlights were **pinyon beardtongue** (*Penstemon scapoides*, with blue flowers) and a robust *Stipa* grass with extremely long awns.

Patriarch Grove (at 11,200 to 11,390 feet) is home to the patriarch of bristlecone pines, the largest known individual of this species, with a massive fluted branched trunk that is 36 feet in circumference and reaches a height of just over 40 feet (Fig. 9). ...

On July 22, the final day of our trip, we headed back toward Reno from Bishop, escaping before the predicted daily high of 105°F was reached. Along the edges of a tennis court located in a park close to our hotel in Bishop, a few of us saw a large clump of **Mexican whorled milkweed** (*Asclepias fascicularis*) in good bloom and were pleasantly surprised to find some clumps of *Epipactis gigantea*, “gone over.” ...

At Virginia Lakes (about 9400 feet), we stopped for lunch and explored a lush flower-rich meadow, adding to our trip list **lanceleaf springbeauty** (*Claytonia lanceolata*), **threepetal bedstraw** (*Galium trifidum*), **Lemmon's willow** (*Salix lemmonii*), and an atypical purple-foliaged clump of **American yellowrocket** (*Barbarea orthoceras*). It seemed fitting for a bald eagle to fly overhead as we celebrated that last few moments of glorious mountain vistas, a kaleidoscope of wildflowers, crystal clear mountain lakes and great camaraderie, before parting ways and heading in different directions.

The LIBS 30<sup>th</sup> anniversary trip to the Sierra Nevada was superb, with no rain, mostly sunny skies, fantastic leaders, joyful encounters with plants and other biota, cheerful company and big smiles. A deep and heartfelt thanks to the organizers and to our trip leaders for giving us this exquisite opportunity. Participants will be busy sorting out notes, observations and photos for years to come.

## FIELD TRIPS

**October 22, 2016 (Saturday) 10:00 AM**

*Goldsmith Inlet and Soundview Dunes County Parks  
Peconic and Southold, NY*

Trip Leaders: Andrew Greller, Vicki Bustamante,  
and Louise Harrison

Cell phone: 631-428-1315 (Harrison)

We will walk from Goldsmith Inlet County Park along the inlet, through a forest and a maritime freshwater interdunal swale, onto a Long Island Sound beach, eastward to Soundview Dunes County Park, back into the interdunal swale, through the park's forest and possibly around the park's “hidden” freshwater lake, depending on time. We can walk or drive along Soundview Avenue back to the starting point, stopping at a private residence deck for refreshments and a view of one of the inlet's salt marshes.

We will look for *Quercus muehlenbergii*, found last year on the South Fork and known from the North Fork, and will have opportunities to explore a wide variety of ecological communities. If time allows following refreshments, a secondary foray may be made to see an ancient post oak with a remarkable survival strategy.

Please bring lunch, sunscreen, tick/insect repellent, water, and wear long pants that can be tucked into socks. Shoes appropriate for walking in loose sand are recommended.

*Registration is limited and required.*

Please email [consnap.li@gmail.com](mailto:consnap.li@gmail.com) to register.

**Directions:** From the LIE eastbound, take Exit 71 and go north (left) on Edwards Avenue to Sound Avenue. From the South Fork, take 105 north to Sound Avenue. Proceed east on Sound Avenue onto C.R. 48 (a.k.a. “Middle Road” in Mattituck and “the North Road” thereafter). You will go through Mattituck and Cutchogue, then past the BP gas station in Peconic to the next light, where you will make a left onto Mill Lane (it is called Peconic Lane on the south side of C.R. 48). From Mill Lane, make the first right onto Soundview Avenue. Less than ½ mile down Soundview you will see a short length of a split-rail fence on the left that marks the trailhead for Goldsmith Inlet County Park.

A maximum of three cars can park at the trailhead at Goldsmith Inlet County Park, but parking along the road is allowed. Please park between the trailhead and Diamond Lane, on the left side of Soundview Avenue, avoiding the fire hydrant at the base of Diamond (hint: Diamond Lane looks more like a driveway than a road). Additional cars may park on the right side of Soundview. We will arrange for one or two cars to be available for the return trip from Soundview Dunes County Park.

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## UPCOMING PROGRAMS

**October 11, 2016\***

**Tuesday, 7:30 PM**

**Jessica Enzmann: "Seatuck Environmental Association Efforts to Restore the American Chestnut on Long Island."** The American chestnut was once a dominant tree in the forests of the Eastern United States, accounting for one out of every two trees in some woods. But an Asian chestnut tree, imported into New York in the late 1800s, carried a fungus that would change everything. Since the introduction of the fungus, billions of trees have died, and organizations such as Seatuck Environmental are working to preserve the few remaining trees and restore the population. Jessica is a recent graduate of Stony Brook University with a Bachelor of Science degree in Biology, with concentration in ecology and evolution. She plans to expand her studies into wildlife science, and pursue a career in conservation.

Location: Earth and Space Science Building,  
Gil Hanson Room (Room 123),  
Stony Brook University, Stony Brook

**November 8, 2016\***

**Tuesday, 7:30 PM**

**John Wernet and John Pavacic: "The Southern Pine Beetle Infestation on Long Island: Status and Trends."** This talk will cover background information such as the initial discovery and past history. It will touch on current trends and the ongoing activities to respond to and manage the infestation. John Wernet is Supervising Forester, Division of Lands and Forests, NYSDEC-Region 1, planning and managing DEC properties on Long Island. Previously, he was a private forester working with the southern pine beetle in southern forests. John Pavacic is Executive Director, Central Pine Barrens Joint Planning and Policy Commission. Previously, he was Commissioner, Suffolk County Department of Parks, Recreation, and Conservation, and he worked with the DEC in Stony Brook and the Township of Brookhaven.

Location: Bill Paterson Nature Center, Muttontown  
Preserve, East Norwich

*Upcoming Programs continued on page 30*

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\* Refreshments and informal talk begin at 7:30 p.m. Formal meeting starts at 8:00 p.m. Directions to Muttontown or Stony Brook: 516-354-6506