

National Speleological Society
Administrative Vice President (AVP) Report, Spring 2021

Prepared by Adam Weaver, AVP
adam@caves.org

Introduction/Summary

The Department of the AVP consists of 4 Divisions (Cave Management, Conservation, Conventions, and Education) and two Commissions (National Cave Rescue and Vandalism Deterrence) contained within are 67 Committees and sub-committees and 21 Nature Preserves.

Highlights this reporting period

- The Cave Preservation Network has continued to grow and the fundraising has begun to bring in good tangible results. Learnmore.caves.org has had several thousand views and educational material downloads
- The Speleoguest program has presented to more than 500 students.
- A number of education grants, preserve acquisition grants, and conservation grants have been awarded since November.
- The first research permit under the new permit system was accepted and approved for one of our preserves.
- The NSS Convention Student Scholarship program was formalized during this period.
- The 2021 NSS Convention is still in flux, and a lot of time has been spent determining its viability as an in-person event, due to the COVID-19 pandemic.
- A new position “NCRC Liaison” was created to increase NSS support to the NCRC.
- The Chair of the NSS Biological Response Committee, has been filled!
- We have a new Karst Conservation Task Force working in the Midwest to create a number of karst conservation interpretive sites in Iowa, Minnesota, Wisconsin, and Illinois.

Thematic Plans for the next quarter

- All of the major committee chair positions in this department have now been filled with a full or interim chair. In the coming quarter we hope to shore up these positions, and define them with position descriptions for each committee chair. Also, I will begin making a push that will continue for the next year to get a vice-chair in all committees. We need to build a bench of knowledgeable volunteer staff who can both ease the burden of some of these positions, and be ready to take over when needed.
- The CPN will be transitioning from a pilot-program to a full program during this time period, with most of the show caves re-opening and more coming online. New materials will be rolling out in the April-May time-frame.
- Work with the division chiefs and key personnel in each division will continue to make the various grant processes easier / more transparent for applicants and membership. This will also include more outreach to get the best applicant pools for these programs.
- Some streamlining of the preserve management plans and budgeting for some maintenance at the preserve will be determined in the near future.

NSS Education Division Spring 2021 Education DIVISION REPORT

Prepared by Devra Heyer
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 Karst Management Symposium	512-663-2287	cavercrash@gmail.com	26791
Marty Reames	NCRC Liaison	719-357-9261	mreames@caves.org	53414
Anmar Mirza	NCRC National Coordinator	812-388-6800	anmar.mirza@gmail.com	45765
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
Debbie Spoons	Webinars Chair	801-808-8180	xplorecaves@yahoo.com	61744
Devra Heyer	Education Division Chief	415-640-2639	dheyer@caves.org	60026

Education Division Summary/ Highlights:

Progress:

- o **SpeleoGuest program**: started in October we have reached more than 500 students, looking for several dedicated volunteers for the initiative
- o **EEC**: has started creating material for CPN, including banners and a children's workbook
- o **Grants**: Awarded two education totaling \$2000, Microgrant still needs to be awarded
- o **Website**: Met with website steering committee, many education initiative materials are on learnmore.caves.org
- o **NCRC Liaison**: New position to act as a liaison between NCRC and NSS, Marty Reames was chosen from a pool of nominations from the BORC
- o **NCRC**: Two to four virtual topics will be presented each month until the end of May
- o **NCKMS**: Education Division is helping with a NCKMS workshop: "Cave and Karst Management through Accessible Education"
- o **Partnerships**: Represented NSS at [AGI meeting](#) and meet with NESTA to facilitate many of the NSS initiatives to reach geoscience/earth science classroom teachers
- o **Webinars**: Since November 2020 there have been 6 webinars and more than 1000 views on YouTube
- o **IYCK 2021** *International Year of Caves and Karst*. Working with Pat Kambesis to create public education events
- o Created Education Division new volunteer [Welcome Package/FAQ](#)
- o **Education Division meeting**: The Division met as a whole in December is helping to change culture of the overall division and foster collaboration

Plans:

- **Teacher Resources:** Create a dedicated teacher resource page which links to vetted educational and conservation material
- **Education Material:** Create lesson plans that use caves as an educational tool by using actual cave data to teach STEM standards. Create posters for teachers and the public with QR code that links to NSS educational materials. Note: conservation is an educational standard
- **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.
- **Guidelines/Protocols/FAQ Page:** Christy Starr has created multiple files for our membership to understand how YM works however there is not a good place to house it yet. A dedicated [shared folder](#) has been created and work will be started in February 2021 to start creating a membership FAQ and “How to” page. A volunteer [FAQ](#) has been created and there is work to turn that into a google site for the Education Division. A template has also been created so that other divisions can use it.
- **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. Convention Scholarship will be using the same interface and a similar awarding process.
- **Collaboration:** Within the NSS, Education has been working tirelessly with PR, Outreach, Social Media, and IT. More collaboration is starting to happen between science, preserves, membership, NCRC and NCKMS.
- **Resources:** Acquired non-profit Canva and adobe so that volunteers can make more media for the NSS. 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.

Problems:

- **Technology and Resources:** Go to Webinar is very limited in its ability and expensive. With two dedicated NSS zoom accounts the “Go to Webinar” subscription has been canceled. The Ed Division is working on acquiring all necessary software to make educational material. The division is also working to ensure that when the NSS is represented that a caves.org is used due to possible associations with personal signatures and email names.
- **Information:** When initiatives are supposed to get done it is very unclear on who to contact and how. There is a lot of work to find out information or what has been done. There is work being done to create FAQ pages but there should be NSS shared drive and files that answer all of these questions.
- **Safety and Techniques:** Needs several dedicated volunteers
- **SpeleoGuest:** Needs several dedicated volunteers
- **SpeleoGuest:** Need to create follow up process
- **Webinars:** Do not have data besides YouTube views on how many people attended the webinars over the last several years. Would like to see trends on which date works best, what topics have been done and what topics are the most well received.

- **Grants:** Need to create follow up procedure and better way of reporting to our membership about our awardees and what historically has been done.
- **NSS Youth Liaison:** Needs regional coordinators
- **Webinars:** Debbie has taken a leave of absence, Devra is filling in while looking for volunteers to help out. NCRC Virtual Topics are running until May, meaning there will be 24 remote presentations similar to the webinar series.

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 general public need to know about caves?
 - What do cavers need to know to cave safely?
 - What do rescuers need to know to help cavers?
- Cave Education
 - What are caves and what makes them unique?
- Education Through Caves
 - What can learning about caves teach us?
- Conservation Education
 - How do we protect caves?
- Finance Education Initiatives

- **Education Division Goals:**

1. Help Youth Liaison find regional coordinators and content for new websites by end of year 2021
2. 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
3. Create protocol that zoo outreach program can be recreated by local chapters 12/2021
4. Find a dedicated safety and techniques chair, create goals and vision statement and start to assess website content for update by July 2021
5. Find new webinar committee chair, have one webinar per month or do IYCK public outreach videos until webinar chair can return ([calendar](#))
6. Have at least two lessons up on website by end of year ([example](#))
7. Have an education resource page with unrolling of new website
8. Have an educational public outreach event each year, could coincide with convention

9. Help Preserves with educational outreach initiatives (signage, art contest, inventory document)
10. NCRC liaison onboarded to support NCRC initiatives be able to attend next BORC meeting End of February 2021
11. Support NCRC short course initiatives Feb-May
12. Have NCRC teacher appreciation week in May 2021
13. Have education grants more accessible and increase application pool by April 2022
14. Have a dedicated person to SpeleoGuest program and have at least 2 SpeleoGuest a month (since October have 12 programs)
15. Have a Environmental Education Committee create new content once a year and create process to review content for CPN
16. Support NCKMS with initiatives such as workshops and field trips November 2021
17. Increase partnerships with external educational organizations
18. Art Contest that outreaches to schools highlighting caves very similar to google doodle, 2022
19. Have NSS Education representative attend GSA and/or NSTA by July 2022
20. Create FAQ/How to web page for Education volunteers by July 2021 ([example](#))
21. Create FAQ/How to web page for YM and other membership issues by November 2021 ([example](#))
22. Have each committee have mission statements and goals by July 2021 ([example](#))
23. Create committee chair volunteer descriptions to give to volunteer description by July 2021 ([example](#))
24. Create committee guidelines to assist in onboarding new volunteers by July 2021 ([example](#))

Education Division Initiatives:

SpeleoGuest, Website, NCKMS Workshop, Educational Resources, IYCK, Zoo Cave Animal, Art Contest

Chair: Devra Heyer
dheyer@caves.org

[SpeleoGuest Program:](#)

Progress:

SpeleoGuest program was created in October. Since then, there have been 7 different educational contacts that have resulted in Guest appearances. One appearance reached 160 students. Several educators typed in the wrong contact information so there was no ability to contact them. A procedure was developed to contact educators and guests. A spreadsheet was created to keep track of information. A mailing list (thank you Will Urbanski) and a pool of around 50 volunteers has been created. Another spreadsheet keeps tracks of Guest, locations they are associated with and their field of expertise. Guests fill out a [form](#) when they join the mailing list.

Plans:

Would like to expand and combine with other outreach programs. Have consistent advertising for programs on education websites.

Problems:

SpeleoGuest program has not been well advertised and needs to be formalized and given a specific committee chair. No other push or advertisement has been put out since November. A process needs to be created to better advertise and follow up. Would like to have 3 volunteers to help with this program. Two for the matching and one for the follow up procedures.

Website:**Progress:**

Meeting with website steering committee about needs of the Education Division Alex Sproul and Tony Canike have been very helpful adjusting links as needed on caves.org to update personnel and to help with deadlinks. THANK YOU!

Plans:

Continue to evaluate caves.org and what material should be transferred and what material needs to be created.

Problems:

Safety and Techniques needs to be updated and evaluated. Several of the pages had not been updated in over a decade and there are many deadlinks, there are lots of pages to go through to determine what needs to be kept or changed.

Workshops for [NCKMS](#)

Progress: Ed Division meet with Jim Kennedy to talk about NCKMS needs. Jim asked the Ed Division to have an education workshop. Brad Barker has agreed to help spearhead the workshop on “Developing Stewards: Cave and Karst Management through Accessible Education”

Plans:

Workshop will be on Monday November 1st 2021. The Education Division will also see if they can reach out to local colleges to do other educational workshops.

Problems:

Currently the plan is for NCKMS to be in person since it is in November. It is very difficult for people to commit when there are so many uncertainties.

IYCK**Progress:**

Meet with Pat Kambesis to discuss public outreach talks and how to highlight other initiatives. Also working in partnership with Preserves and Outreach to do an art contest.

Plans:

9 public outreach events starting in March

Meeting with Preserves, Salons and outreach to determine how to use NSS current structure for an art contest.

Problems:

TBD

Teacher Resources

Member: Liz Tobin

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

Progress:

Working with Liz Tobin to create educational units that are aligned to NGSS and 3D learning standards while using integrated learning strategies. Two lessons are still in rough draft form. [Example rough draft](#)

Plans:

Create two unit plans with formal lesson plans attached showing standards. Have all associated learning material on learnmore.caves.org website by the end of March 2021.

Problems:

Trying to 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.

Zoo Outreach Initiative:

Progress:

Multiple meetings have occurred between PR, Education and the San Antonio Zoo. To fund food for the cave species animals for the whole year it will be \$900. This will be used as a partnership with the NSS, San Antonio Zoo and the NSS CPN.

Plans:

The zoo's educational outreach is working with EEC and Outreach to determine interpretative signage and media to be used at the facility site. There are many possibilities of collaboration. This money will be used to feed 9 obligate troglodytic species that live at the zoo but are not on display and 3 others that are being collected for research purposes.

Problems:

Need to determine what resources we can create and how it will be displayed. There are no organisms on display so the interpretive signage is paramount to show the NSS contribution.

Education Committee and Subcommittee Reports

Environmental Education Committee:

Chair: Sharon Weaver

sharonweaver@caves.org

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

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:

Created a committee that is meeting regularly with active members

- reestablishing the environmental education committee

Secured access and funding to Canva and Adobe for material creation.

Plans:

1. Complete childrens activity booklet for distribution by March, 2021.

2. Develop 3 additional educational works for distribution with the CPN

3. Create a game plan of additional educational materials and resources

Problems:

Resources trying to ensure that all volunteers have access to technology to allow for media to be created.

Education Grants Committee:

Pam Tegelman-Malabad

Pam.teg.mal@gmail.com

Goals: This committee is responsible for supporting and administering educational grants and scholarships

Progress:

Two grant proposals submitted and awarded (partially or fully)

\$1000 award to Dave Jackson of CaveSim for project entitled, "CaveSim Educational Video Production", grant application submitted- 12/06/2020 (requested \$1798.55) and awarded 1/27/2021

\$1000 award to Dr. Sharon Weaver of Cave Discovery Initiative (SD) for project entitled, "Caves as Museums", grant application submitted 12/29/2020 (requested \$1000) and awarded 1/27/2021

Plans:

Work on advertisement for mini-grants; get word out to other organizations about the availability of these awards

Work in conjunction with PR to better advertise grants and create a larger pool of applicants.

Increase pool of applicants by advertising specifically to education platforms

Increase the amount of money awarded in 2021

Have AVP, President, EEC chair and Grant chair all sit on 2021-2022 awards board

Have AVP, President, EEC chair, Convention Division Chief, and Grant chair all sit on 2021-2022 Convention Scholarship awards board.

Create a more accessible process to apply for grants and convention scholarships

Need to create a better follow up procedure to check in with our award winners and do a “where are they now” PR for our membership.

Have official award announcements for grant winners

Problems:

At this point we are very proactive and I don't see any major problems- increasing monies available for grant awards is always a goal

As I project more grant proposals received in the future, we may need to decide on two dates for yearly review. This may help streamline the process and have firm deadlines for submissions.

National Cave and Karst Management Symposium

Chair: Jim “Crash” Kennedy
cavecrash@gmail.com

Progress:

The 2021 NCKMS will be held in San Marcos, TX on 1-5 November. Currently we have venues locked in, website being finalized, and about 20 cavers on the organizing committee. We'll be doing a big publicity and registration push in about a month.

Plans:

Refining plans for 2021 NCKMS and planning for New York in 2023 and Nevada in 2025. Possibly also South Dakota in 2027.

Problems:

No problems to report

NCRC/NCRC Liaison:

NCRC National Coordinator: Anmar
anmar.mirza@gmail.com

NCRC Liaison: Marty Reames
mreames@caves.org

Progress:

Worked with the AVP and Ed. Div. chair to better coordinate NCRC and NSS

[NCRC virtual topics](#) began February 10, 2021 and will continue until May 2021.

Marty Reames is the new [NCRC liaison](#). She will act as a representative for the NSS in BORC meetings and as a representative for NCRC in Education meetings. She is helping create new initiatives that help both the NSS and NCRC mission.

Plans:

At the NCRC BORC meeting in February will be the usual position elections. Notable at this one is the fact that I will not be running for election as National Coordinator again. I have held this office for 12 years which is longer than any previous NC and it is time to step down.

NCRC liaison will gather information and write a report showing trends with concerns and issues. They will help support the NCRC virtual topics series. They will help with initiating a NCRC teacher appreciation initiative to start in May.

Problems:

WNS and the pandemic are seriously impacting our ability to conduct training. We have some dysfunction within the NCRC board of regional coordinators. The current system of election of regional coordinators from within the NCRC BORC is causing issues as there are some pretty serious personality conflicts among a few of the coordinators. My recommendation to fix the problem is more close oversight of this process by the AVP. As a whole I feel that the NCRC serves its mission fairly well in all outside respects.

NSS Youth Liaison:

Chair: Allen Maddox
trailsitter@yahoo.com
Members:

Progress:

Meet with the Education Division Chief to discuss vision and goals. Starting to find regional coordinators. Working with the website steering committee about how to interface with the public. Looking over BSA guidelines to ensure aligned with the NSS mission.

Plans:

Write up vision and goals for the committee
Establish regional coordinators and communication procedures

Problems:

Due to covid there is not a lot of youth caving occurring right now so developing the Youth program has been a low priority. However, this makes a perfect time to update procedures and start onboarding volunteers when tasks are more manageable.

Website needs to be updated

Safety and Techniques Committee:

Interim Chair: Hazel Barton
hazel@cavescience.com

Members:

Progress:

Safety and Techniques has been working along with the vertical section to create a questionnaire to acquire data about curriculum needs for the NSS membership dealing with technical SRT proficiency.

Plans:

To finish the rough draft of the questionnaire and to send out to the membership.

Write reports to send to interested parties and articles to membership.

To aid the vertical section to create a curriculum with topics of concern identified in the questionnaire.

Problems:

Safety and Techniques webpage needs to be evaluated and updated for new website rollout.

Hazel has been doing a wonderful job working on the questionnaire but more volunteers are needed to ensure membership needs are being met.

Webinars Committee:

Chair: Debbie Spoons
Interim Chair: Devra Heyer
dheyer@caves.org

Members:

Progress:

The Rough Draft of [operating procedure](#) is in the process of being refined by IT, PR and third party users to create something comprehensive for anyone using zoom or having to give a presentation for the NSS.

6 webinars have been given since November 2020 of various topics. With the issues of “go to webinar” how many people registered and watched in real time can not be determined.

There have been over 1000 view of the webinars via the NSS youtube channel

Plans:

Continuing using [webinars calendar](#) to help coordinate with PR, IO and IT or other interested parties.

Have one webinar per month, no more than two webinars

Give all PR and social media volunteers at least 2 weeks preferably one month advance notice

Next talk is in March with Cave Sim and the one after that will be in April with Nick Anderson.

Would like to start gathering metrics on what works and what doesn't work from topics of interest to days of week and advertising platforms.

Problems:

There is a learning curve to using zoom as there is with all technology.

There is no longer a dedicated webinar person so many people are taking over as “host” so a protocol is being developed but it is not complete

Need to find new dedicated volunteers for program

NSS Conservation Division Spring 2021 CONSERVATION DIVISION REPORT

Prepared by Val Hildreth-Werker and Jim C. Werker, Conservation Division Joint Chiefs
valhildreth@icloud.com valhildrethwerker@caves.org

Conservation Division Summary/ Highlights

- **IYCK2021** *International Year of Caves and Karst*. **Register your events** on the Website. Due to the Covid-19 global pandemic, the virtual launch was January 26, with two videos that can be used during outreach events: <http://iyck2021.org/> **Register any cave/karst events at** <https://www.iyck2021.org>
- **All Cave Laws Updated on NSS Website!** Super useful reference tools! Check out revised pdfs at caves.org/conservation/cavelaws/ Thanks to Tom Lera's perseverance, all federal acts and state statutes on cave protection are up-to-date. The extensive 2020 research/formatting efforts are recognized with an NSS Certificate of Appreciation to long-time NSS Conservation Team contributor, Thomas Lera.
- Annual Conservation NSSNews is the April 2021 issue. Final deadline for submissions is 15 January each year to valhildrethwerker@caves.org
- Calling for submissions for **Conservation & Management Tuesday Talks** during the 2021 NSS Convention scheduled for Weed, CA. Send abstracts to valhildrethwerker@caves.org
- We welcome the new **DARK CTF Karst Discovery Trails**, an outreach/awareness road trip initiative conceived and organized by Dawn Ryan, long time NSS Member and Manager of Mystery Cave in Minnesota. The tours, trails, and show cave destinations extend into four states, and the programs are developed and accessible through a geospatial data app. See report below.
- **New WNS Decon Protocol** issued by USFWS in October <https://www.whitenosesyn-drome.org/static-page/decontamination-information>. Submerge time reduced to 5 minutes at 131°F (55°C).
- **New Biological Response Committee Chair** — **Welcome aboard Steve Taylor** long-time NSS Member and cave biologist involved in many projects across the US. Thank you, Steve!

NSS Conservation Vision/Mission—All Things Caving Encompass Conservation

- NSS Conservation is about promoting cave and karst protection for generations to come.
- Support access. Without caver access, there is no active conservation, study, or exploration. We advance science and conservation through minimum-impact ethics in exploration and mapping.
- Make karst a household word, locally and globally! Vital groundwater resources around the world are often clean-karst dependent.
- Value caves as archival vaults protecting Earth's rich heritage. Cave systems protect important cultural legacies and significant natural history. Train cavers, often the best stewards of these key resources.

Conservation Committee/Team (Committee and Sub-committee 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.

- NSS Website Steering Committee — Please keep sight of overall vision, integration of NSS Conservation Pages, and **secure archiving of historic Conservation & Management Section** web-based material containing 40 years of important NSS advancements in cave conservation/management.
- Recurring Website issue —According to a Board Act several years ago, the current and all past NSSNews Conservation Issues are to remain available and free for all to easily view (no Membership required). The link should stay on the Homepage. Thanks to Tony Canike and Alex Sproul, we now also have a direct link to recent past years of the "free" Conservation Issues on our NSS Conservation Pages caves.org/conservation/ To be the outreach tool intended by the Board Act, something that also stays on the Homepage should also provide an easy, permanent link.

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 several international invitations.
- Completing conservation chapter for Guads Photo Book, a joint NCKRI/UIS International Cave Photographers publication.

Conservation Group and Grotto Awards

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

- Nominate a Group or Grotto (G&G Awards). Submit articles to the NSSNews Conservation issue.
- Send nominations to lavoiekh@plattsburgh.edu and valhildrethwerker@caves.org

Brochures Coordinator

Cheryl Jones (VA) cs.jones@verizon.net

No change. Tons of hits NSS Discovering Caves Brochure Series <https://caves.org/brochure/index.shtml>

USA Cave Animal of the Year

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

- The 2021 USA Cave Animal of the Year is the cave ground beetle, specifically cave beetles in the genus *Pseudanopthalmus* found throughout much of the Appalachians and Interior Low Plateau karst regions of the eastern United States.
- We (Matthew Niemiller, Mike Slay, Gretchen) will submit article for the April 2021 *NSS News*.
- Updating the USA Cave Animal of the Year website: <https://caves.org/conservation/caveanimaloftheyear.shtml> (first launched in Feb 2020).
- [USA Cave Animal of the Year Facebook page](#) has over 200 members.
- 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.
- The US program corresponds with programs in other countries in creating a unified approach for the first International Year of Caves and Karst in 2021.

NEW! Volunteer Value Database Committee

Sonia Meyer, Chair sonia@caves.org

- Progress: Sonia Meyer joined the committee as Chair. Val sent Sonia all previous work done on this initiative, and Sonia obtained a copy of the NSS Cave Conservation and Restoration to read up on Volunteer Value.
- Plans: Sonia plans to review in detail the Volunteer Value forms and create an online form for volunteers to use by the Summer BOG Meeting. Once implementation is standard, Sonia will generate analytical reports on data collected.
- Problems: Lack of time.

NEW! Show Cave Conservation Programs

Ethan Oleson, Coordinator (MT) coleson0@gmail.com

NSS Conservation Team welcomes aboard Ethan Oleson with his vision of developing broader conservation program outreach to show caves.

- Finishing draft for the *Show Cave Conservation Series* for the Cave Preservation Network. Once edited, the series will be available on www.learnmore.caves.org
- Wrote an article for the Annual Conservation Issue of the NSS News about lessons and perspectives gained from working as a private show cave conservationist.
- Attended the December NSS Education Division meeting at the request of the AVP.

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 Conservation Pages Website Coordinator

Tony Canike tony@canike.net

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

Conservation Grants

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

- New proposals for Save-the-Caves grant rewards in review as received.
- Recipients submit articles to valhildrethwerker@caves.org for NSSNews Conservation Issue.
- One Conservation Grant awarded to Cave Exploration Society to promote matching funds for energy efficient caver facilities near Morca Cave.

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 is doing online programs for grades 3-12 at schools around the country, and we'd love to reach more students. 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

- 30 days of live online programs for schools in Colorado, Oklahoma, Texas, and other states.
- Video interview with Jim "Crash" Kennedy about bat-friendly cave gates.

Progress

- Currently fundraising for a new CaveSim trailer (to double our capability to do school programs). Peter Jones has created CaveSim mugs, which can be purchased at cavesim.com/sponsor. 20 individuals and grottos are supporting the project.
- Formalized a partnership between CaveSim and the Cave Research Foundation to support educational programs at low-income schools and other organizations in need.
- Conducted 36 days of online classes in 2020. Most days included multiple classes (sometimes as many as six 1-hour sessions per day).
- Facilitated 35 days of in-person CaveSim programs in 2020, including socially-distanced demonstrations at a Georgia museum in November and December.
- Produced 12 educational videos, available at cavesim.com/distance-learning.
- Published 4 video interviews with 5 cavers. The most recent was with Donna Frazier, who discussed her bat rehab work.
- Building two new mobile CaveSim systems. One cave is 85% complete, the other 70%. We continued our internship program this fall for grade-school students (to help them learn about construction, leadership, communication, and other skills).

Problems: We're looking for organizations that would like to sponsor the new CaveSim trailers to help us reach 10,000 K-12 students per year with lessons about cave conservation and science. We're also looking for more schools that would like to make use of our free distance learning programs. Please contact Dave Jackson if you're interested in either of these opportunities.

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 (AZ) stevenlsmith@usa.net

- **CAG, EGI, SAG** are still working to update a Cost Share Agreement with Tonto NF to better protect and manage caves within the Forest. Hope to sign the new agreement by the end of January 2021 ... Received word on 8 February that Tonto NF accepted and signed the cost share agreement (caves on 2 million acres) with the four Arizona Grottos. This agreement provides for new two-way information transfer between the Forest and the Grottos. They will be using the Tonto agreement as a starting point with Coronado NF next week.
- **EGI, CCC, SAG** are still working with Coronado NF staff to finalize Management Plans to better manage and protect SP Cave (Huachuca Mtns.) and Crystal Cave (Chiricahua Mtns.). Goal is for CNF to sign plans and implement as soon as practicable.

Central Arizona Grotto (CAG) – Phoenix

- In the Coconino National Forest (NF), cavers from CAG and other AZ grottos removed graffiti from Lava River cave.
- In the Tonto NF, cavers from CAG met with Tonto personnel to open Redman cave for the winter, followed by a register installation in Black's cave.
- Cavers from CAG and other grottos entered Pishiboro's Hole to continue the survey project and perform a radio-location procedure in the dome of Cark Sink to facilitate planning for a possible gate.

Escabrosa Grotto (EGI) – Tucson

- Escabrosa manages access to Onyx Cave (Santa Rita Mtns.), and for five previous summers cavers conducted non-intrusive infrared emergence counts to monitor the overall status of a maternity colony of fringed myotis bats (*Myotis thysanodes*). With five years of data on Onyx, EGI expanded the project to three additional caves within the Coronado NF (two in the Chiricahua Mtns. and one in the Huachuca Mtns.). Counts continued through the fall of 2020, with the goal of expanding the overall database on maternity usage within the CNF so that Forest officials can make better-informed decisions on whether current seasonal bat closures are biologically appropriate.

Cochise County Cavers (CCC) – Sierra Vista

- CCC cavers along with cavers from other AZ grottos visited numerous caves in the Huachuca Mtns. to restore/repair gate locks and to update registers with new sign-in sheets and mechanical pencils. Follow-up trip was later necessary to perform additional maintenance on one of the gates.

Southern Arizona Grotto (SAG) – Tucson

- The gate on Cave of the Bells (Santa Rita Mtns.) was discovered to have been left open—SAG cavers did emergency repairs. It has long been suspected that tiny cavers (or children) can actually squeeze between the gate's bars and then once inside unlock the internal "emergency release" and allow entry. After discussion and approval from Coronado NF officials, cavers carried welders, steel, and other equipment to weld additional bars/strapping to prevent future 'squeeze' entries of this type.

Joint ARA Projects

- **CAG, EGI, SAG** are still working to update a Cost Share Agreement with Tonto NF to better protect and manage caves within the Forest. Hope to sign the new agreement by the end of January 2021.
- **EGI, CCC, SAG** are still working with Coronado NF staff to finalize Management Plans to better manage and protect SP Cave (Huachuca Mtns.) and Crystal Cave (Chiricahua Mtns.). Goal is for CNF to sign plans and implement as soon as practicable.

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

Camille Pullham McKinney (UT) cami_mckinney@nps.gov

- 2021 is the International Year of Caves and Karst. The International Union of Speleology (IUS) has set the official start date as January 26, with a video shared by this website to kick off the celebration: <http://iyck2021.org/> The USFS is planning to participate in this effort over the next year
- New Rocky Mountain Industrials (RMI) CEO Brian Fallin is confident that the BLM Colorado office will approve quarry expansion plans for the controversial Mid Continent Quarry located in Glenwood Springs, CO. The quarry expansion, which would greatly increase truck traffic on Transfer Trail, threatens unique caves and groundwater flow. The Glenwood Springs Citizens' Alliance, a grassroots nonprofit which opposes this expansion, is currently suing the BLM for this proposed expansion.

- The Grizzly Creek Fire northeast of Glenwood Springs, Colorado has finally been 100% contained as of late December, after continuing to burn throughout the fall. The fire grew to 32,631 acres in total.
- The Wyoming Bat Working Group has released a final draft of a strategic plan for managing White-Nose Syndrome among bats in the state. Required permits for cavers, gating of selected caves, and enforced decontamination practices are among potential new practices. More research is needed to determine where bats in Wyoming hibernate during the winter, as large hibernacula of greater than 50 individuals have not yet been discovered there. The complete document is available at: https://wgfd.wyo.gov/WGFD/media/content/PDF/Wildlife/Nongame/20201120_WY_WNS_StrategicPlan_FinalDraft.pdf
- Bat Week was celebrated from October 24–October 31, 2020. Although it was staged online due to the pandemic, a number of videos, activities, and resources for bat conservation were offered by bat-week.org in association with the BLM, National Park Service, and many museums and wildlife agencies.
- Members of the Southern Colorado Mountain Grotto are volunteering their efforts on a graffiti/trash removal project in Huccacove Cave in Williams Canyon. This project began in early 2019 and is ongoing. However, due to Covid-19, the project has been postponed from Fall 2020 to present. We hope to resume our efforts beginning late Winter/early Spring of 2021.
- A press release from the Montana Dept. of Fish, Wildlife, and Parks (FWP) was issued on December 21, 2020 asking the public to keep an eye out for dead or dying bats this winter. FWP encourages reports to their local office so that these bats can be tested for white-nose syndrome, which has been found in six eastern counties in MT so far. White-nose can cause bats to leave hibernation too early, which puts them at risk for emerging into cold temperatures in winter months.
- The Bigfork High School Cave Club in Montana completed two field projects from October 2020 to January 2021, conducted under a cost-share agreement with the US Forest Service. For the first project, the club visited 5 caves in the Trail Creek area of the Flathead National Forest in NW Montana, continuing a mineral, biological, and photomonitoring project that has been ongoing for eleven years in three of the caves and starting a monitoring project in the other two caves. Very little human-caused changes were found, and some movement of organic debris by woodrats and clustering harvestmen (*Oplionids*) were discovered. GIS-driven monitoring reports will be completed in the winter/spring 2021. For the second project, a monitoring project that was initiated in the Mill Creek Crystal Cave in the Custer Gallatin National Forest last year was completed. Mineral, biological, and photomonitoring was established for ~2,000 ft of passage. A GIS-driven monitoring report will also be completed this year. COVID-safe protocols were utilized for both of these projects. Macroinvertebrate specimens to be studied at the Marsh Lab at Montana State University were also collected by club members during both of these projects. So far, the club has collected over 44 specimens from 14 caves throughout MT as part of this study in conjunction with the Montana Natural Heritage Project, the US Forest Service, and Montana State University.
- For two caves in Montana, gating entrances has been determined to be the best way to prevent injury and theft of speleothems. Ophir Cave, in the Helena-Lewis and Clark National Forest, has been the scene of a number of Search and Rescue operations in recent years, including one fatality that occurred by a breakdown pile near one cave entrance. A locking steel gate system was installed to address the fall hazard in June of 2020. This gate does not impede cave entry or limit access to the remainder of the cave system. Incidents of theft and vandalism have continued in nearby Lick Creek Cave despite an increase in monitoring, inspection, volunteer days, and educational initiatives. In addition to a number of speleothems that have been destroyed or stolen, the cave is also home to Montana's largest bat hibernacula. The entrance was assessed in 2020 for gating options, and it was determined that a steel cupola system with locking access gate will work best. Pending available funding, it will be installed sometime this year. The US Forest Service will manage public access via permitting system.
- The Montana Conservation Corps, partnering with the US Forest Service and the BLM, is seeking candidates for one Conservation Fellow and one Conservation Intern for the summer of 2021 to identify, document, and monitor potential caves in the Pryor Mountain region of MT. Previous recon flights have identified several potential cave areas. Anyone with strong caving skills is encouraged to apply, and the application is available at this website: <https://www.mtcorps.org/joinmcc/individual-placement-programs/conservation-interns-and-fellows.html>

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

- Many caving activities on hold due to COVID.
- Mesilla Valley Grotto monitoring javelina activity in Robinson Cave. In December, Jim & Val joined Steve & Kathy Peerman on a masked, socially distanced trip to check and download their trail cam.
- Mike Mansur, Todd Roberts, Minori Yoshida and other team members are doing formation repair work in several caves in southeastern New Mexico.
- October 2020 Cottonwood Cave Formation Repair Project-Cantina Room. Completed 3 trips, with a total of 12 participants. Repaired 76 formations, previously matched. 64 total volunteer hours. Jen Foote, new Guads Cave Specialist participated in one trip.
- October 2020 Ft. Stanton Cave Formation Repair and Restoration Project completed one trip with 5 participants. Total of 50 in-cave volunteer hours. 8 stalagmites and 1 stalactite.
- Also in Ft. Stanton, discovered a virgin pit and passage on the east wall on a previous trip to the Lake Room, 6 broken stalagmites at the bottom. Knutt Peterson provided a cable ladder. Retrieved broken formations, surveyed the passage, plus another passage. We named the first "Pool Fingers Pit", and the other unmapped passage the "Mud Fingers Passage". The total survey was 166.5 feet, and was added to the total length of the cave. We were able to match and reattach 8 stalagmites. BLM Cave Specialist Knutt Peterson participated on this trip.
- December 2020 Cottonwood Cave Formation Repair Coke Table Room. 5 participants. Total of 39.5 in cave volunteer hours. Repaired 10 formations including 1 coke table on this trip. To date, we have completed 22 trips on this project, with a total of 559.8 volunteer hours, plus 8 hours by Jen Foote, who was on the clock while working with us. We have repaired 201 formations so far on this project.

Texas Speleological Association – Ross Winton (TX) ross.winton@tpwd.texas.gov

We welcome Ross Winton who is providing updates from Texas Grottos, agencies, and organizations. Introducing Ross Winton (NSS#67440). I've been a caver for close to 20 years but only in the last 10 have I become active with NSS. I recently moved from Idaho where I was a member and past Vice-Chairman of the Silver Sage Grotto in Twin Falls. While in Idaho I worked on the surveillance of cave obligate invertebrates primarily in lava tubes and also the monitoring of bat hibernacula and state screening for WNS. I currently reside in central Texas where I work for Texas Parks and Wildlife as their Invertebrate Biologist and I hope to continue to work with grottos and my fellow cavers to monitor and conserve rare cave obligate species. I look forward to working with the NSS Conservation Division to communicate Texas conservation activities and to coordinate and promote opportunities for future work.

TSA projects are assisting land managers in knowledge of cave resources to better conserve and protect:

- Government Canyon Karst Survey Project - Discovered 4 new caves and improved gps coordinates for 2 others. Photographing of cave interiors and mapping of 1 cave. 95 total service hours.
- Hill Country State Natural Area Karst Project – Recording of 8 new karst features and completing investigation of 3 others. Completed surveys of 3 caves and discovering new passage in an additional cave. Photographing and gps'ing all new 8 cave features. 123 total service hours.

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

Weekly restoration work continues at Crystal Cave. Also, we thank Grotto members for spending New Year's Day doing socially distanced resto throughout the cave.

Southeastern Region – vacant

Requesting new rep to provide updates.

John Hoffelt mossyguy@comcast.net — Nothing new.

Ohio Valley Region – vacant

Requesting new rep to provide updates.

Northeast Region – vacant

Requesting new rep to provide updates.

Western Region – Pat Seiser (CA) patricia_seiser@nps.gov

- While a few grotto members are meeting in person (presumably all from the safe bubbles) most meetings are being held via zoom. It's been great to see how cavers have leveraged friendships across the country for presenters.
- Weed Convention—work continues on the 2021 convention, from selecting caves, restoration and mapping trips to addressing COVID19. Potential plans to move the convention to later in the summer, dependent on what ICS decides to do with the international congress. Cavers in the region not hesitating to weigh in on virtual vs live convention.
- Members of the Oregon High Desert Grotto (primarily Matt Skeels & Neil Marchington) have been working on a problem arising from BLM transferring lands with six designated significant caves (1997 designations) to the State of Oregon (also in 1997) as a result of a lawsuit the Fed's lost. Since then the lands were sold to a developer who announced they planned to bury the caves, although the deed mentions protecting at least some of the caves as minor arch sites and for Townsend bats. It is unclear how the developer will respond. Matt and Neil are engaging with the developer and their representatives in a very professional manner and have extended them the offer to help manage the caves. Ray Keeler is in the email loop.

Central Oregon Caves Graffiti Project Neil Marchington, Coordinator Climbingallday@yahoo.com

- Oct 2019 Removed all graffiti from Boyd Cave.
- Oct 2020 Performed maintenance day at the cave removing minor graffiti in ½ a day.
- Dec 2020 Major new graffiti discovered in cave.
- Dec 2020 Started criminal investigation, raised \$500 local reward from Wanderlust Tours.
- Jan 2021 Approved for NSS Cave Vandalism Deterrence Award (\$1000).
- Did four local media stories requesting public leads and announcing \$1500 joint reward.

Deschutes National Forest Cave Management Plan Neil Marchington, Chairman OHDG

- The Deschutes National Forest went through public comment periods on a new unified Cave Management Plan.
- Coordinated a caver response effort and submitted formal comments from the Oregon High Desert Grotto (OHDG) and the Western Cave Conservancy.
- Of the 9 priority changes requested, the final plan included 6. Overall, the final plan is a good plan that sets reasonable precedent.
- Sent a thank you letter from OHDG to the Forest Supervisor thanking her crew and office for considering our input and ongoing partnership in cave conservation issues.

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

- Many conservation activities postponed due to pandemic. Masked, socially distanced groups continue.
- October 3, 2020 — Seven members of the Triangle Troglodytes Grotto (Michelle Cavaliere, Michael McBride, Elena Morgan, Elise Sanderson, Emily Graham, Tanya McLaughlin, and Ken Walsh) visited West Virginia Cave Conservancy's Hancock Cave Preserve and performed several surface tasks to establish a relatively safe trail from the road to the cave entrance up along the steep mountainside. The TriTogs cleared bottles and cans dropped near the roadside, labeled a walking path with flagging tape to the stream, removed an unsightly manmade object from the property, and used found rocks to construct dozens of steps that now form a safer pathway to and from the cave entrance.
- October 3, 2020 – Front Royal Grotto hosted a Skyline Caverns Karst/Nature Trail Maintenance Day. All 19 participants followed COVID19 guidelines wearing masks and social distancing. The weather was perfect to spruce up the trail which included raking, cutting up fallen trees, and cleaning/painting kiosk and trail signs.
- October 4, 2020 – West Virginia Cave Conservancy installed kiosk signs at numerous Cave Preserves that they own or manage.
- October 18, 2020 – Richmond Area Speleological Society (4 participants) conducted Adopt-A-Highway trash pickup near their fieldhouse property in Highland Co, VA.
- The Virginia Department of Conservation and Recreation (DCR) Karst Program is continuing Phase two of a project to identify potential new locations for targeted cave beetle species. Finding additional habitat for these species, usually found in 1 or a few caves, extends their safeguard zones if the type locality gets destroyed or impacted by anthropogenic activity. Two caves without previous beetle records

were surveyed and cave beetles were found in both. Taxonomic work will reveal if the species belong to targeted groups or are something entirely new. Additionally, a few pseudoscorpions carrying eggs were observed, a rare sight that gives further insight into subterranean life. The cave landowners are very protective of the locations resulting in few visits and extensive, well preserved cave formations. (copied from Virginia Natural Heritage October 1, 2020 FB posting)

- 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

NEW! DARK Conservation Task Force

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

The NSS Conservation Team welcomes Dawn Ryan and 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.
- We brought together a group of 37 different, federal, state, and local agencies, as well as nonprofits to identify karst features of public interest that will be published on the DARK Website.
- The NSS is hosting the DARK Website.
- The National Park Service is providing an intern to develop and publish the Website.
- The University of Minnesota is providing their Flyover Country App for us to publish Discovery Areas for the public to visit and learn about the Driftless Area.
- The Northeast Iowa Resource Conservation and Development is developing DARK logo and branding.
- We hope to have the Website and APP up and running by March, in time to participate as an event in the International Year of Caves and Karst 2021.

Hawai'i Cave Conservation Task Force

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

- Continue efforts to protect large part of Kipuka Kanohina Lava Tube System.

High Guads Restoration Project (HGRP) CTF

Jennifer Foote (NM) highguads@gmail.com

<http://www.hgrp.org>, www.facebook.com/High.Guads.Restoration.Project

- HGRP runs volunteer trips in the Lincoln National Forest, New Mexico to assist the Forest with cave restoration, science, and trail maintenance.
- We have cancelled all trips this year due to COVID-19 related state restrictions including limiting “mass gatherings” over 5 people and a 14-day quarantine for anyone traveling from out of state.
- Lincoln National Forest hired me as the new Cave Specialist in October, jennifer.foote@usda.gov I am teleworking during COVID and I still don't have a phone. There is still a need for volunteers to help, so HGRP is not going away.
- Tentative future dates are 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>

Klamath Mountains CTF

Steve Knutson (OR) SssKnutson@aol.com

- There is nothing going on for the KMCTF. The winter is full on, and agencies and their lands are in Covid lockdown.
- Our efforts to work in Ape Cave, southern Washington, is also on hold. 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.
- We do have our method worked out. The paint on walls in Ape is on a moist surface and appears to be actually attached nowhere. So, nothing drastic and damaging (like sand blasting or chem application) is needed. Chris Forstrom has developed and tested a battery powered water sprayer that easily takes the paint off. However, since the resulting surface is cleaner and smoother than it should be, so he also worked out a light sprayer of ground loose floor lava. We hope this application will help the regrowth of the slime which coats much of the cave walls. Important: The water sprayer will also take on the slime graffiti, by making words illegible, but leaving the slime as undisturbed as possible.

Ozark CTF

Kathy Kriska-Crider (MO) katcstrygrl@sbcglobal.net

CTF on hold — nothing to report. (Thank you for staying in touch each reporting period, Kathy!)

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.

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.

Cave Vandalism Deterrence Commission

Sarah Richards, Chair, 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 (Photos of part of the recent vandalism <https://photos.app.goo.gl/H4RjM2PH4UusVt9N7>). Blatant and substantial event, probably committed by several people. The Grotto, Region, and Western Cave Conservancy had dedicated substantial resources to removing all graffiti from the cave just prior to this new event. (Related story on prior clean-up: <https://centraloregondaily.com/the-great-outdoors-cleaning-boyd-cave/>)
- 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. <https://ktvz.com/news/2021/01/08/boyd-cave-vandalized-law-enforcement-asking-for-communitys-help/>

NEW CHAIR! **Biological Response Committee**

Steve Taylor, Chairman (NC) ceuthophilus@gmail.com

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

- The Biological Response Committee is pleased to announce that Steve Taylor, long-time cave biologist who has contributed to projects all across the US, has graciously accepted the Conservation Division request that he Chair this important Committee that is responsible for coordinating the NSS response to biological threats to caves and karst.
- Committee Members are tremendously appreciated and will continue to participate in their various roles. (This committee has successfully functioned without an officially designated chair for several years. You each know how vital you are to ongoing outreach, networking—Thank you!) Recent issues have included 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, attended the annual USFWS WNS Symposium by Webinar in June, and has been attending monthly informational telecons.
- USFWS issued new WNS decontamination protocol in October <https://www.whitenosesyndrome.org/static-page/decontamination-information>. It reduced the time needed submerged at 131°F (55°C) to five minutes.
- Petzl published recommendations (and warnings) for decontamination of equipment <https://www.petzl.com/US/en/Professional/News/2020-4-17/Recommendations-for-disinfecting-your-equipment>
- USFWS is investigating potential risk of impacts to bats by COVID-19, the preliminary report is here <https://doi.org/10.3133/ofr20201060>. Merlin Tuttle published an article on concerns <https://www.merlintuttle.org/resources/concerns-for-covid-19-management-in-north-america/>
- A new study found that big brown bats are not infected by Covid-19, other bats still need study, https://madison.com/wsj/news/local/health-med-fit/covid-19-doesnt-infect-key-us-bat-species-madison-researchers-find/article_1b0b75c8-4b3e-59d3-a7fd-0acdcf35234c.html
- Primary source for information on WNS <https://www.whitenosesyndrome.org/>

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

- COVID-19 has limited cave exploration opportunities, with the exception being Morca Cave, Turkey. August 2020 expedition, led by A.S.P.E.G. Morca teams have explored to -1287m deep.
- New leads promise to go deeper.
- In August 2021, The Cave Exploration Society Inc. and the Turkish caving club Anadolu Speleological Group (ASPEG) will start building a caving hut in the Taseli region (900 km² of karst) in Turkey. Solar powered, kitchen facility, outdoor shower/bathroom, house 15-20 people. Support research and ongoing explorations of Morca Cave and area caves. The hut location will protect the karst ecosystem far better than camping next to the cave.
- Morca Hut will be available to international cavers and researchers year round. Three PhD students currently conducting research in and around Morca will immediately use the new facility. Morca Hut will support long term studies in this remote karst area high in the Taurus Mountains.
- Initial funding for the project is graciously provided by the Paul and Betty McDonald Foundation, internal funds, material donations. We are seeking further grant funds. Additional donations are welcome.
- Contact John Fioroni John@CaveExploration.org for usage requests or to partner with Turkish researchers.

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: None.

Bigfork High School Cave Club in Montana

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

- No report received.

Bat Conservation International

Shawn Thomas, BCI Subterranean Program Manager (WA) stthomas@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 (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/>

- Our virtual launch was January 26. Two videos can be used 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 cal 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, the critical work to educate 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 Convention Division Spring 2021
CONVENTION DIVISION REPORT
Prepared by Carol Tiderman, Convention Division Chief

HIGHLIGHTS

A support for students process was developed
The Arts & Letters has been transitioned into a NSS Salon
2022 logo is nearly finished and will be presenting a design to the committee

STEERING COMMITTEE

Dan Austin (2022)
Matt Bowers (2021)
Jean DeVries
Kristine Ebrey (S-T, 2019)
Rich Geisler (2020/2023)
Maureen Handler (OVP, 2019)
Dave Lester
Carol Tiderman - Chair
Adam Weaver (AVP)
Meredith Weburg (2020/2023)

Volunteer hours spent since the last report: 23

CONVENTION DIVISION STAFF MEMBERS

Committee	Name	Phone	Email	NSS #
Caver Co-op	Russ Kennedy	240-224-6861	uaim@yahoo.net	16950
Historical Data	Jean DeVries	616-560-7955	devries@aol.com	36251
IT	Alex Sproul	540-377-6364	alexanddru@gmail.com	8086
Publications	Tom Rea	812-339-7391	tomrea@ccrct.com	5683
Registration	vacant	-	-	-
Treasurer Asst.	vacant	-	-	-
Sessions	Bob Hoke	301-725-5877	bob@rhoke.net	19274

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 group who will be hosting the 2021 Convention in Weed CA
Working with group who will be hosting the 2022 Convention in Custer SD
The Steering Committee has been having monthly calls addressing items in Ad hoc committee report and creating new forms and processes which are on the NSS cloud..
The Convention Manual has had another overhaul
A 'support for students' attending the convention process was developed

PLANS

Attend convention committee planning meetings (any year's) whenever possible. This is facilitated with Zoom

Continue working with confirmed groups
Continue working with group yet to be confirmed
Continue to solicit new host groups

PROBLEMS:

COVID-19 continues to make finalizing plans difficult

Volunteer hours spent since the last report: 30

2021 Convention, Weed, California

June 28-July 2, 2021

Report compiled (2-10-21)

Matt Bowers, Chair (matt.bowers@caves.org)
Daniel Veelik & Betty Farfan, vice-chairs of finance
John Bowling, vice-chair of operations
Kevin Lorms, vice-chair of services
Pat Kambesis, vice-chairs of programming

Progress

Since the last report, complications from the Covid-19 pandemic have been at the forefront of our minds. This global plague weighs heavily on our actions, but we remain guardedly optimistic that new advances against the disease will get the country back on its feet in time for a safe and successful convention this summer.

As of today, the 2021 NSS Convention is set for June 28-July 2 in Weed, California. BUT... IF the UIS postpones the international congress, we plan to move the NSS Convention to their July 26-30 dates later in the summer. That extra month might be the "magic bullet" we need to hold a safe convention in California. We're hopeful that Covid-19 transmission rates will be controlled by the end of June, but having an extra month would be our better choice. Only time will answer that question.

Our underlying operational plan is to move forward with a live production until such a time as it is no longer logical to do so. If we stick with our existing June dates, that live vs. virtual decision will happen in mid-April. If we move to July, that decision will move to late May. Either scenario will allow 2 months for our members to make alternate plans for the summer.

Notwithstanding the Covid-19 issues, plans are progressing exceptionally well for the 2021 convention.

Plans

Conservative fiscal management will be a key component to our success. All non-essential expenses are being delayed for as long as possible. We're not expecting a tremendous number of registrants to sign up until after our confidence in a live convention matures in late April or May. This cash constraint dictates that we hold most expenses until such a time that consumer confidence stabilizes across the country.

The convention website has launched. To date, we have delivered over 3,000 page views to members across North America. Online registration service is fully configured and will launch to the public within the next few days.

The convention senior staff plans another site visit in late April or May where we expect to refine our remaining plans. Additional meetings will be with city and county law enforcement, local fire chief and the Weed City Council - all of whom have expressed their support of our efforts.

Sponsor recruitment has been challenged by the uncertainty present in our operational plans. Once we can lock in on a date and confirm a live event, these revenue streams will be easier to secure.

Our promotional presentations to grotto virtual meetings continue. Upcoming Zoom meetings are scheduled from Arizona to Ohio.

Problems

Previous instabilities with our host venue's foodservice staff have been mostly solved by securing outside caterers to serve the major events (Howdy Party, banquet, etc.) More work needs to be done in this area, but things are moving along well.

Given that international travel is expected to remain under duress longer than domestic travel, we are not anticipating a large number of international guests at the 2021 convention. This will not dramatically impact our viability.

We may be in a position to require proof of vaccination for all convention attendees. Those rules are still evolving and we're watching the state regulations closely. There may be some limited pushback from NSS members who refuse to be vaccinated. We're aware of this, but not dramatically concerned.

The NSS insurance committee blocked us from purchasing event insurance that would have saved the convention about \$3,500. We acquiesced and have agreed to pay our \$7,000 tithe to the society's internal committee.

Our ability to manage finances of the convention is still in question. Day to day operational expenses are proving challenging. Hopefully a solution may be discovered to facilitate our actions as the NSS becomes more confident in our operation.

2022 NSS Convention, Custer, South Dakota

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

Chris Pelczarski (co-chair)

Lydia Austin (promotions)

Pat Kambesis (programs)

Adam Weaver (NSS Support)

Dean Faust (sec. treasurer)

Nick Anderson (logistics)

Bobbi Flynn (registration)

Progress

We've made significant progress since our last report. Our convention committee has met with the Custer School superintendent (Mark Naugle) to finalize plans for usage of the school facilities. Additionally, we've met with the owners of Rush Mountain Adventure Park (Rushmore Cave) to begin plans for the Howdy Party, and we've also met with the Custer Chamber of Commerce. Lastly, we've made good progress on the guidebook and some of the smaller logistics related to transportation and tent rental costs. The person making our logo is nearly finished and will be presenting a design to the committee within a couple of weeks.

Plans

The Custer school is on-board with the event and we will meet with Mark again in March to begin work on the contract and discuss final costs. We need to work out some of the details for utilization of the grounds around the school, which includes whether to place a banquet tent between the schools, and the usage of grounds for the quiet campground. We anticipate good progress this spring.

Problems

The biggest problem, however, has come in the form of our campground. Due to COVID, Buffalo Ridge has backed out on the event, leaving us scrambling to find a new location. With help from the Custer Chamber, two possible options are in play: Option 1: Use Fort WeLikIt (less than a mile from the school) for the noisy campground, and split the quiet campground off and have that at the school (no alcohol allowed). Dan and Chris met with Fort WeLikIt owners, and they seem agreeable to helping us out for the event, the campground has 15 acres of usable space. The plus side is that we'd have the entire

campground, and their staff would take care of garbage, cleaning, etc. Option 2: Utilize a former state facility for youth called Star Academy about 5 miles south of Custer.

Dean and Chris have been researching alternatives in the city of Sturgis, about an hour and a half north, and in Rapid City, 45 minutes to the north. Dean and Chris did a site visit and reported that Sturgis has some great campground options, but facilities for the programs and classrooms are lacking. Rapid City would have everything we need, but the committee feels that using Rapid would be a last-ditch option as we would prefer to support the local smaller communities. Rapid does have the only banquet hall that would seat all of the convention attendees at the Rushmore Plaza Civic Center, and we very well may be utilizing this facility for the Friday night banquet by sending attendees by bus the 45 minutes north from Custer). Sturgis is plan B if we can't get Custer to work for our campground needs, and Rapid City is a plan C. We will continue to work on the issue, and will have more information available soon.

Volunteer hours spent since the last report: 140

3P Report – Blake N. Jordan, Co-Chairman - NSS Salons Committee – January 20th, 2021

Progress

I am in the process of gathering all the Salons information for submission into the NSS News for the 2021 NSS Convention in Weed, CA with clickable links within the file.

I am in the process of making sure all the Salon pages are updated and making note of the update on the bottom of the page near the counter.

I will be coordinating with the NSS 2021 Convention staff to make this year's Salons a continued success, whether it be online, in-person or both.

The Arts & Letters has been transitioned into a NSS Salon with a webpage under the Salons tab at caves.org. New Co-chairs (Michael Ray Taylor and Jo Schaper) have stepped up to direct events at convention and coordinate with convention staff.

Plans

We are planning on having an Annual Salons Committee Chairman's forum to discuss account reporting and other issues for this year via Zoom.

I have discussed with Adam Weaver, AVP a plan to coordinate with the NSS Office to make sure that the Salons Equipment be delivered with the NSS Bookstore on a palate to the convention in Weed, CA and then have the Salon Equipment passed along to South Dakota via Adam Weaver after the convention.

We are looking to replace Dean Wiseman with Nikki Fox as Photo Salon Chairman for the 2021 NSS Convention in Weed, CA ongoing.

We are researching Salon Areas where Chairman may need to change for efficiency or for modern times and looking for suitable replacements interviewed by the Salons Committee.

There will be open spots for Graphic Arts (Posters, Postcards, Brochures, Stickers & Cover Arts) Salon, the T-Shirt Salon, and the Fine Arts Salon.

Problems

Getting all the Salons to give their accounting reports to the Salons Committee Secretary-Treasurer at convention was successful in 2019 except for the Cave Ballad Salon. I believe that all went well for the accounting and cost analysis for the 2020 Virtual Convention with the Cave Ballads Salon as the exception. There was a problem with the configuration for the PayPal until Gary Bush corrected it.

NSS Cave Management Division Spring 2021 CAVE MANAGEMENT DIVISION REPORT

Prepared by John Wilson, Division Chief

The March 2021 Board of Governors meeting will be held online

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)
Tom Griffin Julie Schenck-Brown	Nature Preserves & Acquisitions	240-676-3184	Preserves@caves.org	24333RE (FE) 30493RL (FE)
Dr. Ben Tobin	Preserve Science Sub-Committee	860-716-8127	btobin.director@caves.org	49350RE/FE
Jeff Karr	Cave Conservancies and Roundtable 2020	863-712-0375	drkarrsalsal@gmail.com	68408RE
John M Wilson	Contemporary Cave Use Study	808-929-8256	jmwgeo@gmail.com	13112RL (OS-FE)
Nicole Ridlen	Show Caves Coordinator	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

SC = Subcommittee

Progress

The BOG mandated reporting format below, was sent to all Cave Management Division chairs

Committee Name Chair's name with contact information

Member(s)' names

Progress What was done?

Plans What is hopefully going to be done?

Problems What is inhibiting progress?

The report should cover **only** the time frame since the last report.

Use only 12-point Psalino Linotype font, left-justified, single-spaced

Bullet point or paragraph form are both fine.

While the reports should be detailed, they should also be succinct.

Plans

AVP Adam Weaver has developed a PowerPoint presentation that explains the role of the NSS in nature preserves and cave conservancies. The presentation diagrams the relationship between the many committees involved in this part of cave management.

Continue the same sound Cave Management Division approach we have practiced for the last twelve years

Problems

New social norms, cultural change, pandemics, and global warming may tend to make long-term objectives of the Division more challenging.

Cave Conservancy Committee Chairman Report for the Spring 2021 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: None to report.

Appalachian Cave Conservancy: Access to their caves are still closed due to Covid 19.

Butler Cave Conservation Society, Inc.: Cave clean ups continue, otherwise no new items to report.

Carroll Cave Conservancy: Cave clean ups continue, otherwise no new items to report.

Cave Conservancy of the Virginias: Cave clean ups continue, otherwise no new items to report.

Cave Conservancy of Hawaii: Cave clean ups continue, otherwise no new items to report.

Karst Conservancy of Illinois: Cave clean ups continue, otherwise no new items to report.

Kentucky Karst Conservancy: Cave clean ups continue, otherwise no new items to report.

Mid-Atlantic Karst Conservancy: Cave clean ups continue, otherwise no new items to report.

Missouri Caves and Karst Conservancy: Cave clean ups continue, otherwise no new items to report.

Northeastern Cave Conservancy Inc.: All NCC projects, workdays, Member's Day, ceremonies and events which require more than one person to be present are on indefinite hold.

Pennsylvania Cave Conservancy: Cave clean ups continue, otherwise no new items to report.

Rockcastle Cave Conservancy: Due to the COVID-19 pandemic, All Rockcastle Karst Conservancy preserves are CLOSED to all visitation until May 8th, 2020, and perhaps beyond, pending lifting of the current State of Kentucky event and travel restrictions.

Southeastern Cave Conservancy: Cave clean ups continue, otherwise no new items to report.

Texas Cave Management Association: As the pandemic has continued to evolve, the board has made the decision to keep our cave preserves closed. The current situation in Texas does not allow us to give an estimate on when we will reopen.

The Indiana Karst Conservancy: Cave clean ups continue, otherwise no new items to report.

The Michigan Karst Conservancy: Cave clean ups continue, otherwise no new items to report.

West Virginia Cave Conservancy: Cave clean ups continue, otherwise no new items to report.

Western Cave Conservancy: Cave clean ups continue, otherwise no new items to report.

Plans: None.

Problems: None.

Respectfully Submitted,
Dr. Jeffrey C Karr

NSS member 68408
NSS Cave Conservancies Committee Chair
Southeastern Cave Conservancy member
Florida Speleological Society Grotto member
Tampa Bay Area Grotto Member
Hawaii Grotto Member
863.712.037

Contemporary Cave Use Study

John M. Wilson, acting chair jmwgeo@gmail.com
Public Relations and Promotion Section - Kristine Ebrey

Progress

No Progress

Plans

“CaveLog.org” will be the primary CCUS URL

Problems - The use of paper caver registers is not practical. I do not anticipate any progress until a workable internet data collection system can be established.

NCA Liaison for NSS and Show Cave Coordinator

Show Cave (NCA - NSS)

Nicole Ridlen
424 255 0873
NicoleRidlen@gmail.com

Progress

We have been slowly but surely adding more caves to the NSS CPN program. I am in talks with Lake Shasta Caverns. For many caves it is a question of point-of-sale system logistics or just waiting to reopen in the Spring season. It is certainly increasing relations of NCA show caves with the NSS. Our speleologist seems to be a favorite benefit offered by the NSS, along with the promise of the new Cave Activity Book for kids (in process by education committee) and the new easy to read Cave Restoration document made with show caves in mind. Many show caves are excited about building a better, stronger relation with the NSS and nearby grottos. We all have the same goals is a common theme I hear from all show cave owners.

Plans

I will be contacting more show caves that have expressed interest and getting them set up for the CPN program or just make sure they know what the NSS has available. This is a two-way relationship and it is important not only for us to make sure show caves promote the NSS and local grottos as responsible ways for people to get into caving, it is equally important for the NSS to offer all the expertise that we have to help protect and promote these show caves. Remember: show caves are where the public learns about how important our world really is. We need them and they need us.

Problems

Typical pandemic problems and off-season problems, but honestly, it is going pretty good and I love learning all these show caves' stories and sharing them with you in the NSS News.

NSS Landowner Relations Network Committee Report

February 2021

Prepared by

Julie Schenck-Brown, NSS 30493 RL, FE - Chair

Tom Griffin, NSS 24333 FE - Vice-Chair of the Eastern Region

Zach Angstead, NSS 58603 - Vice-Chair of the Western Region

LRNC@caves.org

OVERVIEW

The NSS re-established the Landowner Relations Network Committee (LRNC) in 2016 with the principal goal of interacting with and supporting private landowners. The LRNC works with grottos and internal organizations of the NSS to provide support for questions and inquiries that private landowners have about their caves. Our mission statement is:

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

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

During the last quarter of 2020, Earl Suitor sent the NSS LRNC Certificate of Appreciation that was awarded to Cliff & Lois Lindsay (Culverson Creek Cave System SSS entrance / Fullers Entrance) after he made the presentation at the virtual holiday get together for WVACS in December. Earl had intended to present the award in person at the WVCC banquet for 2020 but it was cancelled because of COVID-19 and didn't want to wait any longer. The award was presented in a mahogany frame donated by Earl and his wife, Cheryl.

Richard and David Sell of Pennsylvania, who were nominated by Curt Harler, Garrett Czmor, Derek Flaig and Dennis Melko last August for a NSS Landowner Realitions Certificate of Appreciation were recognized in November on the NSS Facebook with a great response. An article describing the positive landowner-caver relations exhibited by Richard and David was also featured in the *Cleve-O-Grotto News*, which is published by the Cleveland Grotto of Ohio.



At the Hipple presentation honoring landowner David Sell (center with cap) were, from left, Curt Harler, Cleveland and Pittsburgh Grottos and MAKC; Jack Speece, NSS Speleo-historian and MAKC member; Derek Flaig, Huntingdon Cave Hunters Grotto Chair; and Garrett Czmor, NSS Tytoona Preserve Manager and member of both MAKC and HCH.

Bruce Archambault

Nomination submitted by Shawn E. Williams

Bruce has been a model landowner and a joy to work with. With three caves on his property, two being significant, his cooperation and hospitality since the start of the mapping/gating/bio-inventory/photo documentation process in 2013 and continuing to this day have been exemplary. He even opened up the caves on Big Cavern Ranch for the 2015 NSS Convention held in nearby Waynesville, MO that resulted in a major discovery by some intrepid Texas cavers and the naming of that feature as Texas Dome. The caves are managed by the Missouri Caves and Karst Conservancy and permit work through that entity continues.

The door to his 100 year-old log cabin on the property has always been open during our project stays and many, many friendships have been made and nurtured in that cabin, many times in front of a roaring fire whilst enjoying celebratory libations.

His efforts in conservation by gating two of the caves and his paying cave conservation forward by sharing the importance of cave stewardship to his grandkids is admirable and invaluable.

His enthusiasm is boundless and his hospitality unmatched. He deserves such an award as this.

Chairman's Note: This is our first landowner recognized from Missouri!

The NSS Memorial Patio has been installed at the NSS Headquarters and among the hundreds of bricks are two tributes to landowners.



The late Tom & Cathy Crockett owned multiple entrances of the Sloans Valley Cave System, hosted 100+ cavers every year for their Thanksgiving dinner and were advocates for cave and karst protection.



The late Charlie Smith was a renowned TAG landowner who welcomed cavers to his home and his caves, a tradition continued by his daughter, LeAnn Smith.

COMMITTEE PROGRESS

- Since the inception of the NSS Landowner Relations Certificate of Appreciation in 2016, a total of 66 awards have been presented in 14 states. Our first nominations for Missouri and Ohio have been received and our goal is to award a NSS LRNC Certificate in every state.
- Kim Fedrick requested support with re-establishing a landowner-caver relationship for Godwin Cave in Tennessee. As Kim has recently relocated to Hawaii, Taylor Lynn is willing to work with the landowner to serve as a liaison to manage access for cavers.
- Shawn Hogbin reports that the landowner of Lost Innocence has temporarily (and maybe permanently) closed the property. The landowner said there is a lot going on at the property and therefore did not want cavers on it for the time being. Shawn will reach out again to the landowner in the late Spring.
- Management is going well with Sites & Cave Rat Cave in West Virginia. Both caves are open for responsible caving and cavers must contact Earl Suitor for permission.
- Earl Suitor is still in communication with Mr. Steve Callen (the owner of Mystic Cave) and trying to work out help with management and access. Earl reports that it's slow going and the US F&WS is delayed in getting him the necessary management documents. However, he is in communication with the replacement for our last US F&WS contact at the Keyser office, and remains semi-optimistic about possible future visitation arrangements.
- Collaboration between the Sewanee Mountain Grotto, Nashville Grotto, and the Upper Cumberland Grotto (Cookeville, TN) bolstered landowner mailing lists maintained by each Grotto for Holiday Cards. Special thanks to Alan Hatcher of the Nashville Grotto and Chuck Sutherland of Upper Cumberland Grotto for mailing the Holiday cards for their Grotto. Cards from the Sewanee Mountain Grotto are mailed by Julie Schenck-Brown, with a message on each card to thank landowners for their kindness to cavers. We expect mailings from each Grotto to include over 100 landowners next year!
- Andy Zellner published an updated Closed Cave List for TAG, which is accessible at www.dogwoodcitygrotto.org. Although the list had not been updated in several years, this had been the "Go to Document" for cave access in TAG and will hopefully stimulate and encourage discussions with landowners.
- Duplicate copies of the NSS LRNC Certificate of Appreciation were 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.

PLANS

- Continue to solicit nominations for the LRNC Certificate of Appreciation and the Outstanding Landowner-Caver Relations. Our goal is to recognize at least one landowner in every state.
- Upload a list of Landowner Relations award recipients to the new NSS website.
- Increase social media posts on the NSS Facebook about landowner relations, in particular photos of landowners receiving awards.

PROBLEMS

- None, thanks to weekly communication with Adam Weaver, NSS AVP.

NSS Preserves Committee Report

February 2021

Prepared by

Julie Schenck-Brown, NSS 30493 RL, FE & Tom Griffin, NSS 24333 FE

Preserves@caves.org

OVERVIEW

The NSS currently owns or manages 21 Nature Preserves throughout the United States. Each NSS Nature 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.

SUMMARY FROM THE NSS PRESERVE CHAIRS (Tom Griffin & Julie Schenck-Brown)

Cave Acquisition Grants:

- The Rockcastle Karst Conservancy (RKC) provided recognition for the NSS in their annual newsletter published in January 2021. The NSS has provided a total of \$4,000 for the RKC's acquisition of multiple entrances of the Sloans Valley Cave System in Kentucky.
- Per Keith Dunlap, Indiana Karst Conservancy (IKC) Treasurer, acknowledgement for the \$2,000 grant from the NSS has been (and will be) listed in the quarterly IKC newsletter, on the IKC website (www.ikc.caves.org/shawnee-expansion-donor-list) and will eventually be listed on the kiosk at the property, when constructed later in 2021. A final financial summary and copy of the deed were also provided by Keith.
- An inquiry was received from Mid-Atlantic Karst Conservancy (MAKC) about the possibility of a Cave Acquisition Grant for Penn Aqua Cave in Pennsylvania. The MAKC has previously received a \$5000 grant from the NSS for the acquisition of Billy Clay Pit in Pocahontas County, WV, and a \$5,000 grant for the purchase of Sarah Furnace Cave at their Barbara Schomer Preserve, PA. Grant guidelines were provided, but the formal request has not been received.
- An email was sent to the Western Cave Conservancy to advise them of grants available from the NSS Cave Acquisition Fund. Discussions continue and we anticipate a grant application for the organizations purchase of two California caves.

The Preserve Science Subcommittee has developed a draft permitting process for research in caves and started a framework for prioritizing research needs on NSS preserves. The next steps for this second project are:

- Working with the Preserve Managers to determine the key resources protected, biggest knowledge gaps, and potential threats to resources at every preserve.
- Archiving all previous research on preserves.
- Working to update the Board of Governors Manual acts and appendices to match the direction of research in the NSS.

Preserve Emails - The new email addresses have been assigned by NSS IT, which changed the old format from SheltaCommittee@caves.org to SheltaPreserve@caves.org to welcome potential visitors to the preserves, since the use of "Committee" in the old emails sounded very formal.

Kiosks - We will be working with Devra Heyer, NSS Education Division Chief, to develop information for the kiosks and have requested input from the Preserve Managers. We also encouraged the managers to continue posting educational information such as brochures, contact information for the NSS, cave laws, etc. at preserve kiosks.

Preserve Signs - Per a recommendation from Jay Clark, NSS General Counsel, all NSS Preserves will need to have signage that specifies the need for all visitors to obtain a permit. We have been in discussion with Adam Weaver, NSS AVP, about ordering the signs in advance of full implementation of the online

permit system. Because all NSS Preserves should be using a permit, we plan to move forward with ordering the signs.

Expense Requests - As we are entering the final quarter of the fiscal year, Adam Weaver is encouraging us to move forward on several of the long-term projects we have discussed, such as gravel for parking areas, cave gates, kiosks, trail maintenance items, repairs, etc.

Permit System - This has been a project that has taken longer than we anticipated. Thankfully, we have located a non-caver with IT experience who has a passion for helping non-profit organizations who is evaluating the use of Google docs with drop down menus for the Preserves permit. Ben Tobin has also started research into an app for post trip reports, which will help us track visitation, as well as suggestions and comments.

Logos - We have received logo suggestions for the Albert & Ethel Ogden Preserve (TN) and the Gage Preserve (NY), but we need more. We have also developed a sketch for a possible NSS Preserves logo. We are grateful to have two experienced graphic artists, including Cheryl Suitor who also serves as a Preserve Manager at the Guilday Preserve (WV offer to volunteer their artistic talents for this project.

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 was \$25.34/ an hour. In 2020, we began to track the volunteer hours accumulated for preserve management and are very proud to report that cumulatively, the NSS Preserve Managers provided 3,133 hours of service which equates to \$79,390.22 invested into communities throughout the country.

SUMMARY OF PRESERVE MANAGERS REPORTS

McFails Cave Nature Preserve, New York

Peter Haberland and Jason Siemion, Preserve Managers

- No report received.

Shelta Cave Nature Preserve, Alabama

Kevin Reeves and Bill Torode, Preserve Managers

- Dr. Matt Niemiller, a Professor from the University of Alabama - Huntsville, continued his biological research and visited the cave twice this quarter with his students.
- Members of the Huntsville Grotto will be removing rotten trees from the property.
- Routine visits continued for property monitoring with no issues noted.
- In 2020 there were 30 volunteer hours dedicated to research and Preserve Management, which equates to \$760.20 invested into the local community.

John Guilday Caves Nature Preserve, West Virginia

Earl and Cheryl Suitor, Preserve Managers

- Hamilton Cave and New Trout Cave are open, but visitation is down due to the virus.
- Have asked that all visiting cavers wear masks & gloves, and social distance.
- There was some small graffiti at the kiosk & in New Trout. The person left their name and social media address(!). They were and made aware that the sign & kiosk would have to be repainted in spots and we feel the situation is resolved.
- The kiosk was restocked with NSS brochures and cleaned.



- The parking area has been widened by the West Virginia Highway Department and we asked them to please put more gravel down to which they have agreed.



- The winter bat counts are cancelled due to COVID-19. They will resume in 2022. This was done in consultation and unanimous agreement with WVDNR & US F&WS.
- In 2020, there were 75 volunteer hours dedicated to Preserve Management, which equates to \$1900.50 invested into the local community.

Kingston Saltpeter Cave Nature Preserve, Georgia

Larry Blair and Kevin Glenn, Preserve Managers (Managed for the Felburn Foundation)

- The Preserve is a significant biological sanctuary and there has been no visitation since September.

- Access is closed during deer season while the surrounding landowners hunt and restrict access.

James Gage Karst Preserve, New York

Bob Simmons, Emily Davis, & Michael Warner, Preserve Managers

- With Covid 19 still in full play, very little visitation or cave trips were made this period and the Preserve remains essentially unchanged from the previous quarter.
- The preserve is open, but the caves closed on 10/1/20 for northern long-eared bat hibernation season as required by New York State law.
- Assuming the Covid 19 restrictions are eased later in 2021, we plan on beginning the cabin replacement project this year. Tentative schedule will start with permit acquisition this Spring, clean out and demo of existing cabin and concrete slab late Spring to early Summer, Cabin building in late summer early fall. Funds have been raised and are on deposit with the NSS.
- Once the cabin is completed, a new informational kiosk will be erected. A replacement Kiosk is available from another local land trust that will be rebuilt and repurposed for the preserve.
- In 2020, there were more than 60 volunteer hours dedicated to Preserve Management, which equates to more than \$1520.40 invested into the local community.

Warren Cave Nature Preserve, Florida

James Hamlin and Dave Lizdas, Preserve Managers

- The pandemic continues to affect caver visitation, with at least three canceled trips due to COVID or COVID positive results.
- The parking area has been used as a shooting gallery and many of the small trees have been shot up. There are two bullet holes in the Warren Cave sign from what appears to be poor marksmanship. There is no fence and trash was dumped near the entrance road, but not on the preserve property.
- The cave gate is scheduled for an upgrade this spring. David Springhetti has purchased additional steel and has started fabrication of the gate in his South Dakota shop.
- Due to the parking area being used as a shooting gallery, we need to upgrade our preserve boundary. We need boundary markers and a new sign and we are open to suggestions from the NSS. *(Note from the Preserve Chairs: NSS Preserve Boundary signs are being sent by the NSS Office staff and we will order a Preserve sign. We also plan to talk with Andy Prewett, Land Manager for the Land Trust of North Alabama for suggestions about securing the boundary).*
- A bat study is being conducted by Lisa Smith, a biologist with the Florida Fish and Wildlife Conservation Commission (no cost to NSS):
- An Anabat acoustic logger was placed outside the cave (<https://www.titley-scientific.com/us/anabat-swift-passive-bat-detector.html>). It is very small and requires FWC personnel to come in and replace the batteries about every 2 weeks without the need to enter the cave. Additionally, a roost monitor (<https://www.titley-scientific.com/us/the-anabatr-roost-logger.html>) was placed inside the cave at the bottom of the rappel. It will be retrieved in the spring. The roost monitor will detect when the bats are active inside the cave, and the Anabat will detect if they leave the cave. iButton temp loggers were also placed in the cave. This is part of a joint project with Clemson and Kennesaw State that studies bat activity levels during winter throughout the southeast.
- In 2020, there were approximately 60 volunteer hours dedicated to Preserve Management, which equates to \$1520.40 invested into the local community.

Donald R. Russell Nature Preserve, Oklahoma

Clayton & Cynthia Russell, Preserve Managers

- Six visits were made to check the cave entrances and there was no sign of visitation at the preserve, which is a protected biological habitat site.



Approximately 300 Ozark Big Eared bats in seven different clusters.

- We used the On-X hunt phone app to mark corner boundaries to determine the property line.
- Due to the COVID pandemic, we have an incomplete survey of Sassafra Cave, but remain hopeful that Mark Jones and the CRF can finish this year.
- In 2020 there were 40 volunteer hours dedicated to Preserve Management, which equates to \$1017.20 invested into the local community.

Schoharie Caverns Nature Preserve, New York

Christa Hay, Preserve Manager

- The preserve is open year-round for surface visitation. The cave closed October 1 for the bat populations and visitation has been light with one request for the cabin on New Year's Eve.
- No Improvements during this quarter.
- Need to revisit a possible issue with the one boundary line and currently in communication with the surveyor that surveyed the property. We will be placing the NSS boundary markers once received. *(Note from the Preserve Chairs: NSS Preserve Boundary signs are being sent by the NSS Office)*
- In 2020 there were 20 volunteer hours dedicated to Preserve Management which equates to \$506.80 invested into the local community. 2020 was obviously a different kind of year for any kind of projects.

Mill Creek Sink Nature Preserve, Florida

Andrew Pitkin, Preserve Manager

- Andrew took over as the NSS Preserve Manager on January 15, 2021 and has already made three site visits for preserve management activities.
- The preserve has been open, although conditions have not been suitable for diving from July 2020 to early January 2021, so no one has entered the cave during that time.
- There is some ongoing exploration and survey work continuing in the cave by Charlie Roberson and Andrew Pitkin, but cave conditions have not been suitable until very recently.
- The Cave Diving Section has refunded Howard Smith and Roberts Culbert for materials costs for work already done on the stairs.
- The NSS Office received notification from the Suwanee County, Florida Property Appraiser that the property no longer qualifies for a partial or total tax exemption. The notice stated, “As of January 1 of this year, the property was not being used for tax exempt purposes.”

Tytoona Cave Nature Preserve, Pennsylvania

Garrett Czmor, Preserve Manager

- Late summer and fall showed an increase in visitation. This might be attributed to better weather and many with “cabin fever.”
- Received a donation check of \$400 on behalf of Tytoona Cave from Jeanne S. Downey. She and her husband have made yearly donations. This recent donation (as all donations) will be forwarded to the NSS office. Including this check, the Downey’s have donated \$3,710.00 and are truly remarkable people.
- Due to COVID, only minimal maintenance took place, but an incident of illegal dumping was observed at the Preserve and the suspect was apprehended as a full report was made to the Pennsylvania State Police and the suspect appeared in court. A detailed account of the incident and the trial were provided to the Preserves Chairs when the incident occurred and is also documented in the quarterly report. Based on testimony and photos taken during the incident, the judge found the defendant guilty and ordered him to pay a fine.



Trash dumped at the Tytoon Nature Preserve



Trash cleaned up after it was dumped at the Tytoona Preserve

- In 2020, there were 28 volunteer hours dedicated to Preserve Management, which equates to \$709.52 invested into the local community.

Wells Cave Nature Preserve, Kentucky

Bob Roth and Duke Hopper, Preserve Managers

- The 2021 Wells Preserve Management team includes Duke Hopper (Co-Manager), Steve Vaughn, Harry Goepel, Lee Florea, Jim Helmbold, Larry C Simpson, Jerry Nichols, Barb Graham, Delania Roberts
- Visitors are not signing in at the kiosk or register but have depleted the brochures in the kiosk. Requesting more and *Guide to Responsible Caving* is preferred.
- The viewing bench, which was completed by Ken Bailey will be dedicated to Bill Walden, who served as the Wells Preserve Manager. The ceremony is TBD but may be scheduled in June.
- Work continues with Ben Tobin, NSS Preserve Science & Research Subcommittee Chair to evaluate the purchase of a weather station. Currently assessing location and models. ATM leaning towards a HOBO RG3 Data Logger with a solar shield.
- Drainage issues: Duke Hopper met with the County who reports our driveway is a private drive and not a County road. (We share the drive with the neighbor behind us and he expressed interest of spreading out some gravel in the low spots). Before this happens, we need culvert work completed as the State Route 192 culvert is filled solid with gravel and slit and now gravel is washing down the road. There is work being performed west of Dykes bridge and new concrete culverts have been installed. Duke to check with the state if we can get assistance. (An addendum with photos and labels was provided.)
- The cave is open; however, the Pipistrel Room is closed from November-May for bats (count less than 50, which is a 90% decline since 1990s).



Blue Grass Grotto President Kevin Zachary in a high lead in Left Cave.

- In 2020, there were 300+ volunteer hours dedicated to Preserve Management, which equates to more than \$7602.00 invested into the local community.

Great Expectations Cave Nature Preserve, Wyoming

Bob Montgomery & Savannah Sawyer, Preserve Managers

- Derek Bristol led a “Mini” Great Expedition for four days in late September. Approximately 10 cavers surveyed 5000’ additional feet in the river passage and did a through trip.
- Due to heavy snow fall in early October an additional Great Expedition and a visit by Bob Montgomery and Savannah Sawyer was cancelled. The preserve and the cave are resting for the winter under a soft blanket of snow.
- New fence construction is needed on the southern boundary of the preserve. This will probably cost \$500 for supplies and require 80 to 100 hours of volunteer time.
- Removal of dead trees above the entrance is needed. This will probably take 10 to 20 hours.
- We still need to identify invasive plants and have an archeological survey of the preserve.
- We are looking into the possibility of installing stream gauges at the entrance and exit of Great X to predict water levels more accurately within the cave. We have not determined a cost for this at this time.
- In 2020, there were 132+ volunteer hours dedicated to Preserve Management, not including travel time, which equates to more than \$3,344,88 invested into the local community.

Richard Blenz Nature Preserve, Indiana

Anmar Mirza and Dave Everton, Preserve Managers

- Continued weekly trips through the cave to check on issues from visitors, complete the weekly bat and salamander count, as well as recreation.
- The Bloomington Indiana Grotto and the Central Indiana Grotto held a joint Halloween event at the Preserve as this is an outdoor venue that enables appropriate physical distancing.
- We had one issue with a person who had requested a trip in December who was then found living

in the cave in the LV Cushing Room. When queried he responded that he intended to meditate in the cave for 30 days and then intended to write a book about his experience and make the cave famous. He had food, water, and camping equipment to support this. He was escorted out of the cave and law enforcement advised him that we were issuing a “no trespass” order against him. A write-up of the event, which contains more details was also submitted.

- The septic system for the Blenz house needs to be replaced. Cost will be approximately \$9750. We have some pledges of support from the caretakers who live in the house and outside donors who will front the money and donate a portion when the weather allows for work to begin, but the majority will need to be reimbursed by the NSS.
- An extension to the shelter is still planned for the near future.
- In 2020, there were approximately 550 cumulative volunteer hours dedicated to Preserve Management, which equates to more than \$13,937 invested into the local community.

New River Cave Nature Preserve, Virginia

No Current Preserve Manager

- Jonathan Roberts had been serving as Preserve Manager until we could locate another caver to accept the position, however, he has asked to be removed from any correspondence related to NSS Preserves.
- The Preserves Chairs have been in discussion with Wil Orndorff, former NSS Preserve Manager, about filling in as an interim manager, as well as Vince Snell, a member of the VPI Caving Club. Hopefully, Wil could serve as a mentor to Vince or other VPI students as this preserve needs routine visits due to its popularity with cavers and locals.

William J. Stephenson Nature Preserve, Alabama

Kevin Reeves and Bill Torode, Preserve Managers

- No preserve visitation by cavers this quarter, but the property and trails were walked.
- Planning to work on kiosk installation.
- In 2020, there were 24 volunteer hours dedicated to Preserve Management, which equates to \$608.16 invested into the local community.

Sims Sink Nature Preserve, Florida

Buford Pruitt Jr., Kelly Jessop, & Paul Moler, Preserve Managers

- The preserve continues to be open for research, but none completed since the last ternary report due to Covid-19 self-imposed restrictions.
- The co-owner of the adjacent 6-acre parcel (Lori Hempfling) provided us with a copy of the \$1,500 GeoHazards report. Pruitt thanked her for that donation. Also, she and her husband are informally keeping an eye on the preserve. (*Preserve Chair's Note: A copy of the Geotech report was provided to Dr. Ben Tobin, Preserves Science & Research Subcommittee Chair*)
- The residents of the adjacent 6-acre parcel reported to Pruitt that a snag (dead tree) fell across and knocked down a portion of the east fence, which was repaired by Moler on January 14, 2021 who reported that the snag was rotten and easily removed using a chainsaw. As the chain link fencing needs to be stretched and some horizontal poles replaced, Pruitt has asked NSS member Tevis Kouts to lead the effort to repair the fencing, as he led a similar effort a few years ago.



Fence damage from a fallen snag (Photo by Lori Hempfling)



Fence on the eastern property boundary that needs to be stretched (Photo by Lori Hempfling)

- In 2021, there have been 8 volunteer hours dedicated to Preserve Management, which equates to \$202.72 invested into the local community.

Haggard Nature Preserve, Tennessee

Brad Long and Lesley Colton, Preserve Managers

- The preserve had six trips this quarter.
- We are still working on developing a gated parking area and expect to make progress over the next year. Maureen Handler has volunteered consultation and equipment.
- Jon Zetterberg continues work on an overland survey using GIS and field observations to gain a better understanding of the property.
- In 2020, there were 8 volunteer hours dedicated to Preserve Management, which equates to \$202.72 invested into the local community.

Albert and Ethel Ogden Nature Preserve, Tennessee

Megan Atkinson & Chuck Sutherland, Preserve Managers

- We had 18 cavers visit this quarter, with the increase related to the SERA Cave Carnival.
- David Springhetti purchased the steel and begun fabrication of the cave gate at his shop in South Dakota for installation this spring or summer with volunteer support to be provided from the Upper Cumberland Grotto.



Chuck Sutherland measuring for the gate in Secret Cave.

- There were several volunteer hours this quarter due to the SERA Cave Carnival being in the area. Management activities included led trips, rigging, de-rigging, and site walks.

Thunderhole Cave Nature Preserve, Tennessee

Megan Atkinson and Warren Wyatt, Preserve Managers (Managed for Jason Cathey)

- Visitation included three different groups this quarter.
- The adjacent landowners are super pleasant and supportive.
- Still intend to clean the pit bottom with Upper Cumberland Grotto when Covid-19 worries lessen.
- In 2020, there were 20 volunteer hours dedicated to Preserve Management, which equates to \$506.80 invested into the local community.

Dahm Springs Nature Preserve, South Dakota

Rene Ohms, Dean Faust, & Adam Weaver (Black Hills Cave & Nature Conservancy)

- Management visits were made to Brooks Cave to evaluate the ladder that we are planning to replace and determine what materials we will need. There was an additional trip to Brooks Cave to collect samples for microbial research for Riley Drake from MIT. There was also a trip to both Brooks and Dahm Spring to collect samples for microbial research for Dr. Hazel Barton (University of Akron). During this trip to Dahm Spring, we unfortunately discovered that the new gate had been breached. Two return trips were then made to the cave: one with a sheriff's deputy who collected evidence and wrote a report, and one to replace both locks and look for damage or vandalism. Thankfully, it appears that the perpetrators did not damage anything.

- The gate on Dahm Spring Cave was breached. We have now replaced both locks (which had been cut) and are planning to add some steel plates to the gate to make it more difficult for someone to cut through the lock housing and access the locks. We are also going to deploy trail cameras for security and will increase our physical visits to the preserve.
- An initial botanical survey of the preserve was completed by Stephanie Rockwood and Devra Heyer, and we received the species list this quarter. 181 plant species were documented in the preserve.
- We still plan to stabilize the ladder in Brooks Cave, which will cost approximately \$300 and approximately 10 person hours. We will do this in the spring, when it is easier to access the cave entrance. We also plan to deploy several trail cameras to monitor for unauthorized entry and wildlife. These cameras were donated by a neighboring landowner.



Ladder in Brooks Cave that requires some stabilization work

- This quarter, we received 32,782.63 in donations from nearly 200 donors, and our year-end Give & Win event raised \$22,520. For the Give & Win event, several sponsors provided prizes for the thank-you drawing, and donors earned one entry for every \$25 (or 6 entries per \$100). The prize drawing proved to be a great incentive for donations!
- Individuals or organizations who donated \$500 or more this quarter were: Dean Faust, Rushmore Cave LLC, Chris Pelczarski, Julie Schenck-Brown, Sharon Weaver, Bob Montgomery, Ken Steinken, Charles Walker, Thom Engel, Dave Springhetti, and Hazel Barton. One \$1,000 donor wished to remain anonymous.

- In addition to the fundraising, there were 1,700 volunteer hours dedicated to Preserve Management, which equates to \$43,078 invested into the local community.

Myrna Attaway Nature Preserve, Tennessee

Maureen Handler & Kristine Ebrey, Preserve Managers

- No cave visitation this quarter, although a permit was obtained for hiking on the Preserve.