November 1-5, 2021—2021 National Cave and Karst Management Symposium (NCKMS 2021) will be held in San Marcos, TX. Featuring Dale Pate, to speak at the banquet! Field trips to local caves and special access to local show caves! Glass-bottom boat tour of local spring! T-shirt! Online pre-registration is open. Reserve your hotel room for reduced rates. More details at symposium2021.nckms.org.

December 4, 2021—NSS Regular Board Meeting at 9AM CDT, held via Zoom. The meeting will be open to all members. A zoom link will be added to the NSS web page before the meeting.

December 29-30, 2021—NSS Conservation Expo 2021 will be held at the NSS Headquarters and Conference Center, Huntsville, AL. Open to the public. Purpose: to provide engaging “Leave No Trace” classes and cave simulation with focus on underprivileged children. See https://members.caves.org/event/nssconservationexpo2021

December 31, 2021—Bat Ball 2021 will be held at the NSS Headquarters and Conference Center, Huntsville, AL. A festive New Year’s Event for NSS members and their guests. See https://members.caves.org/event/BatBall2021 for more information and updates.

January 31-February 6, 2022—The Hawaii Grotto will be hosting Hawaii Cave Week. You know it’s gonna be cold where you are, so come bask in some Hawaiian lava caves, take part in removing invasive plant/tree species, and learn how to sketch a cave. The annual grotto meeting is scheduled for Saturday, February 5th, and will be held at Ka’u Cave Farm on Hawaii Island. Membership to the Hawaii Grotto is included with your NSS Membership. For more information, or if you would like to join the Hawaii Grotto, please email Kim Fedrick at kfdrcik@gmail.com. You can also find us on Facebook.

Send items for the calendar to davebunnell@comcast.net at least 4 weeks before desired month of publication (e.g., by April 1 for the May issue).

Following the Flowstone, by Nikki Fox, won a Merit Award in the 2021 Photo Salon. It shows Hannah Bortel climbing a 57-foot drop out of the Travertine Dog Room in Stove Cave, WV.
2021 Convention Wrap Up

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SPELEAN SPOTLIGHT

An Interview with Jim Olson

Gary Gibula

Mystical Waters, by Nikki Fox, was the medal winner of the 2021 Photo Salon. It depicts caver Alex Martin in the stream passage of Mystic Cave, WVA. Nikki reports that she used a star filter on her 20mm (or 24?). The light is from a single M5 or M25 bulb, backlit.

Front cover:

Back cover:

Pool Formation Gallery, by Nikki Fox, won a Merit Award in the 2021 NSS Photo Salon. It shows Dave Knox in a highly decorated area of Stove Cave in West Virginia.
The NSS recognized the following members at its virtual 2021 National Convention (hosted by the Weed Convention Staff) for their contributions to the exploration, scientific study, artistic expression, and conservation of caves.

2021 NSS Awards by Members of the Awards Committee

The NSS awards one Honorary Membership each year for outstanding contributions to the field of speleology. Candidates need not be NSS members; the award is open to cave scientists from around the world. This year’s recipient is **Dr. Steve Worthington**. As an honorary member, he received life membership in the Society, NSS 23760. Steve has had a very long and distinguished career as both a caver, and cave scientist. He has worked extensively in the United States and Canada. He was born in England and received his Master’s and Doctorate of Philosophy degrees in Geology at McMaster University under Dr. Derek Ford. Steve’s dissertation was titled “Karst Hydrology in the Canadian Rocky Mountains.” The late Dr. James Quinlan called Steve’s dissertation as one of the most important works on karst in the last 20 years. It still stands the test of time.

Steve is also a well-known hard charging caver. He started caving in 1967 in Sheffield University and has caved in the U.K, U.S, Morocco, Ethiopia, Bulgaria, Turkey, Spain, Mexico, Papua New Guinea, Australia, New Zealand, Greece, Austria, Ireland, Crete, Puerto Rico, Dominican Republic, Belize, Italy, Switzerland, Slovenia, France, and Canada. He has mapped more than 100 kilometers of cave mostly as the survey team leader and commonly as the trip and expedition organizer. He has also used the cord technique to solo the Gouffre Berger to a depth of -900 meters. He also worked extensively in Castleguard Cave in Alberta, Canada where he made five expeditions of one to two weeks in length in the winter and one summer expedition. Steve coordinated the mapping of the cave which stands at over 20 kilometers and extends under the Columbia glacier. Castleguard is the longest mapped cave in Canada.

Steve has been granted numerous awards for his caving and professional work. He was awarded the Tratman Prize by the BCRA for best speleological publication and is also a fellow of the NSS (1994) and fellow of the Geological Society of America.

The **William J Stephenson Outstanding Service Award** is presented annually to one NSS member for their outstanding service to the society and its goals. This year’s recipient is **Michael K. Hood**, NSS 24166. Mike joined the NSS in 1983 as a member of the Central Indiana Grotto. It was after a grotto cave trip that he got involved in the NSS at the national level. He was sitting with Tom Rea, then NSS Secretary-Treasurer, in a Long John Silvers in Bedford, Indiana, when he casually asked Tom how someone gets involved in being a committee member. Tom looked at Mike and asked him, “How would you like to chair a committee?” Mike agreed and was soon appointed the chair of the Cave Ownership and Management Committee. From that day on, Mike has served in a variety of positions continuously to this day.

Mike is a life member and became a Fellow of the Society in 1993. In 1998, he was elected Operations Vice President and then President in 2000, where he served until 2002. He was elected to the Board of Governors in 2013 as a director and was the Chair of the Directorate from 2014-2015. Since joining the Society, Mike has held the numerous positions within the NSS at the grotto, regional, and national level.

The **Lew Bicking Award** annually recognizes the dedication of an NSS member cave explorer (or a pair of explorers) for the thorough exploration and mapping of a cave or a group of caves. Those activities also imply a level of persistence, hard-charging attitude and hardcore endeavor in cutting edge cave exploration. This year’s recipient is **Carol Vesely**, NSS 18703. Carol lives in southern California and is a dedicated project caver. She has explored and surveyed thousands of caves in the U.S. and abroad. She is known as an accurate and thorough sketcher and her maps have won numerous Cartography Salon awards. In Hawaii she has spent over 26 years surveying in numerous caves as part of long-term survey projects, traveling there 2-3 times each year.
The NSS Science Award annually recognizes an individual NSS member who has made significant contributions to the science of speleology. This year’s recipient is Brian Pease, NSS 7476.

Brian is an expert in the theoretical development and application of radiolocation electronics to advance the science of speleology, cave exploration, and mapping. He is a quiet nerd, whose work is not glamorous but is important. Brian is generous in helping cavers of all kinds with his brilliant and practical electronics equipment.

The Victor A. Schmidt Conservation Award annually recognizes an individual NSS member who, through significant action over time, has demonstrated outstanding dedication to the cause of cave conservation. The award may recognize a pair of members who qualify equally based on work they have done together. This year’s recipient is Jennifer Foote, NSS 45211.

For Jennifer, all things caving encompass conservation. She trains a lot of people to cave softly, from the experienced to the novice caver, and makes everyone feel welcomed-and-valued while insisting they employ minimum-impact ethics in the exploration, survey, and restoration projects she leads. Jen’s quiet and powerful leadership is literally the force behind many cave conservation projects.

She has volunteered thousands of hours for caves on our public lands, and has worked with the Forest Service, Bureau of Land Management, and National Park Service to ensure agency support on critical cave management projects across New Mexico. The High Guads Restoration Project, under Jen’s leadership for the past 21 years, is an official NSS Conservation Task Force and has charted tens-of-thousands-of-hours and hundreds-of-thousands-of-dollars in NSS Volunteer Value to the Forest Service.

The Spelean Arts and Letters Award is presented each year to one, or a pair of, NSS member(s) who, through joint specific actions qualify equally for the award, over time has advanced spelean arts and letters by significant artistic expression, management or criticism. This year’s recipient is Derek Bristol, NSS 34941. Derek, a caver known for over 150 caves and caving videos, including in such large caves as Carlsbad Caverns, Lechuguilla, Fort Stanton and Jewel caves. A world-class caver he recorded cave expeditions in sensational locations across the globe from Huautla and Cheve in Mexico to Clearwater in Borneo. His videos have included on-rope gear reviews, techniques for descents and ascents, and lessons on rigging and surveying. These You-Tube tutorials have taught national and international cavers what they need to know for safe, ethical, and efficient caving. The videos exemplify skills as a storyteller, scriptwriter, videographer and editor. His zeal for spelean arts and letters continues to be inspiring to young and old, but especially beginning NSS cavers.

Certificates of Merit are awarded annually for recent specific accomplishments in cave exploration, conservation, or other contributions, which further the goals of the NSS. This year, the NSS awarded two Certificates of Merit.

The second Certificate of Merit was to the 2020 Virtual NSS Convention Staff for putting on the NSS virtual convention. Faced with an unprecedented pandemic and lockdown, the convention staff promptly organized and put on mostly the same programs and presentations as previous conventions, except remotely. Led by Rich Geisler and Meridith Hall Weburg, the staff allowed cavers who could not travel to experience some of convention and helped expose the NSS to the public.

The James G. Mitchell Award is annually presented to an NSS member, who is a student, for the best scientific paper presented at the convention. This year’s recipient, Kaylie Wheeless, NSS 70808, was recognized for her paper “Analysis of Secret Squirrel Cave, Tennessee: A Presumptive Chemoautolithotrophic System Supporting Multiple Trophic Levels in a Potentially Sulfur Speleogenetic Cave.”

The Peter M Hauer Spelean History Award is annually given to an individual who has made a significant contribution to speleology history. This year’s recipient, Bert Ashbrook, NSS 25104.

Bert is a long-time member of the NSS and is active in documenting the history
and exploration of caves, especially those in Pennsylvania. He is the author of *Caves of Pennsylvania in the Eighteenth Century*. In addition, Bert has also been investigating the history of caves in the Mammoth Cave Region of Kentucky. He has presented many papers at the American Spelean History Association sessions at NSS conventions and has published numerous articles in the *Journal of Spelean History*.

The **National Cave Rescue Commission Steve Hudson Cave Rescue Award** was presented to John Punches, NSS 39211, from Roseburg, Oregon.

John served as National Coordinator from 1999 through 2009 and followed as Training Coordinator from 2014 through 2019. During the majority of that time, he simultaneously served as Northwest Regional Coordinator from 1995 through 2015. During his many years of administrative service, he spent countless hours in conference calls with the NCRC Education Committee developing and modifying training curriculum. John’s exceptional leadership was directly responsible for increasing the level of professionalism demonstrated by the NCRC instructor cadre.

The **NSS Outstanding Landowner Award** was presented to Ohio Caverns for their legacy of cave conservation, access, exploration, and education. Even though Ohio is not the most cave-rich state in the country, it does have a proud tradition of cave and karst exploration and research. One need only point to Ohio Caverns’ ongoing relationship with the public and local grottos as a preeminent example of a landowner who has wholeheartedly supported cave information in the state and beyond the borders of Ohio over the past 100 years. See the sidebar on page 8 for more.

The NSS President is empowered to award a **Certificate of Appreciation** to persons or organizations that have, by specific action, furthered a goal or several goals of the Society. This year, NSS President Gary Schindel awarded Certificates of Appreciation to the following Society members:

- **Nick Anderson**, NSS 69733, for his assistance in installing gates for Secret Cave and Warrens Cave, NSS Preserves;
- **Hazel Barton**, NSS 38665, for serving as chair of the Ad Hoc Vertical Training Committee;
- **Nathan Farrar**, NSS 5222, for serving on the NSS Board of Directors and serving as chair of the Nominating Committee;
- **Tom Florer**, NSS 47639, for his generous support of the NSS;
- **Richard E. Geisler**, NSS 33708, for chairing the 2020 NSS Virtual Convention;
- **David Hoffman**, NSS 5761, for his generous support of the NSS;
- **Roswell W. Jones**, NSS 4822 for his generous support of the NSS;
- **Anmar Mirza**, NSS 45765, for his many years of service as chair of the National Cave Rescue Commission;
- **Dr. Leslie North**, NSS 5877, for her work as an associate editor for the *Journal of Cave and Karst Studies*;
- **John Schelten**, NSS 10886, for his assistance in installing gates for Secret Cave and Warrens Cave, NSS Preserves;
- **John Schneider**, NSS 18520, for his generous support of the NSS;
- **Caroline**, NSS46812 and Wm. NSS 22677, Shrewsbury and OnRope1 for their generous support of the NSS;
- **David Springetti**, NSS 13631, for the fabrication and installation of gates for Secret Cave and Warrens Cave, NSS preserves;
- **Will Urbanski**, NSS 59221, for serving on the NSS Board of Directors;
- **Meredith Hall Weberg**, 21477, for Co-chairing the 2020 NSS Virtual Convention;
- **Cindy Wu**, NSS 67952, for serving on the NSS Board of Directors; and
- **2020 Elkins, West Virginia Virtual NSS Convention Staff**.

The NSS bestows the title of **Fellow of the NSS** on members who, over a number of years, have exemplified through their actions their dedication to the goals of the Society. The NSS honors the following members with Fellowships this year:

- **Carl Amundson**, NSS 50213;
- **Josh Brewer**, NSS 56030;
- **Judith Calford**, NSS 51878;
- **Betty Farfan**, NSS 54867;
- **Art Fortini**, NSS 26189;
- **William Gee**, NSS 49528;
- **Vico Jones**, NSS 30883;
- **Brian Masney**, NSS 51142;
- **Terry McClanathan**, NSS 12103;
- **Amanda Mortimer**, NSS 31003;
- **Marty Reames**, NSS 53414;
- **Dave Stratford**, NSS 33204;
- **Val Stratford**, NSS 33205;
- **Janice Tucker**, NSS 31863;
- **Daniel Veelik**, NSS 54866;
- **Adam Weaver**, NSS 62352;
- **Ellen Whittle**, NSS 67153.

The NSS recognizes the following members for their **Long-Term NSS Membership** in the Society.

- **50 Years of Membership**:
  - Ann Harman, NSS 12754;
  - Rochelle Devereaux, NSS 12766;
  - William W. Besse, NSS 12767;
  - James V. Crail, NSS 12781;
  - Richard W. Niska, NSS 12787;
  - Gary W. Zumwalt, NSS 12796;
  - Robyn Koerschner, NSS 12829;
  - Jimmy L. Clements, NSS 12840;
  - Kenneth J. Mattern, NSS 12851;
  - Vance A. Nelson, NSS 12853;
  - Gary W. Ford, NSS 12857;
  - William L. Schulze, NSS 12859;
  - Alberta E. Zumwalt, NSS 12881;
  - Keith Conover, NSS 12893;
  - John White, NSS 12898;
  - Robert M. Jones, NSS 12902;
  - Thomas M. Whitehurst, NSS 12919;
  - Thomas W. Wesson, NSS 12923;
  - Allen M. Mosler, NSS 12940;
  - Gary Storrick, NSS 12967;
  - George E. Jagers, NSS 12978;
  - Merlin Tuttle, NSS 13020;
  - George P. Cesnik, NSS 13030;
  - James C. Cullen, NSS 13035;
  - Rolf Paul McQueary, NSS 13036;
  - David J. Engel, NSS 13057;
  - Mirmam G. Cuddington, NSS 13078;
  - Letitia J.W. Hess, NSS 13097;
  - John E. Kibler, NSS 13105;
  - James C. Currens, NSS 13110;
  - John M. Wilson, NSS 13112;
  - Bill Stringfellow, NSS 13128;
  - Louise D. Hose, NSS 13138;
  - Jim Thompson, NSS 13154;
  - Dennis M. Regan, NSS 13166;
  - Scott Belland, NSS 13183;

Not pictured: William Gee, NSS 49528.

Facing page: New NSS Fellows for 2021
Above: Josh Brewer, NSS 56030
Right: Judith Calford, NSS 51878
Far right: Betty Farfan, NSS 54867

Art Fortini, NSS 26189
Vico Jones, NSS 30883
Brian Masney, NSS 51142
Terry McClanathan, NSS 12103

Amanda Mortimer, NSS 31003
Marty Reames, NSS 53414
Dave Stratford, NSS 33204
Val Stratford, NSS 33205

Janice Tucker, NSS 31863
Daniel Veelik, NSS 54866
Adam Weaver, NSS 62352
Ellen Whittle, NSS 67153

New NSS Fellows. Not pictured: William Gee, NSS 49528

Carl Amundson, NSS 50213

NSS News, November 2021
Karen Padgett, NSS 13184; Robert Gulden, NSS 13188; Anne Knox Strait, NSS 13218; Scott Christenson, NSS 13219; Jeffrey A. Hatcher, NSS 13234; Karen S. Hunter, NSS 13236; William R. Via, NSS 13256; Joe Domnanovich, NSS 13287; Hubert C. Crowell, NSS 13289; Paul A. Uglum, NSS 13290; Russell Turner, NSS 13308; Robert L. Crawford, NSS 13315; Daniel Craig Rudolph, NSS 13359; Elizabeth Susie Rock, NSS 13362; James A. Sinning, NSS 13363; Leslie Anne Sinning, NSS 13364; David Bechler, NSS 13387; George William Zachariasen, NSS 13389; Kathy Michaels, NSS 13425; Thomas M. (Duke) McMullan, NSS 13429; Rick Olson, NSS 13432; Susan K. Johnson, NSS 13436; James W. Harbison, NSS 13456; Mark T. Duigon, NSS 13464; Cathy Huckins, NSS 13469; Michael G. Francik, NSS 13474; Randall H. Owen, NSS 13508; and Tom Smith, NSS 15045.

60 Years of Membership

- Glenn M Pense, NSS 5417
- Steve Knutson, NSS 5433
- Hubbard A Seward, NSS 5434
- Bruce Fowler, NSS 5502
- Richard Finch, NSS 5560
- Pete Lindsley, NSS 5566
- Eugene O Reynolds, NSS 5571
- Richard L Dixon, NSS 5589
- G Warren Smith, NSS 5601
- John Craft Taylor, NSS 5624
- Theodore Steinke, NSS 5658
- Alice Steinke, NSS 5659
- Kenneth N. Laidlaw, NSS 5664
- John Tichenor, NSS 5670
- G. Thomas Rea, NSS 5683
- Ray McAdams, NSS 5706
- Jerry M. Johnson, NSS 5739
- Dwight T. Hoxie, NSS 5758
- David Hoffman, NSS 5761
- Don Shannon, NSS 5795
- John S McLean, NSS 5840
- Fred Steinhoff, NSS 5854
- Brian A. Crist, NSS 5956
- Bob Weber, NSS 5958
- Bruce Sloane, NSS 1417
- Jack R. Herschend, NSS 1529
- Porter B. Echols, NSS 1579
- Robert H. Higgs, NSS 1993
- Roger W. Brucker, NSS 1999
- Rev. Paul R. Wightman, NSS 835
- Carroll S. Slemaker, NSS 1903; and

Thank you for submitting your nominations and letters of support each year for NSS awards. Please keep those nominations and letters coming to the Award subcommittees. Many NSS members are deserving of our appreciation. Cavers may have thought some deserving caver has been previously acknowledged. However, it is surprising that many still have not yet received Society recognition. Nomination information is located at https://caves.org/committee/award/.

The NSS awarded the Outstanding Landowner-Caver Relations Award to Ohio Caverns, Inc., at the Awards Banquet on July 30, 2021. On Monday, August 23, 2021, three Ohio NSS members met with Ohio Caverns owner, Eric D. Evans, to present the award plaque to him. Presenting the award were past-NSS-President, Mike Hood, Kevin Lorms, and Gary Bush. Also present was Ohio Caverns staff member, Tim Grissom.

Members Hood, Lorms, and Bush are also board members of the Ohio Cave Survey.

Mr. Evans was genuinely touched by the award, stating this was a tribute to his fine staff for maintaining the high standard of public relations and cave information offered by Ohio Caverns for over 100 years. He considered the NSS award “a very big deal for Ohio Caverns.”
2021 NSS Salon Summaries

Each of the 2021 Thursday Night Salon videos are available in a playlist on the NSS channel on Youtube. Search or use this custom URL: https://bit.ly/2021-salons

Cave Ballad Salon
Chair: Roland Vinyard

Judges: Gary Gibula, Fofó Gonzalez, and Steve Kovach

HONORABLE MENTION
On Rope Again (Traditional Category) [2:15] by Dave Brumbaugh

MERIT AWARD
Goin’ Cavin’ (Original Category) [5:51] by Andy McKinnon

BEST OF SHOW
Rocks Complete Me (Traditional Category) [2:56] by Melissa Horn

Clips from the first two songs and Melissa’s full performance can be heard in the Cave Ballad Awards program video: https://bit.ly/2021-ballads

Cartographic Salon
Chair: Pat Kambesis

The 2021 Cartographic Salon was held virtually in July of 2021, among nine judges and the salon chair, and across four time zones. PDF files were received in lieu of paper maps. Fourteen maps from three countries were entered. The judges awarded ribbons to nine maps and wrote (and even typed) critiques for all the maps entered. This was Dwight Livingston’s last year as chair of the Cartographic Salon. Josh Brewer will chair next year.

Judges: Dan Austin, Hazel Barton, Paul Burger, Rod Horrocks, Howard Kalnitz, Johanna Kowarik, Dwight Livingston, Ben Miller, Nancy Pistole, Kayla Sapotika, Bev Shade, Mick Sutton, Mark Sutton, Carol Vesely, Cyndi Walck

The awards program with images of all the maps can be viewed on Youtube at https://bit.ly/2021-maps

HONORABLE MENTION
Wallace Cave, Shannon County, Missouri, Dan Lamping (Experienced)
Rushmore Cave, Pennington County, South Dakota, Derek Wolfe (Experienced)
Maetus Cave, Sultan Kudarat, Philippines... Mikko Cuevas (Experienced)

Rocks Complete Me (The Guadalupes)

Vocals and Guitar – Melissa Horn
Backup vocals - Rosalee Brumbaugh

I’m heading down south to the land of the caves
Where Guadalupes to the west overlook the Gypsum Plain.
And I’m packing up my bags and throwing in a few extra headlights. Forget about the coast I’ll try my hand at desert-livin’ I’ll see you all at Christmas Or as early as Thanksgiving.
But I’ve got to go where the big reef meets the sky (The Guadalupes)

To rocks beneath and rocks up high
But no rocks in the middle just a place where I can hide
I’ll find my way back home eventually

Well I’ve got my pack
And I’ve got my feet
So I’ve got much more Than I could ever need at all Rocks complete me.

Kickin’ up dust on a two-track road Headin’ out to a hole which is known to blow
And if the story holds up I’m gonna Go, Dog, Go
Just like that Eastman book... (Do you like my hat?)
Won’t be as easy as ABC’s
To find that new mega-cavern that’s been in my dreams Huffin’ puffin’ up the ridge but it’s a dry heat so they say... (The Guadalupes)
And I’m making my way to-

Rocks beneath and rocks up high
But no rocks in the middle just a place where I can hide
I’ll find my way back home eventually Well I’ve got my pack
And I’m got my feet
So I’ve got much more
Than I could ever need at all Rocks complete me

How many paces I’ve yet to go And caves that blow I’ll never know
But with a light that glows I’ll lead the way.

So many fires yet to sit around Exchanging stories of the underground Once we’re safe and sound once more but still longing for... (Onward!) Rocks beneath and rocks up high
But no rocks in the middle just a place where I can hide I’ll find my way back home...
It’s too hot.

Well I’ve got my pack
And I’m got my feet
So I’ve got much more
Than I could ever need at all Rocks complete me (The Guadalupes)

Gourdneck Cave, Marion County, Tennessee, Kyle Lasitter (Apprentice)
Anvil Points Claystone Caves, Garfield County, Colorado, Derek Wolfe (Experienced)

MERIT AWARD
Kalog Dzonot-Upstream, Quintana Roo, Mexico, Alessandro Reato (Experienced)
No Cave, Jackson County, Alabama, Pat Kambesis (Master)
Close to the Edge, British Columbia, Canada, Dan Green (Apprentice)

BEST OF SHOW
Sunshine Canyon Complex, Ulster County, New York, John Dunham (Experienced)

Graphic Arts Salon
Chair: Blake Jordan

Judges: Steven Frye and Deanna Stever

Cover Art

HONORABLE MENTION
Carbide Dump, January 2020
Blue Ridge Grotto
Caver, November 2019
Meramec Valley Grotto
Cascade Caver, Vol. 58, No. 1
Cascade Grotto
CIG Newsletter, April/May/June 2020
Central Indiana Grotto
ICS Notebook, March 2020
Indiana Cave Survey

MERIT AWARD
Caver, June 2019
Meramec Valley Grotto
Cascade Caver, Vol. 59, No. 1
Cascade Grotto

BEST OF SHOW
Caver, December 2020
Meramec Valley Grotto

Bookmark & Poster

HONORABLE MENTION
Bookmark: Australian Cave Animal of the Year
Business Card: Sandia Grotto (below:)

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T-Shirt Salon
Chair: Blake Jordan

Judges: Mary Georgia Jordon, Glenda Jordon, Isabelle Jordon
This year we had a total of 6 t-shirt designs entered in the salon. All designs were evaluated for impact, artistic rendition, caver appeal, and technical quality.

HONORABLE MENTION
SERA Cave Carnival 2019
Designer: Sabrina Simon

MERIT AWARD
Indiana Cave Capers 2016
Designer: Rich Lunseth
Indiana Cave Capers 2020
Designer: Rich Lunseth

CAVERS CHOICE
Indiana Cave Capers 2019
Designer: Rich Lunseth

Above: SERA Cave Carnival 2019 T-shirt, depicting a theme of Pirate of the Carabineers Left, the 2016, 2019, and 2020 Cave Capers T-shirts

2021 Video Salon
Chair: David Socky

Judges: David Socky, Alex Sproul, and John Waller.
There were seven entries submitted this year with all programs accepted. The programs submitted this year were exceptional, and the awards show it. There were two Honorable Mentions, three Merit Awards, and a Best of Show.
The video awards presentation with highlights can be viewed on youtube: https://bit.ly/2021-vidsalon
The full length videos can also be viewed on Youtube, here is a link to the playlist: https://bit.ly/2021-vidlist

HONORABLE MENTION
Exploring Clarksville Cave - 12:00 min
Mike Sandone, 2021
Silver Mines of the Hudson Valley - 21:00 min
Mike Sandone, 2020

MERIT AWARD
Castleguard Cave: Hindsight 2020 - 25:05 min.
Darryl Jensen, Aquatic Films, 2020
The Invisible River (El Rio Invisible) - 19:00 min
Sofia Oggioni, 2019
International Year of Caves and Karst - 6:38 min
Uwe Krüger, 2020

BEST OF SHOW
(Tom Zannes Award)
The Invisible River (El Rio Invisible) - 19:00 min.
Sofia Oggioni, 2019

Photo Salon
Chair: Nikki Fox

There were 94 photo entries submitted this year from 4 photographers. Fifty-four (57%) photos were accepted for showing, of those were 29 images that received medals.
The award winners list below is in ascending order (lowest first) based on the judges’ scores.
The judges were Adam Haydock (NV), JD Lewis (PA), and Kelly Smallwood (TN).
The 2021 Photo Salon presentation can be viewed on Youtube: https://bit.ly/2021-photos

HONORABLE MENTION
Arizona Borehole Name Withheld (Entrance) – Dave Bunnell
Bacon, Columns, OH MY (Formations) – Nikki Fox
Waiting for the Next Meal (Life) – Derik Holtmann
Big Business (Cell Phone) – Nikki Fox
Hunting for Passage (Caver) – Nikki Fox
The Coliseum (Cave) – Nikki Fox
The Final Pool (Cave) – Dave Bunnell
In Her Element (Formations) – Nikki Fox
A Nuisance Climb (Cave) – Nikki Fox
Climbing the Pit (Caver) – Nikki Fox
Her River Shadow (Cave) – Nikki Fox
Stooping to New Horizons (Cave) – Dave Bunnell
H20 and Still Goes (Caver) – Derik Holtmann

MERIT AWARD
Pearled Pebbles (Formations) – Dave Bunnell
Textbook Example of Moonmilk (Formations) – Dave Bunnell
Sinking Creek Stream Room (Cave) – Nikki Fox
Pool & Formation Gallery (Formations) – Nikki Fox
The Shale Contact (Cave) – Nikki Fox
Following the Flowstone (Cave) – Nikki Fox
FLAD the Inhaler (Cave) – Nikki Fox
The Depths Beyond (Cave)- Dave Bunnell
Swirly Pahoehoe (Cave) – Dave Bunnell
Woodwards Survey (Caver) – Will Boekel
5th Runner Up: Pool Parlor Stalagmite Bighorn Caverns (Formations) – Will Boekel
4th Runner Up: How I Spent My Philippines Vacation (Cave) – Dave Bunnell
3rd Runner Up: On Station Lava Tube Edition (Science) – Dave Bunnell
2nd Runner Up: The Cave Shines on Her (Formations) – Dave Bunnell

BEST OF SHOW
Mystical Waters (Caver) – Nikki Fox
Crawling Cavers seemed to be a popular theme in this year’s Photo Salon with some 5 ribbons going to such photos. In this spread:

Below, upper: H2O and Still Goes by Derik Holtmann. Dan Lamping is the caver. (Honorable Mention)
Below, lower: Hunting for Passage by Nikki Fox. Hunter Campbell is the caver. (Honorable Mention).
Facing page, upper: On Station Lava Tube Edition by Dave Bunnell. Ed Schultz is the caver. (Merit Award and third place overall).
Facing page, lower: Woodwards Survey by Will Boekel. David Gianforte is the caver. (Merit Award)
Cavers from across our nation and around the world participated in the second virtual convention presented by the National Speleological Society in July. Over 50 video presentations mirrored a wide swath of NSS interests. From communications and electronics to fine arts to speleothem repair methods - these videos highlight the outstanding work our members.

While “virtual-fatigue” from this long pandemic was reflected in a low number of technical presentations, those we received were of superb quality. Almost 16 hours of videos have now been posted to the society’s YouTube channel at http://tinyurl.com/NSScaves.

Unsurprisingly, highlights of the collection include the annual salon awards, a cartographic salon review, and multiple geology presentations. The annual luminary series, featuring Frank Binney, Ralph Ewers, and Richard Breisch, also proved to be popular with our virtual audience.

In addition to the standard fare, many special sessions were also presented online. A recorded presentation from the director of the new IMAX movie, “Ancient Caves” was the most watched video of the 2021 collection. In it, director Jonathan Bird related the challenges of filming underwater scenes for the feature, and spoke extensively about his dive certification from the NSS Cave Diving Section in advance of the production.

NSS caver, Bill Steele, recorded a live interview from California with author Roland Vinyard about his new biography on NSS caver, Peter Hauer. Bill was live on stage in California while Roland joined live from SpeleoBooks in New York.

For the first time, the society’s annual Congress of Grottos meeting was delivered over Zoom and posted to the YouTube channel. Led by Bill Stringfellow, that recording is available in the online collection at tinyurl.com/NSScaves.

Organization of the virtual presentations was led by Pat Kambesis, the convention’s vice-chair of programming. Extensive support was also provided by Dave Socky, Meredith Hall-Weberg, Carol Tiderman, Dave Lester, and Kelly Prebil. Their dedicated efforts are sincerely appreciated.

Although our hope was to deliver an in-person convention in 2021, we’re pleased that our NSS family of cavers tuned in to support the virtual delivery. If the pandemic allows, we look forward to gathering in person next summer in South Dakota.

The appropriately named Sunbeam Pit was one of several lava tubes featured at the Speleo-Ed gathering.

The appropriately named Sunbeam Pit was one of several lava tubes featured at the Speleo-Ed gathering.

Above: Cassandra Roemer-Baer, Pat Kambesis, Amy Morton, and Chuck Lee at the Cartography Workshop
Right: Unusual ice flowers in one of the ice caves

Gretchen Baker in one of the ice caves in the Medicine Lake Highlands
A Good Time Was Had by Some

Matt Bowers

Following the Society’s directive in March to move the 2021 NSS Convention to a virtual format, a small group of cavers moved to rebrand the event as a regional activity of the Society’s Western Region.

About 140 cavers from across North America travelled to Weed, California to enjoy a week of social events, cave trips, caving workshops, and an ice cream social. Virtual video presentations from the NSS Convention were available for viewing in the 560-seat theater. Our host venue at College of the Siskiyous was about 10 miles away from the summit of Mount Shasta Volcano, which provided a stunning backdrop to the week’s activities.

Geologically, Weed, California sits at the edge of the Cascadian volcanic areas and the limestone beds of the northern Sierras. Both lava tubes and solution caves were heavily featured in our trip schedule. Two distinct geology field trips also explored the igneous and sedimentary features in this land of fire and ice!

The brief respite between pandemic surge #1 and pandemic surge #2, allowed us to gather safely in northern California. Proof of completed vaccinations or recent negative tests were required for entry, and all activities offered ample space for social distancing.

The week-long event featured 3 live bands, craft beers, and, of course, soft drinks provided by Shasta Beverages. The Western Cave Conservancy and the Revolutionary Hodag Party sponsored our social events, and a live auction was held during the campground party to support the Western Region.

The event also featured two in-cave workshops: a Cartography Workshop led by Pat Kambesis and Carol Vesely, and a Photography Workshop led by Dave Bunnell. Each was fully attended despite it being a smaller event. Additional workshops included:

- Microshaving by John Norman
- Self-Rescue by Gretchen Baker
- Stream Dye Tracing by Pat Kambesis
- Disto X2 Calibration by Carol V
- Caver obstacle course by Carly Robison

Bill Steele and Cyndie Walck announced the NSS award recipients on Friday night during the banquet.

While we’re disappointed we were not able to offer a full convention for the society, we hope you have a chance to visit this unique caving area someday.
Cartographic Salon Best of Show:
Sunshine Canyon Complex, Ulster County, New York,
by John Dunham (Experienced)

Ed Note: Since even a two page spread could not have done this large map (69 x 31 inches) justice I’ve chosen to show the overall layout and then a 1:1 detail view of it.
In Response to the recent Online Survey regarding Vertical Safety in Caving sent by Hazel Barton, Chair
ad hoc -VTC

Dear Ms. Barton, et al of the Vertical Education Committee trying to organize Vertical Safety in American Caving,

Thank you for addressing this topic in the NSS!

The most important piece of equipment in any activity is a person’s mind. Attitude affects Altitude, in this case, and platitudes are not always devoid of value in the void. For this please consider, “You cannot teach Common Sense”. (Envision Rod Serling speaking here)

But that is what all safety revolves about.

Many people agree that teaching good vertical techniques is needed. Many cavers agree that the NSS membership needs better instruction in this regard. Now the hard part. What are to be “uniform standards” to instruct? Who will teach, and who will teach the teachers? And how do teachers teach? This last point is very important.

Since you have stepped up to the plate to be the “batters” in this ballgame, please remember that some real people need to be able to “catch” the balls you send out there into the field. American cavers compared to “other” cavers seem to be an “ornery” bunch. Approach them with “rules” and “experts” and you have already lost them. Tough job you have.

Some years ago in the NSS News there was an article about how some “old-timers” refused to give up smoking while in cave. Some responded in letters (tongue-in-cheek I hope) that they stood up for individual rights and they would continue to carry their firearms in cave. People need to learn “first-hand”, or from those they feel “confidence” in. But an “expert” talking doesn’t work. Case in point: An NSS caver (originally from England) was caving alone (!) in a well known, well frequented, American cave when they decided to shoot off some firecrackers in the entrance room before leaving (!) They proceeded to grope at the walls of a pretty small room for many hours in thick smoke till they found the exit they had gone though many times before on other trips. Their response (perhaps typical dry English humor) was, “Yeah, I won’t do that again.” I don’t think they were “infected” by American poor
form in their caving techniques.

When I was going though the question-naire you bravely put out there regarding vertical caving, I was taken aback by those questions containing the word “Expert”. I do not feel I am alone. Even you had to question how people who said they may have had only one (1) year vertical experience could rate themselves at an “Expert” level. You then said they were definitely incorrect in your Youtube questionnaire follow-up. So even you must consider the possibility of self-bias in our very human beliefs. Who made up those questions? Were there expected responses? …to be “Approved” and “Disapproved”? Unintentionally, there might have been “loaded” questions, as they say.

Now “Proficiency” On-Rope can be measured better than a person’s belief about being an “Expert” in any field. You say you were surprised by cavers that you considered “Expert” yet they did not say that about themselves. This shows their Common Sense. We ARE always learning. No one can “know it all”, period, the end. We all need others to check ourselves.

Case in point: A very good caver, vertically proficient, with over 6 years of very active caving was just about to drop an outdoors pit and I stopped by to say hello with my girlfriend who had no experience in caving. She spoke up suddenly and said very calmly. “Shoudn’t that be connected to you somewhere?” The rappel rack with loaded rope was not actually connected to the seat harness. The caver was as surprised as I was that this was “missed”. The correction was made and that day’s activities proceeded safely. My girlfriend could not ever be considered an “Expert”, yet the caver (not yet) on-rope was easily considered an “Expert” in vertical caving. My point.

Everyone gets “tired”. Danger to us comes to an unhappy end when we are not thinking things through. We all need to understand the value of the “group” we cave with, to allow not only “introspection” but “cross-inspection”. And that is regardless of how well each of us may “know” the rules of safety in any activity.

I was impressed when caving in Czechoslovakia (it was still one country then) by the numbered patches that cavers had on their cave suits. This was a means to inform each other of that person’s level of caving proficiency. It certainly aided the group when making decisions regarding who should lead, who should follow, who should “fit” between those with more proficiency, and who should not travel on certain trips or down certain passages. People can certainly learn to cave outside their “comfort” zone on any trip, but the group, especially the leaders, can make better decisions in a cave and be more effective cavers.

So please, do not try to create “Experts”. Throw the term away perhaps. Psychologists say the term “insane” is only a legal term, not a medical term or one that can be used in science. Proficiency is the best we can teach. And we must always encourage Common Sense.

The word “encourage” contains the word “courage”, to give others courage to learn by doing.

Don’t be clouded by statistics and numbers. A caver I had never met before told me they’d been caving 10 years. But during a beginners trip in a cave with no vertical drops (but constructed like Swiss cheese with passages over and around each other) I was surprised to see them laying on their back panting heavily with eyes a bit glazed over. I tried to assess if they might be having a medical emergency. I calmly talked with them to find they were just shocked by this cave. “Do you need to do a lot of this crawling?” he said excitedly, “We never had to do this in my Grotto!” They came from a background of “walking passage” caves. So 10 years was not a good metric. I learned.

Consider this “Word Cloud” of caver groups: Not-confident—Confident—Over-Confident.

I am willing to bet that the most “danger-ous” cavers are in the first and last groups, but since the first group may naturally not try an activity, I think most accidents occur with the third group statistically. Maybe I’m wrong but I still think we need to limit the size of that third group of cavers. Again, let’s teach Proficiency not “Expertise”. I hear that term used on newprograms during some dramatic rescue.

Remember that saying? “Cavers rescue Spelunkers”. Yeah, the word Spelunkers makes good press too.

Confidence and Proficiency both need to be developed. But without Confidence, you are stepping off in the wrong direction.

Calmness, Comfort, Introspection, Proficiency. Teachers must inspire Confidence, and not just technical Proficiency. Teach what works and what doesn’t work in different situations. Cavers must learn how to get out of difficult situations to achieve Confidence on rope.

Don’t leave this out of the equation. Confidence includes humbleness. Otherwise you are Over-Confident and “jumping” to conclusions.

[Ed: Interested parties might want to check out the video put out by the Vertical Training Commission that discusses responses to the questionnaire: https://bit.ly/NSS-VTC]
I would ask people to consider that most accidents occur (in any activity) from over-confidence. If someone is confident and proficient but does something to cause an accident, it is by passing over into a mental state of over-confidence by being tired or by otherwise being fearful or “in a rush” (was it some bees?). In either case it is a “clouded” mental state. You forget to do a certain step, or choose to leave out a certain step if you are “in a rush”. It happens. This is where being in a group must help get people back “on track” or “on rack” as the case may be.

I hope this can be of value in setting things up.

Sincerely,

Ken Nichols, NSS 2768

Hazel’s Reply

Dear Ken,

I wanted to thank you for the comments and concerns that you raised regarding the proposed Vertical Training Commission (VTC); however, I would caution against conflating the terminology used in a questionnaire and its resultant data with the goals of the VTC. I know this distinction was perhaps unclear in the video, as one provided the justification for the other, but these are two independent entities: one was an academic effort to try and understand the education preferences of cavers; the other is a commission that may be established within the NSS.

I do share your concerns about elitism, but the VTC has only one mission – to improve vertical cave safety through better training within the US.

There has always been resistance to change within the US caving community – as you said, we are all independent thinkers. Even the creation of the NCRC met with a significant amount of resistance at the time, with some people believing that the organization would be used to create an elite rescue group. Yet, by cavers training cavers, the NCRC has gone on to become the preeminent caving education organization within the US. It is our hope to similarly build the VTC as a community organization. We do not intend to create rules or absolutes, nor is there any intent to create experts. Rather, we intend to create an organization that can teach the competencies and critical thinking skills necessary for safe vertical caving, while utilizing the best practices for effectiveness in vertical training.

There have been a number of vertical accidents in the US that could have been prevented by education, including deaths. At the same time, landowners are finding it increasingly difficult to obtain the insurance necessary to allow people to cave on their properties due to high profile accidents. Therefore, while it is likely that the initial organization we create will be far from perfect, we need to start somewhere, and pointing out the myriad of ways “…it’s not going to work” is no longer sufficient justification not to try. Rather, our aim is to identify those challenging issues and propose solutions to directly address them.

Sincerely,

Dr. Hazel A. Barton

Given your enthusiasm for the subject, I look forward to working with you and other cavers in identifying those solutions as we build the VTC into an active, vibrant and effective training commission.

Louise Hose Given Meritorious Contribution Award from GSA

Long-time NSS member Louise Hose (13138LFe) received the Meritorious Contribution Award at the Geological Society of America meeting in Portland, Oregon, in October, for her lifetime of work in advancing karst science. Previous awardees include fellow NSS members John and Joan Mylroie (2020), Will and Bette White (2019), Art Palmer (2018), and Nick Crawford (2017). The award recognizes “the author of a published paper or body of work of distinction that has significantly influenced the intellectual direction of karst or broadly enhanced the knowledge of the discipline.”

The nomination and support letters for Hose cited the influence of publications on sulfuric acid speleogenesis, her role as a “pioneer” and role-model cave explorer-scientist in a time (1970s and 1980s) when there were very few women in the field, her impact on raising the prestige of the Journal of Cave and Karst Studies during her seven year tenure as Editor-in-Chief, as well as her publications and presentations on the geology of deep caves in Mexico. Also mentioned was her work with the media and educating the general public on caves and karst.

While accepting the award, Hose said she viewed herself as more an explorer who recognizes the special value of unique caves and then recruits the appropriate scientists to do the serious “science” work. Thus she thanked her collaborators, in particular Diana Northup, Dan Jones, Zoe Havlena, Harvey DuChene, Penny Boston, and Art and Peg Palmer. Although mostly retired, Hose continues to study the caves of Nevada, in particular Lehman Caves in Great Basin National Park.

 Winners Announced in the DARPA Underground Challenge

CERBERUS won the Systems Competition and Dynamo topped the leaderboard in the Virtual Competition as roboticists and engineers from eleven countries participated in the Final Event of the DARPA Subterranean (SubT) Challenge this week at the Louisville, Kentucky Mega Cavern. With $5 million in total prize money at stake, the Systems and Virtual winners won $2 million and $750,000, respectively.

The Systems Competition involved physical robots and the Virtual Competition took place in simulated underground worlds. Four of the teams competed in both competitions. Teams in the Systems Competition developed a wide variety of robotic systems to advance and evaluate novel mapping and navigation solutions for application in realistic field environments, such as human-made tunnels, urban underground settings, and caves. Teams in the Virtual Competition developed software and algorithms using virtual models of systems, environments, and terrain to compete in simulation-based events, and explore simulated environments.

“In time-sensitive missions, such as active combat operations or disaster response, warfighters and first responders face difficult terrain, unstable structures, degraded environmental conditions, severe communication constraints, and expansive areas of operation,” said Timothy Chung, program manager of the SubT Challenge. “The Challenge has helped to significantly advance technological tools for tackling these impediments and safeguarding lives.”

Since the SubT Challenge began in 2018, teams have had the opportunity to compete in three Circuit events – Tunnel, Urban, and Cave (though the Cave Circuit was shifted to virtual-only due to the pandemic). The Final Event tested qualifying teams on courses that incorporated relevant challenges from all three environments.

From the DARPA Website, https://www.darpa.mil/news-events/2021-09-24a
Jim Nieland
1949 – 2021

This past February, Jim Nieland, NSS F7455, passed away at his home in Alaska. A native of Oregon, he was in the 3rd grade when he found interest in caving and climbing. He was mentored by Dr. William Halliday and members of the Cascade Grotto in his early teens, then later became a charter member of the Oregon Grotto and the Willamette Valley Grotto. In 1974, he was awarded a NSS Fellowship.

Jim taught himself cave mapping, leading to over 50 years of direct experience in exploration and survey of caves in the United States, specifically over 100 miles of underground survey and the development of cave inventories for Oregon and Washington. The attention to detail necessary in mapping led to an interest in photography and cave ecology.

For 35 years Jim worked for the U.S. Forest Service, serving as Recreation Planner for the Mount St. Helens National Volcanic Monument, and Region-6 Cave Specialist. He developed a GIS system for caves that is still in use by the U.S. Forest Service.

In the 1980s, Tom Lennon, Jerry Thornton, and Jim Nieland wrote the Forest Service Directive System Manual FSM 2356 addressing cave management on USFS lands. FSM 2356 later was the core of the Federal Cave Resource Protection Act of 1988. The initial team developed the concept that all caves are significant and deserve protection. Jim published a history of federal cave protection in the electronic magazine, Beneath the Forest, Spring 2018.

Jim served on the Board of Directors of the American Cave Conservation Association for a number of years. He published 15 professional papers on cave and bat management, developed a Washington state-wide habitat database, and conducted seminars on management and protection measures. Additionally, after connecting with Roy Powers, Jim developed bat gate construction criteria and initiated a series of 14 on-site bat gate seminars across the United States.

Jim was presented with the NSS Cave Conservation Award in 2001. He constructed 402 specialized bat gates on mines and caves during his lifetime. The last projects focused on bat habitat management at:

- **Horne Lake Caves, Provincial Park, Canada, 2011**. Jim designed and constructed two bat gates with doors for visitor entry. He developed a special design to minimize visual impact while providing maximum security. Cooperator: BC Parks, the Canadian Cave Conservancy, Vancouver Island Cave Exploration Group.
- **Project Lead, Mount St. Helens National Volcanic Monument, Bat Hibernation Surveys, 2000 to present**. Jim has been involved in the ongoing, long-term monitoring of hibernation caves to determine health of the Townsend’s big-eared bat population, and the effectiveness of management activities for the protection of the population.
- **Project Manager, Bat Gate Design and Construction, Sawyers Cave Gate, Blue River Rd., Willamette National Forest, 2010**. Jim managed the site evaluation and construction of an angle iron bat gate 27 feet wide and 12 feet high for the protection of hibernating bats at Willamette National Forest.
- **Technical Advisor, Coronado National Memorial, Abandoned Mine Closures, 2010**. Jim advised and instructed contractors in the closure of abandoned mines. These were mines evaluated during the summer of 2009, for which he developed closure and construction recommendations.
- **Senior Environmental Specialist, National Park Service Mine Closure Project, Louis Berger Group, 2009**. Jim served as the Senior Environmental Specialist, which involved the development of standardized mine closures for mines in the Pacific West Region, National Park Service. He developed drawing packages of standardized closure types and engineering specifications, for use in government ARRA contracts, 2009-2010.
- **Project Manager, Identification of Abandoned Mines in Washington State, US Forest Service, 2008**. Jim managed a mine evaluation project reviewing 3600 abandoned mines to determine their potential as underground bat roost locations. This project was under contract with Bat Conservation International and the Pacific Northwest Region, US Forest Service.

Jim was also a skilled artist, rock climber, writer, welder, sailor, house builder, and friend. In the late 1960s to early 70s, Jim was an instructor in the Portland Oregon Climbing Club Mazama’s advanced climbing school. Several of his drawings appeared in early editions of the Oregon Grotto’s Speleograph. In the late 1970s, he assumed the editorship of the Speleograph and the Northwest Caver for a couple of years. Later, he and his wife constructed and remodeled over 52 houses. When he stopped the part-time construction work, he retired and they sailed to Alaska.

Jim passed quickly and quietly after a February barbeque with his friends. Thank you to all who enriched his life with fun, interest, and challenges.

Libby Nieland

James R. Steinberg
Dec 20, 1952 – Aug 1, 2021

Jim crossed the veil on August 1, 2021 at age 68 in Pasadena, California after a brave fight for life over several months. He’s now in the loving embrace of his parents Bob & Marilynn Steinberg, his beloved...
Gloria Jean Newman Briggs

7/12/1949 - 9/17/2021
NSS # 24123

Born to Everett and Billie Newman with 2 brothers and 3 sisters in Damascus, MD
Married - Frederick Briggs
Daughter - Marley (James) Wilkinson
Son - Joseph Briggs, deceased
Grandson - James Wilkinson
Dog - WORF
Gloria and Fred married young and started a family.

Gloria started caving in the late 1970’s while working at an alternative school with at-risk youth teaching confidence, environmental, conservation and land reclamation. Gloria supervised/lead a number of beginner trips to caves like Silers, Molers, Hensleys and others working with students on safe caving, climbing and rope-work (rappelling off the White Oak Bridge, at Harper’s Ferry and Carderock).

Gloria and Lynn Ott were the prime movers of Sligo Grotto in the late 70’s - 80’s. Talking several times a day, every day for years. Gloria assisted in producing the Sligo newsletter, The Subterranean Sun, and later took over as Editor. Around 1994, Gloria established an on-line presence for our newsletter using subsun@aol.com. Gloria also served as Secretary of Sligo Grotto for many years.

Gloria started her Cave Rescue training soon after getting involved in Appalachian Search and Rescue (ASRC). Gloria participated in the ASRC rescue of Shawn Crawford in 1983 on Old Rag.

In 1984, Gloria was in on the first exploration trip into Cricket Maze Cave. She was instrumental in taking on the position of Secretary as Sligo, Baltimore, DC & Tri-State Grotto Members created the Cricket Maze Cave Association (CMCA) after purchasing 5 acres of land with the cave entrance. She assisted in early mapping of the cave. Gloria’s commitment to the environment was strong.

In 1986, Gloria and Lynn started a few different types of grotto trips such as a trip under the Lincoln Memorial and the DC Metro Green Line Tunnel tour as it was being built. Gloria was hesitant to attend the Old Timer’s Reunion (OTR) over the Labor Day weekend, as she didn’t want to risk her friends delivering her baby.

On Sept. 30, 1986, Gloria called Lynn to say “my water broke and Fred’s at work”. Lynn rushed to Gloria’s home and knocked on the door, she didn’t answer. Lynn was frantic, then Gloria came to the door, saying she was taking a shower. Fred soon arrived home from his worksite to gather the family. Lynn headed to the hospital to meet them. Lynn arrived at Holy Cross Emergency Room and they weren’t there yet. After about 15 - 30 minutes later, Gloria, Fred and Marley came into the ER. Again, Lynn was frantic……where were YOU????

Gloria calmly responded - “we stopped at Little Tavern Hamburgers, I couldn’t leave Fred and Marley hungry - I don’t know how long this birth will take”. The nurses rushed Gloria into a room with Marley as Fred went to park the car. Not too long after, Gloria gave birth to Joseph.

When son Joseph was 4 years old, Gloria brought him from MD to visit Lynn in UT. Lynn brought her neighbor’s 5 year old along for a companion as they traveled to NV’s Lehman Cave for a long day trip. They also took a trip to Las Vegas Red Rocks area for hiking/climbing.

Starting around 1989, Gloria led a series of Children’s Summer Caving Programs.

In 1993, Gloria brought her daughter Marley to UT to assist Lynn moving to AZ.

Over the years, Gloria changed jobs several times working in the school system in purchasing and bookkeeping. Gloria assisted Fred in his construction business taking care of administrative duties. Gloria was very involved in Joseph’s sports activities. Gloria also had several dogs and a cat here and there over the years. Marley had graduated high school and moved to MT for college, got married, moved to Maine and started a family. Gloria remained involved with CMCA, focusing more on her day job, assisting in Fred’s business, taking care of things at home and attending Joseph’s sports events.

Around 1999, Gloria and Joseph found 25 acres with old farmhouse and a huge garage in Dickerson/Comus, MD. After Fred learned of the 6-bay garage, he was ready to move the family. They raised dogs, rented out several pastures, and later on, raised chickens, which Gloria donated the fresh eggs to a local shelter.

In 2009, Joseph’s death took a great toll on Gloria. Years later, more information came out on CTE. Gloria’s passion was to learn more about chronic traumatic encephalopathy. She would urge anyone who participated in sports which could cause concussions, to watch the true story - CONCUSSION featuring Will Smith.

Gloria always had a calm, caring demeanor. She will be greatly missed.

Gloria’s Family has requested a small private Celebration of Life, due to COVID concerns.

Cards may be sent to:
Fred Briggs
25225 Old Hundred Road
Dickerson, MD 20842

CMCA cavers will be planning a caver Celebration of Life for Gloria in the spring of 2022.

Donations may be made to:
National Speleological Society (NSS) online at: caves.org or by mail:
6001 Pulaski Pike Avenue NW
Huntsville, AL 35810

Lynn Ott, NSS 15257
John Powers, NSS 14315

Caving with the CMCA
Q. How did your sense of adventure develop?

A. I grew up in a working class suburb of San Diego called Linda Vista, and there were small canyons nearby on the edge of Mission Valley. There were lots of kids in the neighborhood and we played in those canyons. We dug a “cave” in the wall of an abandoned quarry. We called it “The Fifty” because of the 50-foot drop-off on the face of the quarry that had to be climbed to get up there. The quarry was rounded granite stream rocks that would pull out of the poorly consolidated sand, so that made it exciting at times.

Big eucalyptus trees in the neighborhood also provided climbing opportunities. As a family we did a lot of salt water fishing and hunting in the back country or over the mountains in the desert.

Oh, here is a good one: we used to go road hunting as a family! We would drive along the dirt roads in Tecalote Canyon until we spotted a cottontail rabbit. Mom, the crack shot in the family, would ease the 22-caliber Winchester out the window and shoot the bunny. My sister Deb and I—plus our dog, Tammy—would go get the rabbit. When we had enough for supper then we went home and cleaned the rabbits so mom could cook them up. Don’t tell anyone!

Q. Please share some background information about yourself.

A. I was born in Peoria, Illinois, and don’t recall anything about living there. At age three we moved to San Diego and were there until 1965. We then moved back to Illinois, to a farm in Paxton, which was a total climate and culture shock! Farm work was hard and the weather brutal at times, but I learned so much and of course met other farm boys like Mark Anderson, who was my sole caving buddy for several years. To avoid the draft, I entered Parkland College in Champaign. What a lifesaver that was, because my grades were not good enough to enter the University of Illinois. It’s a long story, but Horton Hobbs convinced me to go back to college and apply myself. This I did, and graduated from U of I in 1975 with a B.S. in Life Sciences and a M.S. in Biology. two years later.

Q. How did you land your job at the National Park Service?

A. I was a Seasonal Guide at Jewel Cave during the summers of 1974-1977. That was fun, until I realized that I could not tolerate repetition. I was shocked to learn that I could not apply for a permanent position with NPS because I first needed to have a job with the U.S. government to have “Government Status.”

So I worked at the Illinois State Water Survey, where I learned a lot about water chemistry, and then as a technologist at the U of I Center for Electron Microscopy. The endless variety was perfect for me and I had access to all kinds of high-powered research equipment.

So what did I do? Study caves, of course!

Via a request from Mammoth Cave National Park to the Cave Research Foundation, I wound up studying a weird goo that had been found on the aluminum handrails along tour routes. The gunk turned out to not be microbial, but instead a product of corrosion. The park was concerned that there might be something potentially dangerous about the goo—like disease-causing—but the danger turned out to be handrails weakened by corrosion. As a result, handrails were replaced with stainless steel in the most dangerous places like Bottomless Pit. I presented a paper on my findings at the park’s second Science Conference.

In the process of this and other consultation with the park, I got to know the Chief of Science and Resources Management. I told him that if they were ever going to hire a biologist, then I would certainly be interested. An ecology position was advertised because they wanted to have someone who could work on physical habitat parameters was well as biological ones. Through a series of miracles, largely carried out by the Chief of S&RM, I got the job. Wow!

It was a caver’s dream come true. That was in 1993. I worked at the park for 28 years before retiring earlier this year.

I’ve volunteered with CRF for the past 20 years and of course am still active with them. I’m also signed up as a VIP with S&RM. So, I’m retired but not really going away, just changing hats.

Q. What’s your employment history prior to the NPS?

A. Let’s see. As a kid, I mowed lawns in Linda Vista. I went door to door, asking if neighbors wanted their lawn mowed and weeds trimmed for $3. Dad would haul our lawnmower to the houses for me so I could get a taste of working to make some money. This was before the advent of weed-eaters, so I was using hand clippers.

Then, of course, there was farm work. My pay was a roof over my head, food and clothing. As a teenager, I worked part time on a roofing crew in the summer and then later with the City of Paxton water and sewer crew. Oh, and I worked after school at Larson’s Men and Boy’s Clothing Store in Paxton. I also cut firewood to sell, and that brought in some money. This was followed by a job at a farm implement company where I assembled equipment like cultivators.

With that income, I was able to pay my tuition and books at Parkland College. There’s no way that would be enough today. As an undergrad at U of I, I worked various student jobs in labs—a lot of dishes to clean and animals to maintain in their cages or tanks.

Rick Olson
NSS 13432RL

Q. How did you land your job at the National Park Service?

A. I was a Seasonal Guide at Jewel Cave during the summers of 1974-1977. That was fun, until I realized that I could not tolerate repetition. I was shocked to learn that I could not apply for a permanent position with NPS because I first needed to have a job with the U.S. government to have “Government Status.”

So I worked at the Illinois State Water Survey, where I learned a lot about water chemistry, and then as a technologist at the U of I Center for Electron Microscopy. The endless variety was perfect for me and I had access to all kinds of high-powered research equipment.

So what did I do? Study caves, of course!

Via a request from Mammoth Cave National Park to the Cave Research Foundation, I wound up studying a weird goo that had been found on the aluminum handrails along tour routes. The gunk turned out to not be microbial, but instead a product of corrosion. The park was concerned that there might be something potentially dangerous about the goo—like disease-causing—but the danger turned out to be handrails weakened by corrosion. As a result, handrails were replaced with stainless steel in the most dangerous places like Bottomless Pit. I presented a paper on my findings at the park’s second Science Conference.

In the process of this and other consultation with the park, I got to know the Chief of Science and Resources Management. I told him that if they were ever going to hire a biologist, then I would certainly be interested. An ecology position was advertised because they wanted to have someone who could work on physical habitat parameters was well as biological ones. Through a series of miracles, largely carried out by the Chief of S&RM, I got the job. Wow!

It was a caver’s dream come true. That was in 1993. I worked at the park for 28 years before retiring earlier this year.

I’ve volunteered with CRF for the past 20 years and of course am still active with them. I’m also signed up as a VIP with S&RM. So, I’m retired but not really going away, just changing hats.

Q. What’s your employment history prior to the NPS?

A. Let’s see. As a kid, I mowed lawns in Linda Vista. I went door to door, asking if neighbors wanted their lawn mowed and weeds trimmed for $3. Dad would haul our lawnmower to the houses for me so I could get a taste of working to make some money. This was before the advent of weed-eaters, so I was using hand clippers.

Then, of course, there was farm work. My pay was a roof over my head, food and clothing. As a teenager, I worked part time on a roofing crew in the summer and then later with the City of Paxton water and sewer crew. Oh, and I worked after school at Larson’s Men and Boy’s Clothing Store in Paxton. I also cut firewood to sell, and that brought in some money. This was followed by a job at a farm implement company where I assembled equipment like cultivators.

With that income, I was able to pay my tuition and books at Parkland College. There’s no way that would be enough today. As an undergrad at U of I, I worked various student jobs in labs—a lot of dishes to clean and animals to maintain in their cages or tanks.
While in grad school, I worked as a teaching assistant at Parkland College. Summers were spent at Jewel Cave, which brings us full circle.

Q. What is it in your mind and in your heart that drives you to explore caves and to find out 'what lies beyond'?
A. Oh, the mystery! Where does this go? How did it get here? And what the heck is this thing?

Speaking as a caver, I don’t have to tell everyone about the excitement of finding a new passage—every cell in your body gets supercharged! And then there is research—another kind of caving. Places like Sulphur River in Parker Cave, south of the park, have a lot of hydrogen sulfide (at 50ppm you feel very sick and sulfuric acid forms with the water in your tears), gympsum precipitating directly from water, festoons of microbes in the turbid blue water caused by colloidal sulfur, and there are elemental sulfur stalactiles. How weird is that?! A team of us Illinois cavers researched this and published some papers in the NSS Bulletin in the 1980s. Decades later I was able to contribute a short chapter to a book titled Hypogean Karst Regions and Caves of the World. The chapter is about sulfides in the Mammoth Cave area and how the chemosautrophic productivity by microbes, year-round, may have contributed to our cave biodiversity hot spot.

So my wanderings into geology and water chemistry came back full circle to biology. The lines between disciplines are getting fuzzier all the time! Last July, I joined a team led by Dr. Maggie Osburn of Northwestern University to assist with her research into geomicrobiology. With funding from NASA, she is doing things that are almost like science fiction, but are real!

Q. Tell us about your work with the CRF.
A. Horton Hobbs used his influence to get me into CRF. After the ‘big connection’ there was a crush of applicants, so getting in was not easy. My first expedition was Labor Day weekend of 1973 and it was a revelation. After getting out of Cocklebur Crevise (back when it was still full of popcorn), I was standing in a dome and was amazed that I was OK. At that point we had been in the cave 17 hours, which seemed like a lot to me.

Surveying in caves is a fun activity if you like teamwork. There is a rhythm to it, and you are contributing to a dataset that matters. It is exciting to see the cave “grow” as cartographer Ed Klausner sends first line plots and then finished parts of the cave map with cross sections and maybe a profile section. You can understand much more about the cave with these maps.

Q. What aspect of being a caver do you like the most?
A. Gosh. Well, there are the sights, sounds, and smell of caves that are so attractive. The mysteries of course are important too, but really high on the list too is the friendships. You really get to know someone on a long hard cave trip or working together for days doing cave restoration projects. The NSS Restoration Field Camps are a perfect example. These people are family.

Q. Have you ever participated in a real cave rescue?
A. Yes, we had one of our NSS restoration project family members fall in Crystal Cave in 1993, which dislocated his shoulder. He was out beyond the tightest part of the crawl and it took a long time to get him out (under his own power). After a doctor from Bowling Green reset the shoulder, he recovered just fine.

The same year, I led a team to do a body recovery in Buzzard’s Roost Cave (now Jesse James Cave). That was extra grim because the accident should never have happened. I testified at a hearing about the lack of a belay on a home-made rope ladder in a 30-foot pit.

Then, years later, there was the rescue in Side’s Cave, where Chris Groves fell down a pit that was over 30 feet deep. Later, we found out he had broken ribs and a punctured lung! But he recovered OK.

Q. Please tell the story of your first cave trip.
A. Oh, that was Colossal Cave, Arizona, in 1957! I was just 7 years old and totally jazzed about caving. Every indicator light on me was blinking like crazy. I was nuts about caves after that. The guide told us that a group of men had gone into the cave for a week and went 39 miles. Whoa! That did things to my 7-year-old brain. Never mind that I later found out it was not true. In the real world, of course, 39 miles is not uncommon today.

I went to the library in Linda Vista and asked about books on caves. The librarian was very helpful, as librarians generally are, and showed me The First Book of Caves, which I could check out and take home. She also showed me a National Geographic magazine with Carlsbad Caverns on the cover. Today, I have copies of both, of course.

I figured I would probably never get to see something like Carlsbad. Fortunately, I was wrong about that. Every year that we visited my uncle and family in Tucson, I wanted to go back to Colossal Cave. But the answer always was that we “had just been there.” Finally, in 1962, my persistence paid off and we went back. Still magical. My uncle said there was a group of people in town who explored caves and he thought there was a phone number for them in the book. So at age 12, I cold-called the number and spoke with a caver! They met once a month at a pizza place and, unfortunately, I’d be returning to San Diego. So that was it, for the time being.

Q. What specialized training or certifications have you completed?
A. Hmm. Not that much really. An important one was an NRA gun safety certification when I was 12. This was back when NRA was a membership organization very much like NSS, “grass roots” all the way. Horton Hobbs showed me how to rappel with carabiners and brake bars and to climb rope with ascender knots at the barn out near Buckner’s Cave in 1971. He took time to do this after I told him about how Mark and I had gone into Coons Cave’s vertical entrance hand-over-hand—we knew never to do that again! I was certified as an open water diver in 1980 but only dove once on my own with a friend of a friend in Crystal River, Florida, where we stupidly went into the cave just a bit. Thankfully we had no lights and just went into the twilight zone. The air trapped on the ceiling looked like pools of mercury, which was pretty.

Q. What’s the importance of caving in your life?
A. Oh boy. Work is work, and caving is serious! My job at Mammoth Cave had no boundaries really, and that was both good and bad. The variety was great, but there was an awful lot of ground to cover. Caving was a great respite from the pressures and fear.

Fear? Yes, fear of failure. I was hired because of my knowledge of caves, but the job covered all park ecosystems, including forests, grasslands (locally called barrens), and the rivers, in addition to caves. There was a steep leaning curve and the change in scale bars in the jump from electron microscopy to ecology was scary too!

Once we had visitors from the Hungarian National Park Service who asked me about speleotherapy. I told them that a good long cave trip was the perfect therapy for work stress—nothing to think about but the problems at hand and the survey or other work to be done. You emerged beaten up and exhausted but feeling no stress at all!

Q. Are you a member of a NSS Grotto?
A. I was briefly a member of the Bloomington Indiana Grotto and after I moved back to Illinois. Then, a group of us resurrected the Mid-Illinois Grotto. The MIG struggled into the late 1970s but did not survive, maybe due to the largely bleak, glaciated Prairie State landscape located so far from any significant caves. For years I
Q. What ‘professional’ (work-related) awards have you earned?
A. Well, not as many as you might think. I was given a “STAR” award in 1994 for being park lead on our Long Term Ecological Monitoring program. This was in cooperation with Dr. Tom Poulson from U of I at Chicago, who had done ecological research at MCNP for decades.

Then, in 2007, I was given a plaque for “Outstanding Performance,” and then there were lots of (time off of work) awards connected with annual performance evaluations. In 2008, I accepted a plaque on behalf of the park from Hart County, Kentucky, for contributions in cleaning up sinkhole dumps as part of “Don’t Mess With Mammoth Days.”

Q. Any NSS awards?
A. I was designated a Fellow of the NSS in 1994, which was nice.

Q. What are some of your caving accomplishments, and of which you are proudest?
A. Well, let’s see. In 1992, I found a way into upper levels off Logsdon River, and this led to a five-mile breakout that included Kaemper Avenue—a major trunk passage. I did not find Kaemper Avenue, but got to help survey it and that was a big hit!

In 1998, Dick Market and I got into Robins Run, a nice passage (8-feet-high by 30-feet-wide) with intact prehistoric archeology in the historic section of Mammoth. The next day, Rick Toomey and I got into a bigger passage (15x50) in Mammoth called Watson Trace that also had intact prehistoric artifacts!

Then there were trips to Dixie with James Wells and crew. This was another five-mile breakout in Roppel Cave. At about 10 a.m. on our second day, I crawled off the bottom of the big virgin canyon we were surveying and found Denial River, which was a significant perched stream that was dye-traced to Logsdon River.

I enjoy helping Ed Klausner work on his map sheets. Years ago, he pointed out that I had gone down a Mammoth Cave pit in 1975, noted a good lead, but never made it back. So in 2009, I returned to what I suggested we name Procrastination Pit (after 34 years) and found a way into what we called River Acherson, because it is a tributary to River Styx. That yielded about a kilometer of stream cave until it sumped.

Then the next year I led three trips where we explored a shaft complex from the bottom up. This was another of Ed’s lead list items, and is really under Mammoth Dome Sink. I successfully lobbied to have this named Colleen’s Irish Croft as her “Fortress of Solitude” where she could retreat to write books and not be bothered. Mammoth Dome is a way off and it came as a shock to many park staff that the two were not even hydrologically connected! (note: Rick refers to his wife, Colleen, a beloved Mammoth Cave guide and prolific author who passed away in 2018. –ed.)

Q. Are there other things about you (as a caver AND personally) everyone might be surprised or interested to find out?
A. Years ago, Colleen declared she was going to bake all our bread. When she could no lead that, due to cancer, I took over. I still make bread and wish I could for her. Skateboarding was a new thing back in the 1950s. You nailed a steel clamp on skate to a 2x4 and went for it! Lots of skinned knees and elbows! I recently got myself another skateboard and dink around with it some. An old fart on a skateboard is funny!

Q. What effect has the Covid pandemic had on your caving activities?
A. Well, not as many as you might think. We did not have to travel far for caving. We had research trips that could still go if we masked and obeyed all the common sense rules for stemming a pandemic. One blessing has been our work on paleontology—especially shark fossils! We have become a global biodiversity hot spot for Mississippian aged (~330 mya) fossil fish, including some bony fishes and shark allies like rays, in addition to an array of sharks! In October 2020, we published a poster that our specialist, J.P. Hodnett, presented virtually at the Society for Vertebrate Paleontology meeting. It described 40 different kinds fossil fish, mostly sharks. Currently, we are up to 113 at last count and have a trove of fossils to send to JP! We will be working on this for years to come.

Q. What advice would you give young cavers?
A. Keep on cavin’ but keep it in balance with your family and career.

Q. What are your remaining goals in caving, and plans for the future?
A. Keep on cavin’, especially cool research things like sharks and geomicrobiology. Help to map when it is something I can do. With advancing age you have to be realistic. Art Palmer once said that you can still do a lot of stuff, but you have to take smaller steps!

Rick enjoys other outdoor pursuits as well.
The Golden Age of Caving

Back when I started caving in the 1970s, I considered the “Golden Age of Caving” to be that period after World War II and before 1970. The NSS was new and growing. Americans could travel without gas rationing, soldiers were returning from the war with new ideas, radios were found in every home and television was starting to take hold, roads were improving and allowing easier access to rural areas, people were still living on and working the land and I envision that access to cave properties was easier.

We were entering the Cold War and there was a national initiative to document cave resources near population centers as possible fallout shelters. Work done by Dr. Tom Barr (NSS 982), William Davies (NSS 345), Dr. J Harlan Bretz (NSS 1499), Dr. Richard Powell (3217), and Henry Douglas (NSS 1541) created books on the caves of Tennessee, West Virginia, Maryland, Missouri, Indiana, and Virginia.

Work was done when the ropes were hemp and the cavers were iron.

The state cave survey books were some of the first detailed work on locating and describing caves within their respective states. Tom Barr and Bill Davies were early presidents of the Society. Much of this work was done in cooperation with local grottos of the NSS. Out of their efforts grew the modern state cave surveys we know today. Tennessee now has over 11,000 known caves and Mammoth Cave, Kentucky has more than 420 miles of mapped passage.

By the mid 70s, most of the large easily accessible entrances in the east have been found but the rate of discovery in many states has continued as cavers spent time ridge walking, pushing known caves, and finding smaller features and discovering large cave systems in many states.

The evolution of modern vertical caving techniques and use of wetsuits expanded our tools for exploring large, deep, and wet cave systems. Tracer (dye) testing has unlocked the secrets of groundwater flow in karst and became a powerful tool in determining recharge and discharge relationships between caves, sinkholes and springs. Caving in Mexico was taking off, deep pits were being found, and alpine caving was pushing frontiers in the western US.

However, recent discoveries in Grand Canyon National Park, renewed activity in the Bob Marshall Wilderness Area in Montana, cave diving discoveries in the large underwater caves in Florida and Mexico, and work in the Bridger Teton National Forest indicate that there are still great caves to be found. Alaska has a dye trace showing vertical potential of over a mile and much of the state still hasn’t been checked for caving potential. Blue Springs Cave and Rumbling Falls Cave in Tennessee, some of the longest caves in the state and the US, have been found since publication of Barr’s Caves of Tennessee. Mammoth, Jewel, Wind, and Fisher Ridge caves continue to grow. Even tiny Maryland, not noted as a cave state, has some great recent discoveries.

There are still great caves to be discovered and explored for those that walk a little further, crawl a little longer, and push a litter harder. The NSS is growing, we’re preserving more caves and working with regional conservancies, and the NSS News is setting an international standard for publication.

The ropes may now be nylon, but the cavers are still made of iron.

The golden age of caving is now and always has been.

Book Series for Kids

After a year of effort, the NSS environmental education committee has completed the first of a four-book series of “kids activity books.” This new book is available for download at learnmore@caves.org or by request by emailing education@caves.org

Earth Science Tool Kits

We have 100 Earth Science Tool Kits for educators that are interested in creating cave lessons in their classrooms. The Tool Kits were prepared by the American Geophysical Institute. You can email education@caves.org or call the NSS office to receive a kit.

Bat Week

Bat Week just ended (October 24-21) and the NSS was a partner this year at hosting the materials for Latin American participation in this event on learnmore@caves.org.

Vertical Training Commission

The NSS is continuing to accept applications from members that are interested in becoming involved in the new NSS Vertical Training Commission. An informational video and application are available at https://learnmore.caves.org/index.php/vtc/

NSS 2022 NSS Convention Link

The 2022 NSS Convention is scheduled for June 13-17th in Rapid City, South Dakota. You can obtain information on all of the interesting activities and register for the convention at https://www.nss2022.caves.org/2022. Not only are there some great caves to visit, the Black Hills of South Dakota include Wind and Jewel caves, the Needles, Mt. Rushmore, the Hot Springs Mammoth Site, and many commercial caves.

NSS Webpage

We are making great progress on developing the new platform for the NSS web page and hope to have it rolled out in the very near future. Content is currently being moved to the new platform.

Dark Conservation Task Force

The NSS Driftless Area Karst (DARK) Conservation Task Force has worked in conjunction with numerous government partners to finalize the plans and creation of a new Midwestern Karst Trail that includes Wisconsin, Minnesota, Illinois, and Iowa. This trail highlights springs, caves, sinkholes and other karst features of the Driftless Area of the Midwest. More information can be found at https://driftless.caves.org/

Cave Preserves

At the July board meeting, the NSS accepted a number of new preserves. Nunley Mountain Cave in Tennessee opened on October 1 for visitation by NSS members. Nunley Mountain Cave is over 15 miles of mapped passage and noted as a challenging cave.

Mammoth Crystal Cave Preserves near Sturgis, South Dakota is expected to be open by November 1st. This 4+ mile long cave is being remapped and expected to reach seven miles in length. The cave will be featured at the 2022 NSS Convention. More information on these caves can be found on the NSS Preserves section on the NSS webpage.

Membership

Our membership numbers have continued to climb over the last many months. This growth is in spite of the pandemic, the inability to hold the NSS Convention in July, as well as regional events and many grotto meetings, etc. Membership continued to climb to 7,704 members for a growth of 39 members in September. The highest NSS number issued was 71278. Since December 31, 2020, we’ve gained 501 members.

NSS BOG Meeting

Because of a number of conflicts, the NSS board of governors meeting has been moved from November 6 to December 4th. The board will be considering candidates for the position of President and Secretary/Treasurer as well as other business before the society.

Respectfully,
Geary M. Schindel
Pennsylvania. Meanwhile, cave’s known length up over the 5-mile Cave, cavers succeeded in pushing the seeable future. “Pennsylvania’s longest cave” for the fore-it’s likely the two will trade off the title of is close behind Harlansburg. With active Cave, just 200 feet short of five miles, the northern section of Summer 2021, Vol. 24, Number 1 Karst Chronicle Dig, which was initially pushed hard in 2013-2015 has seen a renewed exploratory effort. After several rounds of enlarging a crawl in an active steam passage, cavers have found themselves right on the edge of drop. However, a ceiling collapse has thwarted initial efforts to access the pit.

The Spelereograph The Oregon Grotto Fall 2021, Issue 435 Mr. Olsen’s Extension and Folgers Cave are two closely related lava tubes, however a connection thus far eludes cavers. Due to new discoveries, Garry Petrie, Bob Roe and Oscar and Ahrlin Bauman are in the process of photo-documenting and resurveying the two caves. Garry Petrie, Oscar and Ahrlin Bauman surveyed six short segments of lava tubes that collectively make up the Lower Thimbleberry System. Each independent tube extends no more than 105 feet, with the total length of the system reaching just over 400 feet.

A large cluster of caves in the Gifford Pinchot National Forest were surveyed by Garry Petrie, Oscar and Ahrlin Bauman in 2021. The 1,021-foot-long Death Drop Cave is currently the longest of these caves, however, additional ridge-walking in this area revealed Comma Cozy Cave and Menagerie Cave both of which the caving trio estimate to be at least as long as Death Drop Cave.

Karst Chronicle Mid-Atlantic Karst Conservancy Summer 2021, Vol. 24, Number 1 After several muddy survey trips to the northern section of Harlansburg Cave, cavers succeeded in pushing the cave’s known length up over the 5-mile mark, making it the first five-mile cave in Pennsylvania. Meanwhile, Sarahs Furnace Cave, just 200 feet short of five miles, is close behind Harlansburg. With active survey projects ongoing in both systems, its likely the two will trade off the title of “Pennsylvania’s longest cave” for the foreseeable future.

The Potomac Caver Potomac Speleological Club May-June 2021, Vol. 64, Number 3 Nikki Fox joined Carl Amundson and Hunter Campbell on a trip to the TARDIS section of Hellhole. The trio’s objectives were impacted by difficult rigging and a large waterfall, however, they were still able to make progress on a technical dig just past Tweedledee Pit. A return trip is needed to follow the air and complete the dig.

Rick Royer and Scott Whalquist are chasing aid leads in Memorial Day Cave with some fair returns for the amount of climbing they have accomplished. Bolting to a ceiling lead in a short dome and then across to a lead visible on the opposing wall, the duo discovered a sinuous canyon as well as a still unexplored passage of sizeable dimensions.

Cleveland Grotto Offers 2022 Science Grants The Cleveland Grotto (NSS 005) will make available a total of up to $1500 in science grants for cave-related projects. The Grotto will make grants of various amounts to bona fide research projects by members of NSS-affiliate grottos or to projects under the aegis of a college or university. Grants are not geographically limited.

The funds are available from the Cleveland Grotto Science Fund which was endowed by Bob (NSS-26333L) & Bev Danielson. The money is available to support research in geology, streams and water, biota, karst and other cave-related research projects.

Requests for equipment grants will be awarded mainly to institutions (schools, grottos). If an individual capital grant for equipment is made, and no supporting institution is available to maintain the equipment after the project is completed, the equipment will become the property of the Cleveland Grotto.

Applicants will be expected to have their project output published in an official publication, preferably the Journal of Cave and Karst Studies, NSS News, an academic journal or other similar publication(s). For all activities to be undertaken, if there is any question regarding legality or access, the necessary permissions must be sought from all appropriate and potentially involved parties (landowners, government organizations, etc.) Fund monies are not permitted to be used for travel or in any way that is illegal, unethical, or objectionably dangerous. Awarding of grants and the amounts of each grant will be made at the discretion of the Cleveland Grotto Board whose decisions are final.

A copy of the application form is available from the Cleveland Grotto at http://www.clevelandgrotto.org/ClevelandGrotto/Science_Fund.html. For questions or clarification contact Rich Kline, Science Fund Chair, at rkliner@gmail.com. Deadline for submission for the 2022 grants is Dec. 31, 2021. Awards are expected to be announced in February 2022.

NCRC 2022 Elections The National Cave Rescue Commission (NCRC.info) is holding elections in February 2022. The NCRC is led by a Board of Regional Coordinators, representing each of the 10 NCRC regions (Caribbean, Central, Eastern, Northeastern, Pacific Northwest, Rocky Mountain, South Central, Southeastern, Southwestern, and Western). The Board also includes a Medical Coordinator, Diving Coordinator, Training Coordinator, and National Coordinator. The NCRC depends on many dedicated volunteers to carry out its assigned mission. For more information on many dedicated volunteers to carry out its assigned mission. For more information or to apply for an open position, please see the election posting: https://bit.ly/NCRC2022Elections or send an email to southwestern@ncrc.info.
A Cave Adventure
by Destany Lytle. Published 2021 by Silver Ink Books. Paperback/32 pages/Color. $11.99

I was caving with the Cave Research Foundation at Mammoth Cave over the 4th of July this year. A young caver, college grad geology major, school teacher friend of mine, Mandy “Crash” Signorelli, from Arkansas was there. I always enjoy talking with her. I told her about a children’s book I’d recently bought and read and will give my grandkids which is about a man who has passed away who worked as a tour guide for many years at Blanchard Springs Caverns, Arkansas.

Crash’s eyes widened and got big as I told her about the book. Then a big smile spread across her face. “Are you talking about Paul?” she asked. “Paul McIntosh inspired me to become a caver. And to study geology. And to teach. He was huge in my life. What a wonderful man!”

Maybe all cavers have had a Paul McIntosh in their lives. I did. Actually, I was fortunate to have had two or three of them, and I think of them fondly for it.

I’ve always felt that there is a need for more children’s books in caving. When I was a boy there were Cave Carson comic books. I first read the word speleologist in one. They were fanciful, too much so, but they did make the point to me that there was science to investigate and adventure to be found underground.

The author of A Cave Adventure, Destany Lytle, is a seasonal guide at Blanchard Springs Caverns, a U.S. Forest Service administered show cave located in northwest Arkansas. She’s also an elementary school reading teacher and a gung-ho caver. In fact, she seems to be sort of a renaissance woman in that she’s also a student pilot, avid hiker, and so on. And now an author of a children’s book and I bet there are more to come.

A Cave Adventure is about an elementary school boy named Blake who goes to Blanchard Springs Caverns on a school field trip. Blake’s fellow students are excited, but he’s afraid because of his secret fear of bats.

At the cave they meet their guide, Paul, whose humor amuses them. Blake starts asking him questions and gets patient, understandable answers.

The children see images of things in the formations like so many show cave guides do. Eventually Blake brings up bats. He learns about them and the geology of the cave from the seasoned cave guide Paul.

In the end, Blake learns things about bats he didn’t know and realizes that he’s over his fear of them. He also learned other interesting things about caves and what a nice and informative man Paul McIntosh was.

The book is rich with color drawings by the author and a photograph of the late Paul McIntosh on a page in the back about him. The book ends with a photo of the author and a short bio about her.

It’s my hope that this is only the first children’s book about caves from caver and elementary school reading teacher Destany Lytle.

Bill Steele

Subterranea: Journey into the Depths of the Earth’s Most Extraordinary Underground Spaces

Members of the caving community certainly appreciate the singular nature of underground environments and the unique opportunities they may afford for exploration and discovery. While the beautiful and sometimes intricate passageways or the many striking formations of natural caves are generally most sought after by cavers, even manmade features stimulate the imagination—as long as they are below the surface.

From the earliest stirrings of the field of biospeleology in Slovenia’s Postojna Cave to the Large Hadron Collider—the world’s most powerful particle accelerator, designed to study subatomic particles traveling at close to the speed of light—Chris Fitch takes readers on a worldwide tour of an array of underground locales.

The narrative that Fitch presents in Subterranea is divided into four sections: 1) Creation, 2) Ancient History, 3) Modern History, and 4) Today. In this regard, discussion encompasses an introduction to a variety of caves, including geologic processes, aspects of ancient cave art, and the many challenges of exploration; a host of incredible manmade underground structures, including engineering wonders of both the ancient and modern world; and the role of several different subsurface facilities in several high-tech applications.

Each of the four sections of the text includes ten chapters, four to five pages in length. The writing is clear and easily understood and accompanied by a wealth of full-color maps, diagrams, and photographs. In Subterranea, Fitch opens a window onto several unique underground realms. Although these different settings constitute a mere fraction of the many worlds that exist below the surface, this text will appeal to anyone interested in unraveling some of the many mysteries of different underground environments.

Subterranean worlds have long been a source of inspiration for filmmakers and writers. Fitch helps to illuminate the fact that real underground environments, whether they be they natural or manmade, are every bit as fascinating as those imagined in fiction.

Danny A. Brass
The bulk of the book consists of species-specific accounts of the 44 bat species known to be present in Britain and Europe. Discussion includes a brief summary of the natural history of each bat, notably geographic distribution, emergence times, flight and foraging behavior, and habitat preferences. This is followed by a more detailed, species-specific description of relevant acoustic parameters of both echolocation and social communication calls. This includes sonograms (or spectrograms), which display both call frequency and amplitude against time.

It should be noted that there is little to no discussion of sensory anatomy or physiology. Echolocation is discussed from the perspective of ultrasonic emission, detection, and acoustic analysis although an effort is made to place acoustic discussions in the context of species-specific foraging strategies. Although some introductory material is included, the information presented is minimal relative to the largely jargon-rich chapters that follow. Certainly, a wealth of information is provided in the text. For the most part, however, a familiarity with bioacoustics is assumed.

The text is well illustrated and includes a variety of tables, charts, graphics, and full-color photographs. A link to the library of downloadable sound files used to create all of the sonograms in the book is also provided. and will likely be of considerable importance to bat researchers. Bat Calls of Britain and Europe is a scholarly publication that will primarily be of interest and value to bat biologists who conduct acoustic-related field research. This is true regardless of whether their research is conducted in Britain, mainland Europe, or elsewhere.

Danny A. Brass

Mammoth Cave NP adds page on Cave Survey to their website

It's always gratifying when an NPS website acknowledges the contribution of our members to their resource management and aside from cleanups, survey is certainly one of the most major contributions of cavers. https://www.nps.gov/maca/learn/cave-mapping.htm

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