2019 SCIENCE ADVISORY REPORT

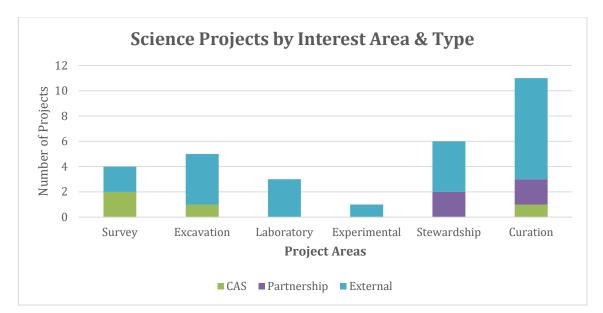
INTRODUCTION

The <u>Colorado Archaeological Society</u> (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.

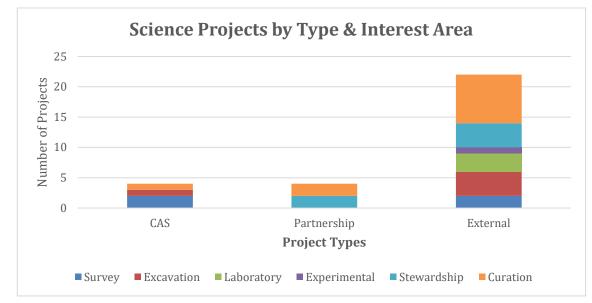
This report summarizes the archaeological research and cultural resource conservation opportunities pursued and reported by CAS chapters and members during 2019. The report is compiled by the Science Advisory Committee from project information submitted by CAS chapters and organized in sections aligned 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 reflect project sponsorship and fall into one of three possible categories – CAS, Partner, or External. CAS project types are led and conducted by CAS or one of its chapters. Partner projects are conducted under informal or formal partnering agreements between CAS or its chapters and one or more external agencies. External 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 provides 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.

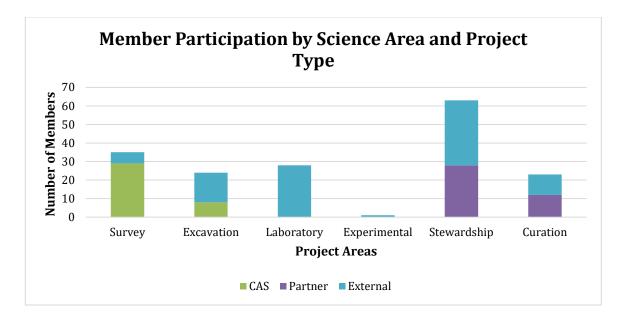
So far this year CAS chapters report conducting, or member participation in, 30 archaeological research or conservation projects. The figure below shows the number of reported CAS projects first by science interest area and then by project type within each area. Currently, eleven of our reported projects (37%) are in the curation interest area.



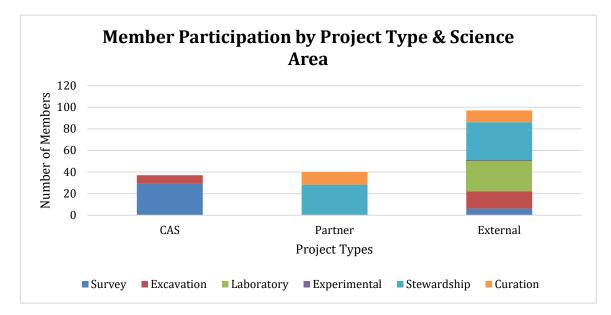
The next figure reverses the first by showing projects by type and then, within that, by science area. Member participation in projects managed by external agencies continues to be CAS's dominant science project type. Twenty-two of our 30 reported science projects (73%) are of this type.



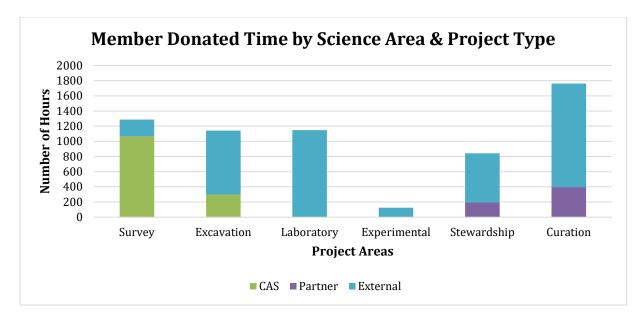
Chapters report 174 members participating in science projects this year. Members often participate in more than one project, so the actual number of different science project volunteers is likely less. The figure below shows the number of CAS members participating as volunteers in the 30 reported science projects by science area and project type. Although CAS membership includes professional archaeologists only members who donate their time as unpaid volunteers are included in this report. Our chapters report strong member participation in all science areas except experimental archaeology. Cultural site stewardship projects, however, have attracted the most member volunteers (43%) this year.



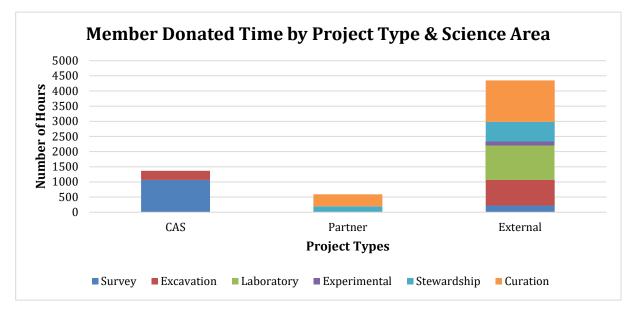
As shown below, the majority (56%) of CAS members participate in science projects managed by external organizations.



This year, CAS members report contributing 6,307 volunteer hours to the projects in this report. The figure below shows contributed time organized by science area and within that, by project type. Members contributed significant time working in all science interest areas except experimental archaeology with curation getting the most attention (28%).



Like the number of projects and participating members, most member volunteer time is devoted to supporting projects managed by external organizations (69%). This is seen in the figure below.



PROJECT SUMMARIES

The remainder of this report summarizes projects reported by our chapters in 2019. 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 five survey projects this year. Some longterm projects include a sequence of multiple surveys. CAS's reported surveys are described below. Mesa Verde Region Survey (Hisatsinom: Chapter Project). This year Hisatsinom is continuing 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 landowners about the importance of preservation archaeology. No collections are made, and all artifacts are identified and recorded in the field. The team uses diagnostic pottery artifacts and a Bayesian model developed by Ortman, et al, to estimate dates of site occupations. This year a team of 21 members have conducted 33 outings on six surveys. The team completed the field work on five of the surveys, completed and submitted documentation on two, and started a sixth which will continue during the 2020 season. Many surveys involve several workdays to complete. This year the team surveyed 467 acres, recording 45 new sites and 6,555 artifacts. Prehistoric sites and features 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 Ute, Navajo, Paleo Indian, Archaic, Basketmaker and the Pueblo sequence through Pueblo III. Required Colorado state recording forms, maps, scaled site drawings and photos are submitted to the Office of the State Archaeologist and entered in the Compass database for use by qualified researchers. 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 landowner and to the Canyon of the Ancients Visitor Center and Museum and Crow Canyon Archaeological Center libraries. For more information contact Bob McBride.

PAAC Lone Mesa State Park Survey (IPCAS, External Project). Two CAS members reported participation in the summer fieldwork project for the Program for Avocational Archaeological Certification (PAAC). This project focused on surveying areas of interest to Colorado Parks and Wildlife staff in planning for the future of this piece of state property. Cultural resources identified and recorded included historic Ute and Anglo sites as well as Archaic sites. For more information contact Delane Mechling.

White Rocks Rock Art Assessment (<u>IPCAS</u>: Chapter Project). Volunteers sketch and assess rock art panels comparing results to past surveys. Assessing damage to the rock art panels is particularly important during these surveys. For more information contact <u>Delane Mechling</u>.

Windy Ridge (*Pikes Peak: External Project*). Two Pikes Peak members participated in the <u>Paleocultural Research Group</u> and <u>US Forest Service</u> Windy Ridge project. Situated about 9,000 feet above sea level in the Routt National Forest, Windy Ridge is an extensive American Indian stone tool quarry site where researchers have documented nearly 200 quarry pits and extensive deposits of flaking debris across about 150 acres. The site is in northwest Grand County. Windy Ridge has been investigated and documented multiple times since it was first recorded in 1981. This project focused on areas referred to as the "workshop", to better understand how the site functioned within the broader landscape.

Crews carried out two main tasks. Both serve to facilitate planned excavations at the site in 2020. The first involved probing the area with a series of auger tests. The second task involved a pedestrian survey modified to survey selected blocks across the site for rodent back dirt piles. Sediments were shoveled into a bucket and then screened. Materials were then bagged and returned to the lab for analysis. For more information contact <u>Chris Johnston</u>.

Bunker Site Survey (<u>Pikes Peak</u>: External Project). Two Pikes Peak members participated in this <u>Paleocultural Research Group</u> and <u>Colorado College</u> field project investigating portions of the Bunker site, a *paraje* or overnight camp, located on the Old Spanish National Historic Trail in western Saguache County, Colorado. Systematic surveys conducted in 2012 and 2016 revealed the presence of numerous metal artifacts associated with the Old Spanish Trail's period of use between 1829 and 1848, as well as artifacts that pre- and post-date that period. The primary research goal of the project was to investigate discrete activity areas within the camp. For more information contact <u>Chris Johnston</u>.

<u>Survey data summary for all participating chapters</u>: Surveyors: 35 Pedestrian Surveys: 8 Rock Art Surveys: 1 Photogrammetric Surveys: 0 Hours: 1288 Sponsors: Private Landowners, History Colorado/OAHP, PCRG, USFS, Colorado College, CAS

Excavation Projects

CAS members report work on five excavation projects this year. These projects are briefly described below.

Swallow Excavation (Denver, CAS: 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 avocational CAS members, the Colorado State Archaeologist, and professional archaeologists from academia and cultural resource management firms. Contact Pete Gleichman for more information on this project.

Northern Chaco Outliers Excavation: (<u>Grand Junction</u>: External Project). One CAS member reports participating in the Crow Canyon Northern Chaco Outliers Project. Crow Canyon archaeologists launched this multiyear project in 2017. The focus of the project is the Haynie site, a significant ancestral Pueblo village located just northeast of Cortez. The Haynie site contains two Chaco–period (A.D. 1050–1140) great houses and numerous small houses. It's part of one of the densest concentrations of great houses north of Aztec Ruins National Monument. Participants learned excavation techniques—then dug alongside Crow Canyon archaeologists. Participants also worked in the Crow Canyon archaeology lab, helping to wash, identify, and analyze ancient artifacts. The Crow Canyon Archaeological Center's 2019 <u>annual report</u> provides detailed information on this project. Contact <u>Clint Driscoll</u> for more information on CAS member participation.

Wallace Ruin Excavation: (<u>Hisatsinom</u>: External Project). Wallace Ruin (5MT6970) is a multistory, multicomponent, pueblo site located near Cortez, Colorado It is situated in a valley bottom and is one of several sites that make up the Lakeview community. Two other large sites have been recorded as part of this community: the Ida Jean Site and the Haynie Site. Also present are a number of small hamlets, a reservoir and a Great Kiva. In addition, two non-architectural earth mounds are present southwest of Wallace Ruin that may be road entry features. Two major and one minor construction phases have been identified: Phase 1 circa AD

1040, Phase 2 circa AD 1090, and Phase 3 circa AD 1120. There seems to have been an abandonment of the structure in the mid-1100s and then a reuse of the building in the 13th century (Phase 4). Since 1969, intermittent research excavations and analysis have been supervised by Bruce Bradley and have frequently used volunteers. In 2019, five volunteers from two CAS chapters participated in the excavation of several rooms adjacent to one of the kivas. For more information contact <u>Karen Kinnear</u>.

Champagne Spring (<u>Hisatsinom</u>: External Project). The Champagne Spring site largely occupies two adjacent knolls near the Champagne Spring water source and borders the eastern edge of Squaw Canyon, approximately 12 km south and west of Dove Creek. Earlier excavations took place on the North Ridge village. Most of the west end of the North Ridge village was laid out as a large linear group of rooms that bracket a large plaza containing a great kiva and seven early kivas and proto kivas. Several unit pueblos are arrayed to the west of the linear pueblo. In 2019, excavations were conducted on the South Ridge village, including the excavation of an unusual roadside shrine and a unit pueblo. Eight CAS volunteers reported excavating during two Four Corners Research field school sessions this year. For more information contact <u>Karen Kinnear</u>.

Bunker Site Excavation (<u>Pikes Peak</u>: External Project). Two Pikes Peak members participated in this <u>Paleocultural Research Group</u> and <u>Colorado College</u> field project investigating portions of the Bunker site, a *paraje* or overnight camp, located on the Old Spanish National Historic Trail in western Saguache County, Colorado. Systematic surveys conducted in 2012 and 2016 revealed the presence of numerous metal artifacts associated with the Old Spanish Trail's period of use between 1829 and 1848, as well as artifacts that pre- and post-date that period. The primary research goal of the project was to investigate discrete activity areas within the camp. For more information contact <u>Chris Johnston</u>.

Excavation data summary for all participating chapters: Projects: 4 Excavators: 16 Advisors: 8 Hours: 1142 Sponsor: CAS, History Colorado/OAHP, Native Cultural Services, Metcalf Archaeological Consultants, PCRG, Front Range Community College, Colorado College, Four Corners Research, Crow Canyon Archaeological Center, Bruce Bradley

Laboratory Processing & Analysis Projects

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

Northern Chaco Outliers Laboratory (<u>Hisatsinom</u>: External Project). CAS members, working as volunteers in the <u>Crow Canyon Archaeological Center</u> Research Laboratory, completed processing and analyzing artifacts from the Ida Jean Pueblo II site curated at the BLM <u>Canyon of the Ancients Visitor Center and Museum</u> and are now processing and analyzing artifacts from the nearby Haynie and Wallace sites. Ida Jean, Haynie, and Wallace form the Lakeview 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 <u>Northern Chaco Outliers Project</u>.

The Wallace artifact analysis is being conducted in collaboration with Bruce Bradley. For more information contact <u>Dr. Kari Schleher</u>.

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

El Pueblo Artifact Re-inventory Laboratory (*Pikes Peak*: *External Project*) Three CAS members worked in the Fountain Library lab for History Colorado to re-inventory artifacts excavated from the El Pueblo site. This project is now complete. For more information contact <u>Dr. Holly Norton</u>.

Laboratory data summary for all participating chapters: Projects: 3 Analysts: 28 Hours: 1148 Sponsors: Crow Canyon Archaeological Center, CU, History Colorado/OAHP

Experimental Archaeology Projects

Experimental archaeology is a potential growth area for CAS. This year, we have a report on one continuing experimental project. A brief description of this project follows.

The Pueblo Farming Project (<u>Hisatsinom</u>: External Project). <u>The Pueblo Farming Project</u> is a collaboration between the <u>Crow Canyon Research Institute</u> and the <u>Hopi Cultural Preservation</u> <u>Office</u>, begun in 2006, 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 <u>electronic report</u> and <u>video</u>. Field work continues this year. One CAS member participates in this project. For more information on CAS member participation in this project contact <u>Dave Melanson</u>.

Experimental archaeology data summary for all participating chapters: Projects: 1 Experimenters: 1 Hours: 123 Sponsor: Crow Canyon Archaeological Center Research Institute, Hopi Cultural Preservation Office

Site Stewardship Projects

Three CAS chapters report member participation in five cultural site stewardship programs this year. These programs are reported below.

Tres Rios Cultural Site Stewardship (<u>Hisatsinom</u>: External Project). The Cultural Site Stewardship Program includes 58 volunteers who monitor 103 sites within the lands of the Tres Rios BLM Field Office, which includes Canyons of the Ancients National Monument. Twenty-three of these stewards are CAS members who monitor 48 sites. Stewards attend annual training and take annual baseline photos from which they monitor sites 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.

South Park National Heritage Area Site Stewardship Program (<u>PAHS</u>: External Project). Two PAHS members volunteer as site monitors in the South Park National Heritage Area. Stewards work with property owners and public agencies, including the US Forest Service, Bureau of Land Management, and Colorado Parks & Wildlife, to monitor and report on the condition of historic, archaeological and paleontological sites. Two volunteers helped during the 3rd quarter for a total of 41 hours. For more information contact <u>Carla Hendrickson</u>.

Ute Mountain Ute Tribal Park Site Maintenance Project (<u>Hisatsinom</u>: Partnership Project). Eight Hisatsinom members worked in partnership with the Ute Mountain Ute Tribal Park to improve public access to two Pueblo cultural sites on the Park. For more information contact <u>Sissy Pittenger</u>.

Utah Site Stewardship Program (<u>Hisatsinom</u>: External Project). <u>Friends of Cedar Mesa</u> is partnered with the BLM to build a statewide site steward program in Utah. Two Hisatsinom members are part of a three-member team monitoring an important Pueblo habitation site. For more information contact <u>Susan Montgomery</u>.

Boulder Open Space & Mountain Park (<u>IPCAS</u>, External Project). CAS member OSMP stewardship protects and restores Boulder's cultural and historical resources. For more information contact <u>Delane Mechling</u>.

Uncompany Stewardship Program (Chipeta: External Partnership Project). Currently Chipeta members monitor 55 sites of which 43 are on BLM lands, 7 are on USFS lands and are designated as Priority Heritage Assets, 3 are on Colorado Parks and Wildlife property, and 2 are on land owned by the Archaeological Conservancy. 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. For more information contact <u>Bill Harris</u>.

<u>Site stewardship data summary for all participating chapters:</u> Projects: 5 Stewards: 63 Sites: 49 Hours: 842 Sponsors: BLM Tres Rios Field Office, BLM Canyons of the Ancient National Monument, Southwest Colorado Canyons Alliance, Ute Mountain Ute Tribal Park, USFS, BLM, CP&W, Utah Site Stewardship Program, Boulder Open Space & Mountain Park.

Cultural Resource Curation Projects

CAS chapters report work on eleven curation projects this year. These are reported below.

Projectile Point Projects(*Grand Junction*, *IPCAS*: *Partnership Project*). In collaboration with Coal Creek Research, chapters set up teams to document private projectile point collections. Two

such projects have been reported so far this year. A great number of projectile points reside in private collections. Studies in the Midwest indicate that private collections have more than 10times 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 (<u>Hisatsinom</u>: External Project). CAS volunteers work at the BLM <u>Canyon of the Ancients Visitor Center and Museum</u> (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 <u>Chappell collection</u> 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 <u>Susan Montgomery</u>.

Ancestral Pueblo Maize Database Project (<u>Hisatsinom</u>: External Project). The <u>Ancestral</u> <u>Pueblo Maize Database Project</u> is an outgrowth of the Pueblo Farming Project begun this year. In this project the <u>Research Institute at Crow Canyon</u> and the <u>Hopi Cultural Preservation Office</u> are building the first-ever comprehensive, publicly-accessible database of curated ancestral Pueblo maize. One CAS member participates in this project. For more information contact <u>Dave</u> <u>Melanson</u>. *Autobee Oral History Project, (PAHS: Chapter Project).* In 1840, at the request of Ceran St. Vrain, Charley Autobee built a plaza along the Huerfano River in present day Pueblo County. To capture family knowledge, lore and stories, one member of PAHS is conducting oral histories with Autobee family members. During the 3rd quarter, 2 hours were spent on this project. For more information contact <u>Brad Patterson</u>.

Pueblo City County Library, Special Collections, Bill Buckles Collection (PAHS: Partnership Project) A CAS member has begun creating the archival database for the Buckles materials housed at PCCLD. These materials include work done in preparation for survey and excavation work in Colorado, as well notes from field work sessions. For further information contact Georgine Booms.

Pueblo City-County Library Colorado Rock Art Association (CRAA)

Archives (<u>CRAA</u>, <u>PAHS</u>: 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. The Sally Cole collection has been digitized and is now available online. For further information contact <u>Anne Whitfield</u>.

Edge of the Cedars Curation (<u>Hisatsinom</u>: External Project). One CAS member is cataloging lithics from a site in SE Utah excavated in the 80s. For more information contact <u>Susan</u> <u>Montgomery</u>.

Edge of the Cedars Passport in Time (<u>Hisatsinom</u>: External Project). Two CAS members catalog ceramics and lithics from pedestrian surveys at USFS sites conducted in the 1970s. For more information contact <u>Susan Montgomery</u>.

Douglas County Historical Repository (Denver: Chapter Project). One CAS member helps to curate archaeological and historic resources from gifts, trades, purchases, and under permits issued by the Colorado Office of Archaeology and Historic Preservation. Primary duties include cataloging, cleaning, and documenting Repository artifacts. For more information contact <u>Tami</u> <u>Coyle</u>.

Museum of the West (<u>Grand Junction</u>: External Project). A CAS member curates a backlog of surveys from the Grand Mesa, Uncompanyer, and Gunnison National Forests (GMUG). For more information contact <u>Clint Driscoll</u>.

<u>Cultural curation data summary for all participating chapters</u>: Projects: 11 Curators: 23 Hours: 1763 Sponsors: CAS, BLM/CAVM, Pueblo City County Library, Hopi Cultural Preservation Office, Coal Creek Research, Douglas County, Museum of the West, Private Collectors

Respectfully submitted for the Colorado Archaeological Society's Science Advisory Committee, David Melanson, Chair