CHAIRMAN'S CORNER

How does the SPS fit into the scheme of things in the Sierra Club? How does the SPS further the objectives of the Sierra Club? A little reflection on this subject should be worth while.

It seems to me that we have two major objectives. One of these is to increase the enjoyment and appreciation of wilderness values for ourselves and for others. We enjoy the mountains and the mountaineering friends we have. We value comradeship that comes from sharing a campfire. Many of us were introduced to the mountains and to our mountaineering friends through the SPS. It is hoped that the SPS can function in this way for many others. To this end the SPS and its members should always extend a hearty welcome to newcomers.

The second major objective is the conservation of our mountain wilderness. You are not now being asked to take pen in hand and start a barrage of letters to various public figures. Letter writing is a powerful tool for conservation, but it is not the whole story. We have done a lot for conservation and hardly noticed it. By getting more people interested in the SPS and its activities we have enabled more people to learn wilderness values and hence become conservation minded. Also the recent efforts of the SPS to leave nothing behind at its campsites are very commendable and worth while.

It appears that the founders of the SPS must have had thoughts like these in mind when they drafted the purposes of the SPS (Page 10 of current Schedule). What do you think?

GENERAL MOUNTAINEERING TECHNIQUES SELECTED AS MAY MEETING TOPIC

General mountaineering techniques will occupy the attention of Sierra Peakers attending the business meeting scheduled Tuesday night, May 26, according to Chairman Chuck Miller of the Training Committee.

The topic will cap a four-part series started at the February meeting. Other topics were first aid, ice and snow techniques and mountain rescue.

A field practice was held April 4-5 in conjunction with the ice and snow session, and 24 persons attended.

John Biewener, who has had extensive experience on the snow peaks of the Northwest, was the instructor.

The group was unable to practice on the slopes of Mt. San Antonio as planned, so it headed up Icehouse Canyon for Kelly's Camp to find snow.

Biewener demonstrated various uses of the ice ax and discussed types of equipment for snow and ice climbing.

The temperature dropped to 38 degrees during the night and provided a crust on which to practice.

Self-arrests occupied the attention of most of the participants until the snow became too soft for further practice.

The practice was rewarding despite unfavorable snow conditions.

---COMING EVENTS---

May 2-3: Olancha Peak (12,135)
May 16-17: Mt. Bradley (13,280)
May 23-24: Lone Pine Peak (12,951)
May 26: Business Meeting
Silver Lake Playground
May 29-31: Mt. Langley (14,042)
Peak 12,819

(See Page 3 for further trips.)
SECTION MEMBERSHIP CLIMBS TO 142
WITH ADDITION OF SIX CLIMBERS

By Mary Ann Elde

Membership of the SPS hit 142 during the past two months as six more climbers filed applications.

Among the new members is Beatrice Wheeler, 630 Mercedes, Pasadena. She climbed Lemont, Sawtooth and Sherman Peaks with the SPS this year and earlier did Vogelsang Peak and Mts. Dana and Whitney.

The other new members are:
W. L. (Bill) and Betty Crockett, 3136-D Illinois Street, South Gate. Their qualifications include two emblem peaks—Whitney and Olanca Peak. In addition to Whitney, they have Mts. Muir and Langley and Split Mountain in the 14,000-foot class. Bill is a Sierra Club representative to the Federation of Western Outdoor Clubs.

David A. Cubberley, M. D., 1370 Muirfield Drive, Riverside. He is schedule committee chairman for the Riverside Chapter of the Sierra Club.

Robert Lovett, 1700 Oak Street, South Pasadena. His qualifying peak list includes Olanca, Mt. Lyell and Matterhorn Peak among the emblems.

Jim Dodds, 1963 Napa Avenue, Berkeley 7. (Ned Dodds joined earlier.)

Due to a typographical error, a climber who joined three months ago was listed incorrectly in the Echo. He is Frederick Koperski, P. O. Box 44, China Lake (instead of Loperski).

EDITOR OUTLINES ECHO PLANS FOR SUMMER CLIMBING SEASON

By Jerry Keating

Because of a heavy program of SPS scheduled trips this summer, articles dealing with independent climbs will come under close scrutiny of the editor. The editor's policy set forth last October by John Robinson is reaffirmed in the hope it will discourage articles of thesis stature.

Articles describing unusual climbs or containing useful information always will be welcome.

In regard to scheduled trip write-ups, they should be submitted within a week of the climb to facilitate mechanical production of the Echo.

The bimonthly deadline (the Friday preceding the even-month business meeting) is intended for late news—not for that which occurred earlier.

--THE SIERRA ECHO--

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(Checks should be written in favor of Charlotte Parsons)
**1959 SUMMER SCHEDULE**

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<td>Sept. 26-27</td>
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**LEADER DEFENDS HUMPHREYS CLIMB**

By Bill Heusel

Remarks made at the March SPS meeting and several made earlier regarding a climb of Mt. Humphreys last Aug. 16-17 warrant a rebuttal. That the climb was "ill-fated" is not true. Anyone who participated will agree that it was one of the most enjoyable ascents of the season.

First of all, the climb (see Sierra Yoho for October, 1958—Ed.) was NOT scheduled by the SPS. It was NOT a "come as you are, free for all," as some critics seem to think. I had made several climbs during the year with each member of the party and had perfect confidence in the ability of each.

When we met before starting, I was asked to lead. After having to refuse two lads permission to go because of inadequate footwear and because I didn't know them, we started for Humphreys Basin.

We began the actual climb Sunday morning via Route 2 as described in "A Climber's Guide." The route was very easy to follow and with no incident we arrived at the notch. After a short rest we climbed to the trough and to its head. As we climbed out of the trough, I asked for a belay because, although it didn't look difficult, I could not see what was above.

At the top of this third-class pitch I met two other climbers descending. The only time ropes were crossed on this climb was when these other climbers crossed our rope with theirs as one belayed the other down the third-class pitch. They apparently didn't want to wait for the rest of our party to finish the pitch.

The only belay of ours these other climbers could possibly have seen was at the bottom of this pitch. The belay was adequate although not anchored.

As for the other belays we used above, they were excellent. I have slides to verify it and will be glad to show them to anyone who is interested.

I hope the above information will straighten out the various accounts.

**FOURTEEN THOUSANDERS OBJECT OF SUMMER TRIP**

By Paul Bates

Any person interested in a 10-day to 2-week trip to Colorado to climb 14,000-foot peaks this summer can contact Paul Bates at Thornwall 6-6006 or 1036 E. Providencia, Burbank. By careful planning it is possible to climb two and three of these peaks a day. Date of the trip is flexible pending word from interested parties.

**FOUND:** One canteen cover on Lamont-Sawtooth trip. Contact Jerry Keating
The need for a separate section of the Angeles Chapter of the Sierra Club devoted to hiking, camping and climbing in the Sierra was evident to many for several years. Base Campers, High Trippers and the Desert Peaks Section had for many years sponsored and scheduled trips into the Sierra, but it was apparent that the mountains which inspired the birth of the Sierra Club deserved a section devoted exclusively to their exploration, protection and enjoyment. The advent of modern paved highways and fast cars made it as practical to consider conducting weekend hikes into the Sierra as far north as Bridgeport as it was to hike into the Angeles Crest area.

Beginning in 1952, non-scheduled trips into the Sierra were conducted with ever-increasing frequency by an ever-growing number of enthusiasts. Impetus was given this movement by the fact that the Desert Peaks Section scheduled an average of only three hikes per year into the Sierra. This was felt to be a waste of many fine weekends from May through October. By 1955, the non-scheduled trips outnumbered scheduled ones about six to one. Such long-time Sierra enthusiasts as Bob Sheller, Miles Brubacher, Barbara Lilley, Lee Owings, Owen Blackburn, Frank Bressel, Pat Meixner (Gentry), Chuck Miller, John Robinson, Bud Bingham and Frank Sanborn decided that the time was ripe to organize the Sierra Peaks Section.

The most essential step, of course, was to draft a set of by-laws, a statement of purposes and a list of emblem and qualifying peaks. An interim slate of officers had to be selected to guide the affairs of the section until the first regular elections could be held. Finally, official recognition and approval by the Chapter Executive Committee had to be obtained.

Frank Sanborn was selected as the first chairman of the SPS, Bob Sheller the vice chairman, Pat Meixner the secretary, Leo Scotti the treasurer and Frank Bressel the alternate officer. Roger Gaefke headed the first Mountaineering Committee, which was responsible for scheduling also. Lee Owings and John Robinson worked with Roger on the committee.

Late in July, 1955, Frank, Chuck and Pat went before the Executive Committee, informed it of the intent to organize the section and requested official permission to form the SPS. After due deliberation, the Executive Committee granted official permission to organize within the framework of the Sierra Club. Thus the Sierra Peaks Section was formally launched on its highly successful career under the initial direction of the above-named people. The first list of emblem and qualifying peaks was drafted and approved by the Management Committee, and the previously drafted by-laws were approved and put in force.

By the end of 1955, the section had 38 members, and monthly business meetings were being held at the Sierra Club headquarters in downtown Los Angeles. These meetings have been well-attended from the beginning and attest to the interest and activity of section members.

One of the main purposes of the section was, and is, to schedule weekend trips into the Sierra for the purpose of familiarizing Sierra Club members and others with California's premier mountains and fostering comradeship among those interested in this activity. Enjoyment of, as well as knowledge of, the trails, peaks, meadows, campsites, lakes, streams, forests, valleys and wildlife of the Sierra has been of primary interest.

The original list of 200 qualifying peaks reached from Owens Peak in the Walker Pass area to the Lake Tahoe area, a 600-mile stretch of the Sierra. More recently, the addition of peaks between Lake Tahoe and the Feather River area has expanded this list to the northern limits of the Sierra. The original 10 emblem peaks were from south to north, Olancha Peak, Mt. Needham, Kaweah Peak, Mt. Whitney, Mt. Williamson, Mt. Brewer, Mt. Goddard, Mt. Darwin, Mt. Lyell and Matterhorn Peak. Early in 1956 it was decided that (Continued on next page)
Mt. Needham did not deserve emblem status and that Kaweah Peak adequately represented the Mineral King-Sequoia area. Accordingly, Mt. Needham was deleted from the list and Mt. Ritter in the Minarets substituted for it.

The present emblem of the SPS was drawn up by Bud Bingham in March, 1956, and promptly adopted. A beautiful piece of work, it shows the distinctive emblem peak, Mt. Williamson, in profile, with white Sierra summer clouds floating overhead, snow on the flanks and pine boughs intertwined underneath. The climbing of the 10 emblem peaks entitled a member to wear the emblem of the section. By the end of 1956 the section boasted 18 emblem holders.

By the late fall of 1956, the section was well established. Some by-law changes had been proposed and adopted by the membership, the monthly meetings were well attended and committees on social affairs and safety were being set up or discussed. Membership had more than doubled from the previous December, with a total of 62 enrolled.

The officers who guided the affairs of the section through 1955 and 1956 felt that the time had now come for the first of what were to be annual elections. Candidates for the various management offices were listed, and balloting was conducted by mail. As a result of this first full election, the following persons were elected to guide the affairs of the section in 1957: Bud Bingham, chairman; John Robinson, vice chairman; Barbara Lilley, secretary; Pat Meixner, treasurer; and Frank Sanborn, alternate officer. This group officially took over the management of the affairs of the section in January, 1957. It had been decided earlier that no officer could be re-elected for a second consecutive year in the same post. Chuck Miller became head of the Mountaineering and Schedule Committee.

In 1956, the section began its main function, that of scheduling weekend trips into the Sierra. The first scheduled SPS trip was led by Frank Sanborn and John Robinson, to Deer Mountain, near the South Fork of the Kern River, on May 5-6, 1956. On May 26-27, Frank Sanborn and Miles Brubacher took an SPS group to Maggie Mountain, in the Balch Park area east of Porterville. George Wallerstein and Steve Wilkie led a trip to Mt. Gilber, back of South Lake, on June 2-3. Frank Sanborn and Ted Meier took a group to Trail Peak in Cottonwood Basin on June 9-10. On June 23-24, Don Clarke and Bud Bingham led an assault on the northernmost emblem peak, 12,281-foot Matterhorn Peak, in northern Yosemite west of Bridgeport. It was a memorable climb of one of our most beautiful peaks and involved use of crampons, ice axes and ropes. Twenty-eight persons made this climb.

On June 30-July 1, Chuck Miller led a large group (38 persons) to Alta Peak, back of Giant Forest in Sequoia National Park. On July 7-8, Miles Brubacher and Pat Meixner led a very interesting trip out of Whitney Portal up the North Fork of Lone Pine Creek and the snow-filled Mountaineer's Route to the 14,425-foot summit of Mt. Whitney, the highest emblem peak. On July 14-15, Izzy Lieberman and Miles Brubacher led a challenging climb of 13,157-foot Mt. Ritter, the emblem peak dominating the Lake Wize-Minarets region. Frank Bressel and Chuck Miller took an SPS group from Cedar Grove, in Kings Canyon, to Goat Mountain on July 23-29. On August 11-12, Chuck Miller tackled University Peak with a group from Onion Valley. One of the most impressive of our emblem peaks, Mt. Darwin, fell to a group led by Bob Sheller and Leo Scotti, hiking from North Lake (out of Bishop) on August 18-19. This 13,841-foot peak, plus its neighbor, Mt. Lamarck, provided this group with plenty of action. Frank Bressel led a trip to Mt. Irvine, out of Whitney Portal in the Maysan Lake area on August 25-26.

The climax of this very active summer came on the long Labor Day weekend of Sept. 1-3, when John Robinson led a large group up George Creek to the (Continued on next page)
14,385-foot summit of Mt. Williamson. This trip, to the most distinctive emblem peak east of the Sierra crest near Independence, was a great success, although it involved a gain of 10,000 feet from the cars in rugged, trail-less country. Mt. Bernhard and Trojan Peak were also climbed on the trip.

Frank Bressel and Pat Meixner took a group to Mt. Silliman, between Giant Forest and Kings Canyon, on Sept. 8-9. Bud Bingham and Don Clarke, leading a rugged trip over Taboose Pass to Cardinal Mountain on September 15-16, were clobbered by an early-season snowstorm, but made the peak anyway under very adverse conditions. Mt. Morrison, overlooking Convict Lake, is one of the few Sierra peaks that can be done in one day without knapsacking. Miles Brubacher and Izzy Lieberman led a pleasant but steep climb of it on Sept. 22-23. George Wallerstein and Bud Bingham led a group from Whitney Portal around Tulainyo Lake (highest in North America) to Tumabora Peak on Sept. 29-30.

John Robinson was to lead a group from Onion Valley over Kearsarge Pass to Mt. Rixford on Oct. 6-7. Heavy snow prevented this, but an attempt was made on University Pass. A severe blizzard forced six intrepid climbers off the steep northeast ridge of University, so that weekend was a loss.

On Oct. 20-21, the section joined the Desert Peakers in a joint climb of strenuous Peak 11,107, north of Mt. Keynot on the crest of the Inyo Range. John Robinson, Bud Bingham and Bob Bear spearheaded this group, which named the peak Mt. Inyo. This name has since become official. The final SPS-scheduled trip of 1956 was to the southernmost qualifying peak, 6,475-foot Owens Peak. It was led by Miles Brubacher and Pat Meixner on Nov. 11. Here again, no knapsacking was necessary.

All of the mentioned trips into the Sierra were officially scheduled activities, entered in the schedule books of the Angeles Chapter of the Sierra Club. When it is remembered that the average number of trips scheduled by the Angeles Chapter (usually by the Desert Peaks Section) into the Sierra used to be only three annually, it can readily be appreciated that the SPS, in 1956, fulfilled its mission of scheduling many trips. This set the pattern for succeeding years. In addition, the trips extended from early May to early November, putting to rest the old notion that the Sierra was accessible only from the Fourth of July to the end of September. Now Sierra Peaks groups are active virtually all year in the Sierra, falling back upon the southern areas in the winter.

It was decided at the November, 1956, meeting to begin publication of a newspaper for the section, keeping its members informed of what each was doing, providing information on future trips, and giving writeups of past trips, both scheduled and non-scheduled. Roger Gaefcke suggested the name Sierra Echo for the paper, and this was unanimously adopted. Its editorship was undertaken by John Robinson, who turned out the Echo every three months in Mimeograph form. With the appearance of the first Echo in February, 1957, this history is terminated. The Echo carries the SPS record beyond that point.

SAFETY STANDARDS AMENDED TO ACCOMMODATE SUMMER CLIMBS

Changes in the SPS safety standards were approved at the March business meeting and will be in effect for Mt. Humphreys and North Palisade this summer. The changes apply to third and fourth class climbs.

Trip participants will be required to contact a leader beforehand and prove sufficient knowledge of rock climbing technique. The leader will be responsible to see that all participants are qualified to attend the trip.

As a safeguard against unqualified persons appearing for a climb, the trip writeup in the chapter schedule will not include the meeting place.
Mt. Humphreys (13,986')
(4th in a series on S. P. S. Emblem Peaks.)

S - Summit of Mt. Humphreys (13,986')
L - Point reached by Le Conte in 1898
M - Married Mens' Point, 1904
E - Southeast Pinnacle reached by Eichorn, 1933

Mt. Humphreys, one of the Sierra's grander summits, was a late addition to the list of SPS emblem peaks. It, along with North Palisade, were voted on the list in 1957.

The mountain was named in 1864 by the California State Geological Survey for General A. A. Humphreys (1810-93), one-time Chief of Engineers, U.S. Army. It first appeared on Hoffmann's map in 1864 as Humphreys Peak, and at that time it was estimated to be over 14,000'. Later calculations have shown it to be 13,986', making it the Sierra's 14th highest summit.

No ascents were attempted in those early days, for to reach it required a great deal of effort. For a time it was believed that John Muir had climbed it in the early 1880s, for in his writings he describes a view from "the summit of Mt. Humphreys." Later the conclusion was reached that Muir's peak was probably Mt. Darwin. In 1898 J.N. LeConte and Cory made an attempt on the peak but were forced to give up due to very bad ice conditions. They left a register, however, on a little pinnacle just north of the notch north of Humphreys.

The first successful ascent was finally made on July 18, 1904 by James and Edward Hutchinson, brothers. These two started out with Charles Noble and Albert Whitney to climb the peak from the west. The four ascended until climbing became precarious. At that point Whitney and Noble, out of consideration for their families, decided to leave the honors to the two bachelors. Accordingly, they contented themselves with climbing a prominence just south of Humphreys. While they waited

(Continued next page)
there for the Hutchinsons they built a monument and called their peak "Marryied Men's Point."

Since then, and especially with the completion of a good trail over Piute Pass, the peak has been climbed many times, and is one of the more popular climbs in the Sierra.

There are eight routes listed in the Climbers' Guide for climbing Humphreys, varying in technicality from easy fourth to good fifth class. Three of the routes are in the easy fourth category, the simplest probably being Route #2, ascending the peak from the north-west. This route is for the most part class 2, with two pitches of third and one of fourth. This fourth class pitch is exposed, but is abundant with good hand holds. One should consult the "Climbers' Guide to The High Sierra" for details of the climb.

Mt. Humphreys is being scheduled by the S.P.S. for June 6th and 7th. Those attending should have some experience with rock climbing techniques, and must contact the leader beforehand. — J.W.K.
LAMONT (7,468), SAWTOOTH (7,970) PEAKS

By Monroe Levy

On Saturday, March 7, 24 intrepid Sierra Peakers and friends assaulted Lamont Peak, marking the first scheduled ascent of the year. Skies were cloudless, and a two-week warm spell had melted nearly all of the snow along the route picked by leader Burl Parkinson.

Somewhere near the summit, Debbie Tift, 7\(\frac{1}{2}\) (but going on 8), was moved to ask, "Is this all there is, walking?" The youngster and 22 other climbers reached the summit in time for a leisurely lunch.

Arrival of Al Finney the following morning took the hex off the party by increasing the number of climbers to 14. Led by Jerry Keating, everyone made the top in bright sunlight in contrast to last year's foggy adventure.

Snow was plentiful much of the way since the peak was approached from the north side. The party was joined on top by a swarm of lady bug beetles which seemed to ignore the snow piled around the summit block.

LOOKOUT MOUNTAIN (9,826)

By Chuck Miller

Scouting the new Forest Service road up Brush Creek to the Kern Plateau, 21 Sierra Peakers drove to Corral Meadow to start a backpack to Lookout Mountain on Saturday, March 21. Ignoring the old mining road leading up to Sherman Peak, we scrambled 3,000 feet up North Meadow Creek.

Looking at the trees, it was not difficult to see why the lumber people are interested in cutting them. Their gain will certainly be a loss, however, to those who enjoy seeing and being in a very pretty, open pine forest with clear streams and snow-capped peaks for a backdrop. The days of these extensive forests on the Kern Plateau are numbered if the Forest Service goes ahead with its plans. (See "It's Later Than You Think" elsewhere in this issue.)

We were able to find clear ground on which to camp Saturday night. The temperature dropped to 22 degrees under a bright moon.

Sunday brought a warm sun and our climb of Lookout Mountain gave us a view of the high peaks to the north as well as Olancha and Sherman and Siretta to the east and south. Cold winds and scudding clouds speeded our return to the cars via Sherman Peak.

The trip had an "old home week" atmosphere since 7 of the 15 charter members of the SPS were along. It was also noted that all of the former chairmen and the present chairman were there.

CRAG PEAK (9,555)

By Nancy Keating

A moderate spring storm broke an extended drought in the Southern Sierra and confronted more than 20 Sierra Peakers Saturday, April 25, as they backpacked over Haiwee Pass and down to camp on the South Fork of the Kern River. Rain and snow showers fell throughout the afternoon, but the damp band was able to improvise adequate shelters.

Traces of snow covered the ground Sunday as a result of persistent showers during the night. The hikers scampered across the Kern with the help of exposed stones and headed for Crag Peak through broken forest. A boxer dog named sport from the Sam Lewis Pack Station followed the group until third class stopped him below the summit. Clouds spoiled the view on top, and lunch was a hasty pause because of the weather. The retreat to camp was marred when Bill Heusel slipped and took an impromptu bath in the chilly waters of the Kern.

Since the snow show ers had intensified between the peak and camp, the group moved out rapidly and headed for the cars. Most of the party arrived at the roadhead just before dark, and leader Frank Sanborn estimated the day's workout at 19 miles.
HOW SAFE ARE SPS PLANNED THIRD, FOURTH CLASS GROUP CLIMBS?  By Bud Bingham

Many hours have been spent by the SPS safety committees of the last two years to provide good safety practices. Their efforts have been directed toward third and fourth class climbs primarily. The section has come a long way since the first trudges to peaks of the Sierra. The membership has shown a desire to climb some of the more difficult and interesting peaks. Present safety practices certainly are a step in the right direction and have been planned by members very much concerned.

Our summer schedule will offer two climbs of this nature at least. Mt. Humphreys and North Palisade fall in this category. SPS safety practices generally restrict totally inexperienced climbers from making these ascents with the section. We have omitted in our safety program methods in which qualified leaders must conduct the actual climb. Falling rocks will offer one of the major problems on these climbs. Large climbing groups on the same route become a hazard to themselves.

Regardless of how careful climbers may be, experienced or not, a single dislodged rock often starts others falling. Steep, precarious chutes make it almost impossible to find cover under a swift barrage of ricocheting rocks. The peril occurs entirely too quickly. When rocks fall, usually the climbers below have good cause to let out with a volley of screams in protest.

Often the first concern of the eager beginner is to be able to go on interesting climbs. Whether they really qualify doesn't seem to be of great importance to them. It's interesting to note that a seemingly difficult climb published in the Angeles Chapter schedule appears to be a challenge for beginners. Leaders receive no end of telephone calls and often may not be so popular at the time. Normally these people will not attempt serious climbs on their own.

Practice rock climbs or the equivalent are not necessarily a good substitute for experience and conditioning. Small competent and experienced climbing teams would avoid our planned third and fourth class climbs as they are set up at present. Beginners must get out on the standard climbs, become known and prove that they are fairly capable climbers. It won't be long thereafter that leaders will welcome them on the more serious ascents.

Leading large groups up long, steep chutes and precarious ledges with rocks perched potentially ready to fall upon the slightest mis-step, hardly makes good sense to me. It's rather surprising that some of our well-qualified leaders would even consider leading more than four people up a third or fourth class route. One serious climb may be all that leaders will care to lead.

People on a serious climb should band together in small groups as a team and know each other's capabilities. Routes should be chosen so as not to conflict with other climbers ascending or descending. When one route is not feasible for a large group, leaders should time climbers in intervals or recruit additional leaders to take small groups on other routes when possible.

Maxim: No mountain climb is so important that time shall not be taken to plan and conduct it safely.

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NONSCHEDULED TRIPS

SCOUTING THE PIUTE MOUNTAINS  By Frank Samborn

A group of eight Sierrans decided to spend Sunday, April 12, leisurely investigating the pine forested, southerly extension of the Kern Plateau known as the Piute Range. An extensive network of dirt roads enabled Jerry Keating, Graham Stevenson, Francis Foley, Owen Blackburn, Roger Gaefcke, Virginia Aplanelp, Loren Larson and Frank Samborn to ascend four peaks in one day, all of which commanded views of interest.

(Continued on next page)
SCOUTING THE PIUTE MOUNTAINS (Continued)

Starting from Jawbone Canyon, the group drove across Kelso Valley and up into the high country. A two-mile hike gave the climbers Mt. Sorrell (7,700). Then they viewed the Kaweahs and Mt. Langley from Piute Lookout (8,300), which was reached via a dirt road. After a one-mile hike to Piute Peak (8,430), highest south of Walker Pass, the climbers took a steep, 1 1/2 mile climb of Mt. Liebel (9,030). After all this activity (the cars worked harder than the hikers), the group dropped down to Kernville for dinner at Wing's.

Clear, warm weather favored this penetration of the Sierra's "deep south," but the group was disturbed at the extreme dryness, there being no snow in areas where there is normally several feet during early April.

It was unanimously decided that none of the peaks in this area rated SPS qualifying status, but that the Piute Mountains, plus Scodie, are admirably suited for family and beginners-type trips in the fall, winter and spring.

NORMAN CLYDE PEAK (13,956)  By Jon Shinno

The Palisades area has some of the most spectacular mountain scenery in the Sierra, winter or summer, and the peaks are all worthy of serious consideration. Going on this assumption, a party composed of Jim Eslinger, Ricky Tejada-Flores and Jon Shinno packed into the Middle Palisade region March 26 to see what could be climbed.

We found Norman Clyde Peak to be more impressive than neighboring Middle Palisade. Gaining the east ridge, we ascended it as far as we could third class, then transferred to the north face, which we ascended by one of numerous routes. Mountaineering on rock covered with ice and powdered with snow is demanding work. What would normally have been high third class was transformed into strenuous, marginal fourth class, but we had come for this type of climbing. Bivouacking at about 13,600 feet on the north face that night, Jim dropped his pack containing food and cameras. We took turns standing, for the ledge we were on had room for only one seat.

The remaining pitches were covered using practically every type of climbing technique imaginable: Pulling up on wedged in ice ax, climbing the rope, tension traversing on lassoed rock, straight-forward sixth class and prus-siking. Once on the ridge, we reached the summit without difficulty. The return was down a large couloir above the Clyde Glacier, which was reached by first dropping about 300 feet on the west side.

On Saturday, March 28, we hiked out and met the incoming ski tourers.

UNIVERSITY PEAK (13,588)  By Tom Ross

On the morning of Tuesday, April 21, I started from Onion Valley and camped in Upper Inyo Basin (11,500). Next morning, I climbed a steep snow couloir—45 degrees—to University Pass (12,700). From there on to the summit, the views were superb. The weather was perfect. It was the first ascent of University for this time of year.

TELESCOPE PEAK (11,045)—THE CRAZY WAY  By Jon Shinno

Sierra Peakers Bill Sanders, Peter Hunt and Jon Shinno started out Saturday, April 18, at 5 a.m. from Shorty's Wells, reputedly below sea level, to make the desirable—yet undesirable—ascent of Telescope Peak from Death Valley. We tolled up the road to a mine at a juncture in the canyon. At that point we forsook the road in favor of the ridge to the north. This ridge points at the main ridge north of the peak, and it is a convenient route. The place where we met the Mahogany Flats trail was approximately 40 minutes from the summit. On the whole, the climb was characterized by a slow, methodical pace, with frequent and lengthy rest stops. We met George Shinno, who made the car shuttle, on the summit at 3 p.m.

FOUND: Sierra Club cup on ice and snow practice. Contact Charlotte Parsons.
SIERRA PEAKS SECTION

RESPONSIBILITIES OF LEADERS

FOR SAFETY ON SPS TRIPS

A. All trips

1. Keep track of the location of all trip participants throughout the trip.

2. Refuse to let inexperienced persons leave the group. Refuse to let any person leave from the group alone.

3. At the beginning of the trip advise the participants of their responsibilities for safety. It is understood that what is said in this regard should depend on the group and on the trip. The object is not to insult anyone's intelligence but to make sure everyone is informed of his responsibilities. The conditions and route of the trip should be mentioned at this time.

4. When someone must be left behind en route, provide for that person's safe return. This might be done by instructing that person to stay where he is until the group returns, by requesting that he return by the same route as he came, or, by leaving an experienced person with him in order that they may return together.

5. Be sure that all trip participants have returned to the roadhead before leaving it at the end of the trip. However, participants who are not with the main group on the scheduled activity should not expect the leader to be responsible for them. His responsibility lies with the main group.

B. Additional responsibilities for third and fourth class trips.

1. Scout the route of the trip before the date it is scheduled.

2. Make sure beforehand that all participants are qualified to attend the trip.

3. Be equipped to give a proper bale to any member of the party on a trip. See that a bale is given whenever the leader judges it necessary and whenever a member of the group requests it.

4. The assistant leader must have a first aid kit with him throughout the trip and be prepared to use it when necessary.

C. Additional responsibilities for ice and snow trips.

1. Scout the route of the trip before the date it is scheduled.

2. Exercise on the spot judgement to avoid leading a group into dangerous conditions. Examples of such conditions are (1) avalanche danger and (2) steep icy slopes.

3. The assistant leader must have a first aid kit with him throughout the trip—and be prepared to use it when necessary.
A. All trips

1. Stay with the group except when permission to leave it is obtained as in number 2.

2. Participants who wish to join a scheduled trip but do something other than the scheduled activity should obtain permission to do so from the leader before the trip begins. No participant should expect to leave the group alone.

3. Follow the trip leader's instructions on all matters of safety.

4. Signals which can be used in case of need follow:
   a. Distress signal: a signal sequence of three indicates distress; the reply is a signal sequence of two.
   b. The signal "ROCK" yelled loud, clear and at once indicates a falling object or falling objects.

B. Additional responsibilities for third and fourth class trips.

1. Contact the leader and be able to prove to the leader's satisfaction that the participant has sufficient knowledge of and practice in rock climbing techniques to be qualified to attend the climb.

C. Additional responsibilities for ice and snow trips.

1. All participants must have with them items of equipment required in the trip writeup in the schedule or required by the leader.

2. Be able to properly use the equipment required for a trip. When a practice is to be held on a trip, participants may attend it in lieu of having previous knowledge of the necessary techniques.
(Editor's note: Although the following article deals with exercise in general, it also relates to the type of exercise in which mountain climbers engage. The author is a doctor of medicine who practices obstetrics and gynecology in Santa Monica.)

PHYSIOLOGY OF MUSCULAR EXERCISE

By Dr. Andrew J. Smatko

During muscular exercise the increased demand for oxygen by the active muscles and the need for carrying away the waste products of metabolism from the muscles bring into action many of the systems of the body, such as the respiratory, circulatory, nervous, muscular and kidney systems.

The fundamental change during muscular exercise is the increased metabolism of the skeletal (voluntary) muscles. This involves a greatly augmented consumption of oxygen, the quantity used depending on the amount of work. Oxygen is used both during muscular activity and in the recovery from same. The metabolic changes occurring during muscular exercise may be subdivided into two parts: (1) The initial rise. (2) The steady state. With the exception of muscular activity, the metabolism does not rise immediately to the plateau of the steady state (i.e. There is a lag in oxygen intake initially due to a temporary retardation of circulatory and respiratory adjustments). However, the plateau is soon reached; this is the steady state. It may be defined as the condition in which the intake of oxygen meets the metabolic needs of the muscles. The initial lag in oxygen intake explains the so-called second wind phenomenon. Energy for this initial phase of muscular activity comes from the immediately available oxygen in the blood in the muscles. This oxygen is quickly depleted. Additional energy for muscular contraction is obtained from sources not dependent on the use of oxygen (called anerobic metabolism). However, the need for oxygen soon becomes acute, and this accounts for the labored and heavy breathing when one first begins moderate to heavy exercise such as climbing. Depending on the "athletic condition" of the individual is the time needed for this labored breathing to catch up to the oxygen demand of the steady state. When the steady state is reached, one ascribes the term "second wind" to this condition or phase of muscular activity. As mentioned before, the oxygen intake at this period meets the metabolic needs of the active muscles.

We have all experienced this phenomenon at the start of exercise, no matter how conditioned we are. Consequently, at the start of exercise one should proceed slowly until the "steady state" is reached.

Man can continue to increase the intensity of work or energy demand beyond that which can be supplied by his maximum oxygen intake. This is accomplished by increasing the recovery period. In the recovery period the oxygen utilization becomes greater as the intensity of effort is increased. The amount of oxygen used during the recovery period is called the "oxygen debt" for it indicates to what extent the body has gone into debt during the exercise, a deficiency which must be made up after the exercise is over. This oxygen debt may be as high as 18 quarts. The ability of man to go into oxygen debt is dependent in part on lactate production. Large amounts of lactate are formed and found in the blood and urine of man immediately after strenuous exercise. By and large the extra oxygen taken in during the recovery period is used to oxidize lactate. There is a direct relationship between the amount of lactate in the blood and the magnitude of oxygen debt.

The ability of the body to withstand lactate is a limiting factor in muscular exercise. Recovery periods of 15 liters of oxygen have been reported. This indicates that a man can exercise to the degree at which he needs 20 liters of oxygen per minute—5 liters being taken in during the exercise and 15 liters taken in during the recovery period.

(Continued on next page)
Another limiting factor in man's ability to work is his overall efficiency—which at the most is 25 per cent (i.e., he can convert only 25 per cent of his total energy into useful exercise). Efficiency is dependent as well on the speed of work; the higher the speed the less the efficiency.

With the rise in oxygen consumption there is a corresponding rise in carbon dioxide output. The ratio of oxygen to carbon dioxide is called the respiratory quotient. It is expressed as CO₂/O₂ and varies with the type of material or energy source used. When sugar or carbohydrate is used, the volume of carbon dioxide produced is equal to the volume of oxygen used. The respiratory quotient, CO₂/O₂, is therefore 1.0 when fat alone is used as an energy source. The respiratory quotient is about 0.7 for protein; the value is 0.8. In exercise the respiratory quotient is 1.0, which is proof that the immediate fuel is carbohydrate and most likely glucose. However, both fat and protein can and are broken down in the body to carbohydrate to supply the fuel for energy. The exact physico-chemical changes in a muscular contraction are very complex and much too detailed to outline here.

Since only about 20 per cent of energy expended during muscular exercise is converted to useful kinetic energy (average individual), then the remaining 80 per cent is liberated in the form of heat. In order to lose this heat and prevent an injurious rise in the body temperature, various thermo-regulatory mechanisms must go into action. One of the more important of these is the heat loss affected by the hyper ventilation (increased breathing). The increased circulation through the skin as a result of dilation (enlargement) of blood vessels also aids in heat loss by convection and radiation. Evaporation or perspiration further augments heat loss.

Muscular exercise calls forth responses by the entire organism, particularly the major systems. Impairment of the function of any one of these systems limits one's ability to perform exercise. When viewed in the light of mountain climbing, muscular performance is impaired and limited by the gradually decreasing oxygen tension as one ascends. The process of acclimatization does not concern us here, for such changes take from 7-10 days or more to take place.

RECOMMENDATIONS

In view of the analyses above, certain general recommendations can be gleaned for use by the average mountain climber. By average, I refer to the climber limiting himself to altitudes below 18,000 feet, for with higher altitudes one must acclimatize and, as mentioned above, this does not concern us.

1. Since oxygen supply is paramount in mountain climbing, any physical condition—chronic or acute—which may impair the intake or uptake of oxygen would necessarily limit one's capacity for exercise. I do not propose to enumerate the various diseases or conditions which can cause this, but in general acute respiratory infections, acute gastrointestinal ailments, anemia, improper nutrition, chronic lung disease, weak heart and finally an unstable nervous system all can affect the capacity of the body to take in and utilize oxygen.

2. A well balanced diet, high in carbohydrate and with adequate vitamin intake, is also essential for good muscular performance. This would help to insure proper functioning of the oxidative enzyme functions concerned with muscle contraction and to keep an adequate supply of available glycogen in the liver—to be supplied as glucose to the active muscles.

3. Rest, too, is important. Sleep is best for it assures muscular relaxation and permits the muscles to revert to their normal state.

(Continued on next page)
4. Adequate fluids are vital. It is absolutely untrue that one should not drink water while climbing. As one can see from the above, there is a great loss of fluids with exercise, and this fluid must be replaced in order for the various organ systems to function most efficiently.

5. At the beginning of climbing one should proceed slowly and gradually pick up the pace as the "steady state" is approached. This, of course, varies with each individual, but nevertheless holds true for everyone.

6. Since digestion is impaired by exercise, one should rest after eating a significant meal. After exercise is completed, digestion proceeds normally.

7. On a prolonged climb, consumption of sugar several times during the day would tend to keep up a good supply of glucose, the fuel for muscular contraction.

8. Replacement of salt on climbs where considerable perspiration is lost is essential.

9. Climbing in warm or hot weather puts considerable strain on the thermo-regulatory mechanisms. Consequently, prolonged or strenuous activity should not be contemplated unless frequent rest stops in shade are possible or cooling the skin by water is available.

10. Finally, an individual in good physical condition, with adequate respiratory, circulatory and nervous systems, using good judgment as to his capacity and ability to perform moderate muscular exercise, can undertake mountain climbing and enjoy it to the fullest extent.

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IT'S LATER THAN YOU THINK

By Clark H. Jones

Despite strong public protests from sportsmen, watershed and wildlife conservationists, and supporters of wilderness recreation, the U.S. Forest Service is going ahead with its proposed timber access road from Kennedy Meadow on the South Fork of the Kern River to Beach Meadow in the heart of the virgin forest of the Kern Plateau.

The Forest Service decision to proceed with the road has been made in spite of the fact that at last June's public hearing at Ridgcrest, the opponents of the road outnumbered the proponents more than three to one.

The Sierra Club requested the Forest Service to delay the construction of new roads or the making of additional sales in the Kern Plateau area until the President's Recreational Resources Review Commission has published its report. But the timber harvesters and road builders can't wait. Expediency must again triumph over careful and longer range planning as has happened so often in the desecration of our nation's natural and scenic resources.

According to the Forest Service's announced plans, 97 per cent of the merchantable timber on the Kern Plateau is slated for the sawmill. Only 3 per cent is to be saved for its natural beauty.

Arguments against the proposed Beach Meadow timber access road include:

--The arid, slow growing forest of Southern California will add but little to the nation's lumber supply.

--Southern California's mushrooming population needs more space for wilderness recreation. Presently existing wild areas such as San Gorgonio and San Jacinto already are taxed to capacity.

--Valuable watershed is threatened. See January Sierra Club Bulletin which shows muddy waters.

--The spawning grounds of the native rainbow trout are threatened. These grounds represent an extensive source of native fish for the Kern River drainage which serves thousands of persons each year.