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Richard A. Hall

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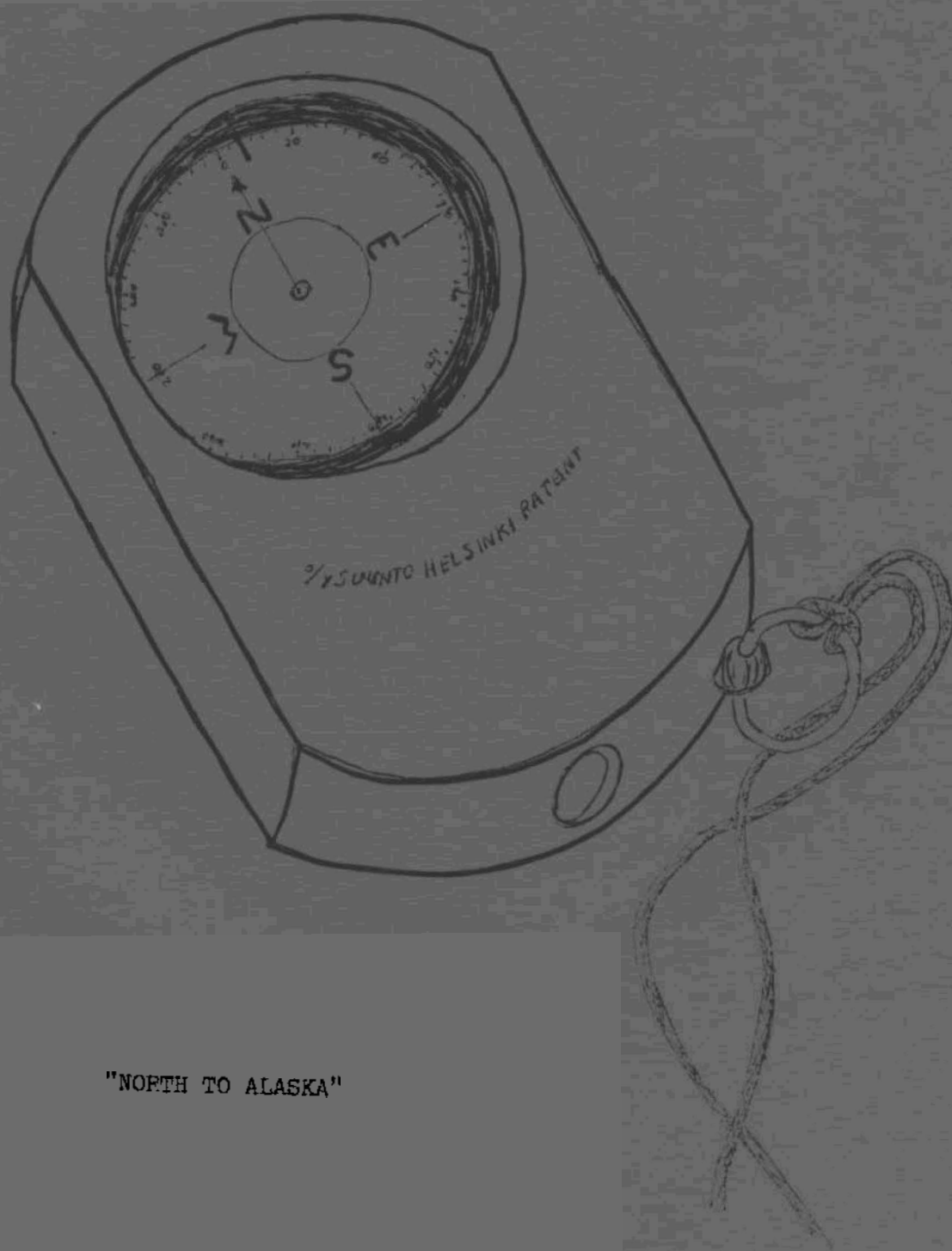
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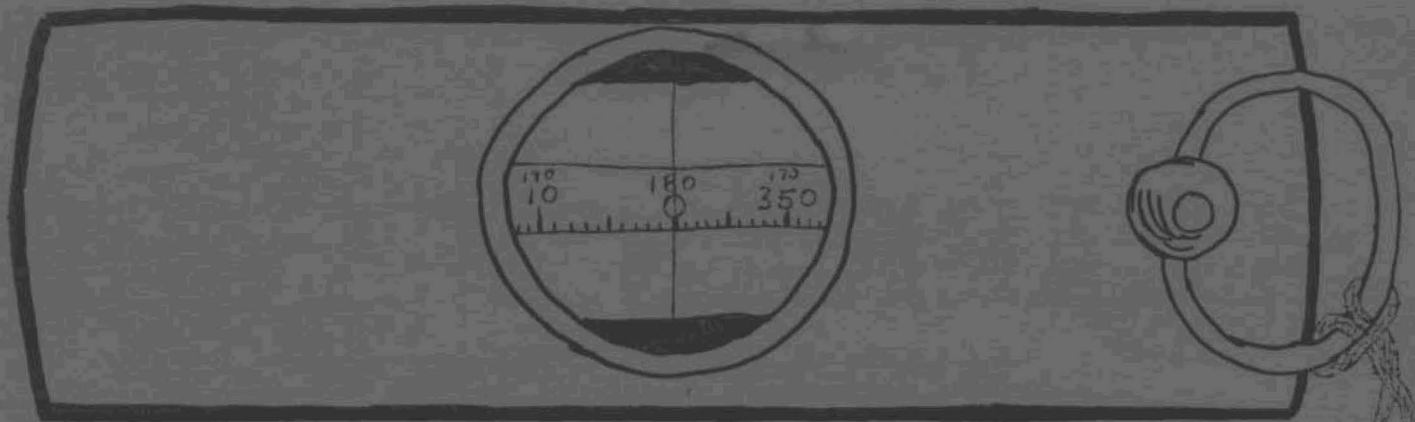
THE ALASKAN CAVER

Volume 6 Number 2

March-April 1981



"NORTH TO ALASKA"



CALENDAR OF EVENTS

- Winter Glacier Caving at Byron Glacier some weekend or elsewhere as weather permits. Contact Jay Rockwell at 277-7150 if you are interested.
- Winter Rusty Rubeck may be interested in trying to snow machine in to Star Cave from McCarthy sometime this winter. If you are interested contact him at 694-3571.
- April 16 Glacier Grotto Meeting. Meetings are held in room 312 Grant Hall, Alaska Pacific University at 7:30 pm. The program will be an NSS slide show entitled "An Introduction to Northwestern Volcanospeleology."
- May 21 Glacier Grotto Meeting. Meetings are held in room 312 Grant Hall, Alaska Pacific University at 7:30 pm.
- June 18 Glacier Grotto Meeting. Meetings are held in room 312 Grant Hall, Alaska Pacific University at 7:30 pm. The program will be an NSS slide show on Wyandotte Cave, Indiana.
- July 16 Glacier Grotto Meeting. Meetings are held in room 312 Grant Hall, Alaska Pacific University at 7:30 pm.
- Calendar continued on page 8.

The ALASKAN CAVER is a periodic publication of the Glacier Grotto of the National Speleological Society. Subscriptions are free to members. Membership dues are \$3 per annum. Dues can be sent to Elizabeth Rockwell at 2944 Emory St, Anchorage, AK 99504. Copyright 1981 by Glacier Grotto. Material not copyrighted by individuals or other groups may be copied by other NSS publications provided credit is given to the ALASKAN CAVER and a copy of such publication is sent to the editor.

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THE GOLDEN HORN LIMESTONE LENTIL

In the same area as, and as little as five miles away from, the Chitistone Limestone which was described in the last issue of the Alaskan Caver, in fact only about twenty miles north of Star Cave, is a pocket of Permian limestone which "forms high cliffs and massive bold outcrops with local sinkholes" (Smith and MacKevett, p 20). The Golden Horn Limestone Lentil is part of the Hasen Creek Formation and is named and described in USGS Bulletin 1274Q, The Skolai Group in the McCarthy B-4, C-4, and C-5 Quadrangles, Wrangle Mountains, Alaska, by J. G. Smith and E.M. MacKevett Jr., pages 20-23. It is usually the highest layer in the Hasen Creek Formation and is often overlain by Nikolai Greenstone which is itself often unconformably overlain by the Chitistone Limestone. As shown on the map on page 4, its entire exposed extent is less than three by ten miles, and half of this area is covered by glaciers and aluvial gravel. There are three patches of the rock; in the McCarthy C-4 Quadrangle just east of the Nizina Glacier and just north and south of Skolai Creek there are patches about three to four square miles each. Further to the northwest by five or so miles is a small patch of about one square mile which is adjacent to Ronn Glacier in the northwest corner of McCarthy C-4 Quadrangle and the northeast corner of McCarthy C-5 Quadrangle.

The name "Golden Horn" was given to the yellow and red stained cliffs of the prominent peak in the area by early prospectors due to the trace amounts of iron in the rock which bled over the surface. The limestone is referred to as a lentil because while the Hasen Creek Formation is quite extensive, this limestone is thick only in the small area as mentioned above and the lentil, which is nearly 800 feet thick at its thickest, thins out at the edges. Likewise, "individual beds having centers as thick as 10 feet pinch out over a distance of several hundred yards" (Smith and MacKevett, p 20). The portion by Ronn Glacier is 250 feet maximum thickness. However, there is often a band of limestone associated with the Hasen Creek Formation elsewhere although it is seldom very thick and is not existant at all in some locations. This band exists in the southern part of the McCarthy C-8 quadrangle and is shown separately in MacKevett et. al., 1978. I assume it also exists in the McCarthy D-3 quadrangle since a stream there is named Lime Creek and no other formation in the area is known to have limestone. The Hasen Creek Formation is contemporaneous with the Eagle Creek Formation also of Permian age which contains two limestone layers and is located in the Mt. Hayes A-1 Quadrangle (Richter and Dutro) and the Tahkidit Limestone in the Eagle and Charley River Quadrangles (Brabb and Grant).

"Limestones of the Hasen Creek Formation are dominantly fossiliferous wackestones consisting of worn disarticulated fossil fragments as much as 1 cm long in a matrix of carbonate mud is mainly calcite, but it is locally dolomitic and generally contains some clay minerals and carbonaceous material" (MacKevett, 1970a, p 10).

continued on page 5.

THE GOLDEN HORN LIMESTONE LENTIL

- Golden Horn Limestone Lentil
- Glaciers


Contours In 1000 foot intervals.
Base from U. S. Geological Survey
McCurdy C-4 & C-5 Quadrangles.

Geologic data based on USGS
Geologic Quadrangle Maps GQ-844
and GQ-899.

Scale: 0 5 10 MILES
0 5 10 KILOMETERS

North Arrow

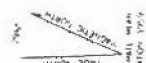
Inset Map: ALASKA

	Golden Horn Limestone Lenticle
	Glaciers

Contours in 1000 feet intervals.

Base from U. S. Geological Survey
McCarthy C-4 & C-5 Quadrangles.

Geologic data based on USGS
Geologic Quadrangle Maps GQ-844
and GQ-899.



NEW YEAR'S IN WEST VIRGINIA

Since Lis and I were outside (East Coast in fact) to visit our folks for Christmas, we figured we would also visit some old friends in the D.C. Grotto. So I called up Paul Stevens and arranged a carpool ride to Ronceverte, West Virginia for the weekend after New Year's for their monthly Organ Cave trip. We had spent many weekends at the fieldhouse there when we lived near D.C. and it felt good to be back. Given my choice of where in the cave I wanted to go I chose a few small leads in Hedrick's Maze, an area of the 35 plus mile cave system seldom visited these days because its been pretty thoroughly checked and mapped. I had been mapping in that area a few years before we left for Alaska and had meant to return some day to survey those last few remaining leads. Paul Stevens, a guy named Harold who had never been in Organ Cave before, and I headed for the cave about 10 am with plans to work hard and be out by six. We left some clean clothes in the tourist section of the cave to change into later, and headed downstream. Every turn brought back memories of old cave trips and every hour brought back memories of muscles that I haven't used in a long time. But it was lots of fun anyway. Paul wanted to resurvey about a dozen stations in Hedrick's mainstream because he thought the compass that had been used was about three degrees off true (in fact the instrument eventually became adjustable in that you could set it for any number of degrees bias you wanted.) Well - it took us about thirty stations to come up with 14 good shots since several of the stations couldn't be found. First mission - accomplished - survey differences ranged from 1.5 to 4 degrees and averaged 2.88.

Our second mission was a small (12 inches high) lead that I had checked for 50 feet once before but hadn't surveyed. But, alas, the way was not easy; after the mud slope off D.C. Avenue and 100 feet of muddy crawling we came to the double pinchdown - nine whole inches between rock and flowstone. Having the largest body there, I went first, made it through the first pinch and then realized I should have removed one more layer of clothing before trying the second pinch. As I lay there on the wet flowstone with my sweater bunched around my waist, realizing our goal was most of a mile further on, I decided that this was really supposed to be a tourist trip, not a hardcore push and that maybe we could get some chahuahuas to survey the lead some time later. So we turned around to head out the crawl, down the mud slope and through the breakdown in D.C. Avenue to our third objective - to check what may be an entrance nearby. But Paul said "wait, have you been down there?" pointing toward a side hole which he said went to a small formation room. Admitting I hadn't, I hopped in only to find no way out of a small breakdown chamber. But Paul said that it really did go and showed me which crack went. I thanked him for so enlightening me but declined the opportunity to do that kind of stuff again. On a positive note however, we realized that this passage, which Paul had surveyed years before, was not on the map (which I had drawn) and this left something for Paul to worry about when he gets home.

Along our route upstream toward the possible entrance, was another formation room which Paul had never seen so we stopped, poked our noses in a few places, decided it was time for lunch (4 pm), ate, and then decided there wasn't really time to check the entrance after all. So we didn't get there either. By now, having become for the most part tourists, we decided we would try a different passage out. At the bottom of DC Avenue, Paul hopped down in a lower level that I swore to him went and while Harold and I kept in voice contact from the overhead 15' high by 30' wide passage, Paul enjoyed the 15' high by one to two foot wide passage below (I'd been in there before, I wasn't crazy) until the two merged two hundred feet later.

Leaving was easy; our last task (to salvage the serious nature of our scientific expedition) was to compare a certain part of the passage to the map. It was quickly accomplished - "No resemblance, someone should come in and re-sketch it sometime (we had now degenerated to 100% tourist). We trudged on, changed into our dry clothes, headed out into the cold right on schedule, drove to the fieldhouse in the car that Lee Stevens had thoughtfully left for us, and then went to town for dinner. We were in a hurry because someone was having a slide show at 8:30. On what? Caves of Alaska, of course.

Rich Hall

NSS NEWS

For the benefit of those Glacier Grotto members who are not NSS members, I have pulled a few bits of information from recent issues of the NSS News. The News is sent monthly to NSS members and contains stories of cave goings-on all around the country.

The December News stated that the 1976-79 issue of American Cave Accidents will be available later this winter from Steve Knutson, 505 Roosevelt St., Oregon City, OR 97045. Or if you know of a cave accident in your area (Alaska?) please write him so it can be included.

Roppel Cave in Western Kentucky is now the second longest cave in Kentucky and eighth in the country at 23.9 miles. This is only four and a half years after that cave was discovered! It is also expected that a major new river in the cave is the same as in the Morrison-Procter section of Mammoth Cave.

This list of deepest caves in the world and in the United States is from the December News.

Caves deeper than 1000 meters:

- | | |
|---|--------|
| 1. Reseau Jean Bernard, France | 1410m. |
| 2. Reseau de la Pierre Saint-Martin, France | 1332m. |
| 3. Sistema Huautla, Mexico | 1221m. |
| 4. Sniezna Pieszcziera, USSR | 1220m. |
| 5. Budoguis, Spain | 1195m. |
| 6. Couffre Berger, France | 1148m. |
| 7. Sima B-15, Spain | 1105m. |
| 8. Schmeloch, Austria | 1101m. |
| 9. Sima C.S.F. Malaga, Spain | 1099m. |
| 10. Lamprechtsofen, Austria | 1074m. |
| 11. Reseau Felix Trombe-Henne Morte, France | 1018m. |

I don't know how difficult the access is but Smith says that "because of the high cliffs, most traverses must be made with care down gullies" (Smith et. al., p 20). The topographic maps confirm a rise of up to 3000 feet over a mile distance. A trail is marked on the topographic map which crosses straight through the area paralleling Skolai Creek; it begins at the edge of Nizina Glacier and crosses the entire quadrangle heading east to Russel Glacier and Skolai Pass which is the lowest pass through the Wrangell Mountains at 4800 feet elevation.

Are there any caves in the Golden Horn Limestone Lentil? I'll bet there are at least a few small ones and it would be worth looking into. There are sinkholes and quite a slope in the terraine, both good signs.

As with glaciers elsewhere, there are probably also caves under all the glaciers in the area. The two mile wide Nizina Glacier would be interesting to check where Skolai Creek runs under the side of it.

Rich Hall

references:

- Brabb, E. E., and Grant, R. E., 1971, Stratigraphy and Paleontology of the revised type section for the Tahkandit Limestone (permian) in the Cordilleran eugeosystem, east-central Alaska: U. S. Geol. Survey Prof. Paper 703, 26p.
- MacKevett, E. M., Jr., 1970a, Geology of the McCarthy B-4 Quadrangle, Alaska: U. S. Geol. Survey Bull. 1333.
- MacKevett, E. M., Jr., 1970b, Geologic Map of the McCarthy C-4 Quadrangle, Alaska: U. S. Geol. Survey Geologic Quadrangle Map GQ-844.
- MacKevett, E. M., Jr., 1970c, Geologic Map of the McCarthy C-5 Quadrangle, Alaska: U. S. Geol. Survey Geologic Quadrangle Map GQ-899.
- MacKevett, E. M., Jr., 1971, Stratigraphy and General Geology of the McCarthy C-5 Quadrangle, Alaska: U. S. Geol. Survey Bull. 1323, 35p.
- MacKevett, E. M., Jr., 1976, Geologic map of the McCarthy quadrangle, Alaska: U. S. Geol. Survey Misc. Field Studies Map MF-733A, scale 1:250,000.
- MacKevett, E. M., Jr., Smith, J. G., Jones, D. L., and Winkler, G. R., 1978, Geologic Map of the McCarthy C-8 Quadrangle, Alaska: U. S. Geol. Survey Geologic Quadrangle Map GQ-1418.
- Richter, D. H., and Dutro, J. T., Jr., 1975, Revision of the Type Mankomen Formation (Pennsylvanian and Permian), Eagle Creek area, eastern Alaska Range, Alaska: U. S. Geol. Bull. 1395-B, 25p.
- Smith, J. G. and MacKevett, E. M., Jr., 1970, The Skolai Group in the McCarthy B-4, C-4, and C-5 quadrangles, Wrangell Mountains, Alaska: U. S. Geol. Bull. 1274-Q, p. Q1-Q26.

Deep Caves of the United States

At the Cave Geology and Geography Section meeting of the 1979 NSS Convention at Pittsfield, Mass., a committee was formed within the section to keep track of the status of the long and deep caves in the United States. What follows is the deep cave list; the long cave list was published in the January 1980 NEWS and the top 100 (99) in the August 1980 NEWS.

The International Congress of Speleology Commission on Long and Deep Caves defines deep caves as those whose total depth from highest accessible point to lowest accessible point exceeds 100 meters (328 feet). The NSS Committee on Long and Deep Caves has a cutoff of only 150 meters (492 feet). This list, as with any list, is not complete, but I'm doing the best I can to keep it up to date.

No.	Cave Name and State	Feet	Meters
1.	Great X Cave, Wyo.	1408	429.1
2.	Bigfoot-Meatgrinder Cave, Calif.	1240	378.0
3.	Neffs Canyon Cave, Utah	1170	356.6
4.	Ellisons Cave, Ga.	1063	324.0
5.	Shvertip Cave System, Mont.	1052	320.6
6.	Carlsbad Caverns, N.M.	1028	313.3
7.	Big Brush Creek Cave, Utah	858	261.5
8.	Zazumura Cave -- lava tube, Hawaii	856	260.9
9.	Papoose Cave, Ida.	825	251.5
10.	Sunray Cave, Mont.	804	245.1
11.	Bull Cave, Tenn.	741	225.9
12.	Lost Creek Siphon, Mont.	730	222.5
13.	Virgin Cave, N.M.	723	220.4
14.	Ape Cave -- lava tube, Wash.	704	214.6
15.	South Grotto, Ida.	690	210.3
16.	Simmons Mingo-My Cave, W. Va.	680	207.3
17.	Spanish Cave, Colo.	670	204.2
18.	Gary Self Pit, Ala.	651	198.4
19.	Jewett II Cave, Tenn.	637	194.2
20.	Jewett I Cave, Tenn.	615	187.5
21.	Organ Cave, W. Va.	600	182.9
22.	Builer-Sinking Creek System, Va.	593	180.7
23.	Overholtz-Blowing Cave, W. Va.	590	179.8
24.	Friars Hole System, W. Va.	585	178.3

If you know of any changes or additions to be made please let me know.

NSS Committee on Long and Deep Caves

c/o Bob Gulden
922 Autumn Valley Ln.
Gambrells, MD 21034
Phone: 301-569-7882

Members of the NSS Committee on Long and Deep Caves of the U.S.A. include Peter Sprouse, chairman and representative to the U.I.S.; Will White, chairman NSS Cave Geology and Geography Section, and Bob Gulden, data compiler and keeper of the list.

25.	Bloodstone-Scotts Barn Cave, Ala.	563	171.6
26.	Kelly Ridge Cave, Tenn.	561	171.0
27.	Wind Cave, S.D.	560	170.7
28.	Lewis and Clark Caverns, Mont.	557	169.8
29.	Hell Below Cave, N.M.	550	167.6
30.	Sorcerers Cave, Texas	548	167.0
31.	Black Abyss (Piute Cave), Ariz.	540	164.6
32.	Luminary Pit, Tenn.	535	163.1
33.	Fern Cave System, Ala.	529	161.2
34.	Engle Double Cave, Ala.	520	158.5
35.	The Gouffre, Tenn.	519	158.2
36.	Meander Belt, Mont.	513	156.4
37.	Small Cave, Ala.	513	156.4
38.	Rendezvous Peak Cave, Wyo.	512	156.1
39.	Wilkinson Hollow Horror Hole, Tenn.	512	156.1
40.	Little Brush Creek Cave, Utah	510	155.4
41.	Doodle Bug Hole, Ala.	510	155.4
42.	Sipapu Cavern, Ariz.	504	153.6
43.	Newton Cave, Wash.	500	152.4
44.	Sioned Well, Ala.	498	151.8
45.	Fowler Pit #2, Ala.	497	151.3
46.	Ram's Horn Cave, Mont.	496	151.2
47.	Summer's Double Pit, Ala.	496	151.2
48.	Elmo's Canyon, Ala.	492	150.0

The November News featured some articles on Carlsbad Caverns celebrating the 50th anniversary of Carlsbad Caverns National Park. The pictures of this, one of the most decorated caves in the country, are mind boggling even in black and white. In addition, the Big Room is the size of 14 football fields - the largest in the country. The articles are very interesting.

Mike Dyas, in the October News, in his monthly column, "Caves & Caving" summarized an article on alpine karst from the Alaskan Caver as he has on some other occasions as well. Thanks go to Mike for the publicity he has provided us.

For a record in cave discovery try the new cave in Budoguis, Spain listed above as fifth deepest in the world. The October News explains that the 1193 meter depth was attained three weeks after the cave was discovered earlier this year.

Over the Memorial Day weekend some cavers from Mother Lode Grotto were in Church Cave in Kings Canyon, California when a Richter magnitude 6.0 earthquake occurred with an epicenter only 30 miles from the cave.

SECRETS OF LIMESTONE

The program for the January meeting was a movie that Jay had borrowed on short notice from Inside Earth entitled "Secrets of Limestone". Its general message was that it is a lot easier to pollute the groundwater in limestone country than where there are sediments or solid rock to filter the water. In the process there was a good explanation of cave formation and lots of excellent photography of caves and springs. We'll probably show it again in a year or so and hopefully we can get more advance publicity; it is well worth seeing.

JENKINS IN NORTH CAROLINA

A recent letter from Sydney Jenkins says they are alive and living in North Carolina (PO Box 2097, Chapel Hill, 27514). They had a good time at the NSS Convention in Minnesota last year and represented Glacier Grotto at the Congress of Grottos. They have been doing a fair bit of caving; they saw a few caves at convention, stopped at Mammoth Cave after the Convention, and did three Tennessee caves on a weekend this winter. They miss Alaska, especially snow for Christmas, but didn't say when they'd be back.

CALENDAR OF EVENTS continued from page 2

- July 18-24 Eighth International Congress of Speleology in Bowling Green Kentucky. This is the first time that the International Congress has been held in the United States. There will be a week of sessions, meetings, and trips as well as pre-congress, post-congress and daily excursions to caves and karst features. For further information request the Second Circular from: Eighth International Congress of Speleology, The Secretariat, Department of Geography and Geology, Western Kentucky University, Bowling Green, Kentucky 42101. Fees range from \$5 for a single day's sessions to \$130 for full membership. An abbreviated NSS Convention will be held the weekend following the Congress (July 25-26).
- August 20 Glacier Grotto Meeting. Meetings are held in room 312 Grant Hall, Alaska Pacific University at 7:30 pm. The program will be an NSS slide show on Wind Cave, South Dakota.
- Sept. 17 Glacier Grotto Meeting.
- October 15 Glacier Grotto Meeting. The program will be an NSS multimedia show based on John Denver's tune 'Country Roads' and titled 'Caving Roads'.
- November 19 Glacier Grotto Meeting.
- December 17 Glacier Grotto Meeting. The program will be an NSS slide show on the C-3 Expedition into Floyd Collins Crystal Cave, Kentucky.

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