

## YEAR-END 2018 SCIENCE ADVISORY REPORT

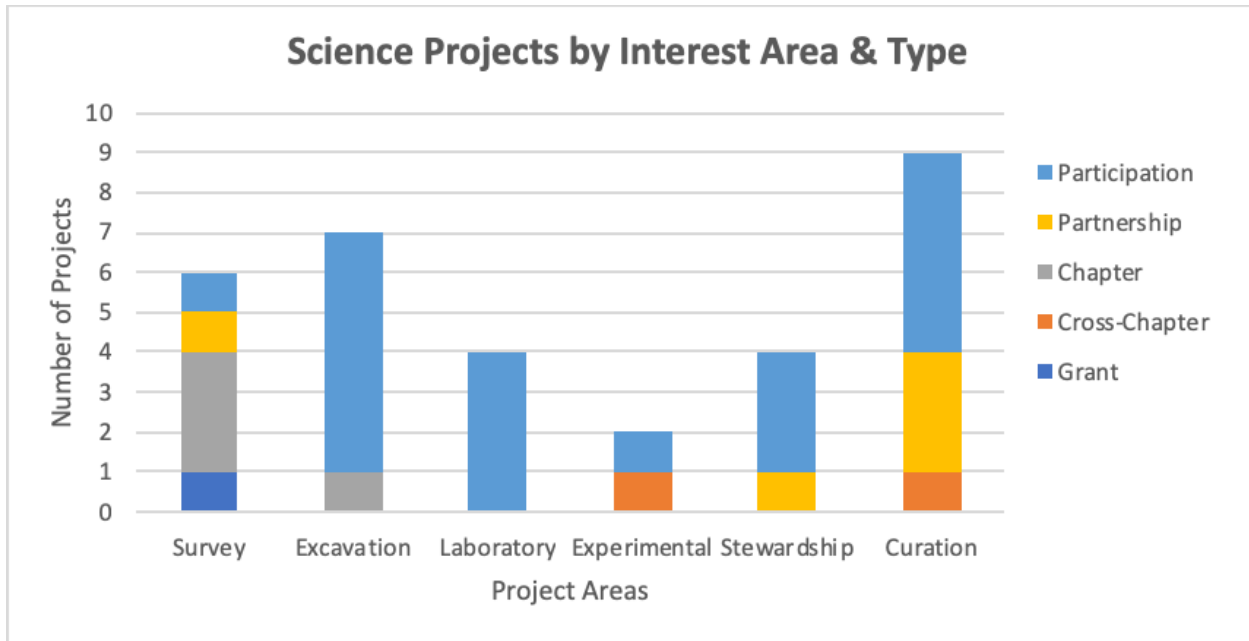
### INTRODUCTION

*The [Colorado Archaeological Society](#) (CAS) is a non-profit organization committed to the stewardship of archaeological resources in Colorado. We achieve this through public education, research, conservation, and enhanced opportunities for responsible participation in archaeology for interested individuals and organizations.*

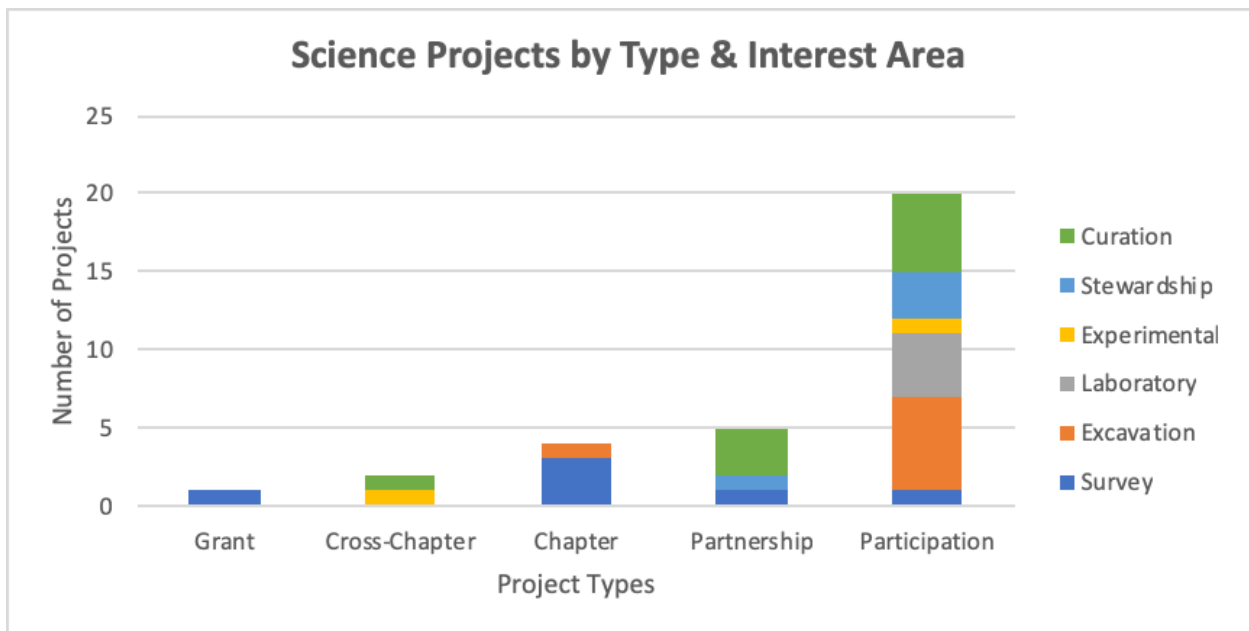
This report summarizes the archaeological research and cultural resource conservation opportunities pursued and reported by CAS chapters and members for 2018. The report is compiled by the Science Advisory Committee from project information submitted by CAS chapters and organized in sections aligned with the CAS science interest areas of archaeological survey, excavation, laboratory processing and analysis, experimental archaeology, cultural site stewardship, and cultural resource curation. Within each science interest area, projects are briefly described, associated with participating chapters, and designated by type. Designated project types include grant, cross-chapter, chapter, external partner, and external participation. Grant projects are funded by an internal CAS grant or a grant from an external agency. Cross-chapter projects are jointly conducted by two or more chapters. Chapter projects are led and conducted by members of a single chapter. External partner projects are conducted under a formal partnering agreement between a chapter or CAS and an external agency. External participation projects are those where individual CAS members participate in projects managed by external agencies.

Research projects represent the leading edge of our mission activities; providing opportunities for our members to responsibly participate in generating new knowledge about Colorado's rich cultural heritage. This work adds new data for the archaeological community to analyze and interpret. While research generates new data and knowledge, cultural conservation projects curate Colorado's cultural resources on the landscape, in museums, and in other curation facilities. It preserves these resources and their associated research materials for current and future researchers and the public. It also helps to preserve the living history of descendent populations.

This year CAS chapters report conducting, or member participation in, 32 research or conservation science projects. The figure below shows the number of reported CAS projects first by science interest area and then by project type within each area. Currently, CAS chapters report participation in more curation projects, than any other interest area. This is closely followed by excavation and survey projects.

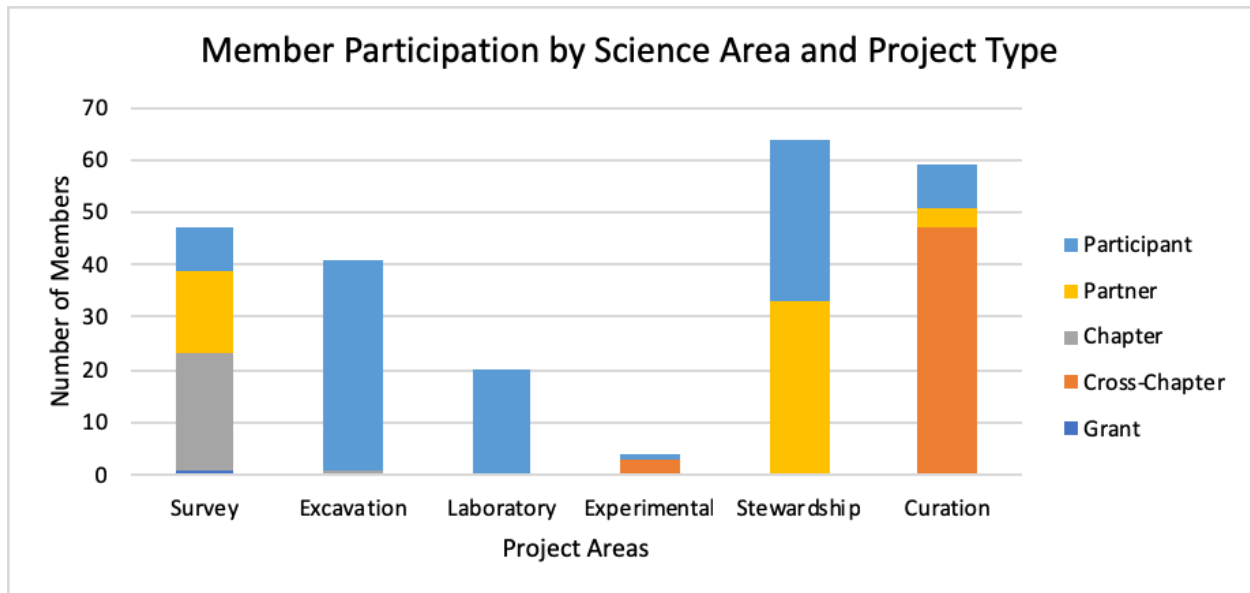


The next figure reverses the first by showing projects by type and then, within that, by science area. Member participation in projects managed by external agencies continues to be CAS’s dominant science project type. Twenty of our 32 reported science projects are of this type. Five of the remaining projects are conducted in partnership with external agencies.

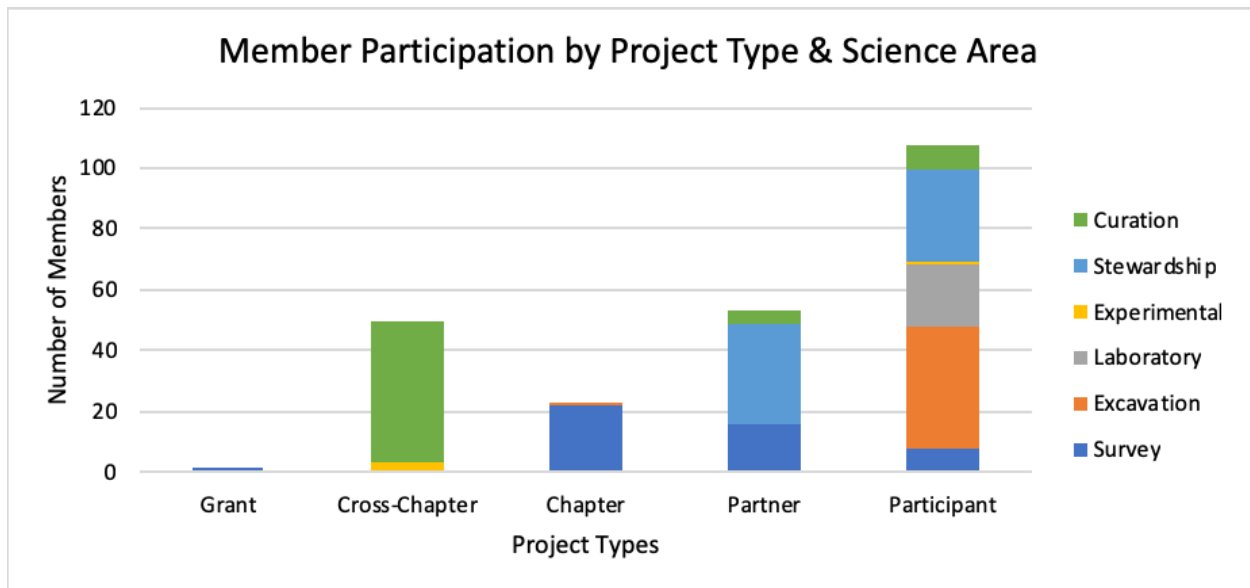


Chapters report 239 members participating in science projects this year. Some members participate in more than one project, so the actual number of different science project volunteers is less. The figure below shows the number of CAS members participating as volunteers in the 32 reported science projects by science area and project type. Although CAS membership includes professional archaeologists only members who participate as unpaid volunteers are included in this report. By science area, cultural site stewardship, closely followed by curation,

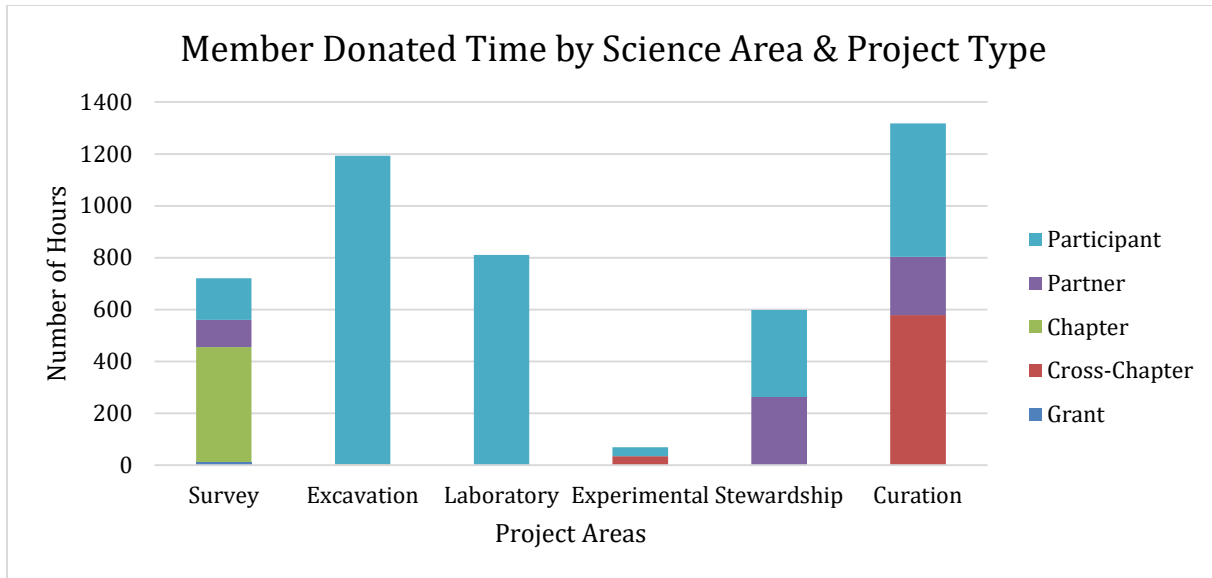
archaeological survey, and excavation attracts the most member volunteers. Both stewardship and curation are underestimated due to the lack fourth quarter government agency data access during the on-going government shutdown.



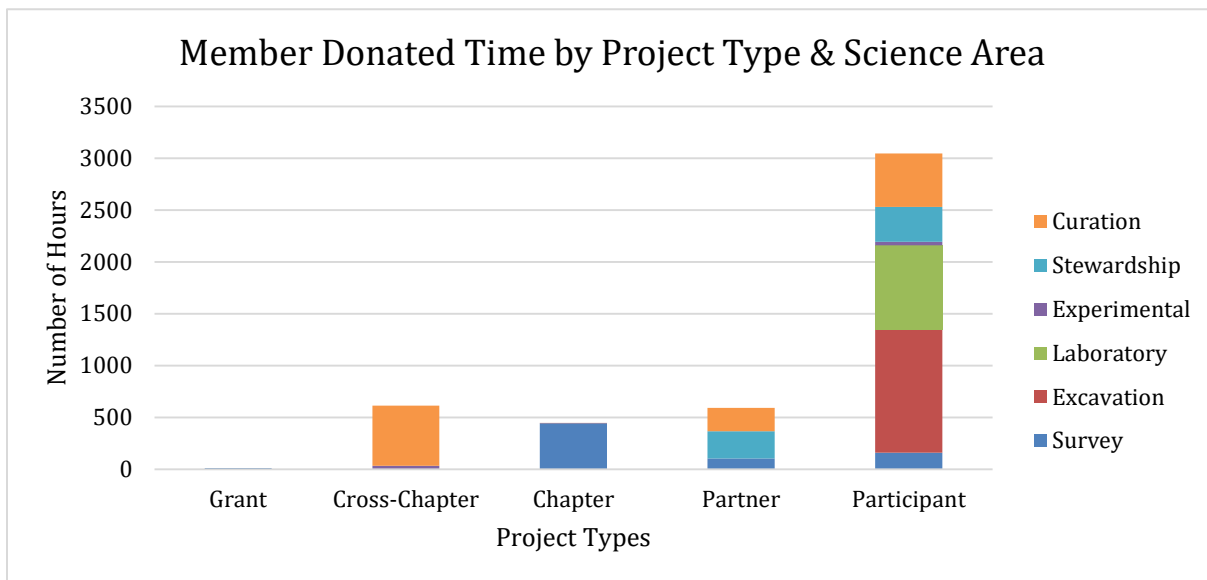
As shown below, almost half the reported CAS members participation in reported science projects, participated in projects managed by external organizations. This is consistent with the large number of external projects reported.



This year, CAS members report contributing 4,708 volunteer hours to the projects in this report. The figure below shows time contributed organized by science area and within that, by project type. As can be seen, members contribute significantly more volunteer time to curation and excavation projects than projects in the other science areas. However, members also spend considerable time volunteering for laboratory and survey projects.



Like the number of projects and participating members, most member volunteer time is devoted to supporting external organizations. This is seen in the figure below.



**PROJECT SUMMARIES**

The remainder of this report summarizes projects reported by our chapters during 2018. The projects are organized by science area and provide a brief project description along with information on the project type, participating chapters, and points of contact. We conclude each science area section by listing project partners and sponsors and member participation data.

**Survey Projects**

Chapters report conducting or member participation in 6 survey projects this year. These are described below.

***Escalante Game Drive Project ([Chipeta](#): Grant Project)***. The Escalante Drive Project is a photogrammetric survey and modeling project funded by the State Historical Fund with a grant managed by the Chipeta Chapter. [Alpine Archaeological Consultants](#) is a subcontractor on this project. The Game Drive site consists of a series of rock features on a steep canyon wall. The grant builds on prior work of Chipeta volunteers who aided in mapping and recording it many years ago. The grant provides a drone-based 3D map of the site that could be used to apply computer-generated models on game behavior and to determine how it may have functioned as a prehistoric game drive facility. The program is complete. For more information contact [Nick Ard](#).

***Mesa Verde Region Survey ([Hisatsinom](#): Chapter Project)***. This year Hisatsinom continued its Mesa Verde Region Survey started in 2008. The purpose of this pedestrian survey project is to record and date the prehistoric and historic archaeological surface record on private land holdings in the Mesa Verde Region, and in the process, help educate owners about the importance of preservation archaeology. No collections are made, and all of the artifact identification and analysis is done in the field. The team uses diagnostic pottery artifacts and a Bayesian model developed by Ortman, et al, to estimate dates of Pueblo occupations. The team recently started its 22<sup>nd</sup> survey since 2008 – the 6<sup>th</sup> this year. Many surveys involve several work days to complete. Since 2008 the team has surveyed 4,824 acres of mostly pinyon-juniper canyonlands, registered 287 sites, and recorded over 55,000 artifacts. This year, the team surveyed over 800 acres, registered 24 sites, and recorded 5,976 artifacts. Prehistoric site types the team recorded include: habitations, check dams, pottery and lithic scatters, points, field houses, rock art, and camps. Historic recordings include farm houses, barns, trash dumps, flumes, and root cellars. Cultural affiliations include Navajo, Paleo Indian, Archaic, Basket maker and the entire Puebloan sequence through Pueblo III. Required Colorado State recording forms, maps, scaled site drawings and photos are submitted to [OAHP](#). When ten or more sites are recorded on a property, a bound summary report is prepared to address community formation processes and population estimates through time. The team provides copies of these summary reports to the Canyon of the Ancients Visitor Center and Museum and Crow Canyon Archaeological Center libraries for access by professional researchers. For more information contact [Bob McBride](#).

***BLM Para-Archaeologist Pilot Project ([Chipeta](#), [Grand Junction](#): Cross-Chapter)***. This is a pilot program begun with the Montrose BLM archaeologist, with the agreement of the Colorado BLM Archaeologist. This project builds on the former BLM Para-Archaeologist program. The objective is to build a cadre of trained CAS avocationalists who can assist the BLM in field projects such as survey. This year the project began with a 4-hour introductory level workshop: Recognizing Prehistoric Artifacts. This workshop was given to 16 CAS members. An initial BLM sponsored survey was done on 5 May 2018. The survey was led by Matt Landt of [Alpine Archaeological Consultants](#), a CRM company in Montrose. Twenty hearths were documented, and the site reports are in work. For more information contact [Teri Hauser](#).

***Autabee Plaza Project ([PAHS](#): Chapter Project)***. The Autabee Plaza Project is a pedestrian survey project performed at the request of Autabee family members interested in locating the plaza site on private property. In 1840, at the request of Ceran St. Vrain, Charley Autabee built a plaza along the Huerfano River in present day Pueblo County. Chapter members contributed 152 hours to researching land records, and with Autabee family members scouting for the possible plaza location. Given the potential significance of this cultural resource, archaeologists Minette

Church and Michelle Slaughter were contacted. Following discussions and visits to the potential site, they with substantial help from PAHS wrote a grant which would provide for a UCCS field school operation during the summer of 2019. The grant was not submitted given the inability to secure land owner permission to access the site. For more information contact [Doug Baxter](#).

***La Botica Field School (IPCAS: External Participation Project)***. One IPCAS member participated in PaleoCultural Research Group's survey field school in the San Louis Valley, donating 26 hours. For more information contact [Delane Mechling](#).

***White Rocks Rock Art Assessment (IPCAS: Chapter Project)***. For more information contact [Delane Mechling](#).

*Survey data summary for all participating chapters:*

*Surveyors: 50 Pedestrian Surveys: 8 Hours: 720 Rock Art Surveys: 1*

*Photogrammetric Surveys: 1*

*Sponsors: Private Landowners, BLM Uncompahgre Field Office, State Historical Fund, PCRG, CAS*

## Excavation Projects

CAS members participated in or documented 7 excavation projects this year. The reported projects are briefly described below.

***Northern Chaco Outliers Excavation (Denver, Hisatsinom: External Participation Project)***. CAS members dug with the [Crow Canyon Archaeological Center](#) on the [Northern Chaco Outliers Project](#). This project focuses on the Haynie Ancestral Pueblo village located on private land near Cortez. The project seeks to understand Chaco influence in the Mesa Verde region, changing human/environment relationships during the A.D. 1130–1180 drought, and the emergence and functioning of community centers through time. For more information contact [Dave Melanson](#).

***Swallow Excavation (Denver: Chapter Project)***. State CAS and Denver CAS have formed an Oversight Committee (OC) to facilitate completion of the Swallow Site report. The OC is gathering the finished chapters and partially completed chapters to determine what analyses remain to be done and determine how the analyses will be completed; organizing the site records and paperwork; and is working with the Denver University Museum on curation of the artifacts and Swallow Site records. The OC consists of Karen Kinnear and Linda Sand from CAS, and 5 archaeologists: Chair - Pete Gleichman (Native Cultural Services), Kimball Banks (Metcalf Archaeological Consultants), Mark Mitchell (PaleoCultural Research Group), Jeannie Mobley-Tanaka (Front Range Community College), and Holly Norton (State Archaeologist). Contact [Pete Gleichman](#) for more information on this project.

***Fossil Creek Excavation (Northern Colorado: External Participation Project)***. One CAS member attended Dr. Jason LaBelle's [CSU Summer Field School](#), helping to uncover hearths and document the excavation. For more information contact [Rae Todd](#).

***Cerise Park Excavation (Chipeta: Chapter Project)***. This project was a one-day effort with Alpine Archaeological Consultants to excavate a historic structure in Cerise Park in Montrose before the building was removed. For more information contact [Teri Hauser](#).

***Tahosa Creek Excavation*** ([Denver](#), [Hisatsinom](#), [IPCAS](#), [Northern Colorado](#): ***External Participation Project***). During June and July, CAS members participated in the ten-day field work portion of the Tahosa Creek excavation project. Site 5LR647, located at 9300 feet in the intermountain region of the state, is thought to be a possible Middle Archaic camp. During the field work, the team excavated twenty 1x1m units and fourteen shovel test pits. For more information contact [Dr. Holly Norton](#).

***Mitchell Springs Excavation*** ([Denver](#), [Hisatsinom](#), [IPCAS](#), [Unaffiliated](#): ***External Participation Project***). CAS volunteers supported and participated in field schools at the Mitchell Springs Ruin Group run by [Four Corners Research](#). A major component of this research is to explore the processes that created Chaco outlier communities in the Montezuma Valley. Members excavated, screened, assisted in training other participants, tracked/logged in artifacts, mapped locations of key artifacts, and other miscellaneous tasks. For more information contact [Karen Kinnear](#).

***Magic Mountain*** ([Denver](#): ***External Participation Project***). Denver participated in excavating the [Magic Mountain](#) site with PaleoCultural Research Group.

*Excavation data summary for all participating chapters:*

*Excavators: 42 Projects: 7 Hours: 1193*

*Sponsor: CAS, OAHP, Crow Canyon Archaeological Center, CSU, PaleoCultural Research Group, Alpine Archaeological Consultants, Four Corners Research*

## Laboratory Processing & Analysis Projects

Four chapters reported member participation in laboratory projects with external agencies this year. These projects are briefly described below.

***Northern Chaco Outliers Laboratory*** ([Hisatsinom](#): ***External Participation Project***). CAS members, working as volunteers in the [Crow Canyon Archaeological Center](#) Research Laboratory, completed processing and analysis of artifacts from the Ida Jean Pueblo II site curated at the BLM [Canyon of the Ancients Visitor Center and Museum](#) and are now processing and analyzing artifacts from the nearby Haynie site. Ida Jean, Haynie, and a third adjacent site form the Lake View Group – a largely Pueblo II complex of at least four great houses and a great kiva. Laboratory analysis of artifacts from this complex is part of Crow Canyon's ongoing [Northern Chaco Outliers Project](#). For more information contact [Dr. Kari Schleher](#).

***CSU Laboratory*** ([Northern Colorado](#): ***External Participation Project***). CAS members analyzed Spring Gulch artifacts including ground stone tools, projectile points, and ceramics during CSU's Spring Laboratory Project. For more information contact [Rae Todd](#).

***CU Laboratory*** ([IPCAS](#): ***External Participation Project***). Under the supervision of Scott Ortman, Assistant Professor of [Anthropology at CU-Boulder](#), IPCAS members participated in a lab analysis of the artifact collection excavated by Florence Hawley Ellis at the Pojoaque Pueblo in 1952. For more information contact [Delane Mechling](#).

***El Pueblo Artifact Re-inventory Laboratory*** ([Denver](#), [Pikes Peak](#): ***External Participation Project***) Three CAS members work in the History Colorado and Fountain Library labs to re-inventory artifacts excavated from the El Pueblo site. For more information contact [Dr. Holly Norton](#).

*Laboratory data summary for all participating chapters:*

*Analysts: 20 Hours: 810*

*Sponsors: OAHP, Crow Canyon Archaeological Center, CSU, CU*

## Experimental Archaeology Projects

Experimental archaeology is a potential growth area for CAS. We have one that is wrapping up and another just getting started. A brief description of reported projects follows.

***Grooved Rock Art Study ([Chipeta: Chapter Project](#))***. There are grooves that occur on rocks in some rock shelters, near some ruins, and on stand-alone rocks that have been called "sharpening grooves". The "just so" explanation has been that they were the result of sharpening and/or shaping tools. However, if that is the case, why do they only occur in some rock shelters and on stand-alone rocks that show no associated evidence of camps or stone tool use? This realization has led to a project to record and analyze the occurrence of these grooves and any patterns that might exist. The intent, in addition to recording and analyzing prehistoric grooves, is to use different materials to sharpen and shape to try and recreate grooves for comparison. For more information contact [Neil Hauser](#).

***The Pueblo Farming Project ([Hisatsinom: External Participation Project](#))***. [The Pueblo Farming Project](#); which is a collaboration between the [Crow Canyon Research Institute](#) and the [Hopi Cultural Preservation Office](#) to understand ancient maize agriculture in the Mesa Verde region through documenting traditional ecological knowledge, experimental gardens, and genetic analysis. The project has produced an [electronic report](#) and [video](#) and is planning the next phase. One CAS member participates in this project. For more information contact [Dave Melanson](#).

*Experimental archaeology data summary for all participating chapters:*

*Experimenters: 4 Projects: 2 Hours: 68.5*

*Sponsor: CAS, Crow Canyon Archaeological Center Research Institute, Hopi Cultural Preservation Office*

## Site Stewardship Projects

Three chapters report member participation in four cultural site stewardship programs managed by government and non-profit organizations. These programs are reported below.

***Uncompahgre Stewardship Program ([Chipeta: External Partnership Project](#))***. This year 33 Chipeta stewards contributed 253 hours making 75 visits to monitor 55 sites on BLM, USFS, [Colorado Parks and Wildlife](#), and [Archaeological Conservancy](#) lands. The sites are spread out across 5 western Colorado counties. Five of the BLM sites are paleontological sites. Most of the sites are in remote settings, far off the beaten path. The Chipeta Chapter thanks Glade Hadden, the now retired BLM Uncompahgre Field Office Archaeologist, for his guidance during the last year and look forward to working with the new archaeologist, Shane Rumsey, in 2019. For more information contact [Bill Harris](#).

***Comanche National Grassland Stewardship Program ([PAHS: External Partnership Project](#))***. Seven PAHS members participated with USFS archaeologist Michelle Stevens in monitoring sites in remote settings on the Grasslands. Sixty-three hours were contributed to monitoring and



the associated updating of records. Members are awaiting direction on approximately 8 sites previously assigned to be monitored. For more information contact [Carla Hendrickson](#).

***South Park National Heritage Area Site Stewardship Program (PAHS: External Partnership Project)***. Two PAHS member volunteer as site monitors in the South Park National Heritage Area. These stewards have contributed 10 hours of monitoring as well as 4 hours completing paperwork and photos. Monitoring and reporting on the condition of historic, archaeological and paleontological sites occurs on private and public properties, including the US Forest Service, Bureau of Land Management, and Colorado Parks & Wildlife. For more information contact [Carla Hendrickson](#).

***Tres Rios Cultural Site Stewardship (Hisatsinom: External Participation Project)***. The Cultural Site Stewardship Program includes 60 volunteers who monitor 100 sites within the lands of the Tres Rios BLM Field Office, which includes Canyons of the Ancients National Monument. Twenty-two of these stewards are CAS members who monitor 37 sites. Stewards attend annual training and take annual baseline photos from which they monitor on a prescribed basis (typically every 2 months) for damages caused by humans, animals, or natural causes. Damages can be caused inadvertently by inappropriate visitation, by wildlife or livestock, or by the natural elements taking their toll. Stewards report any vandalism directly to BLM Law Enforcement as well as the Site Steward Manager. Stewards are also encouraged to increase their understanding of Southwest Archaeology through classes and additional volunteer/field work. For more information contact [Diane McBride](#).

*Site stewardship data summary for all participating chapters:*

*Stewards: 64 Hours: 598 Sites: 101*

*Sponsors: BLM Tres Rios Field Office, BLM Canyons of the Ancient National Monument, BLM Montrose Field Office, Colorado Parks and Wildlife, USFS, Archaeological Conservancy.*

## Cultural Resource Curation Projects

Eight CAS chapters report work on nine curation projects. These are reported below.

***Projectile Point Project (Chipeta, Denver, Grand Junction, IPCAS, Northern Colorado, Pikes Peak, PAHS: Cross-Chapter Project)***. A great number of projectile points reside in private collections. Studies in the Midwest indicate that private collections have more than 10-times the number of points that are available to researchers in museum collections. This limits the accuracy and extent of some types of research projects that can be done using projectile points. The intent of this project is to develop a database of projectile points for Colorado, both from museums and private collections, and associated information that can be used for large area studies such as regional projectile point typologies, movement of materials, movement of projectile point types, evolution of projectile point variations over time and region. Collections from museums will be included in this database to aid both in completeness and to add information on ages (dates) associated with different projectile point styles. The database will be available to researchers and will eventually also be available on selected site(s) on the internet, e.g., Univ. of Nebraska Archaeology Roadshow, etc. The database will contain a) photograph or scanner image (including a scale) of each projectile point, b) general type of point (corner notched, side notched, lance, etc.) , c) material type, d) general color, e) ultraviolet fluorescence color (if applicable and available), f) general location where it was found (7 mile x 8 mile grid),

g) weight (when available), h) thickness (when available), i) other general descriptions (serration, flaking pattern, etc.). For private collections the collector will be kept anonymous (except to the person(s) from the project that are interacting with the collector, of course) and be represented in the database only by a number given sequentially to each collection recorded. Locations where each point was found will be given by a 7 mi x 8 mi grid (size of a 7 min Topographic Map) that contains the location. For museum collections, the collection will be identified by Smithsonian number of the site. For collections from excavations, additional information such as grid and depth where the point was found within the site and associated C14 or other date information will be recorded. Location of the site will be recorded to the same 7 mi x 8 mi grid that contains the site. This project is a cooperative effort between archaeologists at Coal Creek Research Inc., Montrose, and CAS chapter members. For more information contact [Neil Hauser](#).

***Canyon of the Ancients Visitor Center and Museum Curation ([Hisatsinom](#): External Participation Project)***. CAS volunteers work at the BLM [Canyon of the Ancients Visitor Center and Museum](#) (CAVM) on projects to improve curation efficiency and availability of collections to researchers. This includes packaging, packing, and cataloging whole ceramics, including bowls, jars, dippers, mugs and other items including the entire [Chappell collection](#) with its research and NAGPRA implications; working with CAVM staff on annual Tribal Consultations; cataloging previously (years and decade's worth) uncatalogued collections of various artifacts, especially projectile points, to increase information and availability to researchers and the public; and generally assisting the CAVM in logistics and emerging scientific techniques in conservation and preservation of both artifacts and landscape features at CAVM and Canyon of the Ancients National Monument. For more information contact [Dave Melanson](#).

***Four Corners Research Collections ([Hisatsinom](#): External Participation Project)***. Three CAS volunteers process artifacts collected at Mitchell Springs and Champagne Spring. This includes inventorying and transferring artifacts from bags to numbered and marked boxes. The data is entered into a database; which can be queried to support research projects. For more information contact [Karen Kinnear](#).

***Pueblo City-County Library Colorado Rock Art Association (CRAA) Archives ([PAHS](#): External Partnership Project)*** This project curates and makes the CRAA collection (books, pamphlets, CRAA reports, slides, photographs, rock art tracings, field notes and drawings) available to qualified researchers. Two CAS members volunteer once a week to assist the archivist in creating a useful database. Archaeologist and rock art researcher Sally Cole donated field notes, drawings, original drafts, final reports and original slides relating to her contract work recording rock art resources in Pinon Canyon around 1984. It is of special note that Sally Cole includes in her final report a cultural affiliation and chronological identification scheme for rock art panels of the Southeastern portion of Colorado. This year PAHS volunteers contributed 130 hours to this project. For further information contact [Anne Whitfield](#).

***Pueblo City County Library, Special Collections, Bill Buckles Collection ([PAHS](#): External Partnership Project)*** CAS members continue to compile an itemized database of background research material assembled by Buckles in preparation for survey and excavation work in Colorado, as well as field notes during weekly work sessions. This will allow the Bill Buckles collection to be properly archived. Since January of this year PAHS volunteers contributed 90 hours to curating the Buckles collection. For further information contact [Georgine Booms](#).

***Pueblo City-County Library, Special Collections, Ed Simonich Collection ([PAHS](#): External Partnership Project)*** A CAS member donated 4 hours to preliminary work needed to create a database of materials donated to the library by local amateur historian and archaeologist, Ed Simonich. Oral histories of local residents comprise much of the collection. For further information contact [Carla Hendrickson](#).

***Grey Literature Scan ([Chipeta](#): Chapter Project)***. One Chipeta member is scanning and curating gray literature. For more information contact [Teri Hauser](#).

***Museum of the West ([Grand Junction](#): External Participation Project)***. A CAS member curates a backlog of surveys from the Grand Mesa, Uncompahgre, and Gunnison National Forests (GMUG). For more information contact [Clint Driscoll](#).

*Cultural curation data summary for all participating chapters:*

*Curators: 59 Hours: 1318*

*Sponsors: CAS, CAVM, Four Corners Research, Pueblo City-County Library, Museum of the West, Private Collectors*

Respectfully submitted for the Science Advisory Committee,

David Melanson, Chair  
Science Advisory Committee  
Colorado Archaeological Society