

National Speleological Society
Department of the Administrative Vice President (AVP)
Fall 2021, Report

Prepared by Adam Weaver, AVP
adam@caves.org

Introduction/Summary

The Department of AVP consists of 4 Divisions (Cave Management, Conservation, Conventions, and Education) and two Commissions (National Cave Rescue and Vandalism Deterrence) contained within are 68 Committees and sub-committees and 21 Nature Preserves.

Highlights This Reporting Period

- NSS Education participated in AGI's Earth Science Week and BCI's Bat Week festivities, as well as having a presence at the NCKMS.
 - 100 Earth Science Tool kits are available, free of charge, and can be acquired from the NSS office.
 - Preserve insurance has been set up on the two new preserves, and they became open for business during this period.
 - The Vertical Training Commission Charter was completed. A concerted effort to obtain and collate member input was also completed. A comprehensive report of that committee's work will be at the end of this document.
 - NSS Convention 2022, to be held in Rapid City, SD, June 13-17, is on track with registration open and many exciting events being planned.
 - We have a new chair of the Biological Response Committee and Liaison for federal bat meetings.
 - IYCK, International Year of Caves and Karst officially extends through 2022.
 - Plans made for the Caver Use Study and Volunteer Value database to get off the ground once again.
- A special note: the preserves committee has decided that moving forward, we will have a fall annual report for each preserve in lieu of the long reports from each preserve every quarter. This will hopefully give us a better product and short summaries prepared by the preserves committee. As well as aide in the budgeting process.

NSS Conservation Division Fall 2021, Division Report

Prepared by Val Hildreth-Werker, Conservation Division Joint Chief
valhildreth@icloud.com ; valhildrethwerker@caves.org

Conservation Division Summary/ Highlights

- NCKMS 2021, Nov 1-5, in San Marcos, TX had good attendance at over 100, a particularly successful, masked, socially distanced event during a lull in Covid-19 infections. Jim & Val attended and congratulate the Texas staff on an exceptional event. Many thanks to y'all for your time and energy in organizing the 19th National Cave and Karst Management Symposium!
- ANNOUNCING! New Conservation Life Membership Pin is available! NSS Staff graciously remembered this long-standing idea and worked to make it happen. Michelle Vaughn sent out letters and pins to all existing Conservation Life Members. Going forward, the official Conservation Life Pin will be included in the packet with the Conservation Life Letter and Certificate. Huge kudos and thank yous for making this happen, Michelle and Christy!
- Congratulations to the NSS Conservation Expo success in securing Alabama grant funding to host CaveSim for STEM programs at schools throughout the state this fall.
- Submit articles for Annual Conservation Issue of NSSNews before December 31. Send notice to Val valhildrethwerker@caves.org (January 15 drop-deadline for the 2022 issue). The 2021 NSSNews Conservation Issue holds several international articles, and is registered as an official event of the International Year of Caves and Karst. <http://iyck2021.org>
- Conservation & Management Tuesday Talks for the 2021 virtual convention are available on the NSS YouTube Channel. Check the 2022 Convention Website for abstract submission details for in-person presentations at the 2022 Convention in Rapid City, South Dakota, June 13-17 <https://www.nss2022.caves.org>
- Congratulations to **Circolo Speleologico Romano (CSR)** in their successful efforts to raise EU\$110,000 to purchase the facility that houses their outreach headquarters and library in a historic neighborhood of Rome. Founded in 1904, Circolo (The Circle) is among the oldest caving organizations in the world.
- **Note to NSS Website Steering Committee** — Please keep sight of overall vision and integration of NSS Conservation Pages, and please **secure archiving of historic Conservation & Management Section** web-based material containing 40+ years of important NSS advancements in cave conservation/management.
- IYCK is officially extended through 2022. **Promote your 2022 seasonal local, regional, and national events as International Year of Caves and Karst events, even if virtual!** It's quick and easy to follow guidelines and register events. Learn how at <http://iyck2021.org/index.php/events/>

NSS Conservation Vision/Mission

All Things Caving Encompass Conservation—NSS Conservation promotes cave and karst protection through the multi-faceted venues of exploration, science, management, education, global conservation, and public outreach.

- Make karst a global household word! Populations around the world depend on vital karst groundwater resources, but they've never even heard about the importance of karst.
- Support conservation-minded access. Without caver access, there is no active conservation,

study, or exploration. Advance science, conservation, and management through minimum-impact ethics in safety, exploration, mapping, research, resource monitoring, habitat restoration, speleothem repair, stewardship, mentoring, and recreation training.

- Value caves as archival vaults protecting Earth's rich heritage. Cave systems protect important cultural legacies and significant natural history. Train cavers to carefully inventory, monitor, document, and protect. Cavers are often the best stewards of these key resources.

NSS Conservation Division Team Chart (it's a long list, not yet complete for this report)

Chair or Officer	Chair/Function	Email	NSS#
Val Hildreth-Werker	Conservation Committee; Grants; etc.	valhildrethwerker@caves.org	28963CL-FE,CM,CO
Kathleen Lavoie	NSS Group Conservation Award	lavoiekh@plattsburgh.edu	
Gretchen Baker	USA Cave Animal of the Year	gretchenmbaker@gmail.com	
Sonia Meyer	Volunteer Value Database	sonia@caves.org	
Cheryl Jones	Brochures Coordinator	cs.jones@verizon.net	
Steve Smith	NSS Conservation Network	stevenlsmith@usa.net	
Tony Canike	IT Conservation Pages	tony@canike.net	
Ethan Oleson	Show Cave Conservation	eoleson0@gmail.com	
Adam Weaver Pete Johnson	The North Face Project	adam@caves.org pete@caves.org	
Dave Jackson	CaveSim Outreach	dave@cavesim.Com	
Wil Orndorff	(BRG) Biological Response Chair	wil.orndorff@dcr.virginia.gov	
Keith Christenson	BRG Federal Bat Meetings	tropicalbats@hotmail.com	
Jim C Werker	Conservation Division Chief	jimwerker@zianet.com	
Val Hildreth-Werker	Conservation Division Chief	valhildreth@icloud.com	28963CL-FE,CM,CO
Adam Weaver	AVP	adam@caves.org	62353RL-FE

Conservation Committee/Team (Committee and Subcommittee Reports)

Val Hildreth-Werker and Jim C. Werker, NSS Conservation valhildrethwerker@caves.org

NSS Cave Conservation Teams consist of Committees, Sub-committees, Coordinators, Regional Groups, Conservation Task Forces, Cave Vandalism Deterrence Commission, and Networking Groups. Together, we encourage, involve, document, and network conservation outreach, issues, projects, and progress.

- USDA Forest Service was seeking comments **on the nomination process for Significant Caves** under the 1988 Federal Cave Resources Protection Act, deadline **October 19**. Review the federal notice (<https://www.govinfo.gov/.../FR-2020-08-19/pdf/2020-18174.pdf>). Stay alert to outcomes.
- USGS released a model on June 2 that claims the risk for COVID-19 transmission to bats through contact with infected humans ranges from 15 to 84 percent (<https://pubs.er.usgs.gov/publication/ofr20201060>). Dr. Hazel Barton responded, pointing out that project cavers and most recreational cavers limit human interaction with bats, therefore resulting in no increased risk to bats when standard PPE precautions are carefully followed (<https://rockymountaincaving.com/bl.../86-certain-uncertainties>).

International Workshops / Consultation / Support

Val Hildreth-Werker & Jim C. Werker (NM) valhildrethwerker@caves.org

COVID-induced hold on planning international Cave Conservation/Restoration Workshops and travel. Maintaining contact with international invitations.

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- Finishing chapter: Guads Photo Book, joint NCKRI/UIS International Cave Photographers.
- Working on a special training event requested by a South American consulting firm, whether virtual or in person, venue will be guided by COVID zones and restrictions.
- CaveMAB, a network of biosphere reserves around the globe that treasure natural and cultural phenomena related to the caves, announces completion of their collaborative
- international video project. <https://cavemab.com>

Conservation Grants

Val Hildreth-Werker (NM) valhildrethwerker@caves.org

- New proposals for Save-the-Caves grant rewards are reviewed as received.
- Recipients will submit articles to valhildrethwerker@caves.org for NSSNews Conservation Issue. Recipients should present during Conservation Tuesday Talks at NSS Conventions.
- Conservation Grant (\$546.83) was awarded in June to Runaway Creek Nature Preserve in Belize for trail monitoring cams to record baseline documentation on wildlife entries and to capture non-authorized entries projected to increase with construction and development of a highway through the wildlife corridor. Jut Wynn continues to communicate on the project—equipment was hand-carried to Belize and is scheduled for installation.
- International Conservation Support Grant US\$1000 to Circolo Speleologico Romano advanced their fundraising efforts and helped them successfully reach the summer deadline of EU\$110,000 for the purchase of their long-time headquarters. The Circle, founded in 1904, maintains one of the oldest speleological libraries in the world. Gratitude also goes to Individual NSS Members who contributed through The Circle's GoFundMe campaign.

NSS Group Conservation Award

Kathleen Lavoie, Chair (NY) lavoiekh@plattsburgh.edu

- By consensus, the Awards Committee and this committee of the Conservation Division, we recommend, that by Board Act, this award changes from two Group & Grotto Conservation Awards to the single NSS Conservation Group Award.
- **Group Conservation Award** — This award recognizes the outstanding dedication to conservation efforts of one NSS Group or Internal Organization each year. The recipient of this annual award shall be selected by a the NSS Group Conservation Award Committee in the Conservation Division, and is awarded during the banquet at the annual NSS Convention. Send nominations to: award-groupconservation@caves.org
- **Tips for Writing a Good Nomination** — Included on the web page. The Conservation Group Award is typically given to a Grotto, Conservation Task Force, Conservancy, Region, IO, or a group of NSS members who have consistently made major contributions to the conservation, protection, or restoration of cave systems or karst areas over a period of years, and usually includes a body of work through hands-on actions and outreach activities. A good nomination letter should be no more than two pages in length and contain hard-hitting facts about what the group has done to warrant the award. Your nomination letter should be filled with specific facts and accomplishments and not vague generalities. Tell what the group has done (cause and effect) and paint a clear picture for the Awards Committee members. Give explicit details about what the group has done over the years to benefit cave and karst conservation. Encourage others to write a nomination letter (this can enhance the group's chance of being selected). Supporting letters should be written so they can stand on their own merit. NSSNews Conservation Issue articles about the group's activities can be used to support nominations.
- Submit nominations to lavoiekh@plattsburgh.edu and/or valhildrethwerker@caves.org or through award-groupconservation@caves.org

USA Cave Animal of the Year

Gretchen Baker, Coordinator (NV) gretchenmbaker@gmail.com

Team: Matthew Niemiller (KY), Mike Slay (

Cave Animal of the Year seeks to celebrate the wonders of cave animals, encourage people to learn more about them, and build an increased awareness of caves as important wildlife habitat.

- Initial plans for 2022 are established. November team work is on our calendar.

Volunteer Value Database Committee

Sonia Meyer, Chair sonia@caves.org

- Plans: Address the problems listed below.
- Progress: Created a survey monkey with volunteer value data points, but learned that most federal agencies do not follow the volunteer value worksheets strictly and often request additional data points agency to agency.
- Problems: It is difficult to come up with a single form when there seems to be agency standardization lacking. The NSS survey monkey account I was given access to is extremely limited, the NSS needs a paid survey service. Lack of time continues to be an outstanding problem.
- Note: At the July meeting, the Board approved buying a non-profit ESRI license going forward. The platform is funded, and once the new NSS Website is up, the easiest way to handle the volunteer reporting may be to use a survey 123 template embedded onto the Website with open reporting capability in the phone app.

NSS Conservation Network

Steve Smith (AZ) stevenlsmith@usa.net

Rapid alert e-mail list quickly disseminates info to IOs and interested individuals.

- For posting send alerts to stevenlsmith@usa.net an valhildrethwerker@caves.org

NSS Website Conservation Pages

Tony Canike tony@canike.net

Tony executes tasks we request, but does not write reports for the many committee pages he maintains.

The North Face Conservation Project

Adam Weaver and Pete Johnson adam@caves.org ; pete@caves.org

NSS response to inappropriate cave activity photos published by Climbing Magazine in 2021.

On 10 June 2021, Adam Weaver and Pete Johnson presented to all of The North Face athletes about the NSS, cave conservation, and in-cave climbing ethics. The North Face has agreed to be a major sponsor of the 2022 NSS Convention.

- Progress: Packet was mailed with sponsorship details for the 2020 convention. NSS office staff continued communications with the North Face.
- Plans: Will continue working with The North Face on conservation-minded caving. The North Face has pledged that they will be in-person at the 2022 Convention and will be part of that event. Will continue to work toward The North Face involvement with Conservation Tuesday.

Conservation Outreach-Ed with Cave Simulators

Dave Jackson (CO) dave@cavesim.com

Do you know of a school that would benefit from live online lessons? CaveSim has re-started in-person programs, and we're traveling across the country this fall and winter. We'd love to teach more students about caves and conservation. Please pass along my contact info to any teachers or administrators who might benefit from cave-themed lessons (physics, chemistry, biology, earth science, art, history, etc.) Dave Jackson jacksondmit@cavesim.com

Plans

- Events in Colorado, Texas, Oklahoma, Alabama, and Georgia in the coming months, including programs for schools, museums, and caving groups.
- Continued fundraising to reach more students. We are 94% of the way to our goal of \$40,325 to get the new trailer! Peter Jones has created beautiful CaveSim mugs, which can be purchased at cavesim.com/sponsor. 53 individuals and grottos are supporting this project to help teach tens of thousands of kids about cave conservation.
- Order the new trailer ASAP. Supply chain issues with manufacturers have led to several months of delay.

Progress

- Conducted 69 days of in-person CaveSim events from late June to early September, including 60 days at Cave of the Winds, 4 days at the Cheyenne Mountain Zoo, and events for summer schools, a state park, a city, and Peterson Air Force Base.
- Continuing to build two new mobile CaveSim systems.
- Expanded internship program for students in college, high school, and middle school with projects in engineering and public education.
- Video interview with Jim "Crash" Kennedy about bat-friendly cave gates. The interview is complete, and video editing will be complete soon.

- Story-time video from young cavers featuring a new children's book by Destany Lytle. Currently in the final stages of video editing.

Problems

- We're looking for more schools and other organizations that would like to make use of our in-person educational events and our distance-learning (online) programs. Please contact Dave Jackson if you're interested in either of these opportunities. We have several short informational videos about school programs; check out https://youtu.be/hzmsqwxw_dg as well as <https://youtu.be/uP0p7RJGXwY>.

Regional Conservation Specialist Representatives - Reports are below blue list of Regions

[Arizona Regional Assn. \(ARA\)](#) [Based in Arizona]
[Mid-Appalachian Region \(MAR\)](#) [Based in Pennsylvania]
[Mississippi Valley-Ozark Reg \(MVOR\)](#) [Based in Missouri]
[Northeastern Regional Org. \(NRO\)](#) [Based in New York]
[Northwest Caving Association \(NCA\)](#) [Based in Washington]
[Ohio Valley Region \(OVR\)](#) [Based in Kentucky]
[Rocky Mountain Region](#) [Based in Utah]
[Southeastern Regional Assn. \(SERA\)](#) [Based in Tennessee]
[Southwestern Region \(SWR\)](#) [Based in New Mexico]
[Texas Speleological Assn. \(TSA\)](#) [Based in Texas]
[Virginia Region \(VAR\)](#) [Based in Maryland]
[Western Region](#) [Based in California]

Arizona Regional Association – Steve Smith stevensmith@usa.net

Overall ARA report:

- As part of the recently-signed Non-Funded Challenge Cost Share agreement with the Tonto National Forest, cavers from NAG, CAG, EGI and SAG have almost completed the required cave 'welfare checks' for 18 caves within the Tonto NF and will have all checks finished by the end of this federal fiscal year on 30 September. As stated in the document, NSS grottos are now recognized as "natural partners in the collaboration necessary to manage cave and karst resources", and thus far this working relationship has proven very fruitful and gratifying for all concerned.
- Within the Coronado National Forest, a cave gate on one cave was forcibly breached, while the gate on another popular cave requires a re-design/re-installation to make it more 'bat friendly' as well as add an emergency opening feature that will allow exit if the gate is jammed or the key is lost. Cavers from EGI, SAG and CCC are in consultation with Coronado officials to approve designs for both gates as well as a Forest-funded list of required locks/materials.

Central Arizona Grotto (CAG) – Phoenix

- CAG cavers took the lead and have conducted the majority of the cave 'welfare checks' with the Tonto NF as discussed in the above ARA section.
- CAG cavers took the lead and have conducted the majority of the cave 'welfare checks' with the Tonto NF as discussed in the above ARA section.

Escabrosa Grotto (EGI) – Tucson

- Escabrosa cavers are coordinating the multi-grotto effort to accomplish the cave gate projects discussed in the ARA section above.
- Escabrosa continues to oversee the expanded effort to track bat usage in five caves in three mountain ranges within the Coronado NF. Non-intrusive infrared emergence count protocols are used, with the goal of increasing the overall database on maternity usage within the Coronado NF so that Forest officials can make better-informed decisions on whether current

seasonal bat closures are biologically appropriate. Recently EGI cavers Sandy Wolf and Dave Dalton set up a 'Harp Trap' at one of the caves to better identify the species using the cave.

Southern Arizona Grotto (SAG) – Tucson

- SAG cavers are assisting in the cave gate re-design/re-installation project discussed in the ARA section above.

Cochise County Cavers (CCC) – Sierra Vista

- CCC cavers are assisting in the cave gate re-design/re-installation project discussed in the ARA section above.

Rocky Mountain Region – Shannon Glazer (CO) shannon.glazer@gmail.com

Camille Pullham McKinney (UT) cami_mckinney@nps.gov

- Bighorn National Forest and Wyoming Game and Fish biologists are actively seeking volunteers to help care for the popular Tongue River Cave, northwest of Sheridan. Due to its easy access to the public, it has often been labeled a “sacrifice cave”, but biologists are hoping to change people’s minds with this new initiative. https://www.thesheridanpress.com/.../article_7e434062-c89f-11...
- For the first time, bats in Wyoming have tested positive for the fungus that leads to White Nose Syndrome. The four bats were located at Devils Tower National Monument. This is the first time that infected bats have been found in Wyoming, although the fungus has been documented in the state for several years. https://billingsgazette.com/.../article_2b86677f-e65f-530d-95...
- Cave Creek Cave in Wyoming’s Shirley Mountains, northwest of Laramie, has been designated as an Area of Critical Environmental Concern (ACEC) by the Bureau of Land Management. More than 2,000 feet of passage has been surveyed in the cave, and over 200 species have been documented in and around the cave. <https://capcity.news/.../cave-week-wyoming-cave-in-shirley-m.../>
- In the Rocky Mountain Region, only Utah and Colorado remain free of the fungus that causes White Nose Syndrome among bats. Wildlife biologists in Utah are continuing to survey and document the state’s bats. <https://www.thespectrum.com/.../utah-division-nat.../7550413002/>
- In the Glen Canyon National Recreation Area in southeastern Utah, students from seven area schools and six youth programs participated in a 2016 – 2018 acoustic bat monitoring study. 14 bat species were identified in the 18 trips to 17 different sites. This data will be used by the National Park Service to assist with managing bat populations. Read the NPS report here: <https://www.nps.gov/.../citizen-based-acoustic-bat-monitoring...>
- The [Northern Rocky Mountain Grotto](#) is currently undertaking a resurvey of the Bighorn-Horsethief Cave system, located along the Montana-Wyoming border. Past survey efforts have documented 14.615 miles of passage within the two-entranced system. Learn more, and get involved as a volunteer: <https://nrmq.org/bighorn-horsethief-resurvey-project/>
- The 2021 Pryor Mountains Cave Inventory Crew has had a very busy and productive summer field season working in the Pryor Mountains of south-central Montana. The crew consisted of Custer-Gallatin National Forest, Bureau of Land Management Billings Field Office personnel, two Montana Conservation Corps interns, and one GSA GeoCorps intern. This group has spent the summer months ridge-walking to inventory new cave and karst features and conduct monitoring trips to well-known caves for visitor impact assessments. The crew sets out each day with data-driven locations for ridge-walking, using GPS tablets with GIS software, documenting physical cave characteristics including biologic, geologic, hydrologic, and cultural resource data. With just a few weeks left of field work, the crew currently has documented 526 karst related features and 37 caves on both US Forest Service and Bureau of Land

Management lands. Findings from this field season will be incorporated into our existing cave inventory dataset and utilized in our ongoing resource stewardship and management by USFS and BLM staff. Cave and bat population inventory and monitoring data will also be utilized in ongoing research by the USFS's Rocky Mountain Research Station and the State of Montana's Natural Heritage Program.

- Colorado's culturally-significant Sweetwater Indian Cave in Sweetwater Canyon northeast of Glenwood Springs is now publicly-owned. This natural cave has numerous pictographs and is now a part of the White River National Forest. Nearby Sweetwater Lake has also been added to the Forest. <https://www.postindependent.com/.../sweetwater-lake-ranch-no.../> The cave is open to the public with the standard USFS online permit requirement: [https://www.fs.usda.gov/detailfull/r2/recreation/...](https://www.fs.usda.gov/detailfull/r2/recreation/)
- The Sylvan Fire, near Sylvan State Park south of Eagle, Colorado burned throughout much of the summer, leading to road closures impacting access to caves in the Lime Creek area and Fulford Cave. At press time, the fire is 90% contained and fortunately burned in the opposite direction of the caves in those areas. Access to both areas is now fully open, with all remaining closures lifted by the Forest Service. <https://inciweb.nwcg.gov/incident/7562/>
- The White River National Forest in Colorado has proposed to remove aspens across the forest, meeting with local opposition. The effects on cave and karst environments are among the concerns, along with stressors for bats in the area. <https://www.aspentimes.com/.../forest-service-enviros-at-odd.../>
- Witches' Pantry Cave, within the proposed Mid-Continent Quarry expansion area outside Glenwood Springs, Colorado, was visited by a team of experienced Colorado cavers in early June 2021. A Bureau of Land Management cave specialist that has been contracted by the BLM office in Silt joined the team to aid in cave management specific to the quarry expansion proposal. 184 feet of passage with a vertical extent of approximately 72 feet was surveyed on this trip. Geological, biological, and microbiological inventories were taken as well. The cave specialist agreed that the cave has significance and believes it will be officially designated as such by the BLM. Due to the 1872 Mining Act, however, cave significance does not preclude destruction in certain instances of mining. The BLM requests that cavers refrain from visiting this cave. A visit from a paleontologist is planned so that they can study the variety of bones found in the cave's entrance chamber.
- On June 2, a federal report was released from the USGS stating that there was a risk ranging from 15 to 84 percent that COVID-19 could be spread to bats through contact with infected humans. An expert panel of biologists collaborated on this risk model, which was not based on actual lab testing (<https://pubs.er.usgs.gov/publication/ofr20201060>). Dr. Hazel Barton, in a reaction to this study, stated that recreational cavers already limit any interaction with bats, indicating that there is no increased risk for human-to-bat infections if these limitations along with standard PPE precautions are carefully followed (<https://rockymountaincaving.com/bl.../86-certain-uncertainties>).
- The US Forest Service is seeking comments regarding the nomination process for Significant Caves under the 1988 Federal Cave Resources Protection Act. October 19 is the deadline for submissions. The USFS is questioning if nominations are worthwhile scientifically and whether collection of such data places a burden upon federal officials. Review the federal notice (<https://www.govinfo.gov/.../.../FR-2020-08-19/pdf/2020-18174.pdf>) and submit comments via mail to the following address: Minerals and Geology Management, Attn: Significant Cave Nomination, 1400 Independence Avenue, Mail Stop 1126, Washington, DC 20250.
- Due to COVID-19 closure, the caves of Timpanogos Cave National Monument in Utah are experiencing their first real year of rest in 95+ years. Staff members at the cave have taken

advantage of the closure by gathering microclimate data without the influence of a constant stream of humans. They only enter the cave a few times a month, and monitoring efforts have been increased to establish a baseline of data that is much closer to natural cave conditions than when the cave is open. A publication regarding water quality data trends is in the works and shows changes in water chemistry from the tour operations. Data from 2008–2018 are being examined for this publication, with changes noted in 2013 when tours were reduced in size and frequency.

- Glenwood Caverns and Adventure Park and Cave of the Winds Mountain Park, both in Colorado, re-opened for tours this summer after they developed new policies and cleanliness protocols to protect guests and staff, including requiring face masks for all. Cave of the Winds reopened for cave tours on June 13. Glenwood Caverns reopened on June 8 for tours. On August 13, they were forced to close again due to wildfire mitigation efforts for the Grizzly Creek Fire burning nearby. They were then scheduled to reopen on August 28.
- South Dakota's Black Hills Cave and Nature Conservancy recently acquired 46 acres for the new Dahm Springs Preserve. This area includes seven known caves, including the decorated Dahm Spring Cave. Marilyn Dahm-Borgeson worked with cavers from the Paha Sapa Grotto to create this preserve. Cavers in the region raised \$350,000 for purchase. It will be managed jointly by the Black Hills Cave and Nature Conservancy and the NSS and is open for visitation by qualified cavers (<https://www.blackhillscaves.org/initiatives>).
- 20 dead little brown bats were recently found in Medora, North Dakota, near Theodore Roosevelt National Park (less than 30 miles from Montana's eastern border). Montana Fish, Wildlife and Parks announced June 15 that Daniels, Richland, and Fallon counties in Eastern Montana have tested positive for *Pseudogymnoascus destructans*, the fungal pathogen that causes White Nose Syndrome. Montana wildlife biologists are currently searching in caves, under bridges, and in other known roosts for additional samples (<https://www.mtpr.org/.../montana-scientists-search-signs-dead...>).
- The Conservation Fund closed on the purchase of 488 acres of formerly private land including Sweetwater Lake and Sweetwater Indian Cave near Glenwood Springs, CO on June 30. The acquisition will be added to the White River National Forest very soon. This cave, featuring many significant pictographs, was once sacred to the Ute Tribal Nation. It is expected to be open to the public as soon as the land is officially transferred.
- The Pilot Hill ranch, 5,500 acres located east of Laramie, Wyoming, is moving from private to Albany County ownership in early August and will be developed as a public park over the next several years. The area features recreational trails, limestone outcroppings, and caves.
- Montana's Lewis & Clark Caverns State Park celebrated Bat Week from August 10–15. The park hosted special talks and programs about bats throughout this week.
- The Grizzly Creek Fire, which has been burning east of Glenwood Springs, CO on the White River Plateau since early August, threatens a number of cave/karst areas. Forest Service caves (such as Hubbards), BLM area caves, and private caves on the Defiance Cave Preserve are at risk. Less than 50% contained as of August 25, the extent to which flames and smoke will affect these caves or the bats that live within them is still unknown.
- At its September 17 session in Washington DC, the National Park System Advisory Board of the National Park Service will consider adding Sulphur Cave in Steamboat Springs, CO to the National Natural Landmarks program, one of three candidates considered. This cave, visited by Europeans since the mid-19th century, includes many unusual features. The air is toxic and very hot due to the Sulphur content in the hot spring waters, and life forms such as snottites and blood-red cave worms thrive in this environment. For more information and to comment

on consideration, visit: <https://www.federalregister.gov/.../notice-of-the-september-1...> Tread of Pioneers Museum in Steamboat Springs currently had an exhibit through June 1, 2021.

Mid-Appalachian Region – Dean Snyder (PA) dsnyder3@ptd.net

Weekly restoration work continues at Crystal Cave.

- No report received.

Mississippi Valley Ozark Region – vacant

Requesting new rep to provide updates.

Northeastern Regional Organization – Mitch Berger (NY) mitchb@mit.edu

Welcoming Mitch Berger, our new NRO rep who will provide future updates.

Thank you for taking on this networking task Mitch! We look forward to hearing from you!

Ohio Valley Region – vacant

Requesting new rep to provide updates.

Southeastern Region – vacant

Requesting new rep to provide updates.

John Hoffelt mossyguy@comcast.net

- Nothing to report here. Still no caving :- (for me. jh

Southwestern Region – Janice Tucker (NM) janice.tucker@live.com

- Many caving activities on hold due to COVID rules in New Mexico.
- No report received.

Texas Speleological Association –

Ron Ralph (TX) ronralph@austin.rr.com ;

Nico Hauwert (TX) nico.hauwert@austintexas.gov ;

Jessica Gordon (TX) jessica.gordon@austintexas.gov ;

Drew Thompson (TX) drew.thompson@austintexas.gov ;

Mark Sanders (TX) mark.sanders@austintexas.gov ;

Colin Strickland (TX) colin.strickland@austin.gov ;

Cait McNann (TX) cait.mccann@austintexas.gov ;

Ross Winton (TX) ross.winton@tpwd.texas.gov ;

Many organizations across Texas collaborate in karst and cave study, conservation, mitigation, and educational outreach.

- We welcome new reps recruited at NCKMS2021 who will provide future bullets to include Texas projects, updates, and innovations!

Western Region – Neil Marchington (OR) climbingallday@yahoo.com

Welcome and thanks go to Neil Marchington for jumping on board!

- No report received.

Virginia Region – Janet Tinkham (VA) janete@shentel.net

- May 22, 2021–During a Tri-State Grotto trip to Baker Quarry Cave in Hardy Co., VA 11 participants cleaned up old discarded beer & soda bottles and cans, and other miscellaneous trash in the 3-lakes and walking areas of the cave.

- May 31, 2021—Members of Greenbrier Grotto installed West Virginia Cave Conservancy kiosk sign at Norman Cave, Greenbrier, Co., WV
- June 5, 2021—Paulette & Bob Bennett and Tom Griffin and son Mason met at the Donaldson Cave Preserve property, Berkeley Co., WV to do a much-needed repair on the existing preserve kiosk and install a West Virginia Cave Conservancy kiosk sign.
- June 6, 2021—Carroll Bassett, Randy Rumer and Ed Saugstad installed West Virginia Cave Conservancy kiosk sign at Harr Cave #2 in WV.
- July 2, 2021—Carol Tideman guided 10 students and teachers from Washington & Lee into Grand Caverns a commercial cave in Augusta Co, VA. They were geology students who are doing water sampling of springs all over the Shenandoah Valley. On-site, they measured and recorded the pH and temperature. The rest of the analysis would be done back at the lab. In addition, Carol education on caving basics, geology, and surveying.
- August 2021—New karst viewing trail and platform are being installed at the BCCS Postmaster House Preserve in Bath Co., VA. An educational kiosk will be built and a plaque commemorating the designation of Butler & Breathing Caves as National Natural Landmark by the National Park Service will also be installed. This site will eventually be a stop on the Virginia Cave and Karst Trail. Huge thanks to the Cave Conservancy of the Virginias for their generous financial support!
- August 8, 2021—Richmond Area Speleological Society conducted Adopt-A-Highway trash pickup near their fieldhouse property in Highland Co, VA and picked up four bags of trash.
- September 18, 2021—NSS John Guilday Cave Nature Preserve Pendleton Co WV: Cheryl & Earl Suitor, Charles Maurer and Mike Armstrong worked on a slope of the trail above the kiosk that had gotten slippery & erosion worn. They put in 7 steps that should make travel easier. They also found a rockfall that had happened recently near the kiosk and moved a number of the rocks and cleared the trail a bit, but further work will be required this fall to remove more of the rockfall.
- Ongoing- Grand Caverns, Grottoes, VA. VA area cavers resumed monthly conservation activity which entails Algae abatement, moss and fern eradication, removing coins from pools. Also, they have enlarged the nature trail at the top of the hill and have been working on removing vines strangling the trees along the nature trail.

NSS Conservation Task Forces

CTF reports & inquiries to Val Hildreth-Werker, valhildrethwerker@caves.org

DARK Conservation Task Force

Dawn Ryan, Chairman dryan@caves.org dark@caves.org

Dark Discovery Areas—the 4-state plan for karst outreach via roadtrips.

- The Driftless Area Karst (DARK), established November 2020, is a collaborative effort established to promote public awareness of karst features located within the Driftless Area of southeastern Minnesota and adjoining states.
- The website was launched on May 7, 2021.
- DARK Discovery Areas went live on Flyover Country App May 7, 2021.
- We hired an intern from the University of Minnesota to develop a marketing plan. Position ends soon.
- The National Park Service provided an intern to help develop and update the website.

Hawai'i Cave Conservation Task Force

Tomislav Gračanin (HI) tnv@att.net Asa Aue (HI) asaaue@gmail.com

- Continue efforts to protect large part of Kipuka Kanohina Lava Tube System. In Summer of 2020 a fraudster started attempts to take over an undeveloped subdivision under about half of which a large part of the Kipuka Kanohina Lava Tube System lies. In response, three Friends of CCH (Cave Conservancy of Hawaii) purchased or put under contract 163.5 acres, effectively preventing short term development.
- Friends of CCH continue management and legal process to protect in perpetuity.

Ozark CTF

Kathy Kriska-Crider (MO) kathykrider@yahoo.com

CTF on hold — nothing to report. (Thank you for staying in touch each reporting period, Kathy!)
email changed from katcntrygrl@sbcglobal.net to kathykrider@yahoo.com

Klamath Mountains CTF

Steve Knutson (OR) SssKnutson@aol.com

- Not much going on for the KMCTF due to the pandemic
- Talk is ongoing, still hoping for graffiti inventory and cleanup of copious graffiti in Ape Cave. The cave is closed. We tried to make the point that a cave closed to tourism is a perfect time to go graffiti cleaning, but to no avail. See the summer report for description of techniques we've proposed for testing in Ape Cave.

Ozark CTF

Kathy Kriska-Crider (MO) kathykrider@yahoo.com

CTF on hold — nothing to report. (Thank you for staying in touch each reporting period, Kathy!)
email changed from katcntrygrl@sbcglobal.net to kathykrider@yahoo.com

Twin Lakes CTF

John Durall (KY) TwinLakesCCSTF1@aol.com

Steve Gentry, Lead Advisor (KY) SGentry177@aol.com

CTF on hold — no report received.

Washington Cascade Mountains Bat Conservation Task Force

Dr. William R. (Bill) Halliday, Founder (WA, TN) wrbna@bellsouth.net

CTF on hold — no report received.

High Guads Restoration Project (HGRP) CTF

Jennifer Foote, highguads@gmail.com; <http://www.hgrp.org/>;

www.facebook.com/High.Guads.Restoration.Project

- HGRP runs volunteer trips in the Lincoln National Forest in New Mexico to assist the forest with cave restoration, science, and trail maintenance.
- We are running small trips on request. We ran one large trip (14 people) in September, but rapidly changing COVID protocols still make it difficult to plan events.
- *Pd* is now present in New Mexico but not Eddy County.
- Tentative future dates include: TBD? Email highguads@gmail.com for more info, we need to know who is coming a few weeks in advance to finalize permits. Sign up for the email list at: <https://groups.google.com/d/forum/high-guads-restoration-project>

NSS Mammoth Cave Restoration Project

Brian Hunsaker, Director (IL) macarestocamp@gmail.com

Update: Impacts of COVID-19

- Since 1989 the NSS Restoration Field Camp at Mammoth Cave National Park has provided a way for cavers to volunteer their time and efforts to help the NPS preserve and restore the park. The camp currently consists of three, weekend camps in March, May, and November and a weeklong camp that takes place the first full week of August. I took the position as director of the camp in 2018. **Please see** the Fall 2020 AVP Report/Conservation Division Report/Mammoth Cave Report for an account of volunteer value provided during 2020 and the impact that COVID-19 has had on the group and our camps.
- **Looking ahead** to our next camp, there is hope that we will be able to return to Mammoth in 2021. With proper guidelines, social distancing, disposable masks, and members bringing their own food, perhaps we can safely hold the camps.
- No report received this period.

Cave Vandalism Deterrence Commission

Sarah Richards, Chairman (WV) vandalismdeterrence@caves.org or srichster@gmail.com

- Neil Marchington is Chairman of the Oregon High Desert Grotto, Conservation Chairman of the Western Region of the NSS, and is a Deputy Sheriff working a substantial cave vandalism case in Bend, Oregon. Boyd Cave is on public lands managed by the Deschutes National Forest. Marchington is partnering with Forest Service Officer Eddy Cartaya, who is also an NCRC instructor.
- Boyd Cave was hit with graffiti over approximately 1400 feet of passage in January 2021 (Photos of part of the blatant and substantial vandalism event <https://photos.app.goo.gl/H4RjM2PH4UusVt9N7>). The Grotto, Region, and Western Cave Conservancy dedicated substantial resources to removing all graffiti from the cave just before this new event. (Related story prior clean-up: <https://centraloregondaily.com/the-great-outdoors-cleaning-boyd-cave/>)
- Offering NSS Cave Vandalism Deterrence \$1000 Reward for information leading to conviction of persons for acts of cave vandalism in the Boyd Cave incident near Bend Oregon.
- No update received from Marchington or Richards. They both serve as first responders. We appreciate their service in all arenas.

New Chair! Biological Response Committee

Wil Orndorf, Chairman (VA) wil.orndorff@dcr.virginia.gov

BiologicalResponse@caves.org , www.caves.org/WNS/

Also, a **NEW** Committee Member!

Keith Christenson, NSS Rep to Federal Bat Meetings (PA) tropicalbats@hotmail.com

- We are pleased to announce TWO new additions to this important NSS Committee, and we sincerely thank Steve Taylor ceuthophilus@gmail.com , long-time cave biologist who has contributed to projects all across the US and in other countries, for holding Chairmanship of this important Committee over the past year-and-a-half.
- Wil Orndorff has graciously accepted appointment as Chair of the Biological Response Committee. Wil's home karst is Virginia, where he is the long-time Karst Program Coordinator for the DCR. His activity and influence is legendary across many disciplines of speleology. Thank you for coming aboard, Wil! We welcome your enthusiasm and vision for enhanced networking among professionals in the NSS.
- We welcome Keith Christenson, a bat biologist, caver, cartographer, and photographer with

many credits in international research and publication. He manages field projects related to bat and other small mammal surveys for environmental studies. Keith was honored by Bat Conservation International with their annual recognition award, and he will represent the NSS in federal bat and WNS meetings.

- **BRC is responsible for coordinating the NSS's response to biological threats concerning caves and karst.** BRC members are tremendously appreciated and will continue to participate in their various roles. Recent issues include White Nose Syndrome and SARS-CoV-2, but is not limited to potential bat issues.
- The Biological Response Committee represents the NSS on the USFWS WNS Stakeholder Committee, attends the annual USFWS WNS Symposium or Webinar in June, and attends monthly informational telecons.
 - If Keith Christenson is unable to attend, the **NSS is looking for a local volunteer to attend the 2022 White-nose Syndrome National Meeting in Minneapolis, MN, June 6-10, 2022.**
- New Mexico is now suspect for WNS. Other western states have detected in more counties.
- **IMPORTANT:** The primary source for all the official/latest information on WNS is found at www.whitenosesyndrome.org (USFWS issued new WNS decontamination protocol in October It reduces the time for submerge at 131°F (55°C) to five minutes.)

NSS Mammoth Cave Restoration Project

Brian Hunsaker, Director (IL) macarestocamp@gmail.com

Update: Impacts of COVID-19

- Since 1989 the NSS Restoration Field Camp at Mammoth Cave National Park has provided a way for cavers to volunteer their time and efforts to help the NPS preserve and restore the park. The camp currently consists of three, weekend camps in March, May, and November and a weeklong camp that takes place the first full week of August. I took the position as director of the camp in 2018. **See** the Fall 2020 AVP Report/Conservation Division Report/Mammoth Cave Report for an account of volunteer value provided during 2020 and the impact that COVID-19 has had on the group and our camps.
- **Looking ahead** to our next camp, there is hope that we will be able to return to Mammoth in 2021-2022. With proper guidelines, social distancing, disposable masks, and members bringing their own food, perhaps we can safely hold the camps.
- No report received this period.

Cave Vandalism Deterrence Commission

Sarah Richards, Chairman (WV) vandalismdeterrence@caves.org or srichster@gmail.com

- Offering NSS Cave Vandalism Deterrence \$1000 Reward for information leading to the conviction of persons for acts of cave vandalism in the recent Boyd Cave incident near Bend Oregon. NSS member Neil Marchington is the contact. See summer 2021 report for details.
- No update received from Marchington or Richards. They both serve as first responders. We appreciate their service in all arenas.

External Conservation Networking Updates

Updates for this period. NSS Conservation Division networks with activities worldwide.

The Cave Exploration Society Inc. *Exploring the world from the inside out.*

John Fioroni (MA) info@CaveExploration.org

- In April 2021, the CES made its first major equipment acquisition, a Wingta Drone. Details in

summer 2021 report and sample data sets can be found at www.CaveExploration.org/Drone

- The Petzl Foundation awarded CES sponsorship based on our plans to use the Wingtra Drone for Karst conservation.
- The CES is thankful for the financial support and partnership with the NSS's Education Division to develop a STEM program called STEMing the gap in Karst education. For more information visit www.CaveExploration.org/STEM
- The CES is offering a small travel grant in the form of up to 50,000 JetBlue miles for travel related to cave exploration, research or conservation. Grant details can be found on www.CaveExploration.org/travel-grant.

The Nature Conservancy—Activity Networking Update to NSS Conservation

Cory Holliday, Cave and Karst Program Manager (TN) cholliday@TNC.org 615-504-7427
The Nature Conservancy of Tennessee, 862 Fort Blount Ferry Rd., Gainesboro, TN 38562

- Problem: TNC/NSS **MOU needs updating**. NSS/TNC Liaison page at caves.org needs updating.
- Plan: Review and draft changes.
- Progress: No report received.

Bigfork High School Cave Club in Montana

Hans Bodenhamer, Director (MT) hansb@bigfork.k12.mt.us

- Montana's Bigfork High School Cave Club, founded and directed by Hans Bodenhamer NSS16668FE, CO, has been awarded the President's Environmental Youth Award twice for the club's work in caves. The Montana Experience has released a short documentary, "Keeping Cave" about their exceptional work, which can be viewed here: <https://youtu.be/5EuAhbUT4b8>

Bat Conservation International

Shawn Thomas, BCI Subterranean Program Manager (WA) sthomas@batcon.org
Jason Corbett jcorbett@batcon.org or Nate Breece nbreece@batcon.org

- BCI **FAQ on COVID-19 and bats** <https://www.batcon.org/bats-covid-19-updates/>
- Use #realbatfacts to follow on Twitter.

International Year of Caves and Karst 2021-2022 (IYCK)

George Veni, PhD (NM) - Executive Director, National Cave and Karst Research Institute (NCKRI) and

President, International Union of Speleology (UIS) gveni@nckri.org , <https://www.nckri.org/>

- IYCK is now officially recognized by UNESCO and extended through 2022.
- Use videos during outreach events: <http://iyck2021.org/>
- Ready-made events like your local or regional "Cave Fest" just need to be connected to the IYCK. Virtual events are common. Use social media, pod casts, and call local news media to help spread the word.
- George Veni will be glad to give a virtual program to your Grotto on the IYCK.
- **No matter how big the stage, educating the public will happen at the local level.**
- Check out the planning guide AND post your events to <http://www.iyck2021.org/> If you have questions, contact George Veni gveni@nckri.org

**NSS Education Division
Fall 2021 Division Report**

Prepared by Devra Heyer, Education Division Chief
dheyer@caves.org

Chair or Officer	Position	Phone	Email	NSS #
Dr. Sharon Weaver	Environment Education Committee	651-485-7231	sharonweaver@caves.org	70371
Pam Tegelman Malabad	Education Grant	540-230-4829	Pam.teg.mal@gmail.com	44946
Jim Kennedy	National Cave and Karst Management Symposium	512-663-2287	cavercrash@gmail.com	26791
Gretchen Baker	NCRC National Coordinator	775-234-7357	gretchenbaker@caves.org	50323
Marty Reames	NCRC Liaison	719-357-9261	mreames@caves.org	53414
Allen Maddox	NSS Youth Liaison	484-657-9057	trailsitter@yahoo.com	50572
Dr. Hazel Barton	Interim Safety and Techniques Chair	330-972-2518	hazel@cavescience.com	38664
Nicholas Lashley	SpeleoGuest Coordinator	270-799-6891	nicholas.lashley788@topper.wku	71042
Debbie Spoons	Webinars Chair	801-808-8180	xplorecaves@yahoo.com	61744
Devra Heyer	Education Division Chief	415-640-2639	dheyer@caves.org	60026
Dr. Hazel Barton	VTC Transition Committee	330-972-2518	hazel@cavescience.com	38664

Education Division Summary/ Highlights:

Progress:

- o **BAT WEEK:** Education Division worked in conjunction with PR, Outreach and Preserves to create 8 different social media posts for bat week.
- o **FAQ:** YM FAQ has just received its first request for addition and

update.

- o **EEC:** EEC members continue to work on the children's activity book in conjunction with the Conservation Division.
- o **Grants:** \$200 awarded to City Kids LA Education to go to Black Chasm Caverns.
- o **NCRC Liaison:** Instructor meetings have been going on, instructor appreciation initiative went well.
- o **NCKMS:** NCKMS occurred in person November 1-4 in San Marcos. Venue was changed last minute due to flooding in the original building. Over a 100 people were in attendance.
- o **Webinars:** Webinars was supposed to restart in August after the new website had been created. With issues between communication, technology and publication relations webinars still have not started back up. Several videos were created for Earth Science week.
- o **Collaboration:** AGI Earth Science Toolkit was sent out in October during Earth Science week. Dave Decker donated to ensure that toolkits could be mailed to teachers if they requested one. Christy Starr has been mailing toolkits to teacher upon request.
- o **Cave Conservation Expo Educational Outreach:** Education Division has been working in conjunction with Fenn Spencer to ensure that the initiatives have resources.
- o **Other Initiatives**
-IYCK 2021

Plans:

- o **BAT WEEK:** Would like to create a Bat-week subcommittee so that 2022 activities can be created in conjunction with Bat-week.
- o **Onboard Volunteers:** many of our initiatives have new volunteers or are new positions. Working on a better onboarding process with FAQ pages and division website. Created volunteer descriptions and committee guidelines to help conserve knowledge of previous volunteers and better communicate volunteer expectations and available resources.
- o **Grants and Scholarships:** Increase the number of grants awarded by working with PR to have an increased pool and increase accessibility by creating an easier process to apply.
- o **NSS News Article:** NSS news article has been written but still being proofed. Waiting for grant recipients to give information about their progress to be sent to the news.
- o **Resources:**
 - Get subscriptions adobe so that volunteers can make more media for the NSS. Need to work in conjunction with operations to determine how to get Adobe subscription.
 - Have a dedicated photo media folder to use for educational and outreach purposes. These photos should be watermarked and have written permission from the photographer to use.

- AVP is working on a media release image with the NSS lawyer and getting feedback from NSS liaison and Salons.
- **Teacher Resources:** Create a dedicated teacher resource page which links to vetted educational and conservation material. A spreadsheet has been created looking at around 100 different online resource cites, looking at topic, standard, rigor and accuracy.
- **Art Contest:** To create a yearly art contest geared towards grades 6-12, to bring awareness to caves and conservation issues to academic and youth organizations. Working in conjunction with outreach. First meeting will be at end of November.

Problems:

- **GSuite: Who do I contact for questions? Or if a volunteer needs an email? Or shared drive questions?**
- **Communication/BAT WEEK:** There is little to no protocol for determining relationships between committees and who to contact. During Bat-week it was difficult to determine who to contact to ensure that social media was posted and whose responsibility it was to make sure that happened. Need better communication protocols when volunteers are gone for prolonged periods of time. Need a way to create redundancy in volunteer roles.
- **Resources:** Was unable to figure out the procedure to get an Adobe CC subscription. Had difficulty creating a QR generator subscription. Lots of setbacks in trying to create a media release document to use for NCRC and to receive images to use for educational materials.
- **Youth Liaison:** Looking for regional coordinators to assist Youth Liaison. With covid little has been done with this position.
- **Safety and Techniques:** Purpose of the Safety and Techniques committee needs to be reexamined with the creation of the Vertical Training Commission.
- **Webinars:** Speaker schedule for September backed out. No October was scheduled but three Earth Science Videos were released for Fossil Day, Geologic Map Day and a DIY Groundwater mode. Still looking for more committee members who are comfortable with using technology. Still working on expanding the webinars committee and use previous data to help determine webinar topics. Still need an easy way to connect committee plans with PR/Social Media/website.
- **Collaboration with AGI:** Need to create a subcommittee with AGI liaison to ensure Earth Science week tool kit material is done in a timely fashion and put in the budget for next year. Still need to find a person to help.
- **FAQ page:** Need to create a mechanism to collaborate with IT and ensure that FAQ material is comprehensive and up to date. Create mechanism for updating and determine responsible party to ensure updates and reviews are done at regular intervals.

NSS Education Vision and Goals:

• Education Division Vision:

- ❖ To have the NSS be the nexus for information related to caves.
- ❖ If there is a cave-related question, to have the NSS be the place to start to find the answer.
- ❖ Have resources for NSS members, cavers, and the general population to learn more about caves, conservation, and caving techniques. Education material needs to be accessible and inclusive to diverse learner needs and backgrounds.

• Education Division Objectives:

- Caver Education
 - What do cavers and the public need to know about caves?
 - What do cavers need to know to cave safely?
 - What do rescuers need to know to help cavers?
- Conservation Education (collaboration with Conservation Division)
- Finance Education Initiatives

Education Division Objectives have been reevaluated. With assessment of the number of cave educational resources available, it has been determined that it would be a better use of limited resources to highlight other educational partners' work than recreate something that others are doing well. The following objectives have been removed:

- Cave Education
 - What are caves and what makes them unique?
- Education Through Caves
 - What can learning about caves teach us?

• Education Division 2021 Goals:

1. Help Youth Liaison find regional coordinators and content for new websites, support Youth Liaison with resources. End of 2022
3. Create protocol that zoo outreach program can be recreated by local chapters 12/2021
5. Increase the number of members on the webinars committee to at least 4, have one webinar per month. Use previous webinar data to help evaluate the success of the committee and increase the number of viewers.
7. Have an education resource page with unrolling of new website
8. Have an educational public outreach event each year, could coincide with convention -See Cave Conservation Expo Public Outreach Initiative
9. Help Preserves with educational outreach initiatives (signage, art contest, inventory document) , develop outreach activities to support preserves.

13. Have education grants more accessible and increase application pool by April 2022
18. Art Contest that outreaches to schools highlighting caves, 2022
19. Have NSS Education representatives attend GSA and/or NSTA by July 2022
20. Create FAQ/How to web page for Education volunteers by July 2022

Educational Division 2021 Met Goals:

2. **GOAL MET:** Support Outreach/conservation initiatives such sponsor San Antonio cave animals and providing NSS educational material for the SA Zoo starts 4/2021 for one year
10. **GOAL MET:** NCRC liaison onboarded to support NCRC initiatives be able to attend next BORC meeting End of February 2021
11. **GOAL MET:** Support NCRC short course initiatives Feb-May
12. **GOAL MET:** Have NCRC teacher appreciation week in May 2021
14. **GOAL MET:** Have a dedicated person to SpeleoGuest program and have at least 2 SpeleoGuest a month (since October have 12 programs)
15. **GOAL MET:** Have an Environmental Education Committee create new content once a year and create process to review content for CPN
16. **GOAL MET:** Support NCKMS with initiatives such as workshops and field trips November 2021
17. **GOAL MET:** Increase partnerships with external educational organizations (AGI and SA Zoo initiatives)
22. **GOAL MET:** Have each committee have mission statements and goals by July 2021 (except Safety and Techniques see revised goals)
23. **GOAL MET:** Create committee chair volunteer descriptions to give to volunteer description by July 2021 (**Please note waiting for volunteer coordinator to be found so volunteer descriptions can be given**)
24. **GOAL MET:** Create committee guidelines to assist in onboarding new volunteers by July 2021

Educational Division 2021 Revised Goals:

4. **Original Goal:** Find a dedicated safety and techniques chair, create goals, and vision statement and start to assess website content for update by July 2021
 - **Revision:** Working in conjunction with S&TC chair, AVP, Vertical Section to reassess the role of Safety and Techniques Committee. By 12/2022 determine the role and responsibilities of S&TC
6. **Original Goal:** Have at least two lessons up on the website by the end of year.

- **Revision:** With limited volunteers and resources this initiative can be done by other organizations and the NSS can link to these educational partners.
21. **GOAL MET:** Create FAQ/How to web page for YM and other membership issues by November 2021
- **Revision:** New addition to the YM FAQ has been requested. Goal for 2022 to create a subcommittee and create a timeline for addition and revisions.

**Education Division 2021 Initiatives:
SpeleoGuest, Website, Workshops for NCKMS, Media Resources,
Conservation Expo on the Road Education Initiative, Bat Week**

Chair: Devra Heyer
dheyer@caves.org

Batweek:

Progress:

There were 8 specially created social media posts that highlighted work that the NSS has done or work that NSS partners are doing. This is the first year that the NSS has actively partnered with Batweek. PR, EDC, Outreach all participated in Bat-week meetings with partners from around the world. The NSS Preserves Division and the Social Media Committee also helped to ensure this initiative was successful.

Plans: Next year to have more organized events and social media initiatives. Create a Bat-week subcommittee or liaison under education to facilitate initiatives.

Problems: Without a clear leader and responsibility it was difficult to determine how to break up the workload. There was also difficulty determining how to involve other committees. There is not a clear method on how to get things posted on social media. Usually the Education Division Chief contacts PR to determine how information is disseminated to members. During this initiative it was not possible. It would be useful if there were clear protocols dealing with social media and membership communication. Also having more redundancy in duties and administrative privileges.

SpeleoGuest Program:

Coordinator: Nicholas Lashley
nicholas.lashley788@topper.wku

Progress: Same as last report, found a dedicated volunteer for the SpeleoGuest program. Advertising and link to program is on the AGI Earth Science Tool kit flyer which went out to several thousand educators in October.

Plans: New coordinator will connect SpeleoGuest requesters to volunteers for SpeleoGuest program. Coordinator will receive assistance from the Education Director and AVP until a best practice has developed and will continue to update guidelines until then.

Problems: It is unknown at this time how many volunteers will be needed or the reach that advertising will have. This is still a new program and the Education Division is trying to determine reasonable goals for the 2021-2022 year.

Website:

Goals: To provide resources, such as caving information, lessons aligned to national teacher standards, for classroom teachers and educators. To create a system to evaluate NSS educational resources and their efficacy.

Progress: A spreadsheet has been created evaluating almost 100 different online education resources. This can be used to help improve the NSS education page and create a resource to highlight other educational partners.

Plans: Create an education page that has vetted educational cave resources organized by topic, standard and age appropriateness. Assist IT to ensure that all educational material is accurate and up to date.

Problems: None at this time.

Workshops for NCKMS

Progress: Ed Division Chief attended NCKMS planning meetings. Brad Barker agreed to spearhead a workshop on “Developing Stewards: Cave and Karst Management through Accessible Education”

Plans:

Workshop was not able to be presented at NCKMS but plans are to turn into a webinar at a later date.

Problems:

Brad was unable to attend due to COVID19 considerations with his school district.

Media Resources

Goals: Create a shared folder/media library using Gsuite that contains media that could be used for educational purposes.

To create a system to evaluate NSS educational resources and their efficacy.

Progress:

Little work has been done with this initiative. Some work has been done to create a media release form but little progress has been made. There has been correspondence with photographers and salons to determine next steps.

Plans:

Create a shared folder that anyone with a cave.org email could use for educational purposes. Need to coordinate with Volunteer Coordinator, PR, IT and other individuals with Gsuite access to determine needs, interested parties and next steps.

Problems:

Trying to determine who are the interested parties and who has the possible Gsuite Administrative access. There currently isn't a volunteer coordinator to help with effort. A media release form needs to be created before there can be too much progress in this endeavor.

Access media and get permission for pictures to use for educational purposes takes a lot of time and effort. Working on getting a dedicated photo media folder and person to help with creating a media library. This is a low priority initiative and has been put on hold due other timelier issues.

Education Committee and Subcommittee Reports

Environmental Education Committee:

Chair: Sharon Weaver

sharonweaver@caves.org

Members: Molly Hunt, Jeannie Place, Ann Dunlavy, and Dave Jackson.

Purpose and Goals:

Provides the NSS, caving community and the public with educational documents such as powerpoints, pamphlets, posters and promotional/educational materials that can be used by interested parties. The documents/materials will be proofed by the committee and field experts, revised regularly to make sure content is up to date and pertinent, while being consistent with the NSS missions, ethics, and values.

This Committee will work and regularly meet with the PR committee to make sure goals and objectives are aligned.

Progress: Three educational kid activity booklets are currently being worked on. Booklets are currently being created using Canva to facilitate collaboration. Currently the books are being worked on concurrently. The Conservation Division has been reviewing the books for accuracy and rigor.

Plans: Finish and publish the first activity book by end of year 2021/beginning of the year 2022 and continue to develop new educational materials for the NSS. Expand the number of materials and the number of volunteers.

Problems: New Committee and are creating material from scratch, so there the start is slow but is making a lot of progress. Access to media to create this material is limited. Ensuring the images are public domain or free to use by the NSS in print has been a challenge. We would like to thank Dave Bunnell and Jean Krejca for being supportive of these efforts!

Education Grants Committee:

Chair: Pam Tegelman-Malabad

Pam.teg.mal@gmail.com

Members: Geary Schindel, Sharon Weaver and Adam Weaver

Purpose and Goals:

This committee is responsible for supporting and administering educational grants and scholarships.

Progress: Currently a grant application has been submitted and is under review: "Exploration of Black Chasm Caverns" for \$638. Still in discussion with committee about approval. There has been a change to the submittal dates, which are January 15 and August 15 for bi-annual review with microgrants to be awarded as available. The grants website has been updated to reflect the date changes.

A flyer has been created to advertise grants in NSS News and social

media. The grants were also advertised on the AGI Earth Science Toolkit flyer.

A spreadsheet has been created previous awardees dating back to 2010. This spreadsheet will also be used to hold recipients accountable to the NSS membership.

Plans: Create evaluative criteria rough draft. Started NSS article for membership about grants/ previous recipients/future of educational grants. Trying to get a status of current grant recipients.

Problems: Committee will discuss the outreach for grants: education grants have previously been awarded to specifically K-12 audiences. There are a lot of questions of what type of initiatives we can and cannot fund. The grants committee would like some guidance so that evaluative criteria can be created.

National Cave and Karst Management Symposium

Chair: Jim "Crash" Kennedy
cavecrash@gmail.com

Purpose and Goals: The purpose of the Symposium is promoting, advancing and sharing concepts in effective management of cave and karst resources. These biennial symposia provide an opportunity for practical synergy among cave and karst management professionals from diverse backgrounds, working in various professions and with interests spanning a broad range of cave and karst management issues. New techniques are discussed, issues addressed, solutions developed and effective working relationships formed to help protect and conserve caves, karst, cave ecosystems and water resources.

Progress: The symposium met in person during November 1-5 in San Marcos Texas with over 120-week long participants. The final participant numbers have not come in. James Hughson, Mayor of San Marcos came to the opening ceremonies. Cave and karst specialists from around the USA and Mexico came to join the proceedings.

Plans: The next NCKMS is planned to be in Chattanooga, Tennessee in 2023, there are two potential places for 2024, one being in Kentucky and the other in Nevada. So that location is to be determined.

Problems: There was a last-minute change in venue due to a water pipe breaking and flooding the venue.

NCRC/NCRC Liaison:

NCRC National Coordinator: Gretchen Baker
gretchenbaker@caves.org

NCRC Liaison: Marty Reames
mreames@caves.org

Purpose and Goals: The National Cave Rescue Commission (NCRC) is charged with developing, organizing, and providing cave rescue training, maintaining lists of cave rescue-trained persons, and representing the NSS on cave rescue issues. The NCRC Liaison was established to give both the NSS leadership and the NCRC leadership an increased understanding of the needs and efforts of each respective group.

Progress: NCRC Board of Regional Coordinator (BORC) meetings held on July 6, August 16, 2021 and Oct 18, 2021

Instructor Meetings on October 24th, 2021

- Instructor appreciation initiatives: instructors received various awards depending on their length of service commemorating their work and dedication to the NCRC
- Multiple cave rescue trainings (Orientation to Cave Rescues, regional weeklongs, Small Party Assisted Rescue, and custom classes) have been going on throughout the USA. Due to covid more regional seminar seem to be successful when it comes to getting instructors and safety.
- Texas has an upcoming level 1 and level 2 in January, registration goes live on November 9, 2021

Plans:

- Image replacement continuing. All images in the curriculum have been completed. Anmar is taking the lead on replacing images in the US Manual of Cave Rescue Techniques and that may take longer. A sufficient number of books were printed to support training for this year before the cease-and-desist date.
- Working to rebuild instructor morale and trust in the organization by increasing communication and transparency, recognizing instructors for their achievements, and responding quickly to problems.
- Website committee under development
- Additional trainings are being planned and approved.

- Continue to develop the NCRC Liaison position and create written guidelines for the duties and responsibilities.
- Start to conduct interviews with BORC and BOG members to gather information on perceptions of NCRC and identify opportunities for improvement.

Problems:

- National Seminar is August 28-September 4 in New York was canceled
- Image replacement initiative will take some time. A form needs to be created from the NSS, to have creators sign to clearly identify ownership of the content and that the NSS/NCRC has the rights to use images. The creator may also retain rights.
- Instructor retention: the NCRC has been losing instructors faster than they are gaining them. An instructor retention/development committee is making recommendations to remedy this.
- The NCRC would like to have a more viewer-friendly website that is more student-centered.

NSS Youth Liaison:

Chair: Allen Maddox
trailsitter@yahoo.com
 Members:

Purpose and Goals: The purpose of an NSS Youth Regional Coordinator is to provide informational assistance to cavers, grottos, and youth group leaders so they may conduct safe and appropriate cave-related experiences. In addition to caving trips, these experiences may include presentations on ethics, geology, biology, techniques, and safety, as well as other topics of speleology.

Progress: Same as last report: A volunteer description for a Youth Group Regional Coordinator has been created.

Plans: The volunteer description needs to be put out on social media, NSS news and websites.

Problems: Most youth groups have not been going out because of COVID. There has been a long hiatus and it is taking a lot of effort to get things started up again. There has been a lot of trouble to get volunteers to help. A volunteer description has been written and needs to be advertised to the membership.

Safety and Techniques Committee:

Interim Chair: Hazel Barton

hazel@cavescience.com

Members:

Purpose and Goals: The goal of the Safety and Techniques Committee is "Safety Through Knowledge." Activities of the committee include analyzing and reporting accidents and near accidents, studying and testing equipment, and developing safe caving techniques.

Progress: A lot of the work has been alongside the VTC transition committee to make recommendations to the board. There is a lot of discussion of the new role that the committee will have within the NSS.

Plans: Create a volunteer description for the safety and techniques committee members. To determine goals, initiatives and the relationship between the NCRC, vertical section and any recommendations that come from the Vertical Ad Hoc committee. Write reports or educational documents to send to interested parties and articles to membership. The S&T chair has been spearheading the Vertical Ad Hoc committee and the Ad Hoc Charter Committee working on making recommendations to the board using the data collected from the questionnaire, comments from the membership and committee members.

Problems:

Safety and Techniques webpage needs to be evaluated and updated for new website rollout. Currently the S&T committee is redefining its purpose, initiatives, and guidelines, especially since the Caving Accident Report is no longer part of the S&T committees' purview. Once these have been created more progress can be made.

Webinars Committee:

Chair: Debbie Spoons

Members: Devra Heyer, Dave Brumbaugh, Leah Hill

Purpose and Goals: This committee is responsible for developing and operating the NSS's web-based multimedia outreach program.

Progress: There has not been much progress since the virtual convention. In September a Vertical Training Commission Video was posted. In October a town hall meeting was held for the same commission. Three videos were made in conjunction with Earth Science

Week (Fossil Day, Geologic Mapping Day and creating a Groundwater Model).

Plans: Same as last report: Increase the number of members to the webinar committee to at least 4, plus a member from IT and PR to assist the committee in advertising and putting the videos online. These main four members would divide up tasks such as finding speakers and being hosts. They would use the historical data to help find topics that interest the NSS membership and potential speakers. The goal being to have a virtual talk each month. Some ideas would be to have certain months be reserved for topics such as convention (June or July), Director Election (April), rescue/accident report (June) and conservation (May)

Other possible webinar topics could be Biology (potentially be associated with Cave animal of the year), exploration, cave stories (potentially around October), a volunteer or initiative highlight especially if it is associated with a new board act.

Problems: There has been a lot of difficulty scheduling webinars whether it has been guests canceling or other events being in conflict or having difficulty with advertising for the talk in a timely fashion. There are several people who have agreed to give webinars and people who have expressed interest in helping but no meeting has been scheduled as of yet.

Same as last report: The topics of the webinars are skewed towards certain subjects and are not advertised consistently or scheduled consistently. Even though the guest speakers and committee members are volunteers, steps need to be taken to ensure that communication between committee members and guest speakers are done in a timely fashion and scheduled with enough time that all involved volunteers have enough time to do their responsibilities for the NSS membership.

Communication and coordinating events has been difficult. Not all volunteers and speakers are familiar with technology. Making sure that volunteers respond in a timely fashion and coordinate with all interested parties, for instance webinars and social media. Even with the use of calendars and emails not all interested parties are aware or sure of their responsibilities. A meeting needs to be held with all interested parties to ensure that expectations, responsibilities, and goals are clear.

Vertical Training Commission Transition Committee:

Chair: Hazel Barton

hazel@cavescience.com

- Report will be at end of AVP report due to length –

NSS Convention Division Fall 2021 Division Report

Prepared by Carol Tiderman, Convention Division Chief
ctiderman@caves.org

CONVENTION DIVISION REPORT

HIGHLIGHTS

The Steering Committee did a review of the 2021 Virtual Convention at the request of the President

The 2022 Howdy Party will be held at Rushmore Cave.

2023 is planning to host the convention in June

JSS will have new equipment donated by Camp USA

Salons have a new Treasurer

STEERING COMMITTEE

Adam Weaver

Jean DeVries

Kristine Ebrey

Maureen Handler

Dave Lester

Meredith Weberg

Rich Geisler

Dan Austin

Chris Pelczarski

Carol Tiderman- chair

At the request of the NSS President, Geary Schindel, a post event review of the 2021 Virtual Convention was performed by the Steering Committee and assembled by Jean Devries.

2021 Convention Post-mortem

TIMELINE

- In the run-up to the convention, there must be a well-defined date that equals the point of no return (PNR).
- The PNR will be approximately 3-4 months before the convention.
- Three weeks before PNR, all Convention Committee chairs must report "go/no go" from within their committee to convention leaders (chairs, vice-chairs, treasurer).
- If no go, the report must be accompanied with explanations of the situation and its severity.
- Two weeks before PNR, convention chairs must have a go/no go meeting with the NSS administrative vice-president (AVP) and NSS Convention guru.
- Two weeks before PNR, convention chairs must have a go/no go meeting with the NSS administrative vice-president (AVP) and NSS Convention guru.
- If a convention is to be postponed or canceled, it must be done no less than 2 weeks prior to PNR to allow time for the full cancellation process.
- All large nonrefundable purchases of merchandise, guidebooks, programs, SWAG, etc. must occur after the PNR.
- All non-refundable payments and deposits are made after the PNR.
- All contracts, rental agreements, etc. must have "escape clause" dates before the PNR.

2021 Summary:

The 2021 in-person Convention was canceled on 3/18/2021.

There was constant push back from Convention chair, and explanations of the situation and severity were dismissed.

There were no contracts or large non-refundable purchases made prior to the PNR date. After many emails and conversations relating to the financial exposure and risk to the community and the sense of the Board of Governors that the event had to be virtual, the staff refused to alter their timeline for the PNR or agree to the decision to go virtual. None of the contracts had the exclusion clause and some items needed to be locked in due to competition for the services.

Covid-19 was still an issue in many parts of the country and there was concern for the local community's safety and its lack of medical facilities.

Attendance was not expected to reach the break-even point.

The NSS was at risk of being a super spreader event and suffering a financial loss if the Convention was held in person.

On 3/18/2021, the AVP sent a letter to the 2021 Convention chair notifying him that the decision had been made that the 2021 Convention would be held virtually.

CANCELLATION PROCESS

In pretty quick order:

- Inform the convention staff of the decision
- Inform all community contacts of the decision
- Craft cancellation messages for a coordinated posting to the NSS and convention websites and social media outlets

2021 Summary: Staff was informed of the cancellation on 3/18/2021.

Vendors were contacted on 3/19/2021.

Cancellation notices to members was posted to the NSS Facebook page by President Geary Schindel on 3/19/2021.

PLAN FOR VIRTUAL CONVENTION

Step 1: Embrace the suck. Denial, anger, bargaining, depression, acceptance: you will go through all the stages of grief. It sucks. It really sucks!! You and all the staff have spent years in preparation for an event that won't happen for any number of reasons—social unrest, civil war, global pandemic. However, the quicker you get through it all and find acceptance, the more time you have to explore the possibility of a virtual convention.

Step 2: Contact the convention coordinators. Reach out to all the session, section, Salon leaders to gauge the interest in contributing content to a virtual convention experience.

Step 3: Assemble the crew. You need a small but very dedicated staff of key positions:

- Webmaster
- Video Editor
- Publicity
- Information Technology (IT): The NSS has an IT Committee that the virtual convention staff can call upon. It is required that the virtual convention's website be hosted on the NSS's server (or the one it pays for). Luckily, the 2020 Virtual Convention website was able to migrate over. That makes it available for future use.
- Program Editor (optional)

If there's enough interest (Step 2) and you have a crew (Step 3), then continue.

2021 Summary:

Convention staff member Pat Kambesis did an excellent job of reaching out to sections to notify them that it was going to be virtual. She also collected all the submissions and made them available for review and editing.

It does not appear that there was a dedicated staff for the Virtual Convention from the staff of the 2021 Convention.

The 2021 Virtual Convention staff consisted of Pat Kambesis and members of the 2020 Virtual Convention staff who stepped in to fill the void.

It is unknown why 2021 Convention staff did not want to continue volunteering with the Virtual Convention.

Critical positions for a Virtual Convention were unfilled—video editor, webmaster, publicity, IT.

Dave Socky stepped up and volunteered to do most of the editing work.

Other work was done by dedicated NSS members who didn't want the virtual convention to fail.

VIRTUAL CONVENTION CONTENT

Content will be of two types: prerecorded presentations and live, online events.

Prerecorded Presentations

Most content will be prerecorded and hosted on the NSS YouTube channel or in an embedded photo gallery.

- Salon entries
- Session presentations
- Award programs (usually held on Thursday night and right after the Friday night Banquet)
- Opening and closing ceremonies
- Others as needed
- All content is due 6 weeks in advance.
- All content must be accompanied by an abstract, and have the presenters provide a photo and a short bio.
- Upload them as unlisted so that the public doesn't have access to them just yet.
- All videos are double reviewed for acceptance.
- Use a spreadsheet to track reviews and processing.
- If the video editor(s) can't correct any errors, then there is time to send them back for a retake.
- Once videos are reviewed and accepted, then the material can be embedded into the convention website.

Be sure to prominently inform everyone of this else it will cause confusion

Live Events

Some live events can be hosted within a virtual meeting platform.

- Section meetings
- BOG and COG meetings
- Special live events (book signings and Gone Caving! card game, for example)
- Lightning Talks

The NSS has a Zoom account already and its abilities can be augmented for the virtual convention.

- The NSS's Zoom account does not allow for concurrent meetings.

Meetings and live events:

- Will be scheduled by virtual convention staff
- oWhen possible, schedule at least 30 minutes of buffer time between meetings for runovers
- Should be scheduled with time consideration for all US time zones. Target evenings for people coming home from work.

- All groups intending to host a live meeting are encouraged to host a practice meeting approximately 2 weeks before the actual meeting.
- Will be opened 15 minutes ahead of schedule by convention staff meeting hosts.
- Meeting coordinator should log in 10 minutes ahead of schedule
- Will have descriptions and links posted in the website schedule

2021 Summary:

An online program, with abstracts and a schedule, was not created for the virtual convention.

There was no schedule online, or email schedule communication sent to the membership.

There was a question on the Facebook page about the schedule, and Matt Bowers replied that an email was being crafted, but doesn't appear to have been sent out.

No information was published for the session chairs or meeting leaders as to how to get into their meetings.

The 2021 Virtual Convention staff was not screening presentation quality prior to going virtual. It was being done by the Convention Division chair Carol Tiderman and Meredith Weberg, the co-chair of the 2020 Convention.

Matt Bowers, 2021 Convention chair, was made aware that he needed a video screener and he assigned one person to do the job.

Dave Socky agreed to fix video errors, but he was not on staff either.

Adam Weaver, Dave Socky, Ales Sproul, and Carol Tiderman gathered the schedule and Zoom link information and distributed it via email blasts to the membership.

Pat Kambesis, Dave Socky, Carol Tiderman, and Meredith Weberg are to be commended for the amount of work they did to make the 2021 Virtual Convention happen.

Other 2021 Observations:

There was a lot of negativity and badmouthing the NSS on social media from people who were at the Western Region event held at the same time as the original dates for the 2021 onsite Convention.

There was no publicity for the 2021 Virtual Convention.

Since there was no video editor, many of the sessions that required video editing expertise or guidance were forced to go it alone.

Presentations at the Western Region event were supposed to be made available to the Virtual Convention. However, the day/time kept changing and only one was posted as a YouTube video.

CONVENTION STAFF MEMBERS

Caver Co-op – Russ Kennedy – uaim@yahoo.net

Development - Carol Tiderman

Grants – Buford Pruitt - bpruitt570@gmail.com

Historical Data – Jean DeVries – devriesj@aol.com

IT - Alex Sproul - alexanddru@gmail.com

Publications – Tom Rea - tomrea@ccrct.com

Registration – Margot Geisler -

margotgeisler@gmail.com Sessions – Bob Hoke –

bob@rhoke.net

PROGRESS:

Communicating with the confirmed groups.

Checking on their progress and passing along new information, filling requests for data, history and other materials and answering any questions.

Working with the group who hosted the 2020 & 2021 Virtual Conventions re migrating registrations & funds to 2022.

Assisted in posting the schedule and links for 2021 Virtual Convention

Working with the group who will be hosting the 2022 Convention in Custer SD June 13-17

Working with the group that will be hosting the 2023 Convention in Dailey WV

Soliciting hosts for future conventions.

Instituted a solution to the Hot Tub/Sauna issue.

Providing information to groups considering hosting a convention.

23 volunteer hours

PLANS

Attend convention committee planning meetings (any year's) whenever possible

Continue working with confirmed groups

Continue working with groups yet to be confirmed

Continue to solicit new host groups

PROBLEMS

Need host groups for 2024 and beyond

2022 NSS Convention, SD

Dan Austin (chair) hillscaver@gmail.com – 605-673-3390

Chris Pelczarski (co-chair)

Lydia Austin (promotions)

Adam Weaver (NSS Support, facilities)

Dean Faust (treasurer)

Colin Keeler (registration)

Pat Kambesis (programs)

Progress

Convention staff are moving forward with things at the Central States Fairgrounds, and significant progress has been made in identifying vendor and salon spaces, as well as sessions, registration, campground and other locations.

Registration went live mid-summer, and we already have over 75 registrants.

Several rollovers from 2021 and 2020 have been incorporated into the registration for 2022.

The website has been completed, social media is live, and new site info is added weekly.

Work on the guidebook is progressing, and has seen significant progress over the past month.

Convention staff have secured Rushmore Cave as the Howdy Party location, and transportation to and from the fairgrounds has been arranged via Stagecoach West, a local bus service.

A location for the Fellows Reception has been located at the Journey Museum, not far from the fairgrounds, and a deposit has been placed for this event.

A block of rooms at the nearby South Dakota school of mines dorms has been secured!

Plans

Details of field trips, caving trips, and catering. These are currently being worked on, and will continue to be locked in over the next month.

Problems

The largest issue right now is the status of our bank account. It seems like there's been quite a bit of confusion about what we can or can't do in relation to our account and which bank is appropriate for us to use. We need this to be a little more streamlined by NSS leadership so that we can proceed with deposits and other bank-related items without the headache of trying to decide if it's okay for us to write a check. It sounds like this is currently being worked on, and we're hopeful to have this resolved within the next few weeks.

Volunteer hours spent since the last report: 500

2023 NSS Convention

COMMITTEE

Rich Geisler, Co-chair

Meredith Hall Weberg, Co-Chair

Kim Fleischmann, Vice Chair in charge of Facilities

John Vitela, Vice Chair in charge of Campground

PROGRESS

We have contacted our "cave getter" to remind her to start or continue looking for open and available caves for our convention.

We are waiting to hear back regarding the possibility of opening closed caves on US National Forest land. Fingers crossed!

Beth Webb has expressed interest in being our treasurer and will be contacting our previous treasurer to open a dialog. She has been given our previous budget versions to review.

PLANS

We still plan to have the best Elkins convention ever!

We have two weeks in mind to have the convention, but it depends on the facility availability.

We should know as soon as the 2022/2023 school calendar has been set, hopefully in the next month or so. The two best possible weeks are: June 19–23 and June 26–30.

We will contact the original 2020 staff members to make sure they still want to continue in their roles for 2023.

Next spring, we hope to have an in-person meeting with the entire staff.

Over the next few months, we will likely resume Zoom meetings, at least monthly for the higher-level staff.

PROBLEMS

Because it's still early, we have not encountered any problems to speak of.

JSS

Tor Steinke JSS Chair

Progress

- JSS gear shipped from Carol Tideman, received by Tor Steinke, Yellow and Black Totes
- JSS Gear inventoried and organized
- List of aging and incomplete gear forwarded to Adam Weaver for possible gear donor
- Camp USA agreed to donate a variety of gear
- Camp USA donated gear received by Adam Weaver in SD for use during SD Convention and beyond

Plans

- Work in support of the 2022 SD Convention JSS Staff
- Get a list of gear donated by Camp USA from Adam to incorporate into JSS gear inventory
- Develop a plan for Sellig/Donating/Disposing of/Retiring obsolete JSS gear
- Augment/Enhance/Improve JSS best practices based on past successes and failures
- Continue to monitor COVID-19 childhood vaccination approval process and CDC guidelines

Problems

- No problems to report

NSS Salons Committee –

Blake N. Jordan, Co-Chair, David Socky, Co-Chair, Kim Fleischmann, Sec/Tres

Progress:

There was a discussion of placing an order for NSS Salon Honorable Mention ribbons to renew the supply for NSS Salon Awards.

A plaque will be used to present Best of Show Award.

A Cavers' Choice ribbon will be placed according to a collection at conventions that will be located in the NSS Art Gallery.

There is a medium supply of NSS Salon Merit Award ribbons on hand and will be replenished when close to depletion.

Kim Fleischmann has agreed to be on the NSS Salons Committee as Secretary/Treasurer.

I will be in charge of the Fine Arts Salon for the 2022 Convention in South Dakota as well as Graphic Arts and T-Shirt Salons.

Plans:

There are plans for transporting all the NSS Salon Committee assets to the 2022 Convention via my truck and trailer.

I will be consulting with the NSS Insurance representative about possibly providing an endorsement to my auto policy or having my insurance cover the NSS Salons Assets that I will be transporting.

I am planning to take over the Fine Arts Salon for this coming year and possibly ongoing or until I want to find a replacement chairman.

I am currently looking for chairmen for both the Graphic Arts and T-Shirt Salons.

I plan to reach out to the Artist community in Rapid City for local Fine Art Salon judges.

I plan to work with Kim Fleischmann at conventions in regards to the sale of art in the Fine Arts Salon Gallery.

Problems:

No issues to mention in this report.

**NSS Cave Management Division
Fall 2021 Division Report**

John Wilson, Cave Management Division Chief
Prepared by – Adam Weaver

Cave Management Division Chief - John M Wilson jmwgeo@gmail.com, 808-929-8256

Cave Management Committee Personnel

Chair or Officer	Committee or Function	Phone	Email	NSS Number
Julie Schenck-Brown	Landowner Relations	256-599-2211	LRNC@caves.org	30493RL (FE)
Julie Schenck-Brown	Nature Preserves & Acquisitions	240-676-3184	Preserves@caves.org	24333RE (FE) 30493RL (FE)
Jeff Karr	Cave Conservancies and Roundtable 2020	863-712-0375	drkarrsalsal@gmail.com	68408RE
Blake Jordan	Cave Management Research	505-362-0101	blakenjordan@gmail.com	43030RL (FE)
Maria Perez	Caver Village Study	304-594-8976	maria.perez@mail.wvu.edu	53594RE (FE)
John M Wilson	Contemporary Cave Use Study	808-929-8256	jmwgeo@gmail.com	13112RL (OS-FE)
Nicole Ridlen	Show Caves / CPN	424-255-0873	nicoleridlen@gmail.com	62234RE
John M Wilson	Division Chief	808-929-8256	jmwgeo@gmail.com	13112RL (OS-FE)
Adam Weaver	AVP	605-545-5550	Adam@caves.org	62352RL-FE

SC = Subcommittee

Cave Conservancy Committee Chairman Report for the November 2020 BOG Meeting

Cave Conservancy Committee Chair: Dr. Jeffrey C. Karr conservancies@caves.org.
Cellular: 1-863-712-0375.

Cave Conservancy Committee members: Appalachian Cave Conservancy, Butler Cave Conservation Society, Inc., Carroll Cave Conservancy, Cave Conservancy of Hawaii, Karst Conservancy of Illinois, The Indiana Karst Conservancy, The Michigan Karst Conservancy*, Mid-Atlantic Karst Conservancy, Missouri Caves and Karst Conservancy, Northeastern Cave Conservancy Inc., Pennsylvania Cave Conservancy, Rockcastle Cave Conservancy, Texas Cave Management Association, Western Cave Conservancy, Southeastern Cave Conservancy*, Cave Conservancy of the Virginias, West Virginia Cave Conservancy, Kentucky Karst Conservancy.

*Cave conservancies that are institutional members of the NSS

Progress:

No changes since summer 2021 report.

Caver Village Study

María Pérez and John M. Wilson

Progress

We continue to research Caver communities.

Plans

María Pérez and John Wilson will report on their ongoing study of caver villages, at the 2022 NSS convention.

Progress

Research continues

Problems

Pandemics

Contemporary Cave Use Study

John M. Wilson, acting chair jmwgeo@gmail.com

Progress

No Progress

Plans

This will be integrated into the new website design.

Problems - The use of paper cave registers is not practical.

Geospatial Committee

Adam Weaver, Chair adam@caves.org

Progress/Plans

ESRI non-profits status, and licensing has been acquired. The new NSS account has been established and set up. This committee will work over the next quarter to consolidate NSS geospatial data, and build data collection applications to aide in a number of NSS endeavors. It should be noted that this committee is **not** attempting to create a national cave database.

NCA Liaison for NSS and CPN Coordinator

Nicole Ridlen 812-945-5721, [502-552-2038](tel:502-552-2038) cell showcaves@caves.org

Progress/Plans

Continue to looks for ways to augment the CPN to include more showcaves, working on a proposal for early 2022. Developed some merchandise for fundraising efforts in support of this effort.

Also, have negotiated a reciprocal membership between the NCA and NSS moving forward.

NSS Landowner Relations Network Committee Report – October 2021

Prepared by: Julie Schenck-Brown, NSS 30493 RL, FE - Chair
LRNC@caves.org

OVERVIEW

The NSS Landowner Relations Network Committee (LRNC) has been established to work on private sector landowner relations at a national level and facilitate access to the resources of the NSS to promote education, exploration, conservation, and access to caves.

Through this mission, members of the LRNC endeavor to establish a relationship with cave landowners that see frequent visitors and reach out to landowners of closed or limited-access caves to bring goodwill from the NSS.

COMMITTEE MEMBERS

Tom Griffin, Vice-Chair of the Eastern Region, Zach Angstead, Vice-Chair of the Western Region, Chuck Porter, Peter Youngbear, Earl Suitor, Kim Fleischman, Nathan Farrar, Geary Schindel, Alexander Dobrowolski, Dave & Valerie Howell, Brad Long, Lesley Colton, Andy Zellner, Kristine Ebrey, Shane Stacy, Chuck Sutherland, Megan Atkinson, Samantha Tyler, Mathew Bull, John Wilson, Jean DeVries, Matt Pelsor, Mike Moser, Shawn Hogbin, Jon Zetterberg, Brandon Balkcom, Ben Tobin, Corey Ellis, Alan Hatcher, Hali Steinmann, Curt Harler, Shawn Williams, Miki Manning.

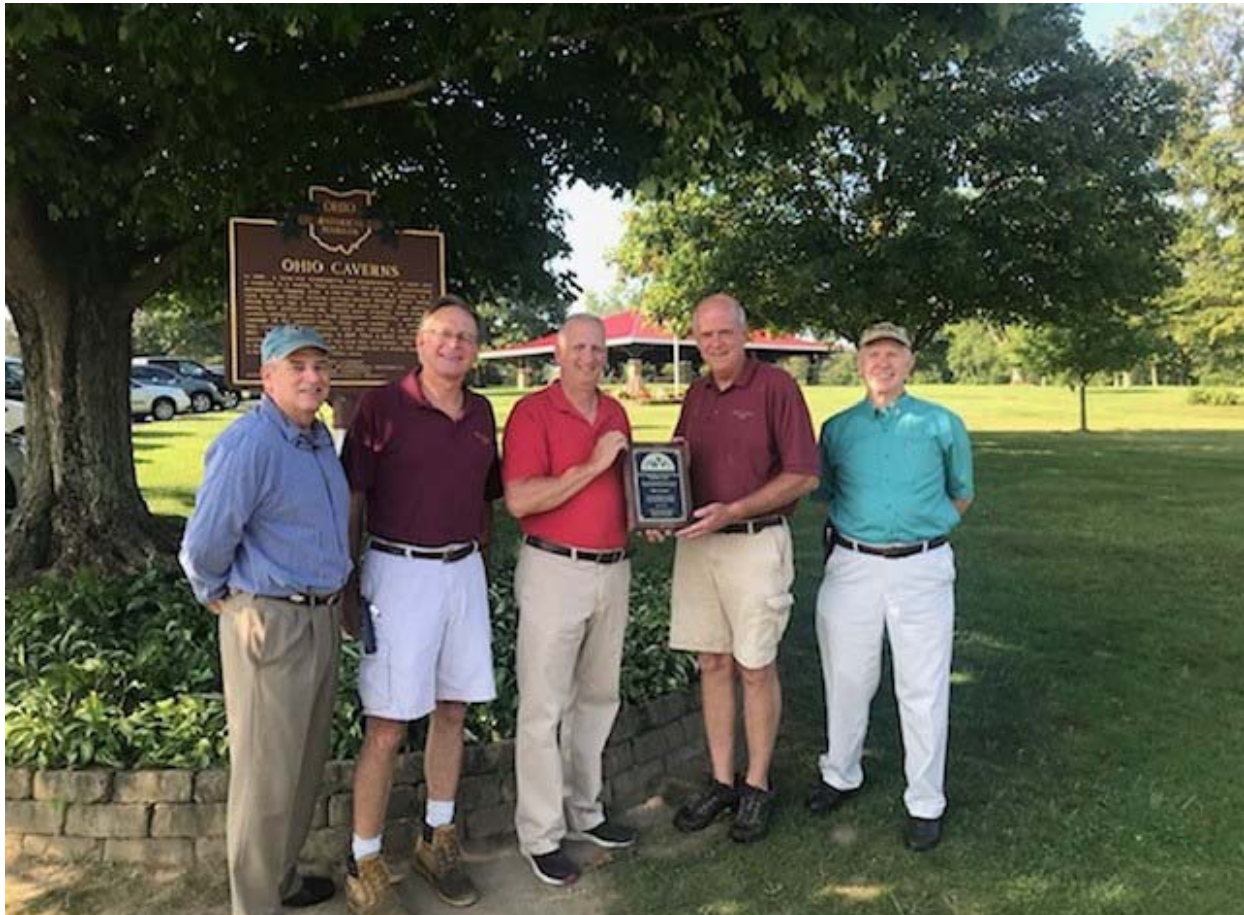
LANDOWNER RECOGNITION

Ohio Caverns – 2021 NSS Outstanding Landowner Recipient Nomination submitted by Curt Harler, Chad Waffan, Mike Hood

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. Ohio Caverns is a unique cave in terms of size, formations, and geology preserved by the landowners for guests and others alike. 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 caving in the state and beyond the borders of Ohio.

Ohio Caverns is a private, family-owned cave business. The owners go to great lengths to protect the delicate cavern environment so future generations can view the cavern, as it was first seen in 1897. They bring their generous and widespread educational outreach (with special tours for elementary, junior high and high school level students) to tourists on each cave trip. Because of their involvement with the cave-curious public, Ohio Caverns is a champion of cave education and awareness, and conservation in general, including the extension of their recent Solar Field installation with OGW Energy Resources.

The NSS is proud to recognize the continued support Ohio Caverns has given the cave community over the past 100 years as it truly reflects their support of cave conservation, access, exploration, and education. Thank you, Ohio Caverns, for being a landowner who has made a difference.



Mike Hood (center) and Gary Bush (right) present the 2021 NSS Outstanding Landowner Award to Ohio Caverns

COMMITTEE PROGRESS

- Since the inception of the NSS LRNC, a total of 69 awards have been presented in 16 states. Our goal is to recognize a landowner in every state.
- Duplicate copies of the NSS LRNC Certificate of Appreciation are still being printed in hopes they will be displayed at the NSS HQ when the next phase of construction is complete. The copies are being placed in the NSS Archives to ensure the Certificates are preserved.
- Management and landowner relations are going well with Sites & Cave Rat Cave, per Earl Suitor. Both caves are closed for Black Bear hunting season per the landowner's request and will be open January 1, 2022. Potential cavers there must contact Earl for permission.
- Belmont Cave, which is the longest cave in Warren County, VA may be back open in the future thanks to efforts led by Jeff Jahn and the Front Royal Grotto. Good relations have been established with the new landowners who are very anxious to get the entrance back open, which had been blasted shut. The landowners' kids are also very enthusiastic to get into the cave!
- Andy Zellner met with landowners in September in preparation for the TAG Fall Cave-In, which typically attracts over 1,000 cavers to the region. Andy also updated the closed cave list and cleared trails to Moses Tomb in Alabama, a popular cave visited frequently during the event.
- Members of the Huntsville Grotto assisted Lonnie Carr, 2019 NSS Outstanding Landowner recipient, with the repair of the suspension bridge at Hanson's Crossing in Blue Spring Cave, Tennessee.

- Miki Manning prepared and mailed 60+ invitations to landowners to welcome them as honored guests at the 43rd Annual TAG Fall Cave-In, hosted by the Dogwood City Grotto.



PROBLEMS

- Nominations for the NSS Landowner Relations Certificate of Appreciation have dropped tremendously this year.
- There have been no nominations received for the 2022 NSS Outstanding Landowner Award, which has a deadline of November 15th.

PLANS

- Continue to solicit nominations for the NSS Landowner Relations Certificate of Appreciation and the 2022 NSS Outstanding Landowner Award via emails, letters, and personal contact.
 - Upload a list of Landowner Relations award recipients to the new NSS website.
 - Work with the NSS Membership Committee to develop the process and procedure for implementing the new landowner membership category.
-

NSS Preserves Committee Report

Fall 2021

Prepared by Julie Schenck-Brown, NSS 30493 RL, FE – Committee Chair
Preserves@caves.org

Overview

The NSS currently owns or manages 24 Nature Preserves throughout the United States. Each NSS Preserve is overseen by a team of NSS members who serve as the interface between the public and the NSS as they provide oversight and maintenance, as well as manage access. The NSS Nature Preserves are a commitment to future generations and ensure cave conservation, access, education, and exploration.

Committee Members (Julie Schenck-Brown, Tom Griffin, Emily P. Davis, Jon Zetterberg)

- It is with a heavy heart that I mention Tom Griffin's decision to resign as the NSS Preserves Co-Chair. Tom has other commitments that are preventing him from investing time as a Committee Chair but will continue to serve on the NSS Preserves & Acquisitions Committee, as well as the NSS Landowner Relations Committee. Tom is not just a good friend, but an asset to the NSS, as his passion and commitment for landowner relations and cave conservation is an incredible model for others. Thank-you Tom for your service to our country and our organization, especially for staying on to help with acquisitions and landowner relations.
- Please join me in welcoming Emily P. Davis of Chattanooga, TN to the NSS Preserves Committee. Emily has an MBA in Environmental Management with a background in biology, land conservation, and forestry management, as well as experience with conservations easements, managing sustainability programs, and environmental regulations. She is currently serving as Chair of the Board for the Urban Lab and is a director at large (West TN) for the Tennessee Cave Survey. In addition, Emily has previously served as an officer for the Nashville Grotto, and is a member of the Chattanooga, Sewanee Mountain and Nashville Grottos. Emily will be shadowing me on email conversations and working on developing kiosks at a few of our preserves, as well as helping the preserve managers write Management Plans.
- Jon Zetterberg, who has a Masters in GIS and is a GISP provides geospatial support through GIS and LiDAR to the NSS Preserves Committee and has provided extra support behind the scenes on pending acquisitions.

Acquisitions

- Julie Schenck-Brown, Jay Clark, and Emily P. Davis met with a landowner who is obtaining a conservation easement and wants to establish a life estate for perpetual protection of her cave and karst lands. Emily is taking the lead on this project and will have a report prepared for the BOG to review in closed session who will then decide whether we continue to pursue this acquisition. In anticipation of a favorable outcome, Emily has already started work on the Management Plan following the proposed guidelines of the amendment to Appendix Z of the NSS BOG Manual. The potential acquisition includes 60 acres and will primarily be used for cave and karst related research per the landowner's request. This model follows other preserves which serve as valuable hibernacula for endangered species.

Cave Acquisition Grants

- No grant requests received this quarter.

Preserves Research & Science Subcommittee (Dr. Ben Tobin, Subcommittee Chair)

Members: Alicyn Gitlin, Riley Drake, Hali Steinmann

Progress:

- Developing a list of on-going research in NSS Preserves
- Developing a matrix of Preserve resources of interest/value and potential concerns to the conservation of preserve resources
- Established a preserve research permit and tracking system

Next steps:

- Update on-going research list
- Continue to develop matrix of resources of interests and conservation concerns
- Determine baseline data that can be collected at each preserve to facilitate future research
- Spread the word about the permit and tracking system to make researchers aware of the possibilities of conducting research on NSS preserves

Sustainability Subcommittee (Randy Hurst, Subcommittee Chair)

- Obtained an application for SilvaTerra's Natural Capital Exchange to apply at the John Guilday Nature Preserve. The application and contract are being reviewed by Jay Clark, NSS General Counsel, and will be signed by Adam Weaver, NSS AVP, pending Jay's recommendation.

New Preserve Managers

- Chris Hudson has joined the management team for the Thunderhole Preserve in Tennessee. Chris will be working with Megan Atkinson and has previous preserve management experience.
- Please welcome Doug Prior at the Warren Preserve in Florida who will be helping Dave Lizdas after stepping up to help with the gate replacement.
- We also welcome Adam Hughes to the Sim Sinks preserve team (Florida), working with Buford Pruitt, Jr. on the management and research of this critical biological habitat. Adam has been gradually taking over research duties from Kelly Jessop who has retired from cave diving after an amazing career.
- Terry Brown will also be part of the management team at the NSS Perkins Preserve, which is managed by the Appalachian Cave Conservancy. Terry works with Steve & Jeannie Bailey as well as Jason Lachinet to manage the conservation and access of our newest preserve.

NSS Rules for Cave Access

- The Rules for Cave Access continue to be reviewed by Jay Clark, NSS General Counsel.
- The goal is to have a uniform approach and ensure we are managing liability at all preserves, while meeting insurance requirements.

NSS Preserves Reports

- The preserve managers have been doing an excellent job with submitting detailed reports and regular updates through email correspondence. To help alleviate the administrative burden on preserve managers and allow more time to focus on direct preserve management, individual reports will be submitted annually prior to the summer BOG meeting. However, quarterly reports will continue to be submitted to the NSS BOG from the NSS Preserves Committee.

NSS Permit System for Preserve Visitation

- A suggestion was made to “test drive” the permit system prior to it going live on the NSS website to allow us to work out any major issues.
- The permit system will not be an automatic system that simply rubber stamps approval of the permits. Instead, preserve managers will continue to have the personal contact and the discretion when reviewing and approving permits.

Research at NSS Preserves

- All research and science at NSS Preserves is being coordinated by the NSS Preserve & Science Subcommittee, chaired by Dr. Benjamin Tobin. The subcommittee works with the preserve managers to review and approve any research to ensure all NSS guidelines are followed and that the NSS receives credit for the research, as well as the results. Questions? Send an email PreserveScience@caves.org

NSS Board Acts

- It was suggested during the annual Preserves meeting that the ideal time to complete a Management Plan is when a property is acquired. In addition, some of the Management Plans do not follow the current Act.
- The proposed amendments to Appendix L – Cave & Karst Acquisition & Grant Policy and Appendix Z – Outline for Writing a Cave Management Plan are on the agenda for the Fall 2021 NSS BOG Meeting. Both amendments have been reviewed by Jay Clark, NSS General Counsel, as well as members of the NSS Preserves Committee and the NSS Preserves Managers.

Value of Volunteer Time

- Each year, Independent Sector gathers data and conducts research on volunteerism in the nonprofit sector. The results of that research provide nonprofits a way to calculate the value of volunteer time. Using their formula, the estimated national value of each volunteer hour is \$28.54/ an hour.
- The preserve managers are tracking their hours as it relates to preserve management, including any correspondence, physical improvements and maintenance, research, and any other method in which they serve in an official capacity as an NSS Preserve Manager. The total figures related to volunteer service at NSS Preserves will be presented in the annual report next summer.

PLANS

- Complete edits to Appendix Y – NSS Guidelines for Naming Caves.
- Develop a Board Act that defines Cave for Pay and how it relates to the use of NSS Preserves.
- Post the criteria for Cave Acquisition Grants to the NSS website.
- Upload material to the NSS Preserves cloud storage and set up access sharing for the preserve managers, preserves committee members, NSS AVP, and NSS General Counsel.
- Create a brochure for NSS Preserves.
- Develop a year end newsletter to send out to Preserve benefactors.
- Scan any property deeds, survey plats, and cave maps kept at the NSS HQ, then upload to Preserves cloud.

Preserve Managers Meeting

The annual NSS Preserves meeting, which is typically scheduled during the NSS Convention was overlooked this year in the scheduling, thus two Zoom meetings were held in August. The annual meeting included introductions by the preserve managers, an overview of the preserves, and a discussion of questions, problems, and concerns. NSS Preserve Managers present for the meetings are listed in parenthesis. The summary that follows is a brief overview based on notes taken by Julie, as well as additional reports submitted by preserve managers who were not able to attend the meetings.

General Obligations Laws

Emily Davis, NSS Preserve Manager, discussed General Obligations Laws, which offer protection in 40 states. Emily mentioned the laws have been tested in several states, including New York, and mentioned these laws offer protection when there is no charge for a recreational activity (as mentioned on the NSS Preserves signs being ordered) and no improvements for recreational use. An example is the Florida Sportsmen's Laws and the Virginia Cave Protection Act.

John Guilday Preserve, West Virginia (Report submitted by Earl Suitor)

- There was a fresh rockfall about 50 feet west of the kiosk. Cheryl and Earl Suitor, along with Mark Hodge, planned to remove the rocks in late October.
- Cheryl and Earl Suitor along with two members of Front Royal Grotto (Mike Armstrong and Charles Maurer) fixed the trail west of the kiosk which had erosion by placing cross logs (4" diameter) on the trail anchoring them in the ground with rebar and backfilling above the steps reinforced with rocks. (Photo).



Gage Preserve, New York (Emily Davis & Bob Simmons)

- Have raised ~\$36,000 for the cabin that is being replaced, as the current one is not safe for habitation.
- Volunteers have started demo of the interior contents of the cabin, including the rotten/moldy furniture. Planning to have the interior gutted by the end of the year to make progress, as the project has been delayed during the pandemic, but still on track.
- Discussed concerns about lumber costs and volunteer labor during COVID, especially the impact this has on the cabin project.
- Discussed the Management Plan and how to merge with the Rules for Cave Access. For example, mushroom hunting is allowed on the preserve and neighbors often enjoy hiking the preserve for recreational purposes.

Warren Preserve, Florida (Dave Lizdas)

- The preserve contains the longest dry cave in Florida, however it was noted that conditions become miserable in the back of the cave.
- Working to maintain a visible presence, so the preserve does not look like an abandoned lot.
- Discussed challenges related to security at the preserve, including protection of the cave and the new gate. Considering the use of security cameras, but not sure what model to obtain. Julie offered to follow-up with Val Hildreth-Werker, NSS Conservation Division Co-Chief, as she has experience with using security cameras to ensure cave conservation.
- Discussed the new gate installed by David Springhetti with assistance from John Scheltens and members of the Florida Speleological Society. Dave was grateful for the contact Julie had made with David Springhetti during the 2020 NSS BOG Meeting in South Dakota and reports the new gate has renewed interest from the local caving community.

Tytoona Preserve, Pennsylvania (Report submitted by Garret Czmor)

- A severe storm broke a very large oak tree off which is lying on the ground. It does not pose any threat nor need to be removed at this time.
- Removed two rotten wooden steps and replaced with 6-inch x 6-inch x 48-inch treated lumber along with six pieces of 30" rebar.





- Continued the usual general maintenance and usual garbage removal.

Wells Preserve, Kentucky (Bob Roth)

- Discussed improvements at the preserve, the survey project, and the installation of the weather station, which has been coordinated with the NSS Preserves Science & Research subcommittee. This research is an excellent example of citizen-based science that will help develop an understanding of the preserve, as well as generate data that can be used by others conducting cave-related research.
- Provided an overview of the preserve and the monthly work weekends hosted by the preserve team.

Great X Preserve, Wyoming (Bob Montgomery & Savannah Sawyer)

- Provided an overview of the preserve, including the closure during the winter months due to the heavy snow, as well as the annual projects being completed.
- Overall, a quiet season so far, but the re-survey project is ongoing and research projects continue this year.

New River Preserve, Virginia (Travis Coad)

- Described the preserve and setting, which has seen visitors from Virginia and North Carolina.
- Research trips are being scheduled with Wil Orndorf.
- The Conservation Chair of the VPI Grotto has offered to schedule a work weekend to work on the removal of invasives, including Tree of Heaven and vines.
- Management activities includes assessments of the property and replenishing the logbooks. Updates to the kiosk are also being planned.

Sims Sink Preserve, Florida (Buford Pruitt, Jr.)

- Discussed research conducted by Kelly Jessop as well as plans to have research continue with Karst Underwater Research (KUR).
- Considering a video for documentation purposes but have concerns of vandalism as the cave is the habitat of the Santa Fe Cave Crayfish (*Procambarus erythroptus*), which is considered a Threatened Species by the State of Florida and classified by the Florida Natural Areas Inventory as critically imperiled globally and in the State of Florida. Thus, introduction of other species, purposefully or accidentally, could wipe out this critical habitat.
- Additional correspondence received from Buford regarding Adam Hughes' plans to discuss with Ben Tobin the potential censusing of *Procambarus erythroptus* in the cave. The last such census was done by Kelly Jessop and Sean Denney in July 2017. Hughes wanted to do another census with Denney in the near future, but this is not likely to happen any time soon.
- An exciting opportunity also being discussed involves water quality sampling in Sims, Warrens, and possibly other NSS preserves. A \$300-400 expenditure was submitted with a detailed explanation and the preserve management team, as well as the preserves committee, believes this would be a very cost-effective way to acquire baseline data for Warrens and other preserves. Buford has a moderate background in water quality sampling and analysis.

Albert & Ethel Ogden Preserve, Tennessee (Megan Atkinson)

- Discussed the new gate installed by David Springhetti, which was installed with assistance from Nick Anderson and members of the Upper Cumberland Grotto.
- Steady number of trips but, overall, it has been quiet at the Preserve.
- Continuing to work with the adjacent property owner.
- Discussed the sale of Morgan's Pit at the end of June. After the meeting, Chuck Sutherland and Jon Zetterberg confirmed the pit is located on Albert Ogden's property, which is currently for sale. Albert sold Secret Cave to the NSS and always thought Morgan's Pit was on his neighbor's property. Julie is following up with Albert to discuss access.

Thunderhole Preserve, Tennessee (Megan Atkinson & Chris Hudson)

- No changes at the preserve. Good relations with the landowner and neighbors continue.
- Upper Cumberland Grotto is still planning to have a workday to remove trash from the pit. This project has been delayed during the pandemic.
- Chris Hudson of the Upper Cumberland Grotto is joining the preserve management team. Chris is a long-time TAG caver who has been active with landowner relations, surveying, and preserve management.

Dahm Spring Preserve, South Dakota (Adam Weaver)

- Provided an overview of the preserve, including the access, topography, and management.
- Discussed ongoing projects such as reinforcement of the gate at Dahm Springs Cave, since it was breached, research projects, and volunteer work.
- Excited to report that the preserve was featured in *National Geographic* this month.

- The Paha Sapa Grotto, which is active with the management of the preserve, is also hosting the 2022 NSS Convention next year, thus anticipate trips to caves located on the preserve.

Nunley Mountain Preserve, Tennessee (Julianne Ramsey, Hal Love, Ronnie Tidwell, Alea Moore)

- Attended both nights and provided an overview of the preserve, including the biological diversity, previous research in the cave, and the topography. Also discussed environmental concerns that could impact the preserve, such as the harvesting of rocks and subsequent erosion on adjacent properties, as well groundwater contamination from illegal dumping near source points.
- Working on right of ways with adjacent landowners, as two adjacent properties are crossed prior to arriving at the preserve.
- Questions about liability releases, and whether preserve managers need to sign were referred to Jay Clark, NSS General Counsel.
- Hal Love provided an overview of the cave data which he is entering into Compass to have a working data set to evaluate potential leads and continue the survey.
- Alea Moore will be starting a program that focuses on access to Nunley Mountain Cave by novices and young children.
- Ronnie Tidwell provided an overview of the ongoing preserve management tasks completed by Mike Moser, who is also part of the preserve management team, but not on the call.
- Requested NSS Preserve boundary signs, to be posted along the perimeter of the preserve.
- NMC Preserve report partial summer quarter 2021:
 - Our five-member management team provided 227 volunteer hours of service, which includes time in the first Zoom meeting on August 17 and continuing through September 28.
 - We are close to completion on the founding phase of the new Preserve.
 - Our insurance coverage will be effective by October 1st, plus we now have a finished release form that NSS cavers will sign as part of their permit process. We may be issuing the first permit around mid-October for an out-of-state caving family who often visit the area and have helped with volunteer maintenance around the property for many years past.
 - There is a feature article on the NMC Preserve being planned for the December issue of the *NSS News*, so permit requests might increase dramatically after that publication.
 - As it happens, there was a recent change of ownership with one of the tracts we currently cross for access into the Cove, but right-of-way negotiations continue.

Perkins Preserve, Virginia (Steve & Jeannie Bailey, Jason Lachinet)

- Attended both nights and provided an overview of the preserve, including previous ownership by John Wilson and his gift to the NSS membership. Also detailed the long-term support provided by the Flittermouse Grotto and the Appalachian Cave Conservancy (ACC).
 - Management authority has been granted to the ACC through a Memorandum of Understanding (MOU) and will continue with the great support of cavers who work to improve the land and the beautiful karst landscape.
 - Discussed John Wilson's plans to provide matching grants for the gate repair and improvements to the barn. Discussed the possibility of David Springhetti improving the existing cave gate, which has been broken into since the cave was re-gated.
-

The following is the final report of the Vertical Training Commission Transition Committee (VTCTC), compiled by Dr. Hazel Barton. We are hopeful that the charter created by this committee will be accepted by the NSS Board of Governors at the December 4th board meeting and this committee will be dissolved. Within this very comprehensive report are the following items:

- The submissions of input to this process
- The webforms used to obtain public input
- Links to presentations on the VTC and supporting documentation
- The Charter as developed and submitted by this committee
- A map of the proposed regions
- The DRAFT By-laws that will be supplied to the new commission when seated for review, amendment, and eventual acceptance.
- Minutes of the VTCTC

It is vital that when looking at the charter and all associated documentation leading to it, that all of this work was completed to get the VTC seated with the tools it needs for success. The charter as written will have changes, the regions will change, and certainly these bylaws will change, but the VTCTC did an excellent job at giving the new VTC a place to start. This will allow them to readily be able to start working and to make improvements as needed, when needed.

Thanks, Adam Weaver, AVP

NSS Vertical Training Transition Committee

Final Committee Report

November 9, 2021

During the August 24, 2021 special NSS Board of Governors (BOG) Meeting a motion was passed to create the Vertical Training Transition Committee to develop the draft charter for the formation of the Vertical Training Commission. Following the meeting, Adam Weaver asked Hazel Barton to Chair the transition committee, and in consultation with the NSS President, Geary Schindel, a committee was assembled of cavers with diverse backgrounds in education and vertical training. The NSS President and AVP remained as *ex officio* appointees. The transition committee membership roster is attached (Appendix A). The committee first met on September 17, 2021 and worked on developing a charter until November 2021. There were three formal meetings, but most of the work of the committee was carried out through input on a shared Google Doc.

In order to inform the NSS membership about the proposed VTC, an article was authored by Hazel, Adam and Geary for the NSS News (Appendix B), with a video posted on the NSS YouTube channel on the VTC and its goals (<https://www.youtube.com/watch?v=pTv8MiW49V4>). The NSS News article included a link where interested NSS members could sign up to be involved in the new organization (Appendix C), which has received over 100 applications to date. The posted video caused quite a bit of controversy, including a letter to the NSS News (Appendix D); however, there seemed to be overwhelming support for the establishment of the VTC.

The committee began with a draft charter provided by the *ad hoc* Education Committee, with a discussion of how a Charter could establish the VTC structure as envisioned in the documents provided by the *ad hoc* education committee. There was concern that if the Charter tried to encompass all the considerations for operation of the VTC, it would be too cumbersome. A decision was therefore made to develop a Charter and recommended Bylaws in unison, allowing the committee to move much of the minutia out of the Charter and into a Bylaws document. By having the Charter established by the NSS BOG, this document would be more fixed, while Bylaws that could be amended by the established VTC Board prior to adoption would provide a more dynamic document to meet the needs of this fledgling organization.

Other considerations that had to be resolved included: the relationship between the board and the education committee; the structure of the regions; how regional coordinators would be selected; and the terminology to be used in training. Throughout these discussions, the NCRC was used as a model organization, both in terms of what worked and what sometimes did not. It was felt that having the trainers in the organization play a role in selecting regional coordinators would reduce the insular nature of the organization. There was quite a lot of discussion on the terminology used for the people who train-the-trainers, and the committee went back and forth with several terms. Ultimately, a decision was made to use the most common terms within the published educational literature¹: 'Master-Trainer' and 'Trainer.'

¹Example journal articles where the terms 'Master-Trainer' and 'Trainer' are used in Train-the-Trainer education techniques. Nakamura *et al.* (2014) Developing a systematic evaluation approach for training programs within a train-the-trainer model for youth cognitive behavior therapy. *Behaviour Research and Therapy*. **1**:10-9. Tobias *et al.* (2012) Building blocks for peer success: lessons learned from a train-the-trainer program. *AIDS patient care and STDs*. **26**:53-9. Servey *et al.*, (2020) The Ripple Effect: A Train-the-Trainer Model to Exponentially Increase Organizational Faculty Development. *MedEdPublish*. **5**:9. Kuo *et al.* (2021) Advancing a cascading train-the-trainer model of frontline HIV service providers in South Africa: protocol of an implementation trial. *Addiction Science and Clinical Practice*. **16**:1-5. Taylor *et al.* (2021). Examining the Feasibility of Partnering with Cooperative Extension to Advance Statewide Physical Education Policies in Oregon. *Journal of Human Sciences and Extension*. **9**:135-45.

A draft charter was completed by the committee on October 22 and public comments were solicited from the NSS membership, including a website that included the video on the VTC. The website included a submission form for comments (Appendix E):

<https://learnmore.caves.org/index.php/nss-vertical-training-commission/>

On October 28, there was also a town hall-style meeting to discuss the proposed structure of the VTC charter, which was attended by over 80 NSS members. A video of the town meeting was posted on the NSS YouTube channel: <https://www.youtube.com/watch?v=7iYO2PJaDGQ&t=1s>

During a two-week public comment period the committee received 24 comments on the VTC, most of which were supportive of the planned organization and included some useful comments related to language and structure within the proposed VTC charter (Appendix C). The committee took these comments and integrated them into a final charter, including better clarifying the role and structure of a Board in overseeing the commission and the relationship between the Board and the Curriculum Committee. There were some questions regarding the large administrative powers of the NSS AVP and the impact that a *bad actor* in this role could have on the VTC; however, the NSS Bylaws already give these powers to the AVP, and the committee felt that clarifying these powers for the NSS was appropriate. In the potential case of a *bad actor* as NSS AVP, the NSS BOG oversees this position and could use its power to censor or reverse the decisions of an AVP that negatively affected the goals and function of the VTC.

A final Charter for the VTC, along with regional map, was approved with a unanimous vote of the for submission to the NSS BOG on November 7, 2021. A draft Bylaws for consideration by the VTC Board for adoption at their first meeting was also approved. Both these documents are provided along with this report.

Respectfully submitted:

Hazel Barton (Chair Transition Committee, Chair NSS Safety and Techniques Committee)

Committee members:

Reilly Blackwell
Gary Bush
Eddy Cartaya
Geary Schindel
Devra Heyer
Jesse Houser
Ron Miller
Marty Reames
Jessica Van Ord
Kurt Waldron
Adam Weaver
Tim White

Appendix A TRANSITION COMMITTEE MEMBERSHIP

Hazel Barton (Chair) – Over 30 years of caving experience, including many international expeditions. More than 20 years in education, including several courses in teaching techniques. Hazel is currently the Education Coordinator for the NSS Vertical Section and Chair of the NSS Safety and Techniques Committee.

Reilly Blackwell - Began caving in 2016 with the VPI cave club and has been an active teacher in its training program. She has worked for the NSS as an intern, has a SPRAT level one certification and has participated in caving expeditions all over the US and Mexico.

Wm. Gary Bush - Caving for 45 years with the Greater Cincinnati, Central Ohio, and Florida Speleological Society and 40-year member of the Vertical Section, including past Chair. Six years as NSS Director. VS Instructor for the Vertical Techniques Workshop and the Reblay Course. Editor of the initial (1995) VS Basic Vertical Training Course

Eddy Cartaya - Caving internationally since 1987. Has been teaching cave rescue since 1994 and developed the NCRC certification program launched in 2018. Eddy is a national coordinator for the NPS technical rescue academy, the NCRC delegate for international programs, a board member & Rope level 3 certified tech for the International Technical Rescue Association.

Devra Heyer - Has been an educator for over 12 years, and the NSS Education Division Chief for two years. Devra started caving in Texas and has participated in expeditions in China, Malaysia, Mexico, Kentucky and New Mexico.

Jesse Houser - Involved in caving projects and expeditions in the US, Canada, and Mexico for the past ten years. Active member of the Chattanooga-Hamilton County Rescue Service Cave/Cliff/Technical and SAR teams. Four years of professional rope access experience, including as a SPRAT Level III supervisor.

Ron Miller – Vertical caver for 38 years and 13 years of professional experience as an instructor and consultant in vertical rope techniques, technical rope rescue, and industrial rope access (currently certified as a SPRAT Level III Rope Access Technician). He has served as an active member of the Chattanooga-Hamilton County cave/cliff rescue team since 2007 (and as a director since 2020).

Marty Reames – Caving for 28 years, volunteering on numerous caving projects throughout Colorado and nearby states. Involved in planning several events for the NSS, including the 2011 NSS Convention, and has served as the Director of the Colorado Cave Rescue Network. She became an Instructor for NCRC in 2012, is currently the NCRC Scholarship Chair and NCRC Liaison.

Jessica Van Ord – Began caving in 2016 and has taken part in numerous NCRC trainings, including Level 1, Level 2 and SPAR, as well as the Technical 2 Hungarian course for rigging and rescue. Currently teaches regional SPAR, OCR and Level. Has taken place in at least one caving expedition each year, including Mt. St. Helen's Glacier Caves and Cheve, Mexico.

Kurt Waldron – Has been caving for over 20 years, with many years of vertical training and teaching. He has trained cavers from all of the grottos in the in the DC metro and was a co-founder of the vertical training performed at the annual spring VAR. He is an expedition caver in Germany Valley (West Virginia) and is active with the "Extreme Rappels" team since 2007.

Tim White - Active member of the vertical and cave rescue community for over 30 years, with a broad resume that covers both technical rope rescue and rope access. Currently works as a professional rope rescue and rope access trainer/manager working with adults in an educational environment.

Ex officio members

Geary Schindel – Has been caving for almost 50 years and is an active vertical caver and vertical skills instructor. Geary has written papers on vertical caving, co-edited the Nylon Highway, co-authored a chapter for the NCRC training manual, and has completed Levels I, II, III of NCRC and SPAR. He is currently the NSS President.

Adam Weaver – Has been an active caver and project caver for 13 years, particularly in Jewel, Wind, Lechuguilla and Fort Stanton caves, and led the trip that extended Jewel Cave beyond 200 miles. Has caved in a variety of states, including many vertical caves. Actively involved in the establishment of the Black Hills Cave and Nature Conservancy. He has served as Administrative Vice President of the NSS since 2020.

The NSS Vertical Training Commission

Hazel A. Barton, Adam Weaver, Geary Schindel

Over the past few years, NSS members have raised concerns over vertical safety in the US caving community, an issue that is often emphasized when the American Caving Accidents (ACA) is published. In April 2021, a questionnaire was conducted asking US cavers about their learning preferences. This questionnaire, which was completed by over 1,000 cavers, suggested there were real concerns about the quality and availability of vertical training in the US. To address all these issues, the NSS President Geary Schindel, along with Administrative Vice President, Adam Weaver, decided to create an *ad hoc* committee to examine how they could be addressed within the NSS. This *ad hoc* committee, consisting of 13 cavers with diverse backgrounds in vertical training, rigging, NCRC experience, with a variety of regional affiliations, spent three months considering whether the NSS should become formally involved in vertical training in the US, and if so, what that training structure should look like.

These considerations were informed by the personal and regional experiences of the committee members and informed by both the findings of the questionnaire and ACA. Using this information, the committee felt that the current structure of vertical training in the US is not sufficiently effective, with an apparent deficit in the quality and quantity of instruction, and with no clearly defined competencies or standards for education. The result has been a patchwork of training, with accident reports indicating that insufficient or inappropriate training may have contributed to numerous accidents and even fatalities over the past few years. A concern that was also raised by respondents in the questionnaire, which suggested that many people felt that some trainers lack the necessary skill to train others safely.

Nonetheless, there are examples of vertical training that works in the US, such as the VPI Cave Club, which has successfully trained safe vertical cavers for generations. There are other organizations within the NSS, such as the National Cave Rescue Commission (NCRC) and Cave Diving Section (CDS), which have carried out the training of advanced caving techniques safely for decades. The committee therefore felt that the NSS BOG should create a **Vertical Training Commission (VTC)** which would be a hybrid between the NCRC and grotto training – a *train-the-trainers* hybrid.

It was the recommendation of the *ad hoc* committee that the VTC is structured as a national commission within the NSS, tasked with overseeing vertical training of



Photo by Nikki Fox, Honorable Mention, 2021 NSS Photo Salon

interested cavers within the US. To do this, the VTC will define vertical competencies, create educational materials, and train interested cavers through grottos, regional and national events. The overarching goals of the VTC would be to:

- Identify the core competencies and critical thinking needed in vertical caving
- Generate educational materials that meet modern teaching standards with skills-based assessments, including problem solving scenarios

- Bring together the best teaching practices for vertical caving
- Create competent and active vertical trainers within the US
- Focus on creating an accessible program that is attainable and understandable to people of diverse knowledge sets and backgrounds, while maintaining minimal costs and bureaucratic processes
- Resist any efforts to develop vertical certifications as a mechanism to limit or restrict cave access in the US

The commission will be overseen by a Council of Regional Coordinators (CORC) that represent the following regions:

Northeastern (CT, ME, MA, NH, NJ, NY, RI, VT)

Eastern (VA, WV, PA, NC, MD, DE, DC)

Southeastern (AL, FL, GA, SC, TN, PR)

Central (IL, IN, IA, KY, MI, MN, MO, OH, WI)

South Central (AR, LA, KS, MS, OK, TX)

Rocky Mountain (CO, ID, MT, ND, SD, NE, NM, UT, WY)

Western and Pacific Northwest (AK, AZ, CA, NV, HI, OR, WA)

The CORC will help to identify and train instructors, and schedule regional and/or national training events. The CORC will also select an individual to serve as a national coordinator to oversee the organization and coordinate with the NSS. The VTC will also create a Curriculum Committee (CC), who will identify the core competencies for safe vertical caving and create the training program. These trainings will be geared to helping interested individuals obtain the appropriate and sufficient competencies, critical thinking, and problem-solving skills needed to be safe while using vertical

techniques and will focus on facilitating training at the grotto level. The curriculum is envisioned to have a number of levels that incrementally allow the transfer of skills necessary to become a safe caver, which can be taught using a structure that works well in the grotto setting.

The VTC represents an exciting change in the NSS structure, one which could benefit our caving community for generations, as has been the case for the NCRC. If you are interested in serving in any role, either as an instructor, member of the CORC or member of the CC, please visit <https://learnmore.caves.org/index.php/VTC/>. In order to succeed, we are looking for those volunteers that will help us build a vibrant, successful and meaningful training organization.



Future Convention Hosts Sought

Do you remember going to the NSS Convention? Those fun times, meeting in person around the country and seeing new and interesting caves?

Conventions may seem like a distant memory, but we are coming back strong with South Dakota in 2022 and West Virginia in 2023.

Following those two great events, every caver in the country is going to be excited for 2024...and we are searching for who will be the next to host. Hosting a convention showcases a caving community and the local karst. Did you know there has never been an NSS convention in Arkansas, Arizona, Georgia, Ohio, Utah, Hawaii, or Wisconsin? These are all states with great caves and great cavers. The last time we were invited to have an NSS Convention in Maryland was in 1059, Iowa 1974, Massachusetts 1979, Minnesota 1980, Wyoming 1984, Kentucky 1985, New York 1991, and Oregon 1993. These were great locations and folks had a wonderful time. If you have ever attended an NSS Convention and enjoyed the experience, please consider being a host and inviting 1000 of your friends!

For more information please contact Carol Tideman: ctideman@caves.org



West Virginia Caver

West Virginia Grottos

August 2021, Vol. 39, Number 4

Two trips to **Dry Cave** in April and May pushed the cave into the 100-longest caves in the United States at over 8.47 miles. Nick Socky and Eric Pelkey surveyed 670 feet in the far reaches of Dry Cave, mopping up several leads. The duo managed to navigate through breakdown rooms and formation-filled passages, closing several loops in the process. Meanwhile Dave Knox, Greg Springer and Emilie Hollingsworth worked near the entrance of Dry Cave traversing carefully through heavily decorated passages, while mapping nearly 900 feet.

Amy Skowronski, Hunter Campbell and Dave Knox returned to the recently discovered Dilation Domes of **Friars Hole** to aid-climb. Along the way the new passages were re-rigged and improved for ease of travel. Hunter topped out both domes, which are around 30 and 20 feet tall. Both domes have going passage atop them, but neither were pushed. While one is heading towards known cave, the other dome carries a lot of wind and is heading to blank space on the map.

Nikki Fox, Carl Amundson and Dave Socky traveled to the Sweetwater section of

The Great Savannah Cave System to continue downstream survey. The trio spent their time navigating crawls and passages above the river itself. 31 stations were set and 748 feet of passage was added to the survey books during the overnight camp.

Returning to **Coon Cave**, Mark Minton and crew continue to push leads in the cave. Focusing on a new area, Mark, Yvonne Droms and Dwight Livingston were able to gain access to a tight crawl that terminated at the end of a seemingly deep drop. Dropping rocks appears to indicate a significant chasm is below. However, access to the drop will be difficult due to the tightness of the lead-in crawl. The remainder of the trip was spent enlarging the crawl and improving lip conditions for a future descent.

Rocky Mountain Caving

Colorado Grottos of the NSS

March 2021, Vol. 39, Number 1

Doug Medville's love of soiling piping caves led him back to New Mexico several times where he and friends surveyed **Stairstep Canyon Cave**. Located very near the deepest and longest soiling piping cave in America, B&B Cave, Stairstep shares many of the same features. A steep-down-cutting cave, Stairstep is interspersed with

several open-air pits along its nearly 1,200 feet of passage. With a total vertical extent of 331 feet, Stairstep is only the second soil piping cave in the United States to surpass the 100-meter mark.

Participating in the 2020 Cerro Rabon expedition, Mike Frazier found himself exploring several virgin pits and pushing new leads in some of the more well-known caves of the area. Mike spent a good deal of his time cutting trails through the thick vegetation enabling access to sinkholes visible on Google Earth. The expedition saw a total of 21 new caves surveyed and the discovery of several connection points between **Hard Rock Cave** and **Kihaje Xontjoa**, which is now a 1,200-meter-deep system.

The Meramec Caver

Meramec Valley Grotto

August 2021, Vol. 52, Number 8

Several Meramec grotto members visited **Mammoth Cave** to participate in a Cave Research Foundation project weekend. Chad McCain and Isaac joined other CRF cavers to explore high leads around Cathedral Dome and in the Bransford section of the cave.

Appendix C

The NSS Vertical Training Commission (VTC) has received approval from the NSS Board of Governors. The transition committee is staffing up, and completed the proposed **VTC Charter**. Once chartered, the VTC will begin the process of creating nationwide programs to teach vertical caving techniques, with the goal of increasing safety and proficiency in US caving. For those who are selected, you will become the first set of leaders for this new and exciting program!

The VTC Charter **public comment period** is underway, if you are interested in providing thoughtful input to this process, it can be viewed on the **Charter Page**.

Application for a position with the NSS Vertical Training Commission

Name *	Email *
<input type="text" value="Name"/>	<input type="text" value="Email"/>

NSS # *	State of Residence	Phone *
<input type="text"/>	<input type="text"/>	<input type="text"/>

Position(s) Interested In Being Considered For:

- VTC Instructor - Responsible for training trainers and trainees
- Curriculum Committee - Responsible for developing and maintaining VTC educational materials
- Regional Coordinator - Serves on the Council of Regional Coordinators (CORC), organizes instructors and trainers in each region
- National Coordinator - Chair of the CORC and spokesperson for VTC

Please upload a resume that outlines your qualifications for this position. References are not required, but may be helpful when evaluating applications for senior positions. (max size 2MB: jpg,pdf,docx,doc accepted)

No file chosen

What would make you a great addition to the Vertical Training Commission?

Message

Send





[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>

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 through 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 through the questionnaire 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 are 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, "Shouldn'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 "dangerous" 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 newsprograms 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.

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.

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.

Sincerely,

Dr. Hazel A. Barton

NEWS & NOTES



With GSA Karst Division Secretary Dan Jones

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>

APPENDIX E

Comments from Comment Portal

1. Message: One aspect that doesn't seem to have been addressed is whether the existing Vertical section of the NSS will be involved at all, and/or whether it will be combined with the proposed VTC? And why have both?
-

2. Message: I really like the ideas herein. As a person who has led and regularly helps with our grotto's training, I would love curricula to ensure we're covering all the things that are important/to standardize between our own grotto's teachers. And I acknowledge that we are not as effective at teaching all styles of learning -- I would especially appreciate instruction on how to effectively teach from a pedagogical standpoint.

I'm a little hesitant that the AVP has so much power to shape the commission and tear it all down. It feels like too much power in the hands of one person, regardless of who that is.

3. Message: It's 2021. Why are we using the word "Master" in anything??? And can we please find another term. I don't have the greatest suggestions, but in the interest of being helpful, here's some: Lead Trainer, Expert Trainer, Trainer-Trainer.
-

4. Message: While practice and training are always good things, I'm not sure if this is the right approach. If someone trained by an NSS approved Trainer were injured or killed, would that open the NSS, the individual Trainer, or their Grotto to legal liability if they had been given some sort of certification by the NSS? I remember some sort of accreditation system for vertical being discussed 20 years ago on the old NSS message board, and the consensus I remember at the time was that making some sort of official vertical program might result in people feeling over-confident because someone gave them a card, or certificate of completion.

I tend to agree with this feeling, and think that the traditional method of informal mentor/student relationships within personal relationships works best, where and experienced person wouldn't take another person to a cave that they felt was inappropriate for their experience level.

5. Message: I have a background in LEAN/6 Sigma/Kaizen. The programs have a focus in process development and using a L6S approach would greatly benefit the NSS VTC effort. In L6S we use SMART goals (specific, measurable, achievable, relevant to your project, and have a time-bound estimate for completion).

The goals as listed in the NSS News were:

- Identify the core competencies and critical thinking needed in vertical caving
- Generate educational materials that meet modern teaching standards with skills-based assessments, including problem solving scenarios
- Bring together the best teaching practices for vertical caving
- Create competent and active vertical trainers within the US
- Focus on creating an accessible program that is attainable and understandable to people of diverse knowledge sets and backgrounds, while maintaining minimal costs and bureaucratic processes
- Resist any efforts to develop vertical certifications as a mechanism to limit or restrict cave access in the US

Some of these goals do not follow SMART goal principles. The last VTC goal for example isn't measurable. The third "goal" is redundant or fluff as it is essential a part of the second goal. The fourth goal implies some sort of de facto "certification" as there would be some record of attending that may be used a "credential". This makes the fourth goal conflict with the sixth goal. The fifth goal is worded

poorly in that it states "focus on..." rather than a definable, measurable outcome. Also, there are no time constraints on any of these goals. The "T" in SMART goals is for "Time Bound". In my opinion following a L6S approach and "cleaning up" the goals would resolve a lot of the confusion.

I would recommend and be happy to assist in forming a Kaizen team, doing a "5 Whys" exercise, identifying stakeholders, Subject Matter Experts (SMEs), etc. if using a L6S approach would be of interest to the NSS.

6. Message: The VTC charter as a standalone document seems fine to me. I don't see anything particularly controversial there from a governance perspective. As for success of the program (acceptance by rank and file members of the caving community), much is left to the bylaws and, more importantly, how the program is implemented.
-

7. Message: Suggest changing "utilize" to "use" to save electrons. And wouldn't it be sensible to have the same regions as NCRC as there will be overlap of domain-specific knowledge?
-

8. Message: This is a long overdue initiative. I think your idea of training the trainers is the best way forward. Just make sure that the people being selected as trainers are not self anointed experts or people who do not have the proclivity to be good trainers who will not color the training program with their own personal opinions that would undermine the initiative.

NSS might even consider having professional trainers that travel, maybe even a few regional trainers. Members could pay a fee to the NSS per person to conduct annual or more often depending on demand. I would easily pay to attend a professional formal vertical training. This might be provided as remote learning or a combination teams meeting classroom lecture series and hands on portions. This could generate revenue for the NSS and pay for the time spent developing these courses. I'm sure some folks would squeal about it but what in life can you go do that doesnt cost something.... Especially if it includes a measure of danger.

I've caved with folks of all levels of proficiency and only consider myself to be of intermediate vertical expertise. The people I typically cave with all agree that they prefer to cave with me because I tend to make people stop and do things the right way, or address something that looks dangerous rather than just dismiss things as we've done this 1000 times. Thankfully the vertical situations we are typically confronted with in Texas are typically simple short pitches requiring 1 or less rebelay and the usual accompanying hazards (rock fall, bad air, flying insects). I've rarely had to use more than a single 20m or 40m rope. However there are many trips to central america to participate on much more demanding and dangerous caves. Thinking one is an expert after years of caving simple pitches does not prepare one for multiple rebelay and long abseils.

This is why this initiative is so important. Thank you for starting the conversation.

9. Firstly - THANK YOU for all your volunteer efforts to the NSS and its membership. The need for standard training, access to said training and a coordinated system of trainers and credentials is definitely in my personal 'top 3' priorities for the NSS as a member. I grew up in TN/TAG with no knowledge of grottos - in 2009, I wanted to learn vertical and did not know of NCRC so went overseas to the UK to gain SRT training from credentialed (and thus trusted) instructors there. There was clarity on safety protocols, suggested equipment, etc. without as much 'regional/personal' preference of technique like we see here in the states. It was a great experience and I always wished we had a similar system in the U.S.

The research results presented by Dr. Barton and team around the level of expertise of our US caving community and perceived risks was eye-opening and a great prep for reviewing the commission/charter documentation. As far as the details of the structure of the VTC and verified trainers, generally I think its a super start and I do not have commentary on that portion. With time we will better understand how that part of the VTC should evolve over time based on NSS needs, caving popularity, etc. Very well laid out in the documentation provided, so will let others needle on the details of tenure, levels, etc.

What I was hoping to see more of, however, was clarity of our NSS objectives, vision and the 'end game' for caver training. Of course, the high level charge shared around standard curriculum, access to training and safer caving mentioned in the documentation is critical. But there is so much more to consider. Lots of the questions I have don't necessarily need to be answered now, but adding them here for future reference as I have talked with other members who also have some of the same questions. Questions follow below. I (we!) much appreciate your efforts, professionalism, and for giving us all the opportunity to formally comment on the VTC process. Looking forward to participating in many ways in the future with the leaders of this project! Thanks, Emily P. Davis NSS#62810

- 1) What do we envision as the future state of this system and its tie to the NSS vs other organizations? Maybe we wont know that yet - but are we trying to model systems already in place in Europe for instance (e.g. UK/BCA Local Cave and Mine Leader Assessment (LCMLA) Scheme)
- 2) Do we envision that cave conservancies or landowners could require achievement of a certain level of training or that a certain level of trainer credentials might be required to participate in certain projects or activities?
- 3) Would we encourage show caves and Cave Preservation Network Member organizations to require staff complete portions of the training curricula? What about guides working on public lands and in 'cave for pay' organizations?
- 4) Will it only be vertical or would this extend to climbing/bolting, cave diving, survey at some point? We think we need to be more explicit on what our goals - e.g. % of NSS membership trained, # new cavers trained, institution of trainer credentialing, encouraging credentialing for certain activities or organizations?
- 5) Will training be provided free of charge for NSS members?
- 6) How would the training be different than NCRC/SPAR/SPRAT? Know we still need to develop the curricula still, but what are the VTC's initial thoughts on this?

10. Message: I read over the proposal and while I am all for training, I did not quite understand how it would be executed as far as being pushed as a requirement or something people could take or leave.

I was trained by someone that would almost certainly be considered a "master" approximately 8 years ago. As of now, my skills are rusty and I would spend time brushing up on all my skills before going underground with a harness on for anything other than nuisance drops. I feel that most accidents happen due to people being unaware of their own skills - or lack thereof. This should be evaluated by the group leader or, possibly, just more emphasis put on people knowing exactly where they stand.

I have been a rock climber for longer than I have been a caver and I have more skill in this area. I can teach but I can still learn. These communities are very similar with the same problems. Anyone can go and buy the equipment. Not anyone can use it. The climbing community is very harsh on those that step out of bounds. When we see someone acting unsafe, we try to correct, offer guidance, and if the individual/group does not respond they are generally shunned - often publically. Full stop. We share in this information in our respective community groups. I feel it's safe to say half the posts are about safety. The climbing community is a bit older and more established. Additionally, we do not have the mentality to keep things in the dark - no pun.

While I think the vertical training idea is excellent as an add on for those who want or need it, I don't feel it should be incorporated as a necessity. Instead, I feel the community should open up more to talk about these things. Talk about accidents. Call out bad practices. Stop with the world of secrecy. Even

if you train people, unless that mentality is changed, there will still be accidents. Training is good but it is not the end of the learning process. Training can often give people an inflated sense of self. I take issue with a few climbing guides teaching various forms of lead over a weekend and people think they are pros. Or they take a one day class on anchors and run out like they know something. They don't. You will still need to put in hours under the guidance of a mentor. I digress. My main point is to start making accidents a public accounting. Not just a book issued every few years. They need to be out there all the time. That's training for everyone when we can see what happened. I belong to the "Crappy Caving" group and they do tend to show mishaps. It's supposed to be in fun but it truly is something we can learn from.

So while I definitely welcome classes for those who need them, I really think pushing for more open communication about accidents. Removing the shame of accidents. Pushing for more open communication would be the best thing to educate those that might have the equipment but not the knowledge. When people get on rope that have just enough knowledge to make them dangerous, they don't think anything will happen to them because they are not familiar with accidents. Bring the accidents to light. That might scare folks into actually getting the training.

11. Message: Where is the statistical data and the analysis of the problem? Take a look at the Nahl report on general aviation accidents and you will understand what I mean. To me it appears that this commission will create a bureaucratic monster and is not something the NSS needs.

I understand that the NSS training position has been for mentors to provide the guidance in vertical safety. There are excellent books on vertical technique which could enable someone without vertical experience to self train to be safe. I'm not recommending this, just making a statement. Why is this commission necessary? Is it vertical safety training? The NSS Safety and Techniques Committee in conjunction with the Vertical Section put together a pamphlet that outlines the skills necessary to be a safe vertical caver. The pamphlet should have a short checklist at the end identifying the skills.

I was in the first class of NSS-CDS instructors. Forrest Wilson and Sheck Exley ran that institute. The goal was to provide the training necessary for open water divers to safely cave dive. Over the years certification of instructors and divers is a requirement to enter commercial sites. Cave diving training is provided by a number of agencies now. One requirement that is constant with all is the applicants had to be an open water instructor first and they had to have liability insurance. Who is going to vet the instructor qualification of the trainers? (More bureaucracy) And because you have made mandatory instructor training a requirement, in my opinion the NSS and the instructors are going to incur a liability issue. This is a huge problem.

I am also an active FAA certified flight instructor with single and multi-engine land airplane, instrument airplane and single-engine sea qualifications. I instruct students at the private, commercial, multi-engine and flight instructor levels. I understand what you are trying to accomplish and firmly believe that the Vertical Training commission is not the appropriate approach.

I have volunteered at NSS conventions and at TAG to help mentor vertical caving. Am I an expert? Not by any means. But I have learned the skills necessary to do my best to avoid accidents. I have attended 3 NCRC workshops to improve my caving technique and if required help others in their time of need.

I urge the NSS to not go through with this plan and to remain with with mentor education it has always used. I encourage the the NSS to provide a recommended skills checklist for vertical training. It may already exist and I'm not aware of it. I live in FL and there is not much vertical work here. In which case the information should be available on the NSS website and through the NSS News.

12. Message: I'm curious what the rise in vertical accidents stated is based on. Is that a purely numeric statistic or a metric (accidents per 1,000 NSS members) ?

In any event this is a bureaucratic undertaking that will raise a lot of questions. Who is going to be "certified" as a trainer? By whom? How will you handle the liability that entails? What will they teach? Most grottos already have ad-hoc vertical training that is largely a function of the region they are in - TAG cavers rig differently than Texas cavers working in Mexico. There are dozens of rebelay courses set up in the Austin area alone; I'd venture that there are very few full-expedition rebelay courses anywhere else in the U.S. Do you plan to teach that? Teach rigging? What descender systems do you plan to teach? Ascension systems? If you are going to play that game you should start at the international level, not at the 11mm IRT mantra.... but then, that's what most of the country still uses. Further, what gear are you going to be recommending (again, back to the liability issue).

I don't have time for this kind of diversion, but I will offer the following: a) I've attached the gear list and required rebelay skills that have become the expedition standard of expected competence; and b) if you have a planned syllabus I'll be happy to review it. Another source of input you might find useful would be the Polish caver training program. They are much more rigorous (e.g. demonstrated lead climbing ability is a prerequisite). Marcin Gala could likely provide a good overview of their approach. He can be reached at: Marcin Gala <marcin@speleo.pl>

13. Message: I am interested in how this progresses and would like to stay informed as things happen. I have no suggestions for improvements to the charter. It looks good to me as it stands, as articulated by Hazel Barton in the accompanying video.

Unfortunately I cannot attend the Zoom conference on 28 October. It would be nice if a synopsis can be posted online somewhere.

14. Message: The NSS Vertical Section had a training document years ago, this may be a resource if it has not already been consulted.

15. Message: I am interested in becoming more involved

16. Message: Willing to participate as trainer and leader of the Anthros Costa Rica Grotto.

17. Message: I would encourage a minimalist approach. I think any requirements added should provide a demonstrable increase in safety. The challenge I see for vertical training is that many times it's cave specific. One learns what one needs to know for a specific cave. If there are specific requirements for a new cave, it's leader's responsibility to know that participant has appropriate skills for that cave. I fear that this could create cumbersome requirements that many members choose not to meet and end up leaving NSS and caving even less safely. I do appreciate your efforts and agree that we could be safer. At the same time I am struck by the dramatic difference in emphasis on safety in the caving community vs canyoneering community. I'll end with a prime tenant of medicine. "Do no harm." Thanks for your time.

18. Message: I would like to join as a trainer for the vertical work cavers do.....i have been an NSS member for many years.....i contributed the chapter on big wall rappels in Bruce Smith's book.....i started vertical caving during the golden years of cave exploration and was a proud member of those known as the neoprene marines and was lucky enough to participate in the discovery and exploration

of several of TAGs vertical wet suit caves during the 70's, 80's, and 90's.....i also was the first to climb El Capitan (2700 feet) and the first to descend and ascend Mt Thor (3500 feet) using SRT.

19. Message: I strongly agree with the statement that the VTC is should not be issuing or enforcing vertical certifications for access.

The document structure seems to restart roman numerals at "I" with "COMMISSION" but then skips "II" and "III" and continues to "IV CURRICULUM COMMITTEE".

I.A. talks about an "Office" but the language above lists officers. This is a bit confusion since the term "Office" does not appear to be defined.

I.C.i.1. want to "...maximize the training of interested cavers". This implies that the VTC should train every caver, vertical or not. Should this read "...increase the training of..."?

I.C.i.7 states that the National Coordinator, Secretary-Treasurer, Webmaster, and members of the Curriculum Committee are selected and confirmed by majority vote under the Commission heading. But the Commission includes National Coordinator, Secretary-Treasurer, Webmaster as voting members. How do votes count for National Coordinator, Secretary-Treasurer, and Webmaster? Perhaps who is actually voting is unclear.

I.C.iii is using a plurality of votes. Does this mean that a set of Trainers and Master-Trainers candidates are voted on all at once and top set are selected? Not quite sure how this works. Perhaps the details are coming in the by-laws?

I.D.i.4 states that the National Coordinator shall select a Secretary-Treasurer and Webmaster but I.C.i.7 states that the Regional Coordinators selects the Secretary-Treasurer and Webmaster.

IV.A.i refers to "the committee" at the end of the second sentence. Although the Curriculum Committee is the only formally listed committee, other committee may be created. To be clear about which committee, I would explicitly state the specific committee everywhere "committee" in the charter is unqualified. For example, "...Education Coordinator shall have a vote on the curriculum committee."

VI.D. states that the Education Coordinator may attend a Commission meeting with voting privileges. This appears to contradict I.A where it states that "...no other office shall have a vote...". This is a bit confusing. What is an office? Do others have a vote?

I'm happy to chat more if further details are needed. Please send an email. I plan to attend the town hall meeting.

20. Message: I will be interested in learning more, and getting officially certified. I do have have rapellig and belaying experience.

21. Message: Interesting idea.

Back when Donna Mrczowski (sp?) was safety chair, there was discussion of a vertical caving certification. Regular cavers hated the idea, of course, but the cave owning agencies loved it. So it went nowhere.

I have led and seen a lot of local SRT training sessions, and must comment -- those who learn from a book are better than nothing, but those who have the experience are better. For instance, those of us

who developed srt before the Brits and Aussies invoked Reblay SRT know that rebelayes are almost never necessary and are usually a negative.

Another aspect to consider is that of pit rigging. This in my experience is never included in vertical training, but is an essential part of vertical caving. Many experienced vertical cavers have never rigged a pit. So you might want to give some thought to that. And there are definitely right ways, and wrong ways.

Another aspect is that of self rescue -- improvising to get out of an srt situation gone bad. Locally there are cavers who developed what I think they call a small party rescue course (a sort of, self rescue), and charge big money for. I asked if I could just attend and was asked in reply, what would you do with what you learn from it. My reply, of course, was to pass it on to others and so I was refused. They were out to make money, not educate. But I did hear they werent even including one method that has been successfully used more than once. In my early srt classes I had participants improvise knots to do srt, for instance. Schreiber did San Agustin for a western hemisphere depth record, all on knots, all those years ago. If an ascender goes bad, you should know a knot to use as a substitute (and the prusik is the worst).

And in any srt, slow and smooth is always the safe way to go. V important. I once watched an experienced caver almost kill himself using a frog, by getting a bounce going. The rope was against a surface at one point and almost sawed itself apart.

22. Message: I feel like there is a resource that isn't mentioned here. In Austin, various people run semi-regular "ropes nights". That is where 90% of new cavers learn vertical, and practice it.

- 1) an objective should be to get the people who run Ropes Nights up to instructor level
- 2) over the years I've collected, form myself and others who run ropes nights, a document combining our teaching practices.

We have an informal network of such people.

23. Message: In the Term Limits, vacancies, and removals - the wording under the Removal clause that states removal for "... for any reason or no reason at all."

What is the rationale for the "no reason at all" part? That seems to set up a potential exclusionary method that would be at the whim of those in charge.

24. Message: First, I'd like to praise the NSS for moving forward with this. When I have caved in countries around the world, I have repeatedly found that those countries have formal vertical training programs in place, whereas in the US things have been very ad hoc.

Some specific comments:

(1) There seems to be ambiguity as to how the term "commission" is used in this document. In one context, it is the entire organization for training (section I). In another context, it seems to refer to just the top executives (section III). Perhaps a different term could be used for one of these uses to differentiate them.

(2) It seems odd to me that the Webmaster position is a top executive position. It seems to me that the best person for this job could well be someone who is very computer and Internet savvy, but perhaps not trained at a high level as a vertical caver. For example, the webmaster for the VTC might be the same person as the webmaster for the NSS website.

(3) I'm uncomfortable with the opening paragraph. It seems like this is perhaps an attempt an an

overview statement of the reason for the existence of the VTC (a mission statement), but to my mind it doesn't really accomplish that as well as it could. Also, I have no problem at all with requiring vertical training certification to gain access to certain caves or areas of caves or cave exploration projects; this is what is done widely around the world, as I understand it.

(4) This charter proposes that the AVP has veto power over much of the operation of the VTC. It seems that a boorish AVP could run roughshod over the activities of the VTC, creating serious conflicts. Would it make sense to move some of these powers to the level of the BOG?

(4) Some pedantic items:

-- Roman numerals identifying sections aren't numbered consecutively.

-- "The VTC shall comprise of NSS member..." reads awkwardly to me. I think better: "shall be comprised of" or "shall consist of"

Again, I'm excited that this is happening in the NSS!

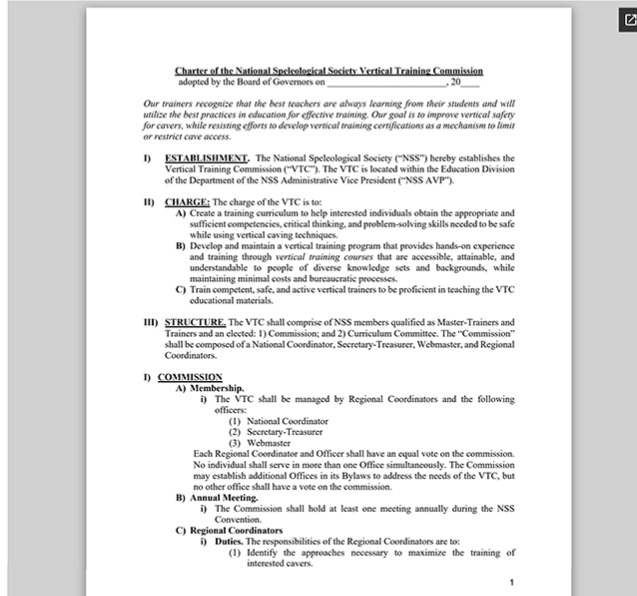
APPENDIX F

The NSS Vertical Training Commission (VTC) Public Comment Page

The NSS Vertical Training Commission (VTC) concept received the approval of the NSS Board of Governors (BOG) in August, with the creation of the VTC transition committee. This committee, building on previous efforts by the VTC ad hoc committee, has completed this proposed charter for this new commission. Following the charter's acceptance by the BOG, this commission will begin the process of creating nationwide programs to teach vertical caving techniques, with the goal of increasing safety and proficiency in US caving.

For those who are interested in becoming the first set of leaders for this new and exciting program please visit the [applications page](#).

Proposed Charter of the VTC



Public Comment Opportunities

The VTC Transition Committee is ready to accept input from NSS Members who have ideas for improvements of the charter. It should be noted that the bylaws of the VTC will be in alignment with this charter, and will be subordinate to the NSS Bylaws and board acts, but will not be finalized until the commission is seated. Please refrain from comments on the need for by-laws or similar respects of the charter that can not be finalized until the staffing step of this process has been completed. If you are interested in being more involved in the VTC please submit your comments in the form below, watch the town hall meeting above, this was held at 9pm ET, Thursday, October 28th 2021, or to become more involved [volunteer here](#).

Name	Email
<input type="text" value="Name"/>	<input type="text" value="Email"/>
Message	
<input style="height: 100px;" type="text" value="Message"/>	
<input type="button" value="Send"/>	

APPENDIX G

Meeting minutes (September 17, 2021)

Committee members in attendance:

Hazel Barton (Chair, NSS Safety and Techniques Committee)
Geary Schindel (NSS President) – *Ex officio*
Bert Ashbrook
Gary Bush
Devra Heyer
Angela Hooker
Jesse Houser
Ron Miller
Jessica Van Ord

Committee members absent with notice:

Adam Weaver (NSS AVP) – *Ex officio*
Reilly Blackwell
Eddy Cartaya
Marty Reames
Kurt Waldron
Tim White

Minutes:

The meeting began with a short introduction from each participant. Hazel then provided a short history of the *ad hoc* vertical committee, starting with a desire from the NCRC for the NSS to look at improving vertical training, leading to Geary and Adam's interest in exploring what vertical training could look like in the NSS, and Hazel's efforts with the Vertical Section (VS) on a questionnaire on vertical training preferences. This led to the creation of the *ad hoc* vertical education committee, which spent ~3 months looking at current vertical education in the US, the best practices for vertical training, and what a successful national program would look like. The recommendation of the *ad hoc* committee to create the Vertical Training Commission (VTC), provided in a detailed report. This recommendation led to an agenda item for the NSS BOG during a special meeting, held on August 24, 2021, to create the vertical training commission transition committee:

From the NSS agenda, **Item 12)** Weaver moves: *The Vertical Training Transition Committee is formed to develop the draft charter for the formation of the Vertical Training Commission. The committee will be located within the Education Division of the Administrative Vice President. Committee members will be selected by the Administrative Vice President.*

Note: This committee will develop a draft charter for the Vertical Training Commission for review and approval by the Board of Directors.

With this background Hazel then spent ~25 minutes going through the results of both the vertical education preferences questionnaire and describing the findings of the *ad hoc* committee, in terms of what the VTC should look like and its guiding principles. The goal is to develop a charter in time for a vote on creation of the VTC for the November 6th NSS BOG meeting. Hazel pointed

out that this is a self-imposed deadline, and if the committee is unable to come up with a recommendation by that date, that is OK. The most important thing is that the proposed charter does what it is intended to do. If it takes more time, that is OK, as it is better to take the time to do things well. Hazel then pointed out that there would be a reorganization of the Safety and Techniques Committee within the NSS to accommodate the new commission, reporting to the Education Director. Devra said that this would result in a liaison committee, rather than a specific Chair of Safety and Techniques.

Hazel stated that the draft of the charter she had already circulated was from the past committee, and that it was decided that the *ad hoc* committee really wasn't the group to work on the charter, which was the task of the Transition Committee. Therefore this committee wasn't bound by the draft charter; however, there was a lot of work that went into the recommendations for the commission structure and goals, and we should not be focusing time on trying to re-do these efforts, but that the role of this committee was to create a charter that achieves those goals.

Geary thanked the members of the *ad hoc* committee for their efforts and stated that it was time that the NSS looked into standardizing vertical training. Trying to develop national standards with an organization modeled on the NCRC seems to be a good direction to take.

Hazel felt that it was important to think about language in a charter and how it can incentivize some activities and disincentivize others. It is important to remember that there is a lot of ego rolled into vertical training and vertical expertise; however, the VTC charter should recognize skills in training and teaching and put students as the highest priority. That any teacher who can't learn from their students is a bad teacher. Therefore, if an instructor cannot recognize the value of learning from their students, then that's not the kind of instructor we're looking for. It is important to remember that charters can change, which allows them to improve. Therefore we need to incorporate a mechanism for change. Nonetheless, the training materials need to be fairly stable, with transparency for all changes, so that we aren't constantly changing the syllabus on instructors without cause. We also need to make sure that the VTC doesn't become something that prevents entry to caves.

Gary talked about writing the original Vertical Section training manual, which was based on the Red Cross methods, assuming that the instructors knew the appropriate skills to be instructors. This model includes an instructor manual to highlight the key points to teach during the class. The student materials are geared toward limiting the need for students to record notes, so that they could focus on the material being presented. Gary said it was critical that students cannot be taught vertical from a book, and that they need the experiential learning to become safe and capable at vertical caving. Gary agrees with the model of train-the-trainer as the right way to go, and that it is important that we can take the materials from everyone for vertical training to be successful. Hazel agreed and said that the new On Rope book would be great to include as a reference material, and that there must be some kind of skills-based sign-off for students who complete the course. The *ad hoc* commission had recommended that in order to complete the course, some in-cave training was required.

There was some discussion of how it was important that the charter not constrain the VTC, but rather gives them direction. In four years, can we look at the VTC and see that they've achieved their goals, or can we envision what the charter could incentivize in that time.

Ron suggested that we would be best served by the charter being a high-level document that is relatively short, and that this group assign the commission to create a series of bylaws to follow. Ron felt that one of the weaknesses of the NCRC model is that there are no bylaws, they can only

look to the charter. As a result, when conflict happens, there's not a good rulebook to follow. There was a discussion that a high-level charter would certainly make the efforts of the Transition Commission easier. The charter would create the guiding principles, which would be relatively hard to change, while the bylaws could be changed more easily by the commission itself. Gary said that the current structure doesn't allow the curriculum committee to get feedback from the students. This is really important, and not just immediately after the course, but feedback that they may have after 6 or so trips, and then they realize what was missing in their course. If there was a way of these students to give this feedback, then the curriculum committee can integrate this into the materials. The curriculum needs to be a living document that is adaptable to changes.

Hazel asked Geary if there was any conflict in having a charter and bylaws. Geary didn't feel that was an issue and was probably a good idea, as changing the charter would require the NSS BOG; however, if the bylaws were within the VTC it would allow the organization to be more responsive to changing conditions. There was a general consensus that this was a good idea, especially in helping to de-politicize the VTC.

Jesse said that having something built into the bylaws that required a review process would be valuable, especially to the curriculum committee. There also needed to be some kind of method of dealing with education materials being submitted to the VTC board and possibly the Council of Regional Coordinators (CORC) rejecting them. There needs to be clear direction on how a conflict between the curriculum committee and CORC this can be resolved.

Angela was happy to hear about the way the committee was talking about student dialog, specifically the feedback on curriculum and how we have conversations on how to use that feedback. Angela wants to think about the process and would probably have additional comments in the future. Devra thought that quality control in the classes was important, as was some kind of refresher for the instructors. There also need to be some mechanism in place for the instructors to stay current, or a continuing education requirement. Bert felt that the charter should be relatively high level, but should allow the commission to write and amend its own bylaws without the need to go back to the NSS BOG every time. Jessica felt that we were doing a lot of brain-storming, which will help highlight a lot of the details. She wanted to know where the VTC charter would end and the bylaws would begin, and this needs to be clear and we can look at the NCRC bylaws as an example. Jessica said it was also important that if the BOG didn't need to be consulted on bylaws changes, we need to make sure we had built in checks and balances, keep the politics minimal, and have clear mechanisms of conflict resolution.

Hazel said she will take the recommendations to try and create the higher-level charter, and then list some of the items that need to be resolved into this document. This will be created in Google Docs. One thing that is important is that the charter is available for public comment, which could be very valuable if other people identify potential pitfalls. Given that people with strong opinions tend to respond immediately, then a two week window open for responses should be enough. Then we would have enough time to reconcile any changes with the document before the BOG meeting. Having the bylaws be separate from the charter is a good approach, as the VTC will have the time to develop the bylaws with time and consideration.

Hazel said that she would send out the article to everyone that will appear in the NSS News, this has a link to a website to allow people to volunteer:

<https://learnmore.caves.org/index.php/VTC/>

The people who volunteer on this website will be considered for roles in the new VTC, as would any members of this committee who are interested. We haven't quite figured out a mechanism of how to select people, possibly through interviews, but it's critically important that finding the right people will help the organization grow. That's particularly important for a position such as the national coordinator.

There was some discussion about learning from the NCRC history, and creating a commission that is accountable to the caver base; the NCRC has tended to become very insular because they nominate and vote BORC members within the board. Having the VTC regional coordinators be nominated and elected by NSS members would be important, and given electronic voting, that is something that would be easy to do with the BOG elections. Other people felt that having the general membership vote on CORC members, given that the general membership doesn't have specific expertise and there is already so little participation, this could result in a popularity contest, rather than choosing the best people for the position. It was suggested that election by instructors would be preferable. Hazel agreed and perhaps having trainers and instructors having a vote is the way to go, and this was something that was pointed out by others as a problem in the current NCRC structure. It is definitely an issue that need to be resolved.

Geary thanked the group for their efforts, which are important in improving training and safety. Hazel said she will set up a google doc for everyone to contribute to, and we'll meet again in two weeks when everyone has had the opportunity to comment on it.

The meeting was then adjourned.

APPENDIX H

Meeting minutes (September 28, 2021)

Committee members in attendance:

Hazel Barton (Chair, NSS Safety and Techniques Committee)
Geary Schindel (NSS President) – *Ex officio*
Adam Weaver (NSS AVP) – *Ex officio*
Bert Ashbrook
Reilly Blackwell
Gary Bush
Eddy Cartaya
Devra Heyer
Jesse Houser
Ron Miller
Marty Reames
Jessica Van Ord
Kurt Waldron

Committee members absent with notice:

Angela Hooker
Tim White

Minutes:

Hazel thanked everyone for their input on the draft charter in Google Docs, which was really valuable – in particular the committee noted that in just creating a charter, it was hard to determine what to include and what to leave for the bylaws. To solve these issues, Bert was able to take the information in Google Docs and write a draft charter, along with a set of draft bylaws, so that it was possible to segregate ideas into either category as they are being written. Hazel had not had the time to get that new draft out to the committee members for this meeting, but was able to identify some of the un-resolved questions between this new document and the comments that had been made online, and had created a list of these questions for discussion. The discussion during this meeting could then be integrated into the new documents for online commentary/revision.

Hazel wanted to acknowledge the document (attached) that Jesse had shared with the committee on his thoughts on the VTC structure, and comment on it briefly. A lot of the questions are important and should be considered by the VTC, in particular the curriculum committee (CC), rather than the transition committee, as they pertained to education itself. Jesse also raised some points regarding the integration of the VTC with existing entities within the NSS. Adam had addressed some of these concerns via email, stating that the NSS received a letter of support from the VS, and that the NSS would be reorganizing the Safety and Techniques committee to accommodate the VTC in its structure. Hazel felt that one point Jesse raised that was important to discuss was the balance of control between the CORC and CC, and the committee should attempt to clarify the role, responsibilities, and control of each group. Nonetheless, the questions Jesse raised were important and it would be valuable to use them as a quality check as we moved forward. Jesse agreed keeping them in mind when considering the charter/bylaws and make sure that the final documents don't constrain the VTC.

Hazel then brought up the questions she felt needed to be resolved out of the Google Docs comments, which were as follows:

- *Inclusion of teaching quote in charter:* Hazel said that she wrote a quote into the charter (*A great teacher is someone who can learn from their students, who can learn with them, and learns for them* - Robert John Meehan), but that it was removed from the new draft. Hazel felt that we needed a statement out front on what we were trying to accomplish. Bert said he thought it was included in *'Establishment and Purposes.'* There was some discussion on what this content could be, and Jessica felt that a mission statement was important and perhaps as a group we could create one that encompassed what we were trying to do. Hazel said she had included the quote was to weed out the people who were interested in becoming trainers for reasons of ego, rather than a desire to really teach, but we could think about how to capture that idea for a mission statement.
- *Statement to resist efforts to create certifications that restrict or limit cave access:* Both Ron and Bert highlighted this as something that shouldn't be included. The reason it was originally included was that some vocal cavers felt we were creating another level of bureaucracy to restrict cave access in the US, and that there are enough reasons already to keep people out of caves. Ron pointed out that it wasn't up to the VTC to decide how landowners wanted to use the VTC. Reilly agreed that it would be unfortunately to see the VTC used as a barrier because not everyone would be able to access training, and it's important to increase participation. Instead the commission should think about how to limit barriers to access and where those barriers would come from – would they come from a grotto negotiating access or a landowner? It's unclear how we could enforce preventing the VTC from becoming a gatekeeping practice for cave access. Ron agreed that landowners struggle with safe access, and there have been accidents in vertical caves directly attributed to lack of training. Right now a cave conservancy has no way of determining the skills of people on its property and liability insurance can be difficult to get. Ron did agree that it is in our realm to reduce the risk of exclusion, such as not calling it a certification. A certificate of completion does not infer any explicit indication of skills, and the commission can certainly do outreach to anyone who tries to use the VTC training in an exclusionary. With careful language we can mitigate these risks of training becoming a barrier to cave access, but should be a positive statement.

Bert said the language he used was that there would be a qualified trainer, but there would be no qualifications, certifications or certificates for those trained. So there would be two levels: 1) trainer qualified to train other cavers; and 2) a regular caver who has been trained without certification. Bert felt that a certificate of completion was not needed, instead the National Coordinator would keep a record of who has been trained. The only qualification would be that someone is a trainer. Eddy said that the NCRC has gone with certification because they do a lot of agency certification, but he felt uncomfortable with certifying trainers, given the complexity of paperwork with re-certification, etc.

Hazel said that one of the things we're trying to accomplish is to have people be better prepared for NCRC training. Marty didn't think it would have much of an impact as long as people were able to complete the entry rope skills test for training. Devra wanted to clarify whether continuing training for instructors and quality control for the curriculum materials would belong in the charter or the bylaws. Bert said that the division is pretty simple; the charter is what the NSS BOG controls, the bylaws are what the commission controls. The initial set of bylaws will be set out by the BOG, and then the running of the organization itself will be done by the VTC using the establishing bylaws and the bylaws modified by the VTC itself. Geary stated that we would create the charter and provide

suggested bylaws for the VTC to begin with, although the bylaws could be immediately modified by the established CORC.

- *Term of office:* Bert suggested that members of the CORC could serve no more than 3 terms within 12 years, with each term being 3 years. The initial set up would be based on distribution across regions, with terms based on calendar years, 2022, 2025, 2028, etc. The big issue is how we pick our first 10 instructors, and once these people are established, how do we add additional trainers. Adam thought that perhaps the CORC members could pick the initial trainers, as they would be working together as a group by then. Hazel wondered whether the commissioners would be the initial instructors, or whether we just let the CORC figure out what they want to do. Adam clarified that any of the CORC who wants to be an instructor should automatically be an instructor. Geary wanted to know why we were limiting the number to 10. Hazel felt that there would be some initial logistical issues with establishing training guidelines, and in the beginning this would be easier with a small group due to better communication. Geary felt it would slow down the roll out of the program, and it could depend on whether you anointed someone as a trainer or instructor, and what the training needs were for a region. Thus, it may be that there are 5 or 6 really qualified people ready to go, and limiting this would be a problem for rolling out training. Geary felt that it would be better to let the CORC or regional coordinators decide how many instructors to approve. The committee felt that was reasonable, but Kurt cautioned that there are many people who think they are good instructors, but are not, and we still need to make sure that the instructors are appropriately vetted before teaching. Eddy wanted to know how the initial vetting would take place and Hazel said that a small group would look at the applications to the VTC and decide, although we would make it transparent as to how this would be evaluated. Devra said a better way to decide on the number of instructors would be to determine on how many trainings could take place in any given region.

Bert wanted to talk about terminology, suggesting one level of trainer qualified by the commission, without a separate level of instructor. Hazel said that there needed to be two levels due to the need to have instructors know how to teach the trainers, and these people need to be well versed in education principles. The instructors should already have a demonstrated portfolio of vertical experience, and simply be trained in how to teach. Bert felt that was too complicated. Hazel said that there is a lot of misunderstanding of what constitutes effective teaching, especially in terms of how people learn, as well as a poor understanding of what constitutes sexual harassment in order to mitigate it. Bert said that in the PASI, which he is familiar with, they teach people how to teach at every level, and that the proposed structure would be too much. He envisioned a system where everyone could be a trainer, but not everyone would be approved to teach the trainers (run a vertical training course to teach trainers). Hazel said that Bert's structure did have two levels, except that we were just calling them different names.

Marty said that there is a vetting process in the NCRC, but that it is being evaluated because it is not working effectively. This includes letter of recommendation from the BORC, including the necessary caving resume, along with selection by the education committee. In the NCRC, the education committee isn't the best way to do it, as the education committee don't necessarily have knowledge of many of the candidates. Marty said she can send details on what is working for inclusion in the bylaws. Ron suggests we do something like NCRC in terms of vetting, and that the initial CORC are solid instructors so they can identify and train the next round of instructors as quickly as possible. Adam felt that the VTC want to have lots of trainers, which will be a relatively fluid population, but the instructor pool would be smaller and relatively stable. Also we have to remember

that the charter is decided by the BOG, but the actual bylaws will be determined by the CORC, who can change them as they see fit.

- *Role of the AVP:* Hazel is concerned about the amount of power being given to the AVP, and is concerned about the potential for someone running for AVP to simply act out some kind of personal grudge against the VTC. Bert said that the NSS bylaws requires that the commissions are run by NSS VPs, and Adam confirmed that there is a board act that requires this, so it is a moot point.
- *Location of the curriculum committee:* Hazel was concerned that if the CC was only described in the bylaws, it could in theory be dissolved by the CORC. Bert felt that moving the CC to the charter would be an improvement, but this would require selection of the CC membership to be approved by the AVP. Currently the CORC is selected by the AVP, but the AVP can only approve nominees provided by the commission. Geary agreed that the CC should be in the charter to prevent dissolution, but it needs to be clear how the members of the CC are chosen. Currently the NCRC BORC chooses the members of the education committee, and the AVP has potential veto power over those decisions. Perhaps the way that these people could be chosen is similar to the VTC CORC, in that it is a democratic process with elections. Devra said it was good to have two separate organizations, with people that have two different skills sets and each group would have two value systems that together would support the goals of the VTC.

Bert said that the NSS bylaws state that the chairpersons of a permanent committee are appointed by the AVP, which would include the CC. Adam said that the AVP normally doesn't know what is going on and the AVP is almost always going to agree with the committee's recommendations. Bert said the VTC would prepare a list of nominees for the AVP and the AVP makes the selection. This could be done for the CC as well. Hazel suggested that the CORC could pick the membership of the CC, and that there could be a way of removing the politicizing of the CC we have the term limits of the CC be different from the CORC. Bert said that the way it could be done is by the limits on who could be included on the CC. Also, it is important that the CORC have a voice on the CC, and if the CORC is the chair of that committee, they will report back to the CORC. Hazel felt that having a commissioner is important, but was not sure on whether they should chair. But perhaps this is something that could be examined by looking at the charter.

Ron wanted to go back to the idea of a bad actor being the AVP, and whether there was a mechanism where the BOG could override the decisions of the AVP. Adam said that this mechanism is already in place.

- *Should members of the CC be active trainers:* There were some feeling that this needed to be broad, especially if we needed to recruit the best people; however, Hazel felt it would be difficult to develop the materials if you aren't actively teaching. It is also important that we create a mechanism of getting some kind of evaluation of the courses back to the CC to integrate into the developed materials. Hazel's question was whether in addition to being responsive to this feedback, would they also need to be trainers. Jesse said that the members of the CC need to decide what techniques to teach, so it is important that they have a good understanding of the methods being taught as well. Kurt agreed felt that you would need to know the materials really well in order to develop the materials effectively. Eddy agreed that we need trainers be part of the CC, but was concerned on how the selection was going to be made. Devra said that developing curriculum requires people to be observing instruction was important for developing the right materials, especially in

terms of establishing best practices. Gary said it could be important to have spots on the CC that could provide important insights into curriculum, but might not be trainers.

Geary wanted to bring up the idea of creating a timeline for CORC to implement the recommendations of the committees. For example, what's a reasonable timeframe for materials, when would we get the trainers out and teaching in the grottos? There have been some notable accidents and it is important that we get things moving soon, although we should ensure we maintain quality of instruction. Geary said it would be nice to see some goals for the CORC to accomplish along a timeline. Adam said it would be good to plan to do something at the next Convention, either in conjunction with the VS or independently. It should be something that could create a splash at Convention and get the word out.

Adam said that there is an article coming out in the NSS News at the beginning of October about the establishment of the VTC, including a website for people to apply to be part of the VTC. Geary will also do social media posts about it. Geary said the NSS Convention would be a wonderful way to roll out the VTC and the CORC will be established. It would be good to present training and possibly have a training event.

Bert wanted to make sure that the charter included information that would make the VTC financially self-sufficient. Hazel said that we need to make sure it is integrated with the NSS so that it is included in the NSS insurance policy to make sure people are paying. Bert pointed out that there would be more than this, such as rental fees, campgrounds, etc. Hazel said that she just wanted to make sure that it is locked in by rule that insurance costs are included. It would also be nice to have some kind of income that could be used to cover scholarships for people to attend that couldn't otherwise attend. Adam added that the Secretary/Treasurer for the VTC could work directly for the NSS Secretary/Treasurer, to make sure things integrate well. Hazel said that we do have some language that can go into the charter.

In rounding up comments, Eddy would like to see how selections are going to be made for people. Jessica wanted to make sure there was a way of removing people, should they not be performing. This is especially important in the CC, where there will be a need for a lot of output generation, so it is important that everyone involved is producing materials. Gary wanted to make sure that the CORC has the appropriate checks and balances so that the CC is not overrun, and that no one person has the ability to sabotage the VTC itself. Marty maybe had some details to consider, particularly in regard to vetting. She is also concerned that an instructor needs to train at least once every year to remain current; however, life happens and perhaps we need to be a bit more lenient in deciding on what these limits. Hazel said a timeline is great, and it would be good to have at least one training at the Convention.

APPENDIX I
Meeting minutes (November 2, 2021)

Committee members in attendance:

Hazel Barton (Chair, NSS Safety and Techniques Committee)
Adam Weaver (NSS AVP) – *Ex officio*
Reilly Blackwell
Gary Bush
Eddy Cartaya
Jesse Houser
Ron Miller
Jessica Van Ord

Committee members absent with notice:

Geary Schindel (NSS President) – *Ex officio*
Devra Heyer
Marty Reames
Kurt Waldron
Tim White

Minutes:

On October 22, the VTC comment portal open for NSS members. This portal included a short video that described the structure of the proposed VTC and provided a means of providing feedback on the proposed charter:

<https://learnmore.caves.org/index.php/nss-vertical-training-commission/>

Twenty-four comments were received, which were circulated with the VTC in advance of the meeting (**Appendix E**). The committee met for ~45 minutes to discuss the comments received and address them to reach a consensus on the final document. The five outstanding questions were:

- Whether the governing commission should be re-named ‘Board’
- The position of the Education Coordinator was a member of the Board
- If the Webmaster was an executive position
- The term ‘Master-Trainer’ and whether this was culturally sensitive
- The terminology of *shall* versus *will*

The committee felt that there could be some misunderstanding of a ‘Commission’ running the Vertical Training Commission. Several suggestions were made to clarify, including ‘Governing Board’ and ‘Council.’ There was no specific strength to either option, and the consensus was to go with *Governing Board*.

As to the Education Coordinator (EC), the committee felt that it made a lot of sense for the EC (who would be helping to develop the training materials) to be an active participant in governing the VTC. The decision was therefore made to make this position an officer within the VTC Board.

Several committee members felt that the Webmaster's role was critically important, but that much of the information would be provided to them for the Website, rather than them taking an active role in material generation. In addition, if the VTC wanted an active and competent Webmaster, having this person also be a Trainer/Master-Trainer would unduly restrict the number of possible candidates, and indeed would rule out the possibility of hiring a contractor for the work. Nonetheless, the committee felt the Webmaster should have voting power, akin to a Trainer/Master-Trainer. These voting privileges would allow them to vote for the Regional Coordinator for the area in which they live.

In regard to the Master-Trainer terminology, one submission to the VTC comment portal had objected to the terminology due to its connotations with slavery. A member of the committee looked up the etymology of the word 'master,' which is derived from the Medieval word for '*acquire knowledge, overcome difficulties, and learn in order to apply.*'

Further investigator determined that master was originally used to describe a '*chief head, director or teacher*' (as in the Early French '*maegester*'). Since the 12th century the term meant '*man eminently or perfectly skilled in something.*' In this sense the word was used to describe a '*craftsman who is... qualified to teach apprentices and carry on a trade on his own account.*' In the 14th century, the term included '*one who employs another or others in his service*' or '*owner of a living creature*' such as an animal. In terms of slavery, the term required being paired with the word 'slave' in the legal language of Colonial American. The term has also been used in education (authority to teach), head of a household (master of the home), respect for rank (master), nautical language (ship's master), in locks (master key), chess (grand master), property (master bedroom), and artistry (old master). Given that the term only being directly related to the oppression and subjugation of people against their will when used directly with the term 'slave,' it was felt that the overwhelming use of the word 'Master' as an educational term was appropriate in this context. The women on the committee were asked on their opinion and they felt that the term remained gender-neutral as the designation of '*Master-Trainer*' is used as demonstration of acquired knowledge and expertise.

Finally, there was some discussion of whether the term 'will' should be used instead of 'shall.' The decision was made to follow the NSS style-guide for NSS BOG acts. This terminology suggested that the word '*mus*' should be used instead of '*shall.*' Hazel took notes on the suggested changes by the committee and incorporated them into a final VTC Charter, which was circulated to the Transition Committee. A vote was then taken to approve (Yes) or not-approve (No) this final draft. The committee voted unanimously in favor of this final VTC Charter:

Hazel Barton - Yes
Reilly Blackwell - Yes
Gary Bush - Yes
Eddy Cartaya - Yes
Devra Heyer - Yes
Jesse Houser - Yes
Ron Miller - Yes
Marty Reames - Yes
Geary Schindel - Yes
Jessica Van Ord - Yes
Kurt Waldron - Yes
Adam Weaver - Yes
Tim White – Yes

Charter of the National Speleological Society Vertical Training Commission

adopted by the Board of Governors on _____, 20____

Our trainers recognize that the best teachers are always learning from their students and will use the best practices in education for effective training. Our goal is to improve vertical safety for cavers, while resisting efforts to develop vertical training certifications as a mechanism to limit or restrict cave access.

I) ESTABLISHMENT. The National Speleological Society (“NSS”) hereby establishes the Vertical Training Commission (“VTC or Commission”). The VTC is located within the Education Division of the Department of the NSS Administrative Vice President (“NSS AVP”).

II) CHARGE: The charge of the VTC is to:

A) Create a training curriculum to help interested individuals obtain the appropriate and sufficient competencies, critical thinking, and problem-solving skills needed to be safe while using vertical caving techniques.

B) Develop and maintain a vertical training program that provides hands-on experience and training through vertical training courses (“Courses”) that are accessible, attainable, and understandable to people of diverse knowledge sets and backgrounds, while maintaining minimal costs and bureaucratic processes.

C) Train competent, safe, and active vertical trainers to be proficient in teaching the VTC educational materials.

III) STRUCTURE. The VTC will be composed of a National Coordinator, a Secretary-Treasurer, Education Coordinator, Regional Coordinators, Master-Trainers and Trainers. A Governing Board (“Board”) will be responsible for managing the overall affairs of the organization, and will coordinate and oversee training operations, including qualification of Master-Trainers and Trainers. The Commission will initially have one standing committee, the Curriculum Committee, which will be responsible for developing and maintaining educational materials for use in VTC vertical training courses.

IV) GOVERNING BOARD

A) Membership.

i) The VTC will be managed by a Board of Regional Coordinators and the following officers:

(1) National Coordinator

(2) Secretary-Treasurer

(3) Education Coordinator

Each Regional Coordinator and Officer will have an equal vote on the Board. No individual will serve in more than one officer position simultaneously.

B) Annual Meeting.

i) The Board must hold at least one meeting annually during the NSS Convention.

C) Regional Coordinators

i) Duties. The responsibilities of the Regional Coordinators are to:

- (1) Identify the approaches necessary to maximize opportunities for the training of interested cavers.
- (2) By a two-thirds vote of the full current membership of the Board, approve materials and curricula developed by the Curriculum Committee.
- (3) Determine the criteria for the qualification of Master-Trainers; conduct Courses to train Master-Trainers using materials and curricula developed by the Curriculum Committee; maintain a record of current Master-Trainers.
- (4) Determine the criteria for the qualification of Trainers and ensure material and curricula developed by the Curriculum Committee is available for this qualification; maintain a list of current Trainers.
- (5) Conduct regional and/or national vertical training Courses as needed for Trainees using curricula developed by the Curriculum Committee.
- (6) Advise the Curriculum Committee regarding the development of materials and curricula.
- (7) Nominate individuals, confirmed by a majority vote of the Regional Coordinators, to serve as the National Coordinator, Secretary-Treasurer, Webmaster, and members of the Curriculum Committee.

ii) Regions. Each geographical area must be represented by one Regional Coordinator. These regions are:

- (1) *North Eastern* (CT, ME, MA, NH, NY, RI, VT)
- (2) *Eastern* (VA, WV, PA, NJ, MD, DE, DC, OH)
- (3) *South Eastern* (FL, GA, SC, NC, TN, AL, MS, PR, VI)
- (4) *Central* (IL, IN, IA, KY, MI, MN, MO, WI)
- (5) *South Central* (AR, LA, NM, KS, OK, TX)
- (6) *Rocky Mountain* (CO, WY, MT, SD, NE, ND)
- (7) *Western* (NV, UT, AZ, CA)
- (8) *Pacific Northwest* (AK, ID, OR, WA, HI, GU, AS, MP)

iii) Nominations. Regional Coordinators are NSS members selected from among the VTC Trainers/Master-Trainers within their region by a majority of votes from this same group. Selections must be sent to the AVP for acceptance and appointment.

iv) Terms. Each Regional Coordinator term will be three years.

D) National Coordinator

i) Duties. The responsibilities of the National Coordinator are to:

- (1) Oversee the activities of the VTC and coordinate with the Regional Coordinators and Curriculum Committee.
- (2) Serve as a NSS liaison, reporting directly to the NSS AVP.
- (3) Ensure that at least one business meeting of the VTC will be organized annually.

ii) Nomination. The NSS AVP must appoint the National Coordinator with input from the Regional Coordinators. The National Coordinator will be an NSS member and will take office once written notice has been given to the NSS Board of Governors and the Secretary of the Board.

iii) Terms. Each National Coordinator term will be three years.

E) Secretary-Treasurer.

i) Duties. The responsibilities of the Secretary-Treasurer are to:

- (1) Coordinate with the NSS Secretary-Treasurer to organize the VTC finances in accordance with NSS policy and practice.
- (2) Meet annually with the NSS AVP and VTC NC to build the VTC operating budget into the annual NSS Budget.
- (3) Approve all expenses of the VTC and ensure that the activities of the VTC are financially self-sustaining.

ii) Nomination. The National Coordinator must nominate the Secretary-Treasurer who must be confirmed by a majority vote of the Board. The Secretary-Treasurer must be an NSS member.

iii) Term. The Secretary-Treasurer term will be three years.

F) Education Coordinator.

i) Duties. The responsibilities of the Education Coordinator are to:

- (1) Oversee the activities of the Curriculum Committee and coordinate with the Board.
- (2) Organize the necessary meetings of the Curriculum Committee to create and maintain the VTC education materials.

ii) Nomination. The Education Coordinator is selected from among current members of the Curriculum Committee and nominated by a majority vote of the Curriculum Committee. The Education Coordinator is appointed by the NSS AVP.

iii) Term. The Education Coordinator term will be four years.

G) Webmaster.

i) Duties. The responsibilities of the Webmaster are to:

- (1) Manage a website that provides a means of access to all training materials, including established competencies and training standards to NSS members.
- (2) The Webmaster need not be a Master-Trainer/Trainer but will have the same voting privileges for selecting the Regional Coordinator in their geographic region.

ii) Nomination. The National Coordinator must nominate the Webmaster who must be confirmed by a majority vote of the Board.

iii) Terms. The Webmaster term will be three-years.

V) CURRICULUM COMMITTEE.

A) Membership.

i) The Curriculum Committee must be composed of a minimum of five and up to seven members, including the Education Coordinator. Each member will have a vote on the Curriculum Committee.

ii) Members of the Curriculum Committee must have the following qualifications and experience:

- (1) At least two members of the Curriculum Committee must be Master-Trainers.

- (2) At least one member of the Curriculum Committee must have professional experience in pedagogy.
- (3) At least one member of the Curriculum Committee must be experienced in advanced vertical caving techniques or have technical expertise with vertical equipment.
- (4) At least one member of the Curriculum Committee must have international caving experience.

iii) Duties. The responsibilities of the Curriculum Committee are to:

- (1) Develop education materials for three tracks for training:
 - a. *Master-Trainers:* Those individuals who wish to train the trainers.
 - b. *Trainer:* Any individual who wishes to train others in vertical techniques through grottos and other internal NSS organizations.
 - c. *Trainee:* Those who wish to receive training at any level.
- (2) Evaluate the effectiveness of the education materials and revise them as necessary.
- (3) Solicit input and recommendations on VTC education materials and effectiveness from all interested parties.
- (4) Select the individual, confirmed by a majority vote, to serve as the Education Coordinator.

iv) Nominations. Members of the Curriculum Committee are nominated from individuals who demonstrate the necessary skills and an interest in serving on the Curriculum Committee. Nominations are approved by a majority of votes of the Board and must be sent to the AVP for acceptance and appointment.

v) Terms. Each Curriculum Committee member term will be four years.

VI) TERM LIMITS, VACANCIES, AND REMOVAL.

A) Regional Coordinators.

i) Term Limits. No person may be appointed to a Regional Coordinator position more than three times in any 12 consecutive calendar years.

ii) Vacancies. A vacancy for a Regional Coordinator occurs from any of these events: (1) death; (2) they resign; (3) they are removed; (4) conclusion of a one-month grace period after expiration of their NSS membership; (5) they move out of the region they represent; or (6) their term expires.

iii) Removal. Regional Coordinators may be removed by a two-thirds vote of the full current membership of the Board. Regional Coordinators serve at the pleasure of the NSS AVP and may be removed by the AVP with or without cause.

B) Officers.

i) Term Limits. No person may be appointed as the National Coordinator for more than two consecutive terms in any 9 consecutive calendar years. The Secretary-Treasurer and Webmaster may be re-appointed for additional terms at the discretion of the NSS AVP with input from the Board.

ii) Vacancies. A vacancy for an officer occurs from any of these events: (1) they die; (2) they resign; (3) they are removed; (4) conclusion of a one-month grace period after expiration of their NSS membership; or (5) their term expires.
iii) Removal. The officers of the VTC may be removed by the NSS AVP at any time, with or without cause. Any officer may also be removed by a two-thirds vote of the full current membership of the Board. Removal of the Education Coordinator does not automatically remove that person from serving on the Curriculum Committee.

C) Curriculum Committee

i) Term limits. No person may be appointed to the Curriculum Committee or as Education Coordinator more than twice in any twelve consecutive calendar years.

ii) Vacancies. A vacancy on the Curriculum Committee occurs from any of these events: (1) they die; (2) they resign; (3) they are removed; (4) their term expires.

iii) Removal. Members of the Education Committee may be removed by a two-thirds vote of the full current membership of the Board. Members of the Education Committee may also be removed by the AVP at any time, with or without cause.

VII) TRAINERS

A) Master-Trainers

i) Qualifications. Any NSS member may be qualified as a Master-Trainer upon demonstrating sufficient knowledge, skills, experience, and proficiency in training Trainers through the Master-Trainer coursework, and upon a majority vote of the full current membership of the Board confirming that the individual has met the criteria for qualification and is also suitable to be a Master-Trainer. Completion of a Master-Trainer course does not automatically mean that the individual has met the criteria for qualification.

ii) Requalification. The Board may impose additional criteria for requalification after a fixed period or any other criteria, as determined by the VTC Bylaws.

iii) Removal. Master-Trainers serve at the pleasure of the AVP and at the pleasure of the Board. Master-Trainers may be removed either by the AVP or by a two-thirds vote of the full current membership of the Board, with or without cause.

iv) Privileges. Master-Trainers may conduct Courses to train cavers in the safe use of vertical techniques, to train cavers to become Trainers, and to train Trainers to become Master-Trainers. All such Courses must be conducted with the prior knowledge and approval of the National Coordinator and must use materials and curricula developed by the Curriculum Committee and approved by the Board.

B) Trainers.

i) Qualifications. Any NSS member may be qualified as a Trainer upon demonstrating sufficient knowledge and skills to teach a specific vertical training course level, upon a unanimous vote of all of the Master-Trainers

conducting a Trainer course that the individual has completed and that the individual has met the criteria for qualification. But such a unanimous vote is subject to veto by a two-thirds vote of the full current membership of the Board. Completion of a Trainer course does not necessarily mean that the individual has met the criteria for qualification.

ii) Requalification. The Board may impose additional criteria for requalification after a fixed period or any other criteria, as determined by the VTC Bylaws.

iii) Removal. Trainers serve at the pleasure of the AVP and at the pleasure of the Board. Trainers may be removed either by the AVP or a two-thirds vote of the full current membership of the Board, with or without cause.

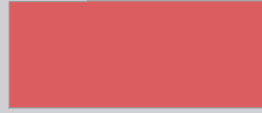
iv) Privileges. Trainers may conduct Courses to train cavers in the safe use of vertical techniques and equipment. All such Courses must use materials and curricula developed by the Curriculum Committee and approved by the Board.

VIII) OPERATION OF THE VTC.

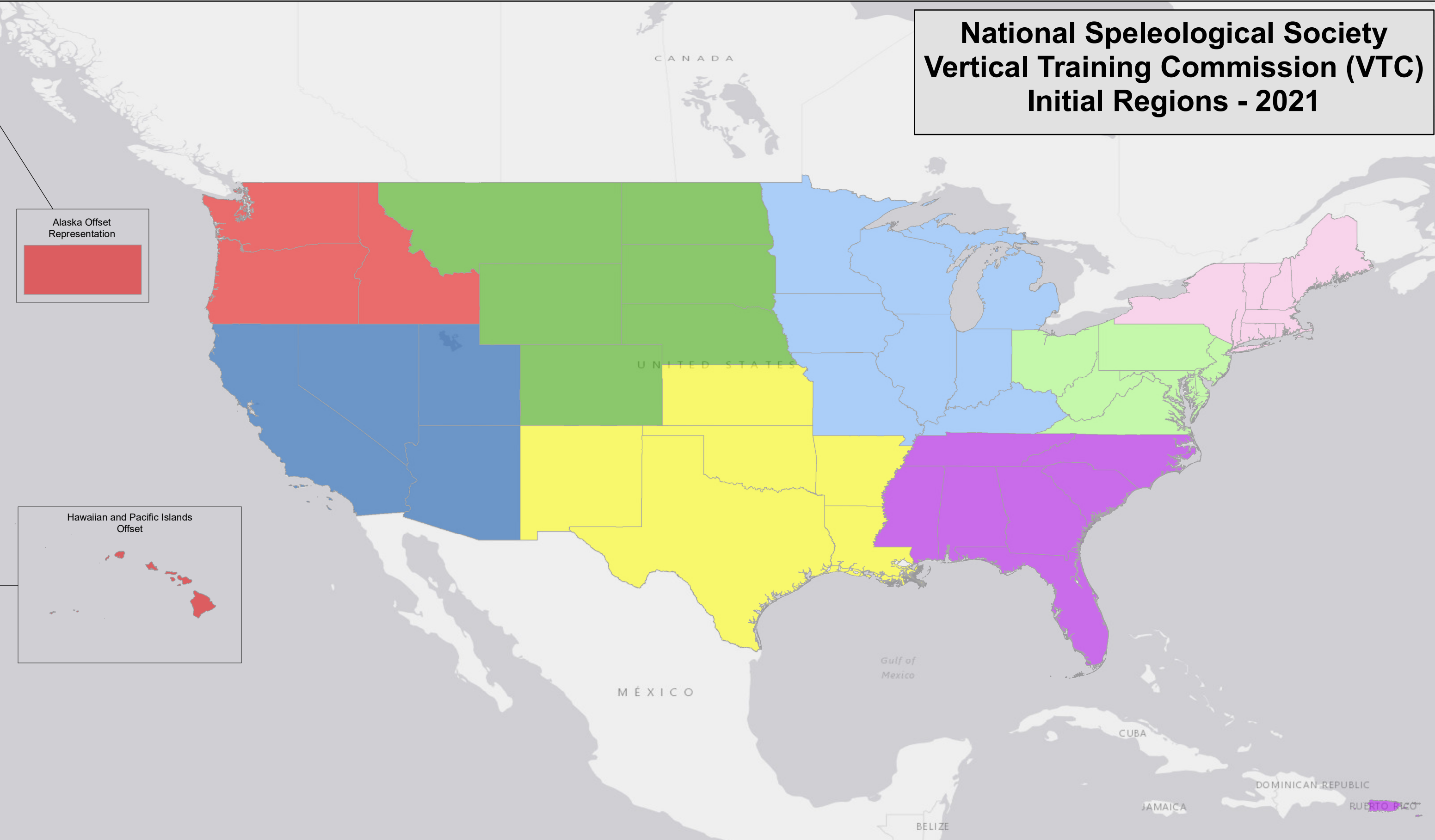

- A) The NSS Board of Governors may, by majority vote, remove any authority of the VTC, veto any action by the VTC, or exercise any authority otherwise given the VTC.
- B) All financial accounting and disbursements for the VTC must be handled in accordance with the Acts of the NSS Board of Governors and financial and reporting requirements established by the NSS Secretary-Treasurer.
- C) The VTC may not construct a website outside of the accepted NSS IT structure, and the VTC online presence must be in alignment with current NSS website strategies.
The VTC secretary-treasurer must likewise manage VTC finances in accordance with the current practices as specified by the NSS secretary-treasurer.
- D) The Board and Curriculum Committee may appoint additional committees to accomplish the work of the VTC. The Board may establish additional Offices in its Bylaws to address the needs of the VTC, but no other office will have a vote on the Board.
- E) The attached bylaws will govern the initial operation of the VTC. Thereafter, the VTC may amend its bylaws only by a two-thirds vote of the full current membership of the Board, followed by approval of the NSS AVP.



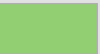





National Speleological Society Vertical Training Commission (VTC) Initial Regions - 2021

Alaska Offset
Representation

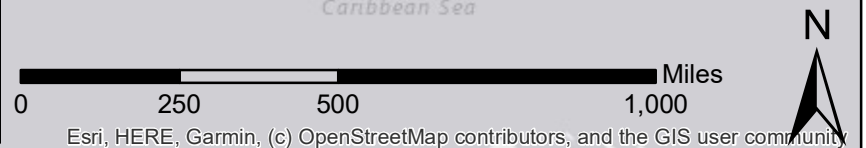


Hawaiian and Pacific Islands
Offset



 Central Region	 Northeastern Region	 Rocky Mountain Region	 Southeastern Region
 Eastern Region	 Pacific Northwest	 South Central Region	 Western Region

0 250 500 1,000 Miles



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BYLAWS OF THE NSS VERTICAL TRAINING COMMISSION

Adopted by the Vertical Training Commission on _____

The National Speleological Society (“NSS”) Board of Governors charter establishes the NSS Vertical Training Commission (“VTC”) to promote safe and effective vertical caving techniques. To do this, the VTC shall create and implement Vertical Training Courses (“Courses”) that teach qualified NSS members (“Trainers”) to train cavers in the safe use of vertical caving techniques and equipment through grottos and other NSS internal organizations. The assets and income of the organization shall only be used to promote the charge of the VTC, subject to the conditions and limitations established in the charter.

MEETINGS

All meetings will be open to the VTC and NSS membership. Meetings, whether in-person or electronic, shall be governed by the current *Robert's Rules of Order*, when applicable and not inconsistent with the VTC Charter or Bylaws. To facilitate business in rare cases, these rules of order may be suspended by a majority vote of members present.

Annual Meeting. The VTC shall hold an Annual Meeting for the purpose of nominating officers and regional coordinators and the transaction of other business as may properly come before the commission. The annual meeting will be held in person at the NSS Convention that enables all members to speak with one another and vote in real time. If a person can not attend in person, they can utilize a proxy who will be in attendance or make arrangements to attend in real time. In the case that the NSS Convention is not held, the meeting may be held by audio or video conference (e.g., a dial-in number or URL for an internet video conference).

The National Coordinator will organize the Annual Meeting, which will include a mechanism of soliciting input and recommendations on VTC structure, education, and proficiencies from all interested parties. The meeting shall also include either a written report from the Curriculum Committee or slide presentation, as determined by the Education Director. The agenda of the business meeting will be distributed to all interested parties at least 30 days in advance.

Special Meetings. Special meetings may be requested by the National Coordinator or from a minimum consensus of three Regional Coordinators. A special meeting need not be in person and may be held by audio or video conference in a way that all the members have an opportunity to read or hear the proceedings, pose questions, and make comments.

Notice. All VTC and NSS members shall be given reasonable notice of a meeting of the Commission. Reasonable notice for the Annual Meeting means publication in the official NSS Convention schedule. Reasonable notice for other meetings requires a poll to determine the majority availability of attendees at least 14 days prior to the meeting. A notice of the location and time for attending in person, by audio or video conference (e.g., a dial-in number or URL for an internet video conference), will then be provided at least 7 days in advance.

Voting. Voting on personnel issues, issues related to approval of Master-Trainers and Trainers, and educational materials by the Commission will use anonymous voting. The process by which this voting takes place will be determined by the National Coordinator at each relevant meeting. Meetings that discuss personnel issues may occur in closed session with all members of the Board present and able to participate. Any meetings to address the action of any individual must include time for the person being discussed to see or hear the nature and

evidence, and be provided time for a defense/rebuttal. Any individual must be informed in writing that there will be a meeting to discuss their conduct or teaching status, and every effort made to provide them time to respond, unless they indicate otherwise. Following such meetings, a brief report will be read into the VTC minutes and provided to the individual being discussed in writing within 30 days.

Proxies. Proxies will be accepted at all meetings and may be counted for quorum purposes. All proxy authorizations shall be made to the National Coordinator via email at least 14 days before a meeting. If a specific proxy to a particular question must specifically identify, and the proxy holder may be instructed to vote for or against the question or exercise their discretion.

Minutes. A written record of the meeting shall be recorded by the Secretary-Treasurer. The minutes will be distributed to the Commission within 30 days and requires a majority vote for acceptance. The minutes will be published on the VTC website within 30 days of acceptance.

Quorum; Actions. The Commission shall require a quorum of at least six members at a meeting to act. The Commission may then act by majority vote of the members present at the meeting unless these bylaws require otherwise.

GOVERNING BODY AND OFFICERS

Commission. The commission shall be governed by a commission that comprises the National Coordinator, Secretary-Treasurer, Chair of the Curriculum Committee, and eight Regional Coordinators. The commission concerns itself with the organization and training activities of the VTC, including but not limited to: nominating Regional Coordinators; nominating officers; appointing members of the Curriculum Committee; approving curricula and materials for courses; establishing standards for qualifying Master-Trainers and Trainers; and setting and collecting fees for course participants.

Acceptance of training materials generated by the Curriculum Committee requires a two-thirds vote of the entire membership of the Commission. The chair of the Curriculum Committee shall be present during any meetings of the Commission to discuss developed training materials.

National Coordinator. The National Coordinator shall be a NSS Member and shall take day-to-day responsibility for the VTC. The National Coordinator shall establish procedures to maintain the following records: a record of each Trainer course conducted, including what Master-Trainers and Trainers are taught, when and where the course was held, what curricula and materials are used, and what Master-Trainers/Trainers successfully completed the Course.

The National Coordinator shall also establish a means of recording the certificates of completion for all participants in training courses and their current qualification (or re-qualification) status, as well as working with the NSS to advertise training courses to the NSS membership.

Regional Coordinators. Regional coordinators will facilitate Courses within their region, including scheduling and/or approving Courses for Master-Trainers; registering Master-Trainers and Trainers to perform training; soliciting feedback from all participants to the Curriculum Committee; and such other duties as the Commission may specify.

In addition to these duties, the Regional Coordinators shall establish a procedure to assure that each Master-Trainer/Trainer is qualified to teach in accordance with policies set by the Curriculum Committee and approved by the Commission. The Regional Coordinators are responsible for developing standards for qualifying and periodically requalifying Master-Trainers and Trainers, including a demonstration of sufficient theoretical and practical knowledge of pedagogy and the use of safe vertical caving techniques and equipment.

Secretary-Treasurer. The Secretary-Treasurer will coordinate with the NSS Secretary-Treasurer to organize the VTC finances in accordance with NSS policy and practice and meet annually with the NSS AVP and National Coordinator to build the VTC operating budget into the annual NSS Budget. The ST shall approve all expenses and use the financial and reporting requirements established by the NSS Secretary-Treasurer.

Webmaster. The Webmaster shall be an NSS Member but need not be a Commissioner. The Webmaster shall maintain the commission website and oversee publicizing VTC events on social media the Vertical Training Course and Vertical Master-Trainer Courses authorized by the Commission, assisting the National Coordinator with any on-line registration of trainers and/or courses, and such other duties as the Commission may specify.

The VTC website will provide a means of access to all training materials, including established competencies and training standards. Nonetheless, certification can only occur by taking the curriculum with a qualified Trainer.

Other Officers. The Commission may create such other officers with such qualifications and duties as it sees fit.

CURRICULUM COMMITTEE

There shall be a minimum of five positions on the Curriculum Committee, with staggered terms that expire at the conclusion of the VTC Annual Meeting. The members of the Curriculum Committee shall select among their members the VTC Education Director. The Education Director is responsible for overseeing the activities of the Curriculum Committee, including working with the National Coordinator to prioritize education materials for development, the timely development of the educational materials, organizing meetings of the Curriculum Committee, delivering materials to the Commission for evaluation, and preparing a report to the Commission at the VTC Annual Meeting.

The Curriculum Committee will define vertical competencies and solicit materials from interested NSS members to create educational materials that ensure that interested individuals will obtain the appropriate and sufficient competencies, critical thinking, and problem-solving skills needed to be safe while using vertical techniques in caves. The Curriculum Committee is not required to use any supplied materials and may generate content itself; however, for any materials supplied to the Curriculum Committee for use, a copyright transfer agreement to the NSS must be signed by the original creator. There must be a clear indication of who has ownership of any images used, and what rights, if any, there are for transfer of the imagery copyright to the NSS. Any training materials generated by the Curriculum Committee must incorporate the best practices in both teaching and safe vertical caving, and the process of updating the syllabus should be justifiable based on safety and technical advances, with as transparent a decision-making process as possible.

The developed training materials will use a curriculum design that includes a series of training levels, with an idea to teach core competencies to individuals as well as teaching skills for future trainers. The curriculum will be flexible in its development, as practical teaching will allow improvement toward a workable training program and will focus on training at the grotto level.

The Commission will serve as a peer-review group to provide feedback on the quality, safety, effectiveness, and overall scope of the training materials developed by the Curriculum Committee. The Commission shall not directly amend or change the training materials generated by the Curriculum Committee; however, they may approve the suggested materials or provide a point-by-point justification for rejection in writing within 21 days, that includes a description of suggested changes to the generated materials. This peer-review will then be used by the Curriculum Committee to change the training materials or will serve as the basis for a written justification of why the changes were not considered. Not all changes recommended by the Commission need to be accepted by the Curriculum Committee; however, a response for the changes or lack thereof must be included in a written response to the Commission within 21 days. This process of back-and-forth shall occur for no more than two submissions of the same document to the Commission for approval.

In the case of a stalemate on the approval of training materials by the Commission and Curriculum Committee, three selected members of the Commission and three selected members of the Curriculum Committee will form a conference committee to negotiate a proposed training materials document. This reconciled document will then be returned to both the Curriculum Committee and the Commission for approval as previously established.

Quorum; Actions. The Curriculum Committee shall require a quorum of at least four members at a meeting to act and then act by majority vote of the members present at the meeting unless these bylaws require otherwise.

MEMBERS

Master Trainers. Only Master-Trainers may conduct Vertical Master-Trainer and Trainer Courses. Following VTC establishment, only people who successfully complete all parts of a Vertical Master-Trainer Course, as defined by the Curriculum Committee, may become Master-Trainers. The Commission shall confirm all Master-Trainers by a two-thirds vote.

Master-Trainers Courses are intended to teach Master-Trainers how to teach the use of safe vertical caving techniques to qualified and potential Trainers, to ensure that Master-Trainers know how to use the curricula and materials produced by the Curriculum Committee, and to provide feedback to the Curriculum Committee.

The duration of the Master-Trainer status shall be determined by the Curriculum Committee and approved by the Commission. The Curriculum Commission will determine a term of expiration and process for requalification.

Trainers. Trainers will have completed the necessary courses with a Master-Trainer to qualify as a trainer. Trainers can only share knowledge and skills from courses they themselves have successfully completed and are approved to teach by Master-Trainers, using the materials created by the Curriculum Committee and approved by the Commission. Any Trainer must be a current NSS member during a training course. If the trainer's NSS membership has expired, the Trainer will not be eligible to provide certificates of completion for any participants.

APPOINTMENTS

Establishment. The NSS AVP will appoint the initial members of the VTC, including the Commission, Curriculum Committee, and Master-Trainers. Appointments will be fair, equitable, and based on the interest, experience, and qualifications of each candidate, using a mechanism of selection determined by the AVP.

Elections, Terms. All officers and Regional Coordinators will begin their term at the end of the Annual Meeting, and at a time when a vacancy occurs. The terms of Commissioners from the Northeastern and Central regions shall expire at the conclusion of the Commission's annual meeting in years divisible by three (e.g., 2022, 2025, etc.). The terms of Commissioners from the Eastern, South Central and Western regions shall expire at the conclusion of the Commission's annual meeting in years immediately following years divisible by three (e.g., 2023, 2026, etc.). The terms of Commissioners from the Southeastern, Rocky Mountain and Pacific Northwest regions shall expire at the conclusion of the Commission's annual meeting in years immediately preceding years divisible by 3 (e.g., 2024, 2027, etc.).

The Commission may nominate one or more NSS members to fill any vacancy for a region's Commissioner until the next Annual Meeting, and the NSS AVP shall appoint a new Commissioner for that region from among those nominees submitted by the Commission. However, if there are no nominees submitted or if in the opinion of the NSS AVP no nominee is qualified to serve, then the NSS AVP may appoint any NSS member living in the region.

National Coordinator. The National Coordinator is appointed by the NSS AVP as described in the Charter and selected from among the current VTC Master-Trainers and Trainers. The National Coordinator shall not be a member of the Curriculum Committee. Nominations, including self-nominations, for the National Coordinator position shall be submitted to the Regional Coordinators at least 14 days before consideration. Any nominations must include the necessary evidence of qualifications and experience for the position, as deemed appropriate by the Commission. The Regional Coordinators will choose a nominee for the position of National Coordinator by a majority vote, and this nomination will be sent to the NSS AVP.

In the case of the National Coordinator being temporarily unable to serve, the Secretary-Treasurer will serve as Interim National Coordinator.

Regional Coordinators. Candidates for a Regional Coordinator position shall be appointed by an election held among the current Master-Trainers and Trainers residing in the region that will be represented. All members of the VTC, which includes approved Master-Trainers and Trainers, will have an equal vote in such elections. The method of conducting that election (including its timing, notice, manner or voting, and threshold of votes needed to receive a nomination) shall be determined by the Commission but shall be reasonably fair under the circumstances.

In the case of a Regional Coordinator being temporarily unable to serve, the NSS AVP will appoint an Interim Regional Coordinator from among the current Master-Trainers and Trainers.

TRAINING COURSES

Vertical Training Courses are intended to train Master-Trainers and Trainers, and for Trainers to teach cavers how to use safe vertical caving techniques. Master-Trainer and Trainer Courses shall be facilitated by the Regional Coordinator for that region and shall follow the curriculum and use the materials designated by the Curriculum Committee and approved by the Commission. Trainers will teach the VTC courses within Grottos or other NSS internal organizations to interested cavers. All trainers are qualified to use curriculum and educational documents supplied by the VTC to impart knowledge acquired during their specific class and may not impart knowledge/skills outside of their scope or ability.

At least one qualified trainer must be present for every four students trained for any course. If more students will be trained, additional Master-Trainers or Trainers are required to maintain a maximum ratio of 1 Trainer to 4 students.

During all courses, the Master-Trainers and Trainers shall solicit feedback from students using a method determined by the Curriculum Committee. This feedback will be sent to the chair of the Curriculum Committee within 14 days.

The Commission may charge a fee for participants in Courses to cover costs. Nonetheless, the VTC will endeavour to minimize costs for participants in training activities without compromising safety. A premium will be charged to any non-NSS member who takes part in any training activities of no less than 50% over the expected cost to NSS members.

BUDGET

The Secretary-Treasurer shall keep track of the Commission's finances under the supervision of the NSS Administrative Vice President and in accordance with policies established by the NSS Board of Governors and the NSS Secretary-Treasurer, and such other duties as the Commission may specify. The Secretary-Treasurer shall ensure that the costs of VTC training activities are covered by fees, including the cost of the NSS liability insurance to cover events.

The Secretary-Treasurer is also authorized to solicit contributions and grants, or to work with members of the Commission to obtain such funding to support the programs and activities of the VTC. Such contributions and grants shall be used in accordance with any stipulations attached to them and shall be managed in such a way as to provide detailed accounting of their use.

Any grants, contributions, or additional funding from training events shall be used to improve the access of individuals to training opportunities, such as fellowships to cover the costs of attending training events. All such contributions become property of, and under the control, of the NSS. They will be accounted for in the NSS financial statements and can be disbursed only under the rules for the financial management established by the NSS Board of Governors.

CODE OF CONDUCT AND PRACTICES

The commission, with input from the Curriculum Committee, shall establish a trainer code-of-conduct to define professional conduct for Trainers and Master-Trainers and others providing instruction or support at VTC events. The established code of conduct shall address questions of safety, including the boundaries of competence and expertise when teaching, ethical responsibility to students and other instructors, and trainer conduct and behavior. All members of the VTC will be expected to abide by the established code of conduct, which will define a process for addressing alleged violations of this policy, including a reporting and grievance

structure, along with a mechanism of appeal. Anonymous student feedback generated during training courses may be considered as a means of reporting; however, anonymous reporting from an individual does not carry the same weight as that by a named individual. Any violation of the VTC code of conduct will be met with disciplinary enforcement, up to and including removal of Master-Trainer/Trainer status. Removal of status requires a two-thirds vote of the Commission.

Only the National Coordinator may speak on behalf of the VTC, whether directly, in writing, or on social media.

Members of the Commission and Curriculum Committee shall serve without compensation and no products, equipment or manufacturer may be promoted or endorsed in exchange for financial gain.

All educational materials generated will have a copyright assigned to the National Speleological Society.

AMENDMENTS

The Commissioners have the duty and responsibility to maintain these Bylaws.

Suggested changes to the Bylaws must be discussed at a joint meeting of the Commissioners and Curriculum Committee called for that purpose. Notice of such a meeting must be given to the attendees at least 14 days prior to the meeting, regardless of whether the meeting is held in-person or by audio or video conference. The meeting notice should contain the proposed changes, allowing time for review.

Changes to the Bylaws, as discussed and amended at the meeting, require approval by two-thirds or more of the Commissioners and a majority vote of the Curriculum Committee. Ratification of amendments occurs upon approval by the NSS AVP.

DISSOLUTION

The VTC can only be dissolved by an Act of the NSS Board of Governors. In that event, the assets remaining after payment of just debts or debts ordered paid by law are to be turned over to the NSS. If, at that time, the NSS no longer qualifies as an exempt organization under section 501(c)(3) of the Internal Revenue Code (or the corresponding provision of any future United States Internal revenue law), all VTC assets must be turned over to a like-minded, non-profit organization that does qualify as an exempt organization under section 501(c)(3) of the Internal Revenue Code.