

## The Cascade Caver

Official Publication of the CASCADE GROTTO N. S. S.



Volume 10 no. 4

Editor: Dr. William R. Halliday

April 1971

#### COMING EVENTS

March 20-21. Vancouver Island. Call Pflum, ME 2-4898.

March 23. NCRA training session, Vern Frese's home, 8-10 PM.

March 27. Ape Cave photography trip. Call Halliday, EA 4-7474.

March 27-28. Oregon Grotto-Gem State Grotto joint trip to Hells Canyon and Pass Creek Canyon. Call Larson, 695-4143.

April 3. Palisades trip. Call Halliday, EA 4-7474.

April 9-11. St. Helens area trip. Call Brown, RO3-9094.

April 16. Planning session, Larsons, 8 PM. 695-4143.

April 17. Practice rescue, Ape Cave. Call Brown, RO 3-9094.

April 19. Regular grotto meeting 8 PM, Hallidays, 1117 36th Ave. E.

May 29-31. Papoose Cave and invitational steak fry. Call Brown, RO3-9094.

All weekends in June. Altitude conditioning trips for Summit Steam Cave group.

July 2-5. Summit Steam Caves. Call Coughlin, PA 5-9127.

(NSS Convention is June 12-19)

Labor Day weekend. NW Regional Meeting, Bear Lake area, Idaho.

Thanksgiving weekend. Possibly Shasta Lake area, with California Region.

### NEW SOURCE FOR GOOSERS

The Cascade Caver is pleased to be able to announce that a new source has been found for goosers, right here in Seattle.

The Sound Swiss-lok Scaffold Company, 855 N.W. 48th, specifically lists both Diagonal Goosers and Straight Goosers, available on either rental or sale basis.



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## Report on February 23 Executive Meeting

The grotto's first executive meeting in many months convened February 23. The following motions were passed:

- That current issues of VICEG News, Brand X, Xanadu Quarterly, Oregon Speleograph and Gem State Caver be circulated at each general meeting. (Editor's note: VICEG News and Oregon Speleograph are doing fine but I have't seen a Gem Caver for months nor a Brand X for about a year; Xanadu Quarterly is currently on a semi-annual basis)
- 2. that a list of members be published annually, with a list of new members periodically and a list of members whose dues have expired.
- that motions, resolutions and amendments to the Constitution or Bylaws be included in the Caver.
- 4. that Chuck Coughlin write a letter of appreciation to the VICEG for the hospitality they have given our members over the years, for the naming of P89-1 for our grotto, and for all their other thoughtful considerations. The letter was to contain an invitation to all VICEG members to stop with us at any time whether caving or not, so that we may return some of the hospitality we receive so often when visiting Vancouver Island, and an offer of any help we can provide in any way.
- 5. that the following assignments be made official and of indefinite duration:

Robert Brown: Regional Representative Field trips and programs

Chuck Coughlin: Membership

William R. Halliday: Editor, Cascade Caver
NSS Business reporter
Exchange publications and library

Ron Pflum: VICEG liason

Jan Roberts: cave leads

6. The following by-laws were adopted and presented to the membership for ratification at the regular meeting March 15; at that regular meeting each was adopted in principle subject to rewriting:

I. The Cascade Grotto shall have four classes of membership:

Section 1. Regular members shall be those persons who have signified their desire to become members, who have paid current dues, who live in the Pacific Northwest and who are not voting members of other units of the Northwest Regional Association. Regular members receive all grotto publications and are entitled to vote on all pertinent matters.

Section 2. Family members are relatives of a Regular Member of the grotto who live at the same address and have paid current dues. Family members receive no publications but those over 15 years of age are entitled to vote on all pertinent matters.

Section 3. Subscribing members are persons who have paid the subscription rate for Grotto publications but do not desire to be active participants in grotto activities. Subscribing members receive grotto publications but are not entitled to vote on any grotto matter.

Section 4. Associate members shall be those persons who have signified their desire to become members but who live outside the Pacific Northwest, or are voting members of some other unit of the Northwest Regional Association. Upon payment of current dues they shall receive all publications of the grotto, are encouraged to attend all grotto activities but are not entitled to vote.

II. All grotto dues shall be paid at the time of beginning membership and shall be renewable one year later. Dues for Regular, Associate and Subscribing members shall be \$3.00 per year. The subscription rate for the Cascade Caver shall be \$3.00 per year. Dues for Family members shall be \$1.00 per year.

III. Nominations for officers shall be made at the November general meeting; such nominations must be made by a grotto member with the right to vote. Elections will be held at the December general meeting and the new officers will take office on the first day of the following January.

IV. A simple majority of voting grotto members shall prevail at general or special grotto meetings. Approval or amendments to by-laws or the grotto constitution, or expulsion of a member shall require a 2/3 favorable vote after due notification to the grotto membership; due notification being 20 days' notice.

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We hope to have a membership list ready for the next issue of the Caver.

\* \* \*

Caver CB radio liason in Missouri was the subject of a recent article by Tom Cravens and Mike Morgan, in MSS Liason (publication of the Missouri Speleological Survey). There, channel 10 has been designated semi-officially as the cavers' channel. Perhaps the NWRA should consider whether it is desirable to standardize on this channel in the NW also.

#### GLACIOSPELEOLOGICAL ABSTRACT

Mumma, Martin D. & Kiver, Eugene P. SUMMIT FIRN CAVES, MOUNT RAINIER NATIONAL PARK, WASHINGTON. Paper presented at 1971 sectional meeting of Geological Society of America.

Extensive cave systems exist in the ice-filled craters of Mount Rainier. The caves develop in ice less dense than glacier ice so that the term firn or nevel cave is appropriate. In the younger east crater over 3,000 feet of continuous passage with at least 14 exits connecting to the surface winds approximately three fourths of the way around the crater perimeter. The lowest accessible point lies 330' (elevation (13,870') below the north entrance and is in a side room 120' x 120' x 70' high. The less extensive west crater caves were explored but not mapped.

The three major entrance passages average 20' across and 10' high with a 46° maximum slope. The nearly horizontal sinuous perimeter passage is approximately 220' below the surface and is 10 to 60' wide and 5 to 30' high. Andesite and volcanic breccia outcrops occasionally protrude through the 30 to 32° sloping floor.

Continuous melting by heat and steam emanations maintains a cave system near the crater-wall-ice fill contact. Melted ice is replaced by slow subsidence and complete ice replacement in the crater occurs every few decades. No appreciable quantity of flowing or standing water was observed. Maximum recorded ground temperature was 86°C and maximum steam temperature 56°C. The east crater ice is estimated to be 350 to 500 feet thick and contains in excess of 1 billion gallons of water. Certain melt features indicate that some new or shifting thermal activity is occurring in the subsurface.

\* \* \*

Extracts on the same subject from a letter from Gene Kiver dated 2-10-71:

... We will be working under a National Geographic grant this next summer at the summit and hope to complete our observations and the mapping of both craters... We plan on spending another two weeks at the summit during August when summer ablation has removed considerable snow and ice from the entrances and bedrock rim. We would be delighted to have you and your group spend some time with us while visiting the caves. We should have ample supplies at the summit camp by thatt time. Please keep in touch and let us know your plans.

\* \* \*

(see next page for accompanying map. In fahrenheit, the temperatures given above are 187 and 133 degrees)

