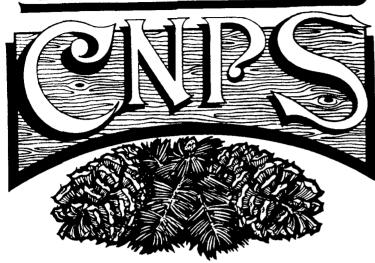
DEDICATED TO THE PRESERVATION OF THE CALIFORNIA NATIVE FLORA

BRISTLECONE . CHAPTER



PRESIDENT'S MESSAGE:

The Feb. 4th water symposium in Bishop was a great success and I would like to thank all the people who helped to put it on. A special thank you goes to our Bristlecone Chapter organizers, Leah Kirk, Mary DeDecker, and Vince Yoder.

Much will be happening in the Inyo-LA water negotiations in the next few weeks, so please keep informed and make comments to the Water Commission and the Board of Supervisors when the time comes. Please note our April first field trip (announced in this newsletter) which will be especially timely and informative on this issue.

.... Mark Bagley

NEWSLETTER

Vol.8, No.2

March 1989

NEXT MEETING

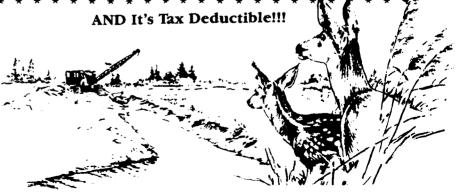
Wednesday, March 29, 7:30 p.m., in Independence at the Sierra Baptist Church on Wall St., just east off of Hwy 395.

Brian Miller, Bristlecone Chapter member and Acting Forest Botanist for the Inyo National Forest, will present a program on the Forest's rare plants and management plans being developed for them. In addition, the Forest Service has a cost-share program and Brian has been asked to tell us how we might participate in this.

SPECIAL APRIL RIDGECREST PROGRAM

"Protecting California's Endangered Flora", a special slide presentation by Ken Berg, CNPS Botanist, will be given on Tuesday, April 11, 7:30 pm, at the Maturango Museum, located on the corner of Las Flores Dr. and China Lake Blvd. in Ridgecrest. Ken works closely with the Department of Fish and Game in the assessment and management of rare plant species. This program is being co-sponsored by Bristlecone Chapter and the Maturango Museum.

Use LINE 45!
Help Conserve Wildlife
and Habitat at Tax Time.



1989 BRISTLECONE CHAPTER FIELD TRIPS, SPRING & EARLY SUMMER SCHEDULE

- April 1. VEGETATION MANAGEMENT AND PLANT ECOLOGY OF THE OWENS VALLEY FLOOR. Leader: Dr. David Groeneveld. Meet at 9:00 a.m. south of Big Pine atop the wildlife overlook near Tinnemaha Reservoir. (The turnoff from Hwy 395 is just south of the small pass crossing the Poverty Hills.) From there we will travel south to visit and discuss the monitoring sites and vegetation in locations near Hines Spring, Black Rock Fish Hatchery, Independence Spring Field, and along the Lower Owens River, south of Mazourka Canyon Road.
- May 6-7. RARE PLANTS OF THE DARWIN PLATEAU AND SOUTHERN INYO MOUNTAINS. Leader: Mark Bagley. We will visit several previously known populations of rare species and look for new populations in surrounding areas. Information we gather will be sent to the Dept. of Fish and Game and the BLM (which manages this area). Meet at 9:30 am on Saturday along Highway 190 at the Darwin turn-off (about 30 minutes east of Lone Pine). Easy walking, but sometimes over rough terrain. Be prepared for a dry camp on Saturday night.
- May 20. ALABAMA HILLS. Leaders: Betty Gilchrist and Vince Yoder. Betty will host the morning on her 10 acres at 851 Sharar Lane out of Lone Pine. There we will find two rare Owens Valley endemics, Calochortus excavatus, Inyo County star-tulip, and Sidalcea covillei, Inyo County checkerbloom, as well as other alkaline meadow species. We will take a lunch break there before visiting choice sites in the Alabama Hills to the north, in the afternoon with Vince as leader. There will be moderate walking. Meet Saturday at 9:30 am at Whitney Portal Rd. and Movie Rd. (about 2 miles west of Lone Pine), unless you know where Betty lives.
- June 4. FIELD TRIPS FOR STATE BOARD MEETING PARTICIPANTS. The CNPS state board meeting will be held in Lone Pine on June 3ed. Locations of field trips will be announced in our May newsletter. All chapter members are invited to participate in the meeting and field trips.
- June 17. WHITE MOUNTAINS. Leader: Doris Fredendall. We will take an easy walk of 2-3 miles along a wash at about 7500 ft. It will be a good identification review of plants in the Pinyon-Juniper zone. Meet Saturday at 9:00 am at the Pinyon Picnic area. Take Hwy 168 east from Big Pine for 13 miles to the White Mountain Rd., then about 3 miles up to the picnic area.
- July 15. LITTLE BLACK ROCK SPRING. Leader: Mary DeDecker.A before and after trip to see critical sites in Owens Valley. Meet at 9:00 am at the turnoff to Black Rock Fish Hatchery from Highway 395. There will be little walking, but be prepared to drive from site to site. Take lunch and water and the usual sun protection.
- July 29. LONG LAKE. Leaders: Jack & Pat Crowther. This will be a botanizing walk for subalpine flowers at elevtions from 9000 to 10,000 ft. Meet Saturday at 8:00 am at the South Lake parking lot, 14 miles west of Bishop. We will be hiking about 6 miles with an elevation gain of about 1000 ft.

FIELD TRIP POLICIES

Generally, day trips last most of the day while overnight trips conclude early Sunday afternoon. Bring a lunch and drinks on a day trip. Often we are near the vehicles at lunch, but always be prepared to carry lunch on a hike. If you leave the trip early, please inform the trip leader so there is no unnecessary concern. Bring plenty of water or other thirst quenching beverages, a hat, dark glasses, sunscreen, sturdy walking shoes, field guides and a hand lens.

Family, friends, and visitors are welcome to come along, but <u>please no pets</u>. The average car should do fine on our trips. Please use a reliable vehicle, with good tires, and start out with a full tank of gas. Trips will <u>LEAYE</u> at the time announced, so please arrive a few minutes early. Car pooling is encouraged. Contact Gordon Nelson, field trip chairman at 873-7489, for more information.

EASTERN SIERRA WATER SYMPOSIUM REPORT

The Eastern Sierra Water Symposium, held February 4 in Bishop, California was success! Jointly sponsored by the Eastern Sierra Audubon Society, the Mono Lake Committee, the Owens Valley Committee, and the Sierra Club, Toiyabe Chapter, the symposium offered a balanced view of water issues locally and statewide. Some 350 people listened to speakers from the Metropolitan Water District of Southern California, the Los Angeles Department of Water and Power, Inyo County's Water Department, the Mono Lake Committee, and the Great Basin Air Pollution Control District discuss issues that directly affect our environment and quality of life in the Eastern Sierra.

One theme of the symposium was the concept of broadening perspectives. Richard Atwater of MWD encouraged those in attendance to view the Owens Valley and the Mono Basin as part of the California water system and to be aware that water issues in every area of the state affect all of the state. Antonio Cosby-Rossmann, an environmental attorney who was special counsel for Inyo County in its litigation against Los Angeles, suggested it is time to think of the Eastern Sierra as a single region unified by Los Angeles' water gathering activities.

The second most important theme of the symposium was communication. Officials of Inyo and Mono counties saw that a substantial number of people care and want to learn about water issues in the Eastern Sierra. The speakers responded to this interest with candid discussions of their tropics.

Inyo County Counsel and Water Director Greg James reported on negotiations between the County and the City of Los Angeles for a long-term water management plan. Inyo hopes to formulate environmental standards that will, in James' words," protect and preserve the vegetation in the Owens Valley and not let it degrade or change any further through groundwater pumping or increased water dsiversions in the future." If these standards are defined clearly enough and are enforceable, such a management plan could indeed protect the environment of the valley.

Historically, the Department of Water and Power's annual pumping rate has been based on arbitrary figures such as the Los Angeles aqueduct's carrying capacity or a compromise reached through negotiation. Environmental standards and careful monitoring of the valley's vegetation and soil moisture will finally link the groundwater management process with reality.

If Inyo and Los Angeles are to reach a tentative final agreement on water management, they must do so by early April. At that time the public will have four to six weeks to review and comment on the plan. That one to two month period is our opportunity to assure that the Owens Valley receives the environmental protection that it should have had 20 years ago.

Inyo and Mono counties are faced with many difficult and sensitive water related environmental issues. The Eastern Sierra Water Symposium succeeded in bringing people together to discuss these issues in a peaceful, positive way. It set the stage for a constructive relationship between the people of the Eastern Sierra and their leaders.

The Bristlecone Chapter has been working on plant lists for the major Sierra canyons on the east side. We are happy to announce that the first one, Bishop Creek Plant List by Jack and Pat Crowther, is ready to be printed. Information for ordering it will appear later.

Rare Plant News from Mono County - Summer of 1988 by Dean W. Taylor and Glenn L. Clifton

Continued floristic sleuthing in the mountains of Mono County during the summer of 1988 has resulted in the documentation of a number of populations of CNPS rare plants.

Raven's milk vetch (Astragalus ravenii) - two additional populations of this taxon were documented. A large population, covering an area of ca. 150 acres, was observed on Wheeler Crest, at the end of the jeep trail to the prospects on the east slope of Round Valley peak. The site is a large, rolling, unglaciated flat vegetated by Artemisia rothrockii, at ±11200 feet. Finding this population induced a review of a DWT collection from the summit of Glass Mt., made on 28 July 1977, identified as A. monoensis -it too was A. ravenii. GLC returned to the summit of Glass Mt. this season to get material of A. ravenii with mature pods. This brings the number of known populations of Raven's milk vetch to four (Taboose Pass trail and Sawmill Pass summit are the others). Plants from the two new populations are more like A. monoensis than the more southerly populations - prompting the notion that the recent combination, A.monoensis var. ravenii is a somewhat better classification for these unique endemics. However, the two taxa are geographically isolated, as well as morphologically distinct in pod size, suggesting that the two are best treated as subspecies, rather than as only minor variants.

Dedecker's Lupine (*Lupinus padre-crowleyi*) - a population occurs along the Round Valley Peak jeep road, growing on the steep, granitic sands amidst open Whitebark Pine (*Pinus albicaulis*) woodland. Plants in this population invariably have blue-flowers, by contrast to the mostly cream-white flowers of the Coyote Ridge-Big Pine Canyon populations.

Turf sedge (Kobresia myosuroides) - this typical Rocky Mt. alpine plant was first discovered in the Sierra back in the 1950s by long time CNPS President G. Ledyard Stebbins. Stebbins had been told of the extensive marble deposits in Convict Creek by Norman Clyde, the legendary Big Pine mountaineer. Stebbins, Jack Major and their students then documented a suite of Rocky Mt. disjuncts at Convict Creek: Kobresia, Draba nivalis, Arctostaphylos uva-ursi, Salix brachycarpa, Scirpus rollandii and Pedicularis crenulata. Since then, S. brachycarpa has been documented from the Tioga Pass region -half a dozen small shrubs grow along the western outlet stream from Gardisky Lake, on alchornfels, a type of calcium rich metamorphic rock. NOW, a second station for Kobresia has been documented; the eastern shore of Cooney Lake, Virginia Lakes basin, at 10,200 ft. At this new site, K. myosuroides grows only on a narrow (ca. 20 ft. wide) band of calcium-enriched rock with a dense turf subirrigated by the lake. Here too is a second population for an apparently undescribed Carex Sect. Capillaris - the nearest location for Carex capillaris is over 400 miles north or east, to the Wallowa Mts., Oregon or the Unita Mts., Utah!! This unusual sedge was first discovered by DWT at Parker Pass in 1985. Only one other alpine sedge (C. incurviformis) is this small: 1-3 inches tall. The diagnostic feature of this new sedge are the small, varnished-green perigynia (only 1.3 mm long) which bear stout (but small!) bristles on the beak. A description of this new species is being written by DWT and Joy Mastroguiseppe, author of Carex for the upcoming revision of Jepson's Flowering Plants of California. This new little Tloga Sedge, dubbed Carex 'tiogana', qualifies for CNSP List 1B, 3-3-3.

Masonic Jewelflower (Streptanthus oliganthus) - DWT had been uncertain of the identity of the Streptanthus on the unusual, non-granitic rocks of Copper Mountain at the mouth of Lundy Canyon. This year, with the help of additional collections having ripe pods and seeds - we can confirm that S. oliganthus grows in the Sierra. It occurs exclusively on limestone on the lower slopes of Copper Mt., while the source of the long standing confusion, S. cordatus var. cordatus occurs on the reddish metamorphic rocks higher on the same slope. As treated in Munz, Streptanthus cordatus is a confusing bunch - Jepson's treatment of the group, recognizing three subspecies of S. cordatus in the Eastern Sierra is a more satisfactory: S. cordatus var. exiguus is the most common - its coarsely serrate, long-petioled rosette leaves are diagnostic; S. cordatus var. cordatus has large, erect ponds and rounded, irregularly dentate rosette leaves; S. cordatus var. duranii has irregularly dentate rosette leaves, but differs in having long, narrow pods - duranii may be closely related to S. cordatus var. piutensis of the Walker Pass region (CNPS List 1B, 3-2-3). S. cordatus var. duranii is apparently endemic to the White Mountains, and should be considered for CNPS List 3 status. The report of S. oliganthus from Westgard Pass (quad 412C) in the Whites, listed in the 1988 CNPS Inventory, is erroneous, being based on var. duranii.

Utah pickleweed (Salicornia utahensis) - a single rather depauperate done of this distinctive halophyte (salt-loving plant) was collected at Fish Slough by GLC. Munz' lists it for only Death Valley in California. Representing only the second station in California, does not the species qualify for CNPS List 2 with a R-E-D code of 2-1-1?

Congdon's Rockcress (Arabis tiehmii) - several new occurrences of this alpine have been located recently: a second large population was observed on the slope of Tioga Peak near the eastern outlet of Gardisky Lake. Another large population occurs at the summit divide at the head of Virginia Canyon and in the upper cirques above Burro Lake (Lundy Canyon drainage). Tina Hargis reports that Bighorn Sheep (recently reintroduced to the Tioga Pass region) apparently find the pods of A. tiehmii to their liking.

ADDITIONS TO THE FLORA OF THE WHITE MOUNTAINS. VI.

contributed by James D. Morefield, Dean Wm. Taylor and Ann Pinzl

This list is sixth in a continuing series of updates to Lloyd and Mitchell [1973] (previous lists: Bristlecone Newsletter 1(4):3-5; 2(6):4-6; 5(2):2-4; 6(2):3-6; 6(6):4-5). It is a rather piecemeal assemblage of White Mountain plant notes accumulated over the past year, among which 16 taxa (13 species and 3 additional varieties) are reported as new to the flora. These include 2 new genera (both introduced) for the range, and one species new to California. Using updated taxonomy, 1094 taxa are now known from the White Mountains, building on an original 763 in Lloyd and Mitchell [1973].

Besides taxa new to the flora, we report on three *Draba* recently new to science [Rollins and Price 1988], two reports first made outside this continuing series [Morefield et al. 1988], and one confirmation of an earlier *Abronia* sighting by Mary DeDecker.

Our new additions represent about 23 days of field work, continuing our steady rate of about 2 new plants for each 3 days spent in new areas. We will not be near completion until that rate begins to decrease. The following genera remain poorly collected in the White Mountains and require further study, as some of the new additions demonstrate: Carex, Chenopodium, Cryptantha, Cuscuta, Epilobium, Juncus, Poa (and Poaceae in general), Potentilla and Stipa.

The format for this list generally follows that of list IV (see references above). Collection dates cited are for the 1988 season unless noted otherwise. Voucher specimens are deposited at the Rancho Santa Ana Botanic Garden (RSA) unless otherwise noted. Initials preceding voucher collection-numbers refer to the authors of this list.

page [in Lloyd and Mitchell 1973]

- Cheilanthes intertexta (Maxon) Maxon in Abrams. Coastal Lipfern. Mono Co. above lower falls of Falls Canyon, 7600'/JDM 3510/25 APR 1986. This specimen previously was included in the reported elevation range for C. covillei, which now is known definitely only from 6160 feet.
- Abronia nana S. Watson ssp. covillei (Heimerl) Munz. Limestone Abronia. An earlier reported observation is now confirmed with specimens: Inyo Co. along Methuselah Trail near Schulman G: 9600'/JDM 4815/25 JUL.
- Arenaria aculeata S. Watson. Prickly Sandwort. Mono Co. in Indian Garden Creek cateron, 5850'/JDM 4730.0/30 JUL 1987. This seems the best fit for what resembles A. kingu X.A. congesta. First reported in Morefield et al. [1988].
- 64 Saponaria officinalis Linnaeus. Bouncing Bet. Inyo Co., introduced in Cottonwood Creek canyon, 6090'/JDM 4792/18 JUL.
- 75 Eriogonum deflexum Torrey var. nevadense Reveal. Nevada Skeleton Weed. Esmeralda Co. along Rock Creek/Trail Canyon road, 5800'/AP 4453/21 JUL 1981.
- Friogonum nutans Torrey & Gray var. nutans. Drooping Buckwheat. Esmeralda Co. near head of Sugarloaf Canyon, 8800'/JDM 3975/25 JUN 1986. Resembles E. cemuum but with glandular peduncles and different, larger flowers.
- Draba californica (Jepson) Rollins & Price [1988]. White Mountain Draba. Abundant in subalpine sandy places; White Mountain endemic, Previously misidentified as D. breweri and D. crassifolia.
- Draba monoensis Rollins & Price [1988]. Mono Draba. Uncommon in moist high-alpine places; White Mountain endemic. Previously misidentified as D. fladrizensis.
- 92 Draba subumbellata Rollins & Price [1938]. Mound Draba. Locally common in rocky alpine places; also in adjacent Sierra Nevada.
- 93 Lepidium campestre (Linnaeus) R. Brown. Cow Cress. Esmeralda Co., introduced along Indian Creek, 6900'/JDM 4857/02 AUG.
- Acer saccharinum Linnaeus. Silver Maple. Inyo Co., persisting with Acer negundo var. violaceum (Box Elder) near old homesite along Cottonwood Creek, 5850'/JDM 4798/18 JUL.

page [in Lloyd and Mitchell 1973]

- 121 Cuscuta denticulata Engelmann. Fringed Dodder. Inyo Co. in Cottonwood Creek canyon on Chrysothamnus viscidiflorus ssp. puberulus, 5480'/JDM 4812/21 JUL.
- Plantago insularis Eastwood. Island Plantain. Esmeralda Co. at road intersection in Indian Creek canyon below Post Meadow, 7050'/JDM 4816/25 JUL. A single waif plant; established populations should be found on our southwest edge, but none has yet turned up.
- Solidago californica Nuttall. California Goldenrod. Inyo Co. along Cottonwood Creek, 6050-6200'/JDM 4875/JUL-NOV. Hybridizes extensively with S. spectabilis in this area, but pure material is also present.
- Artemisia tridentata Nuttali var. parishii (A. Gray) Jepson. Drooping Sagebrush. Mineral Co. in Montgomery Pass area, 7200'/JDM 4866/4 NOV. Intermediate toward var. vaseyana.
- Arnica mollis Hooker. Hairy Arnica. Mono Co. on Chiatovich Flat and Indian Creek, 9900-10850'/JDM 4823/27 JUL. Previous reports by Munz were based on A. parryi.
- 177 Carex exserta Mackenzie. Ring Sedge. Mono County about headwaters of Cottonwood Creek, 11500-12000'/DWT 9148/12 JUL 1987. First reported in Morefield et al. [1988]. These plants probably are what Lloyd and Mitchell [1973] called C. filifolia.
- 177 Carex incurviformis Mackenzie var. danaensis (Stacey) F.J. Hermann. Mt. Dana Sedge. Mono Co. on south end of Pellisier Flats, 12380'/JDM 4831/28 JUL. Intermediate toward var. incurviformis.
- 177 Carex norvegica A.J. Retzius. Northern Sedge. Mono Co. in northeast canyons, 9300-11100'/DWT 8851, JDM 4850/AUG. Includes C. media R. Brown. These are the first reports for California.
- Secale cereale Linnaeus. Rye. Inyo Co., waif along Cottonwood Creek, 6000'/JDM 4793/18 JUL.
- Agrostis exarata Trinius var. monolepis (Torrey) A.S. Hitchcock. Pacific Spike Redtop. Inyo Co. in Silver Canyon, 5770'/JDM 4789/17 JUL. Previous reports of the species were var. minor Hooker.
- 187 Calamagrostis canadensis (Michaux) Beauvois. Bluejoint. Mono Co. along springs in upper Indian Creek canyon, 9900'/JDM 4846/01 AUG.

ACKNOWLEDGMENTS

JDM is grateful to the Rancho Santa Ana Botanic Garden and University of California's White Mountain Research Station for facilities provided during the 1988 field season, and to Christi Perala for assistance and company in the field. We thank James Reveal and Michael D. Windham for identifying *Eriogonum* and Cheilanthes respectively.

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- Lloyd, R.M. and R.S. Mitchell. 1973. A flora of the White Mountains, California and Nevada. Univ. of Calif Press, 202 pp.
- Morefield, J.D., D.W. Taylor and Mary DeDecker. 1988. Vascular flora of the White Mountains of California and Nevada: an updated, synonymized working checklist. In C.A. Hall and V. Doyle-Jones, eds., Plant Biology of Eastern California, University of California White Mountain Research Station, Natural History of the White-Inyo Range Symposium 2:310-364.
- Rollins, R.C. and R.A. Price. 1988. High-elevation *Draba* of the White Mountains of California and Nevada. *Aliso 12*(1):17-27.

CONSERVATION CORNER

There are a number of conservation matters here in our Eastern Sierra that need our attention but I will discuss only two for this issue of the newsletter.

First, representatives of Inyo County and the City of Los Angeles are fast approaching the April deadline for the conclusion of negotiations for a possible long-term water management plan. One of the activities such a plan will include is appropriate mitigation measures. An important one, which truly would be mitigation, is the Lower Owens River re-watering proposal. This would restore a healthy riparian strip of vegetation which would contribute much to the well-being of Owens Valley. A pump-back station to return water to the aqueduct should be at Keeler Bridge rather than at the Alabama Gates in order to provide a much longer riparian strip. Aside from improved fishing and hunting opportunities there would be a permanent, luxuriant growth of natives for plant lovers to enjoy. Besides supporting wildlife, it would provide various receational opportunities. Letters should go promptly to the County Water Department and to the Board of Supervisors in support of this concept.

Second, the Forest Service is requesting comments on the proposed Doe Ridge private golf course project on Forest Service lands. Letters should be sent to Dean McAllister, District Ranger; Mammoth Ranger District, inyo National Forest; P.O. Box 148, Mammoth Lakes, CA 93526 We should thank the Forest Service for their "no action" position in the Draft EIS.; assert that a private golf course may be attractive in a metropolitan area but that our beautiful natural scenery would be degraded by such a development (You can't improve upon nature!). Say that urban development should be kept at Mammoth and not be allowed to sporead as a satellite to the highway and airport. The deadline for letters to the Forest Service is March 17.

Vincent Yoder Conservation Chairman

WE WELCOME OUR NEW MEMBERS

Myron and Phyllis Alexander, Lone Pine,
Martin W. Berbach, Independence
David Jm Bradney, Las Vegas
Gary and Marianne Morgan, Bishop
Larry Nahm, Bishop
Imelda Nee, Ridgecrest

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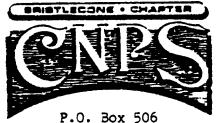
CALIFORNIA NATIVE PLANT SOCIETY - Membership Application

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 understanding of California's native flora and to preserve this rich resource for future generations. Varied interests are represented.

City	State	Zip	Phone
Membership Category:			
Life, Couple	\$500	I wish to be affiliated with the Bristlecone Chapter	
Life, Individual	450		
Supporting	50	Other	
Household Individual or Library Student or Retired	30 ry 18 12		e check payable to: nia Native Plant Society
Retired Couple 15 GIFT contribution: Where most needed Conservation			Bristlecone Chapter, CNPS P.O. Box 506 Independence, CA 93526

The BRISTLECONE NEWSLETTER comes out bimonthly. It is mailed free to members of the Bristlecone Chapter, CNPS. The subscription is \$5.00 per year for others. Editor: Mary DeDecker.

California Native Plant Society



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