

THE NEAR NORMAL NEWS



THE NEAR NORMAL NEWS is published by the:

Near Normal Grotto #363,
P.O. Box 813
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Subscription price is \$10/year or free with the purchase of a grotto membership (also \$10/year). Issues are published in January, March, May, July, September, and November.

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ARTICLE SUBMISSION INFO

We accept most cave-related submissions. Equipment reviews, scientific articles, trip reports, announcements, cartoons, artwork, and pictures are all welcome. Most submissions must be received by the last Friday of the month prior to publication. Scientific submissions need extra time for review.

Send submissions, using the guidelines below, to Jeffery Gosnell at gosnell@greatoakscamp.org. Submissions on disk may be mailed to 1384 County Road 900N, Lacon, IL 61540.

Photographic & graphic submissions should generally be in JPEG format. Query the editor if your submission uses a different program. Photographs should list the cave, general location (ex. Southern Illinois, or Washington Co, IN.), names of any persons included in the photo, and name of the photographer.

Written submissions may be sent as an attachment using Microsoft Works®, Microsoft Word®, or plain ASCII (DOS-text), or incorporated directly into an e-mailed text message. If you are uncomfortable with your writing ability, simply put together a basic account of the trip—ignoring spelling, grammar, and punctuation—and request the editor to help draft the finished product.

Scientific and Technical articles are expected to be of a high standard, citing evidence of statements and crediting references, where appropriate.

The Near Normal Grotto

The Near Normal Grotto meets the second Friday of each month at 7 P.M. in the Community Room of

National City Bank
202 E. Washington
Bloomington, IL.

Adverse weather, holidays, and our annual September picnic may affect meeting times.

2004 Executive Committee:

President: Marc Tiritilli

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<http://oldsci.eiu.edu/physics/len/grotto/nng.htm>

The Near Normal Grotto is part of the **National Speleological Society** (NSS). We encourage all persons interested in caving to join the NSS. Membership is \$35/year. Members receive the *NSS News* (monthly) and other caving publications.

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www.caves.org

On The Cover:

An amphipod found swimming in Equality Cave. Photo by Steve Taylor.

Near Normal Grotto Business

MINUTES FROM MARCH 2004 MEETING:

Meeting called to order at 7:24. Present: Sheri Lynn Atkins, David, Matthew, & Justin Carson, Jim Jacobs, Don Kerouac, Bill Morrow, Ralph Sawyer, John Schirle, Troy J. Simpson, Marc Tiritilli.

SECRETARY'S REPORT:

Secretary's Report of February minutes accepted (motion Jim, seconded John) Troy handed out NNG membership cards.

TREASURER'S REPORT:

Dave reported \$306.05 in the treasury. Dave noted \$38 listed in the "Other" column for expenditures was for the rental of the post office box. Report accepted (motion Troy, seconded Don).

OLD BUSINESS

The January issue of the NEAR NORMAL NEWS was under budget due to fewer pages printed and bringing the postal cost lower.

NEW BUSINESS

- Marc started with the desire to propose caving trips for later in the year. There are two trips on the books with Marc leading a group from his high school to Illinois Caverns. Dave is also planning a trip to introduce Matthew and Justin to IC. Marc mentioned a trip to TAG in November. Troy mentioned a possible trip to Wayne's' Lost this summer.
- Marc mentioned training opportunities coming in the next months. There will be a possible NCRC rescue orientation session in May in Wisconsin. Details are still in the works. There is also an emergency contact list in the works.
- Marc discussed future program ideas. Tentatively, he will look into reserving a Photo Salon presentation from the NSS for the April meeting. A vertical workshop is planned for the May meeting. Troy motioned the Exec. Board use funds to acquisition the presentation, seconded Ralph. Motion passed.
- Jim mentioned the Karst Conservancy of Illinois is in the process of acquiring another cave.
- Discussion about renewing grotto membership to the Bats Conservation International was tabled until April.

TRIP REPORTS

- John talked about leading a youth trip to Illinois Caverns.
- The February Sullivan's Cave Trip was the subject of the after meeting program.

ANNOUNCEMENTS

- Next NNG meeting will be April 9, 2004
- Orientation to Cave Rescue April 3-4 at Eastern Kentucky University
- NCRC national training – June 19-26

Meeting was adjourned at 7:57. Program followed, with pizza at Tobin's afterward.

Respectfully Submitted,
Troy J. Simpson
Secretary-Near Normal Grotto



MINUTES FROM APRIL 2004 MEETING:

Meeting called to order at 7:16. Present: Roy Becker, Rick Delay, John Moritz, Ralph Sawyer, John Schirle, Troy J. Simpson, Marc Tiritilli.

SECRETARY'S REPORT:

Secretary's Report of March minutes accepted (motion Ralph, seconded Rick).

TREASURER'S REPORT::

Troy gave the report in place of Dave Carson. The current treasury has \$316. Report accepted (motion Marc, seconded Rick).

OLD BUSINESS

- Marc called the National City Bank to clarify the reservations for the second Friday of each month. A new person had taken over the position for making such reservation and was not told about the previous arrangement that we had made. We are set for the rest of the year. The grotto will have to contact National City Bank though at the end of each year to make the following year's arrangements.
- The Executive Board gave the go ahead for the editors of the NEAR NORMAL NEWS to not limit the size of the newsletter based on cost of printing and mailing. It

was felt the current treasury can absorb the costs.

- It was decided to continue membership in the Bats Conservation International. The cost is \$75 per year (Motion John, seconded Roy).

NEW BUSINESS

- Marc opened discussion of the grotto calendar. It was decided the June grotto meeting will be held in conjunction with the Vertical Practice session at the ISU Rappel Tower. The date set is Sunday, June 13. The tentative business meeting will occur around 2:00 or 2:30pm. The tower will be reserved from 1-6:00pm (Motion Troy, seconded John). Motion passed.
- Marc also mentioned the Orientation to Cave Rescue class taking place in Wisconsin May 22-23.

TRIP REPORTS

- Troy and Marc traveled up to visit the Sub-Urban Grotto meeting. They enjoyed an excellent presentation of Mexico caving and mapping karst areas of Florida. As a side note, they really enjoyed the Chicago style pizza of Connie's Pizza.
- John Schirle visited Mathieson S.P. and enjoyed the many waterfalls, without the crowds of Starved Rock S.P.
- Roy Becker made a trip to Devil's Lake.

ANNOUNCEMENTS

- Jeffery is interested in a weekday trip during Easter Break.
- Marc and Troy are heading Illinois Caverns with Marc's Environmental Science class April 17.
- Next NNG meeting will be May 14, 2004
- NCRC weeklong national training – June 19-26

Meeting was adjourned at 8:09. No program was planned so all headed out to enjoy pizza at Tobin's!

Respectfully Submitted,
Troy J. Simpson
Secretary





RAMBLINGS OF A TROGLODYTE *by Jeffery Gosnell*

The number one advantage of being the NNN editor? It helps me remember I'm still a caver!

Yes, caving has been rather sparse in 2004. The closest I've been to getting underground since the last newsletter was a trip to Maquoketa Caverns with a group of Chicago 5th graders. I call it "closest" because these 8 gangster wannabes chickened out at the entrance to every hole. My 4 hour (round trip) drive resulted in roughly 15 minutes underground in the Steel Gate Passage of Dance Hall Cave.

However, my vertical skills are getting stretched. Last winter, one of my staff left, leaving me in charge of our camp's high ropes course. Over the last few months

I've been using my caving gear to climb 35'-45', install new "elements," and rappel back down. I'm scared every time I leave the ground, and my change-overs are absolutely terrible. But s-l-o-w-l-y I think I'm becoming a vertical caver (or an obituary column in the NSS News).

NSS CONVENTION RETURNS TO T.A.G

The Huntsville Grotto has announced they have been selected to host the NSS Convention July 4-8, 2005. Details will not be readily available until after the 2004 Convention in Michigan's UP.

JULIE ANGEL IN PRINT

Did you read your latest issue of the JOURNAL OF CAVE AND KARST STUDIES? If not than you missed Julie Angel's article entitled *Comparison Of A New GIS-Based Technique And A Method For Determin-*

ing Sinkhole Density: An Example From Illinois' Sinkhole Plain.

PLEA FROM A DESPERATE CAVER:

I want to cave Memorial Day weekend! I would be happy to join a trip or lead one to Susan Cave, Missouri, plus check out the caves listed on Missouri topo maps I've obtained. I just need to be able to take the family along to stay in a nice hotel. Please contact me if you are interested.

IN THIS ISSUE:

- Where's Marc? His article tells us!
- NSS President, Scott Fee announces a name change for NSS cave preserves.
- Steve Taylor takes us on a hunt for caves in Shawnee.
- Anmar Mirza discusses hypothermia and the caver.

On the Web:

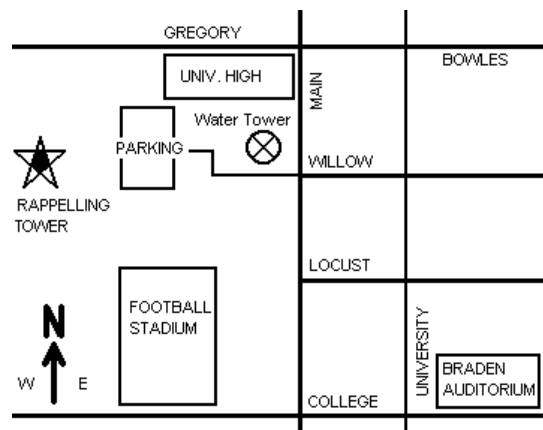
How safe is that bolt you're climbing on? L.J. Tognetti shares some unscientific field tests--climbing bolts vs. a Chevy Blazer. Find out who wins at:

http://www.imdl.gatech.edu/ljthawk/fixed_anchors/

Click on the link titled "Bolt Testing In TAG Limestone."

SPECIAL NNG MEETING IN JUNE

The JUNE meeting will be held in conjunction with a Vertical Practice session at the ISU Rappel Tower on Sunday, June 13 from 1:00 - 6:00 p.m. Meeting time is scheduled for 2:00. (The May NNG meeting is at its regular time, 7:00 p.m., May 14, 2004 at the National City Bank Building.)



Directions to ISU Rappel Tower: Take Business US 51 (Main Street) in Normal to Willow. (1st stoplight north of the ISU football stadium--look for large water tower). Turn west and stay right to enter the parking lot behind University High School. The large wooden rappelling tower is visible from the parking lot.

WHERE'S MARC?

By Marc Tiritilli

Marc's been caving again, this time in Illinois Caverns. In what was supposed to be a trip for my Environmental Science students, several grotto members went caving. I had originally planned the trip for last October and had about 40 students interested in taking part. I was a bit concerned with managing a group of that size, but I knew that if I had enough help, it could be done. A few days before we were scheduled to leave, our football team (Tremont High) made it to the state play-offs. You guessed it, the first round was the Saturday of our trip. Between players, cheerleaders and band members, just about all of my students were involved. I cancelled the trip and waited for warmer weather.

The trip was finally rescheduled for mid-April. Again, I had high interest so I recruited several grotto members to help out. One-by-one during the week leading up to the trip, kids started to cancel. In the end, no students showed up. Perhaps it had something to do with the 5:15am call time. Maybe it was the three-hour ride each way.

Attendance notwithstanding, we had a great trip. What I've really begun to ponder is why so many cave trips fizzle in their attendance. Please let me know what your personal experiences have been, but this Tremont trip is not unique. I have many friends over the last seven years who have repeatedly informed me they want to go caving. Despite many



invitations, most have never gone. I hear things like, "Bring back pictures," or, "Show me the video," but few seem willing to experience a cave firsthand. I don't mind planning the trips—it simply makes me appreciate the grotto members that much more. Usually someone only has to hint at a trip, and several people are asking for the details. That's the kind of excitement that makes caving fun.

My thanks to Roy Becker and his 9 year-old son Jeremy, Troy Simpson, Rick De Lay, and Jon Moritz for being part of a wonderful day.

--Marc



National Speleological Society Changes Preserves Name

By: Scott Fee, NSS President

As our commitment to future generations, the National Speleological Society (NSS) owns or manages 13 properties to protect the caves that lie beneath them and their environments. We also strive to protect the complete habitat within its properties. For nearly 40 years, these lands have been designated "Cave Preserves." However, attitudes, perceptions, and business environments evolve, and the NSS evolves as well. To emphasize the goal of the Society to protect the total environment of our Preserves, the NSS Board of Governors voted in March, 2004, to use the word "Nature" to describe its Preserves. Our lands contain much more than caves, and our management plans include guidelines for conserving and protecting the surface resources in addition to those underground. The

wealth of diverse flora and fauna and important watersheds on our lands enrich the fragile environment we protect underground. Through management plans, the Society endeavors to manage our Preserves to ensure the well being of their total environments, and the new "Nature Preserve" designation better reflects this. For example, we now have the Tytoona Cave Nature Preserve, the Wells Cave Nature Preserve, etc.

An additional factor: The NSS works with land trusts and other nature conservancy organizations, and we are beginning to apply to these organizations, foundations, and governments for grants to support our programs and projects. These groups understand, appreciate, and are used to dealing with "nature preserves." We believe that re-labeling

our preserves will help emphasize to these groups that the NSS is a nature conservancy, albeit one in a special niche. Furthermore, insurance companies better understand and are less fearful of "Nature Preserves" than a "cave preserve." The NSS had great difficulty renewing the Society's insurance policy, and last year incurred an additional \$17,000 expense to do so. This is a great financial strain. To maintain insurance coverage for the Society, for our properties, for our conventions, and for Internal Organizations (Grottos) who request a rider for their activities, we need to do what we can to be seen as the reasonable risk that we are. Perhaps being custodians of "nature" preserves will help us in this endeavor.



An Early Spring Weekend of Caving and Ridge Walking in the Shawnee

By Steve Taylor

The weekend of 27-28 March, JoAnn Jacoby and I headed down to southern Illinois for the weekend. I was interested in going to Equality Cave to check on amphipods (small shrimp-like aquatic critters) living there. One of the amphipods from that cave, *Crangonyx packardii*, is on the state threatened and endangered list, and I wanted to confirm that it was still present in the cave. It so happens that the Illinois Speleological Survey spring meeting was also scheduled for Sunday morning, so it seemed like a good opportunity to do a couple of things in one trip. As we slipped out of Champaign on Saturday morning, on went the cruise control and off went the brain – a few short hours later we resurfaced somewhere near Marion. Twenty something miles from there, we were pulling our gear out of the truck and getting organized for our hike up the hill to the cave.

It was an amazingly warm spring day, considering it was still March. After assembling our equipment, we headed up the trail past flowers and innumerable green buds on the trees. Just as our pasty city legs began to feel the walk, we arrived at the entrance. Unfortunately, this cave is well known to people without much training in caving ethics. The enthusiasm for use of spray paint is not restricted to the inside of the cave, and strings tied off to tree trunks and roots extended from the general vicinity of the entrance down into the cave. We slipped in, taking care to avoid broken glass, and trying to keep from tangling our feet in all the string. Heading downstream in walking passage, we soon found water. I pulled out my cave biology stuff and JoAnn took notes. We quickly located several amphipods (and some broken glass and an old decaying D cell battery) in the cave stream. In spite of all the insults to their way of life, the amphipods continue to survive in the cave. We then worked our way upstream to some more heavily traveled passage, and found still more amphipods (and a long list of garbage I won't itemize here, but every fifth item would be string...). Back out of the cave now, perhaps to go find a spring.

At the truck, we changed clothes and loaded up. As we were getting our stuff together, some locals drove by and waved. Friendly enough. We noticed, however, as we drove off that they were passing around and admiring a rifle...

Another reported site for amphipods that I wanted to visit was a spring in Reddick Hollow, a tributary of Lusk Creek. I had never been to the spring, and didn't have a location for it, so basically didn't have a clue. We found the stream on a topo map, and opted to approach from the upstream end of the hollow. Eventually working our way onto the correct dirt road, we hiked down off the ridge top into Reddick Hollow. Everything was alive with spring. We passed a pond just screaming with frogs. Down in the bottom of the hollow, we found the stream flowing with mayflies, stoneflies, waterstriders and amphipods (not the one I was looking for). We worked our way downstream looking for a spring, but found none. As the sun got low in the sky, we turned around and hiked back towards the truck. Along the way, we found a raccoon skull, a very old chewed upon deer antler, and a tick or two. As we got close to the vehicle, we met some folks scouting the site for their turkey hunt, which was to take place the next morning (fortunately I was wearing an obnoxiously bright orange tye-dye).

The next morning, I participated in the ISS meeting at the Giant City State Park Lodge. The meeting was reasonably brief, civil, and productive, but I was wanting to go play in the woods because the weather was so nice. As soon as the meeting adjourned, JoAnn and I headed back over to Pope County. Our plan was to look for the spring again. But plans don't always work out.

We missed (OK, I missed) one of the turns, and headed a good ways down the wrong road before realizing it. After consulting our maps, we found a cross route that might get us back towards our destination. Driving along with the beautiful flowers in the woods, the bluffs, the swampy rivers, it is easy to get distracted. Then we saw a sinkhole. And another. In a fit of sinkhole fever, I pulled

off to the side of the road. Whoops. Big mistake. I felt the tires sinking in the mud, and tried to pull back onto the pavement, but it was too late. So there we were, stuck on the side of the road next to some interesting looking sinkholes. Maybe I'm getting too old, but my first concern was getting the truck unstuck. We spent about fifteen minutes collecting gravel from the side of the road and putting it in the muddy rut I'd made. Then, with the extra oomph of JoAnn pushing, I managed to pull out of the tire-sucking ditch. Disaster averted. Sinkholes still there – one can assume that on the scale of a few hours you are not going to have sinkholes disappearing just because you have to attend to a stuck vehicle.

We drove up the road a bit to the first house to ask permission (somehow having completely forgotten about the spring...). The man there was in his late 50s or 60s, with arms like a 20 year old body builder. He was friendly, but not the owner, and directed us to a guy a few houses up the road. But he also described where a cave was, and mentioned other smaller crawlways in the area. We drove up and chatted with the landowner. He was nice too, and consented to let us wander around amongst the sinkholes. His recollections of running around the area as a kid confirmed the stories of the first guy, so we were pretty sure we'd see a cave.

We drove back down to the sinkhole area and parked. With so many sinks, and such a hot march day (t-shirts, no coat!) we opted to leave our caving gear in the truck and start by scouting on foot with GPS receiver. Soon we found the old roadbed that the men had talked about, and then the large sink to which they referred. It takes water from a pretty good sized area, and sure enough, when we got to the bottom, there was a hole. And cool air blowing. This is a cave! Unfortunately, there were a couple of 100+ pound rocks that seemed to have slid down into the wrong spot since the childhood years of the two men we talked to. We took turns rock wrestling, and trying to squeeze past them. We managed to get one of the rocks wedged out of the way, but the second

was more contentious. Heavy dark rain clouds began accumulating on the western horizon. We thought again about how much water the intermittent stream bed feeding into this entrance would carry during even a moderate shower. We decided this one needed to wait till next time. And perhaps a sledge hammer to break up the offending rock would be a good idea. We will be back! Having marked the location on the GPS receiver, we moved on to check a couple of other sinkholes. A couple of duds, then a real promising hole. We dug and scrapped

about, moving leaves and logs and rocks. On to the next one. More promise! Several of these sinks look like they could definitely go with a little work – others seem like they just eat silt and feed caver dreams. One of the best leads was a bare rock face in a sinkhole that JoAnn found – you could slip up under the rock, and definitely get into something I'd consider a mapable unit. A cave by modest Illinois standards, at least. We plan to return to map that one. Then another – a tight muddy belly crawl, with cool air – it definitely goes. Or maybe it just looks

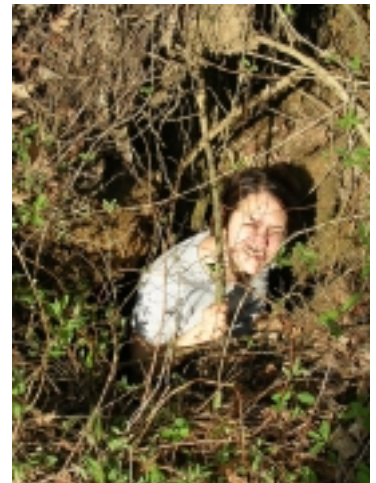
better with sunglasses on. In all, I think there are perhaps 3 caves in this little area. Most certainly there is a cave, a mapable unit, and one or two other possible caves, no matter how conservative one might estimate. By this time, the afternoon was getting late, and the storm clouds were threateningly close. We walked back to the truck and headed west over to the interstate. Soon the rain hit, and we drove home in the dark and pouring rain after another fine weekend in the karst, with promise of more caving to come in the future.



JoAnn taking notes in Equality Cave. Hard not to notice the spray-painted arrows (pointing both in and out of the cave) and large quantities of string.

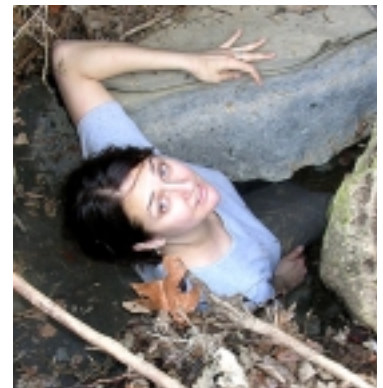


Steve at the entrance to the first cave – this one definitely goes!



"I don't think this one goes..."

Mappable Unit!



...But this one might!"



Mappable Unit from the inside.

A Grim Crawlway



Hypothermia & The Caver by Anmar Mirza

Hypothermia is defined as an abnormal lowering of the core temperature of the body, the average being 98.6 degrees Fahrenheit (37C). This is only an average! Measured temperatures can vary by several degrees depending on where they are taken. People are different and normal individual temperatures may vary, so the temperatures listed are guidelines only. Temperature trends (going up, down, or staying the same) relay more information than absolute temperature.

Hypothermia can be acute, intermediate, or chronic. Acute hypothermia results from immersion in frigid waters. Intermediate hypothermia is the condition most cavers will see. It develops over several hours. Chronic hypothermia applies mostly to the elderly or infirmed, and takes long periods of time (days to weeks) to develop. All types may be called "hypothermia."

Hypothermia has two stages: mild and severe. Mildly hypothermic people may be rewarmed, if possible, in the field. Severely hypothermic patients should be protected from further heat loss, but in general, active rewarming should be done in a hospital setting.

The body compensates for decreased core temperature by attempting to generate more heat through shivering and by shunting peripheral circulation (blood flow to the extremities) to the core. One response of this shunting of peripheral circulation is increased kidney output (you have to pee), commonly called "cold diuresis." Unfortunately, the body considers the head to be an extremity, which can cause loss of mental capability, which can then cause a person to not recognize signs of hypothermia in themselves.

The body generates heat through the action of the muscles and other organs in the normal process of metabolism. The body metabolizes food and uses the energy gained by the food to produce heat. Normally the body can balance heat production and loss fairly well, and does this through the circulatory system. Blood carries heat from the core and the major muscles to the skin. The skin then either opens its blood vessels up to get

rid of heat (vasodilation) or shunts the blood away (vasoconstriction) to conserve heat. To this end, the body requires both food and fluids; food to provide the energy to produce the heat, and fluids to maintain proper hydration levels to adequately circulate the heat.

The body loses heat through several mechanisms. Direct conduction, convection, radiation, evaporation, and respiration are all ways in which it loses heat. You conduct heat away by contacting cold surfaces directly (such as sitting on rock or mud). Conductive losses can be slowed by sitting on insulative materials such as closed cell foam pads, packs, or the like. Convection is heat lost by air currents carrying away the warmed layer of air near your body and replacing it with cold air. Normal clothing helps prevent convective losses. Radiation is the direct loss of heat that any warm surface will have by radiating the heat away in the form of invisible infrared light. Normal clothing helps prevent radiative losses. Evaporation is where wet surfaces lose heat, converting the liquid water to water vapor, and can result in a very high amount of loss! This can be prevented by wearing dry clothing and through the use of a vapor barrier such as a plastic trash bag or mylar "space" blanket (which also serves to help reflect back heat lost through radiation). Respiration is heat lost through the evaporation and convection that takes place in the lungs, throat, and mouth as we breath. Breathing through a scarf or into your clothing can help prevent this type of heat loss. Being immersed in water can cause you to lose heat through conduction at a very high rate; up to 25 times faster than in similar temperature air! Generally speaking, conduction is the fastest way to lose heat, then evaporation, then convection. Loss via radiation tends to be minor. Loss through respiration can be significant and takes place right at the core.

Mild hypothermia is characterized by shivering, loss of fine coordination, and impairment of mental capability. These progress as the hypothermia gets worse. Generally speaking, people with a body

core temperature of 92F (33C) and up are mildly hypothermic. Any mildly-hypothermic patient who is capable of safely ingesting fluids and food should be encouraged to do so if there is no underlying injury that might contraindicate. Fluids should be warmed but not hot, and should be noncaffeinated and nonalcoholic because alcohol and caffeine can seriously contribute to hypothermia. Wet clothing should be replaced by dry clothing. Exercise is the best method of generating heat within the body, but only if the person is not severely exhausted. Exercise should be accompanied by food! The body needs the fuel to burn to create the heat. If that fuel is not available it will rob the last bits that are being used to keep the body alive. External heat sources such as chemical heat packs, flame sources, and other bodies can be used to help rewarm the person. (Be careful not to catch the person on fire! Also, watch out for oxygen levels in dead air passages.) It is often debated whether you should let the person urinate. Hypothermic patients invariably have full bladders, and if they can urinate without wetting their clothing the comfort gained in doing so far outweighs the minuscule amount of heat loss. All rewarming should be accompanied by rehydration if the patient can safely ingest fluids, as rewarming can cause rapid dehydration and lead to shock, and proper hydration is a key defense against hypothermia.

Severe hypothermia is characterized by a loss of shivering, severely impaired mental capacity, and a gross loss of coordination. Severely hypothermic patients may either have a severely diminished level of consciousness or be unconscious. Vital signs may be difficult to find or may even appear to be absent. Body core temperature will probably be below 92F (33C). When the peripheral circulation shuts down to this extent it causes the blood left in the extremities to become cold and acidic (full of waste products). Improper rewarming may cause this cold, acidic blood to be returned

Continued Next Page

Hypothermia & The Caver continued

rapidly to the core, decreasing core temperature and causing cardiac irritability (the heart muscle will become prone to fibrillation, a fatal heart rhythm). Severely hypothermic patients should be treated gently, as sudden shocks can also cause this fibrillation. While generally speaking they should be rewarmed in a hospital setting, the amount of heat we as cavers may be able to add (with heat packs and the like) will not be detrimental to these patients, so such adding heat should not be avoided. They should *not* be given food to eat or fluids to drink unless they are fully conscious, since

they are at a high risk for choking or aspirating (inhaling). Severely hypothermic patients may appear to be dead! A good rule of thumb is that a person is not dead until they are *warm* and dead! Although local protocols may vary, in general it is not a good idea to attempt CPR on a severely hypothermic patient in the cave rescue setting. Vital signs may still be present, albeit below levels of detection, and CPR can turn a heart that is beating into one that is not. This information is not presented to contradict local protocols, so always follow them first! Hypothermia may work

for you when injury is present, as it can slow the blood loss and deterioration of those patients.

With hypothermia, prevention is the best medicine! Stay healthy and fit, well rested and fed, and be prepared for the environment in which you will be entering. The earlier it is detected, the easier it is to care for it. People who are hypothermic are often unaware of the fact, so watch out for your caving companions!

*Anmar Mirza is Central Region
Coordinator of the National Cave Rescue
Commission. Permission for reproduction*

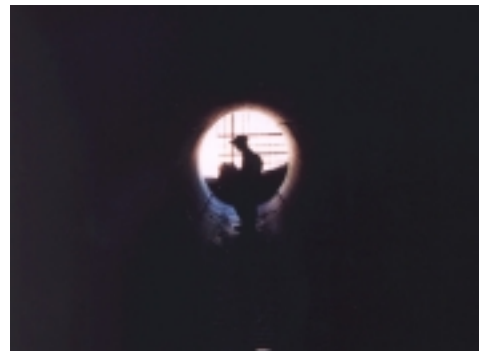
DOGHILL/DONOHUE CAVE TRIP PHOTOS

Photos by Troy J. Simpson



Ralph and Dave beyond the steel tube

*Nathan Marcier explores
the winding passage of
Donohue Cave*



*Dave Carson and the light
at the end of the tunnel*

Washed-in Debris



The Last Bathtub of Sullivan's Cave!

(Editor's Note: Photos were improved as much as possible for publication.)

THE NEAR NORMAL GROTTO
P.O. Box 813
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