Collections Management Assessment

Sample Report

Museum Assessment Program

American Association of Museums

“Geode” Museum

The purpose of this sample document is to help illustrate a sample report. The contents of this information shall not be substituted for, nor substantially used as the basis for, any document produced by the recipient. This should serve as a model only.

The AAM and its Museum Assessment Program, as a 501 (c) (3) nonprofit, tax-exempt organization, reflects, reinforces, and disseminates information on standards and best practices in the museum field. AAM has endeavored to make the information as accurate and current as possible. However, inadvertent errors can occur. Therefore, these materials are provided “as is,” without any guarantee or warranty of any kind, expressed or implied.

This sample report from the Museum Assessment Program is based on a real museum. The report is a good example of the challenges typical of many museums participating in the MAP program. All of the names of the staff, board members, museum, town, buildings, as well as the Surveyor, have been changed.

Why is this a good report?

This report follows the new writing guidelines and is an excellent example of a natural history museum. This is also a good report for museums working with a different private non-profit society as its governing body. The explanation of the emergency disaster plan is particularly comprehensive. Additionally, it does a fantastic job of prioritizing recommendations at the end by time (e.g. short term, medium range, and long term).
GEODE MUSEUM
THE AMELUNG GEM AND MINERAL SOCIETY
MAIN CITY, CALIFORNIA

SAMPLE REPORT

MUSEUM ASSESSMENT PROGRAM (MAP)
COLLECTIONS MANAGEMENT ASSESSMENT
AMERICAN ASSOCIATION OF MUSEUMS

JANE DOE, SURVEYOR
ACKNOWLEDGEMENTS

I am grateful to the Geode Museum Administrator Rosie Riveter for her boundless enthusiasm, expertise, and patience. This visit was one of the most well-planned and enjoyable I have had, thanks in large part to her. Many other Museum and Society members were generous with their time and expertise. My thanks to everyone for this opportunity to review this museum and its collections.

DOCUMENTS REVIEWED

- MAP Staff Self-Review Study Sheet
- Museum Assessment Program Application and supporting documents
- Northern California Map & Scenic Drives. Published by Northern California Visitors Association.
- City of Main City website at http://www.maincitycalifornia.gov/
- Institutional Information Self-Study Questionnaire submitted as part of application
HISTORY AND COMMUNITY

The Geode Museum is located in Main City, California, operated by the Amelung Gem and Mineral Society, directly north of and sharing a boundary with Tourist Village. It is situated in the Giraffe River Valley between the Calla Lilly and Rosebud ranges, making this region particularly rich in geological resources.

Ginny County is on the northern border of California and includes the large urban area of Ashland. Major industries include agriculture, logging, mining, and (increasingly) a high volume of tourism year-round. Main City is close to Calla Lilly-Carnation National Monument, California Caves National Monument, Big Trees State and National Parks, Geode Lake National Park, Rosebud National Forest, Giraffe River-Carnation National Forest, and Iris National Forest, as well as a number of county and municipal parks. There is an abundance of outdoor recreational activities, including hiking, camping, fishing, and others, attracting year-round visitation on which the region depends.

Main City is also located near many cultural attractions, including the California Shakespeare Festival, the Penguin Music Festival, and the Ginny County Expo Center. Annual activities include the Ginny County Fair, Harvest Fair, Hot Air Balloon Festival, and a variety of other activities and musical events. Educational institutions in the immediate area include the Main City School System, Northern California University, and Giraffe Community College.

MUSEUM HISTORY

The Geode Museum was founded by and is the public face of the Amelung Gem and Mineral Society, Inc., an association of amateur rock, gem, and mineral enthusiasts. The Museum was founded in 1948-1955 by Caryn and Ben Rosenau, incorporated in 1963, and features collections from a variety of sources, most from Society members and supporters. The Society has owned and operated the present Museum facility since 1981. Most of these collections reflect the Society’s dedication to earth sciences and lapidary arts, though some holdings of Native American stone points, seashells, wood carvings, and coins have also been included.

The Amelung Gem and Mineral Society is a private non-profit organization, established as a 501(c) (3) in 1984. It is also listed as a state non-profit under Chapter 61 of the California Revised Statutes. Its goals as stated in Article II of its bylaws are primarily educational, including providing general public education through exhibits and programs, operating a public museum, providing earth science scholarships to individuals and local educational facilities, leading public tours, awarding internships to high school and college students, identifying rocks and minerals for the general public, providing public lectures in parks and campgrounds, and participating in local gem shows and related venues.
Membership in the Amelung Gem and Mineral Society includes access to the Museum’s library, participation in field trips, and access to supplies, training, and classes offered by Society members at the workshop at the Museum. Classes include rock polishing, silversmithing, and jewelry design. A monthly newsletter, *The Geode Cracker*, is sent to members as hard copy. There is a website at http://www.geodemuseum.com/ragm.html. The Museum and Society are affiliated with the American Federation of Mineralogical Societies, the California Museums Association, and the Association of Collecting Clubs.

The Museum is the Society’s main meeting place and center for teaching a wide range of lapidary and jewelry-making arts. It is located in a quiet residential area, away from the center of town. In recent years, it has also become a center for classes in regional geology. The Society’s monthly meetings feature lectures on geological topics, and monthly field trips and special events are also offered as membership benefits. Museum staff and volunteers lead tours, teach classes, and put together permanent and traveling exhibits on regional geology, including a recent exhibit at California’s Capitol Rotunda in Sacramento¹.

The Museum and Society should consider collecting oral histories and other accounts of the history and founding of the Society now, while founding members still have stories to share. A history of the Society and Museum would be a very useful reference.

**AUDIENCE**

The Museum identifies its target audiences as school groups, tourists, rock hounds, lapidary artists, and the general public; expansion of all of these and more connection with the local community is desired. Visitors and visitor interests and currently tracked via a guestbook and school tallies. The Geode Museum is well marked in town and on Interstate 5. Its public profile is excellent; the Museum supports or sponsors shows in a number of local and regional fairs, rock shows, and other venues.

The Geode Museum is open year-round, Tuesday through Saturday, 10 a.m.-4 p.m, or ~240 days per year. Admission fees are $4.00 for adults, $2.00 for seniors and children. Attendance in 2008-9 was around 4,000. Operating income in FY 2006 was $123,456, operating expenses were $122,222. The Museum has one paid staff person, the administrator; all other work is done by volunteers from the Society. The annual attendance is 2008-2009 was about 4,000.

Society membership provides a number of benefits, including access to the Museum’s lapidary shop, rock pile and library; participation in field trips and other events; classes and training sessions.

The Museum has exceptional opportunities at hand as it completes a much-needed expansion of its facilities. This report provides some suggestions for advancing the Museum professionally in terms of policies, procedures, and collections stewardship. The Museum and Society are to be commended for taking steps to secure the Museum’s position in the community and to develop its potential for community leadership.

INSTITUTIONAL OBJECTIVES FOR THIS ASSESSMENT

The original objectives stated in the MAP application are as follows:

- Create policies that will govern Museum collection activities and procedures, including cataloguing our collections, examining records, and establishing policies.
- Begin discussions regarding the management of our collections; catalog our collections and create a management database.
- Partner with other museums in our region and across the country to increase visiting exhibitions.

MISSION AND PLANNING

The mission of AMELUNG GEM AND MINERAL, INC, d.b.a. the GEODE MUSEUM is to educate and enlighten people of all ages through the study of earth sciences, geology, lapidary, mineralogy, natural history, and paleontology by conducting tours, teaching classes, and maintaining museum displays².

As stated in the MAP application: “Originally the museum did not have a mission statement, but stated its purpose in the bylaws of The Amelung Gem and Mineral Society. In their bylaws, the mission of the organization is described in Article II ‘Purpose of the Organization’”:

ARTICLE II

PURPOSE OF ORGANIZATION

1. To operate the AMELUNG GEM AND MINERAL SOCIETY for the education of the general public in earth sciences, especially geology, mineralogy, paleontology, archeology, lapidary arts, jewelry, carvings, and coin collecting.
2. To acquire, curate, and display minerals, crystals, fossils, ancient artifacts, sea shells, art glass, musical instruments, lapidary arts, jewelry, wood carvings, and coins.
3. To own, maintain, and operate a public museum displaying the items in #2.
4. To engage in activity that fulfills the purposes of these articles. These activities are to be beneficial to this corporation as long as they do not violate the provisions of Chapter 61

of the California Revised Statutes or jeopardize the non-profit status of the corporation under the provisions of the Internal Revenue Code Section 501(c)3, established in 1981. Non-profit status updated by IRS letter dated October 2, 2009.

5. To provide limited scholarships to individuals and local educational facilities in the field of earth sciences.

6. To establish educational opportunities for members, visitors, schools, and the general public in earth sciences, lapidary arts, museum curatorial, and related skills.

7. To operate and conduct an annual Gem Show in the Giraffe Valley for fund raising and local business opportunities.

GEODE MUSEUM GOALS, PLAN AND VISION

- Our goals are to continue procuring gem and mineral collections from estates and donors as they are offered, and to catalogue and display them in a revolving schedule. We will use this collection to show the beauty of the earth, its unique products, and explain the formation of rocks and their relationship to the understanding of the history of the earth.
- Our plan is to become the premier geology and natural history museum in the Pacific Northwest.
- Our vision is to be an exceptional museum dedicated to education of the earth sciences.

COLLECTIONS STEWARDSHIP

SCOPE OF COLLECTIONS

The Geode Museum houses a large and in many instances spectacular collection, reflecting regional geology and Society members’ interests. The collections are almost wholly on exhibit, with plans for a rotation plan and better options for collections storage for materials off exhibit once the new building addition is complete. At the moment, exhibition is essentially permanent. The Museum does not at the moment have a collections management policy or collections plan, areas in which the Museum administrator is seeking improvement.

Because the Museum is an outreach and exhibition arm of the Society, and the Society is historically an association of amateur geologists promoting their deep interest in the subject, clear administrative guidelines, responsibilities, and authorities have not yet been defined. This is an excellent time to do so.

3 From the Institutional Assessment Self-Study Questionnaire.
The Museum exhibits are organized in a series of spaces in the museum building, which has grown and expanded over the years. There are three main rooms leading from the gift shop; a multi-purpose classroom, meeting, library, and exhibits room; and a smaller gallery with petrified wood specimens and interpretation. The building also includes a dedicated lapidary shop, offices, and a meeting room, and an upstairs storage area. The Museum is in the process of building a large new addition that will house the reception area, a venue for larger exhibits and traveling exhibits, and more exhibit space. Expanded storage is not part of the plan at the time of this survey.

The collection records are maintained in database form via the use of GenericMuseumSoftware. Most specimen information is included on the labels placed with the specimens on exhibit.

Only one collection, archaeological in nature, is of legal or ethical concern, as described below. The majority of the collections are collected and donated legally and ethically. There is no evidence that any materials have come from public lands without permission. Many of the collections have been donated or bequeathed from private owners. Overall, the collections are appropriate to the Museum, in good and stable condition, and documented as well as possible (some collections have very limited information from or about their donors).

Overall concerns: the displays have very limited security provisions, and since they are not often changed out, the Museum is particularly vulnerable to theft. In addition, the specimens on exhibit are subject to light, temperature and relative humidity fluctuations that may cause or which already have caused damage.

The Museum’s petrified wood exhibit room is its best example of its commitment to education in displays as well as in programs. The exhibit features more than 200 specimens of petrified wood displayed in locking wall cases, along with a detailed discussion of the processes involved in mineralization and petrification of wood, as well as a chronological series showing changes over geologic time (for which petrified wood is an excellent and important indicator). Petrified wood is an important indicator fossil in a number of regional formations. This is an excellent example of the Museum’s plan for making its exhibits as educational as possible, rather than simply displaying a series of specimens.

This collection occupies the majority of cases in the exhibit area next to the large multipurpose room. These specimens appear to be stable, and there are no outside windows. The main concern here is assuring that temperature and relative humidity conditions are as stable and free from fluctuations as possible, and that all sources of ultraviolet radiation (UV) from lighting fixtures are blocked.

The majority of the Museum collections are gem and mineral specimens, both in native form and worked through lapidary processes; it is estimated that there are more than 2,000, most of
them on permanent display. These are primarily stored and exhibited in the multipurpose room and in two of the three main display areas. They represent mainly donated personal collections of Society members acquired over the years, collected from the Northern California region as well as from worldwide sites.

Many of these specimens are of exceptional beauty, size, crystalline structure, and value. The museum administrator is undertaking a complete inventory and database project for the first time. As with the petrified wood exhibit, these specimens need protection from theft, inappropriate temperature and relative humidity, and UV. It would be prudent to get a professional appraisal of these holdings for insurance purposes, and to investigate a better schedule of exhibit rotation, with fewer specimens on exhibit at any one time.

There are some 350 fluorescent minerals, an impressive collection from several classic localities. These are actually well protected from undue light and UV radiation when they are not being illuminated by short- and long-wave radiation to exhibit the fluorescence for which they are noted.

The Museum exhibits more than 800 fossils, ranging from common plant and invertebrate fossils to vertebrate fossils, both originals and casts. Increased exhibition of these specimens is planned in future. There is no legal problem with any of these; all are from private lands and are in good, stable condition.

The Museum exhibits include wall cases with around 250 recent shells and corals. These are common species, and are owned and exhibited legally. The shells could benefit from exhibit rotation, pest monitoring, and (in a few instances) more accurate identification. (A horseshoe crab, for example, is misidentified as a ray.) This valuable collection would be of benefit to the public if it could be accompanied by more information in the labels about the natural history and ecology of the species on display.

Scrimshaw carvings of whale teeth from Cape Cod constitute a major wall case exhibit. These impressive artifacts are all pre-Act, and are owned and exhibited legally. It would be prudent for the Museum to ensure that the legal status of this exhibit is documented and on file with the US Fish and Wildlife service office in the area, just in case questions do arise.

A world-class mineral donation is exhibited as the Harbeson Collection. This includes a number of objects and specimens on exhibit, and was accompanied by a $500,000 donation for expanding the Museum, which has funded the building addition. This donation included a number of the non-geological objects on exhibit, as well as the donor’s archives, which are stored upstairs. The donation also includes personal possessions of the donor, which are not appropriate to the Museum’s mission, such as musical instruments and paintings. The Museum and Society are aware of the discrepancy and are working to resolve this issue so that both their needs and the donor’s wishes can be honored.
Examples of non-geological works on display, many from the Harbeson donation, include spectacular wood and jade carvings, as well as number of donated pieces of art glass in the Chihuly School style, all on permanent exhibit in one of the Museum’s main galleries. These lovely and striking pieces are exhibited in the gallery which opens off the gift shop, so that visitors are within eyeshot of the gift shop volunteer. These are perhaps the most financially valuable holdings of the Museum and should be considered separately from the primary gem and mineral collections. As striking as they are visually, these pieces are exceptionally fragile and subject to breakage or theft. A separate appraisal for these holdings, as well as plans for more secure storage on- and off-exhibit, will be needed.

NATIVE AMERICAN ARTIFACTS

The smallest exhibit room houses a collection of Native American objects from Northern California and from Peru, both received as donations from private collectors. The Northern California materials are mostly arrow points arranged in Riker mounts. The documentation with these is somewhat limited, but it appears that they are all surface-collected points from the immediate area. Sandals from a cave, woven from plant fibers, are also part of this exhibit. Pottery and other artifacts from Peru accompany this display.

This exhibit raises legal and ethical concerns. It does not appear that the points are related in any way to burial sites, and thus may not be directly covered under the Native American Graves Protection and Repatriation Act (NAGPRA). The legality of the sandals and Peruvian artifacts is less easy to determine. A separate, in-depth assessment by a professional archaeologist/anthropologist is most highly recommended. As with the scrimshaw above, if these have no legal problems, that status should be documented and filed for future reference should problems arise.

Most of the specimens are numbered on a suitable surface, and are accompanied by a label with their identification and other pertinent information. For a majority of the specimens, this is a reasonable and effective system. A few specimens are problematic in that they have highly dissected or jagged surfaces which do not present a suitable area for direct numbering. For these, paper labels may be the only good solution. These need to be as small as possible to allow good visibility.

Most of the specimens examined during this assessment were in good, stable condition. Overall, there were few instances of breakage or other damage. A notable exception to this was noted in specimens of chalcancanthite, a water-soluble hydrated copper sulfate that appears to be undergoing powdering and breakage as a result of relative humidity problems. These and other sensitive minerals (pyrite, marcasite, etc.) may need specialized storage both on- and off-exhibit, with tightly controlled RH conditions. Monitoring of all of the large vitrines through the use of dataloggers is highly recommended in order to get a clear picture of the environmental
condition of the exhibits. The damage noted at the timer of this survey is irreversible, but future damage can be prevented.

**COLLECTIONS MANAGEMENT POLICY**

At this time, the Museum does not have a number of the key planning and management documents it needs in order to move forward and develop its opportunities. The Museum administrator and board are aware of this need and are prepared to undertake the preparation and approval of these documents.

There is not yet a Museum collections policy or procedures manual. There is a good procedure for tracking donations and accessions. The policy document should be drafted soon and should include the Museum mission, purpose, and scope; policies for acquisition, collections transactions (loans, accessions, and deaccessions), and access; database and archives standards; collections care standards; and sample forms.

Additional statements will be needed in future to cover the problems encountered with destructive testing, repository care of any collections not technically owned by the Museum, and the rights of scientific and commercial reproductions. In addition, if AAM accreditation is identified as a long-term goal, there will need to an expansion of the ethics policy for Museum and Society staff, advisors and volunteers, clearly defining roles, responsibilities and conflicts of interest. The AAM accreditation application provides a handy guide for determining the content of both the collections management policy

Most of the responsibility for implementing and enforcing the collections policy should be given over to the Museum administrator, with the advice of the Board of the Society.

In the collections policy, the Museum should define its collecting goals with these points in mind:

- Strengthen collection areas in which the Museum has a current specialization and an historical interest.
- Broaden the comparative base of established collection areas.
- Obtain specimens, artifacts, and collections of a general nature that are within the broad interests of the Museum.
- The acquisition of materials sometimes must be opportunistic. Collections of importance or national significance may unexpectedly become available from individuals or from institutions that are no longer able or willing to preserve, maintain, and use them in research and educational activities. Acceptance of responsibility for such collections may involve establishing a new interest area for the Museum.
Acquisition and accession of such collections must be judged on their individual merits, carefully weighing the values and costs of such accessions against the evolving programs and emphases of the Museum.

Acquisitions are primarily made through bequest and donation. Full and complete permits should be maintained on file and kept current for any field-collected specimens. No specimens with restricted title should be accepted, and archaeological materials and vertebrate fossils should not be purchased or sold. The Museum and Society should never appraise the value of objects offered for donation.

The deaccessioning policy and procedures should provide a good general framework for a working deaccession plan. A few points should be considered:

- Specimens which are known to be inherently hazardous (arsenic, mercury, radioactivity, etc.) may not be transferred anywhere except to a museum or educational facility equipped to take appropriate measures for safe storage and handling. Full disclosure of hazards must be made at the time of offer. Such specimens may not be sold or otherwise offered to the public by any means whatsoever.
- Appropriate methods of disposal of specimens must be specified and be cleared with the appropriate health and governmental agencies. Hazardous materials may have to follow very specific regulations for disposal. These should be spelled out in the policy.
- The language regarding staff, board, and volunteers vis-à-vis possession of deaccessioned specimens should be strong and clear. It is never appropriate for any such person to possess anything once owned by the Museum.
- Deaccessioned specimens may not be sold in the gift shop.
- The Museum must specify the procedures to follow with any specimens it does not technically own and thus cannot technically deaccession.

The Museum should document gifts through deed of gift forms, accession numbers, donor source files, and catalogue cards. The GenericMuseumSoftware database will put these in a single-source reference for day-to-day use. The Museum should also have a policy of offsite record copy storage for all records and archives, as a backup in the event of fire or other catastrophe.

Complete and detailed collections management policy advice may be found in Things Great and Small by John Simmons, as cited in the references at the end of this document.

The Museum utilizes Past Perfect as its collections management software. This is a reasonable choice for a collection of this size, and has good updates and technical support. Not all historic records of the collection are complete, a common problem with older collections and with private donations. The museum administrator is to be commended for her work in compiling all available records and images of the collections, and for building on that to ensure that all specimens are databased, inventoried, and tracked.
The Museum administrator maintains a detailed procedural manual for the care of collections, which is to be commended. This should be maintained and updated and expanded as needed, as a training tool for all Museum staff and volunteers. Since the Museum’s collections are mostly on permanent exhibition, this should include periodic inventory and documentation procedures.

OTHER RECOMMENDED POLICIES AND PLANS

The museum administrator has expressed concern about the need for a complete museum catalogue and inventory, a project currently in process. The Museum does have a commendable approved code of ethics, covering conflicts of interest and other key issues, to be approved by the Society governing body. This clearly delineates the Museum and Society’s stance on appraisals, intellectual property rights, and other issues. If this is to be expanded in future to cover collecting practices, guidelines are provided by the American Association of Museums, and specific field collecting ethics guidelines are provided by the American Federation of Mineralogical Societies.

Planning documents that should be developed include a cohesive strategic plan for the Museum as a whole, as well as a collections plan detailing the directions in which the Museum and Society want to advance the collections. There was discussion of a three-year master display plan; this should be acted on and expanded. The strategic plan should include a series of goals, each with a timeline and a budget, subject to annual review. This should coordinate the Museum’s and Society’s needs for financial stability, staff growth, public programming, and building management, as well as collections stewardship.

The collections plan should detail the Museum’s present and future collections and collecting priorities, and clearly detail what will and will not be added in future. This may make it easier for the Museum and Society to decline future problematic donations that are outside its mission and purpose. The Museum needs to balance future growth of its collections against the limitations of its facilities and resources, and plan for acquiring and developing those collections that will best enhance its mission and purpose.

INTERPRETATION AND EDUCATION

The Museum and Society have justifiably put a commitment to education at all levels, as well as community and regional partnerships, at the top of their priority list. Currently, there is a good offering of programs for school groups and the public. Society members have always emphasized the importance of field and shop training for rock collectors and lapidary enthusiasts; indeed, the Museum was founded primarily as a venue for teaching and demonstration of these arts and techniques. This is highly commendable and should continue
to be a top priority. Specimens and collections are critically important to the mission of the Museum and its interpretation program, and are extensively used and demonstrated.

Annual attendance, as previously mentioned, is about 4,000. All Museum and Society members interviewed as part of this assessment expressed interest in retaining and expanding their audience. The target audiences have been identified as school groups (K-12), tourists and the general public. Other specialized audience groups include senior citizens, other rock and lapidary amateur societies and clubs, and home school groups. The Museum also offers internships for undergraduates at the local colleges.

The Museum provides rock and mineral services for the general public at no charge; only rarely do they need to refer such inquiries to the local colleges. Museum and Society representative attend a number of regional and even national gem and mineral shows with informative displays and information about the geology of Northern California and the special projects of the Society’s members.

Members of the Society participate in a number of hands-on collecting field trips. Legality, safety, and proper techniques are emphasized throughout these trips. Members also teach and lead a number of lapidary and jewelry-making workshops at the Museum. Training is required before use of the lapidary shop is permitted.

Currently the only program evaluation is the visitor guest book comment section; no formal evaluation has been started. The Museum and Society may wish to contact museum and university resources to facilitate a comprehensive program evaluation plan so that everyone can see which programs are successful, which may need to be retired, and what new programs could be successfully developed. The guest book comments are overwhelmingly positive to date.

The Museum and Society have discussed the potential for developing and marketing a series of traveling exhibits on core topics, including regional mineral identification, fossil chronology, and geological processes at work in the region. This is an excellent plan that should be implemented as time and resources allow; it will extend the Museum’s profile and visibility significantly. Currently the Museum has a successful history of putting up displays in a number of venues, including local libraries and post offices as well as the state capitol rotunda. The museum administrator manages programs off-site at local schools and campgrounds, interpreting the complex and spectacular geological history of the region through information and teaching specimens.

The Museum maintains good collegial contacts with faculty members at Northern California University, Giraffe Community College and the University of California. Faculty members in geology and anthropology have assisted the Museum with identification services and field trip leadership, and some have served on the Board. Annual geology scholarships are given by the
Society to deserving students at Northern California University. The Museum would like to increase its regional faculty cooperative arrangements as a way of expanding its programs to include more opportunities for undergraduate and even graduate students.

The Museum is seen as a community resource, a role it would like to expand. Target partners identified by the Museum include the Main City Parks and Recreation Department. The Museum and Society might want to consider extending its partnership and outreach to the impressive network of state and national parks in the area. This might include joint education and interpretation programs, as well as reduced admission fees for people attending one of more of the partner institutions.

**FACILITIES**

The Geode Museum is a complex of small buildings, with a new building literally placed over an old one to both contain and expand its facilities. This has produced a few odd spaces in hallways and upstairs areas, but overall seems to have worked well. There are at least 4 doors to the outside. A new building addition will dramatically expand the Museum’s public face with a new reception area and space for traveling exhibits. Much of the funding for these expansions has come from private donations.

Most of the building space is given over to exhibits, meeting/classroom, and lapidary shop space, as noted above. The upstairs storage areas were set up to make maximum use of the areas creating by the new building being placed over the old. These upstairs areas provide all of the off-exhibit storage space available; they are wholly inaccessible under the guidelines of the Americans with Disabilities Act. Since the upstairs areas are not public access areas, and in fact are intended to provide some degree of secure storage, this is not as critical as if the upstairs areas were part of the exhibit or classroom areas. Nonetheless, this is an issue that should be brought up with an architect or other outside expert to determine if this arrangement is legally acceptable. The new space and exhibit areas are up to code and are regularly inspected.

**GIFT SHOP**

The gift shop and consignment room areas market a variety of specimens, jewelry, and publications for sale. Members can place items in the consignment room for sale; the Museum takes 25% of the sale price and returns 75% to the member. The gift shop and consignment room are the first stopping point for the general public coming in the main museum door.

One problem was noted here. At the time of this survey, some geological specimens were marked as being deaccessioned items from the Museum’s permanent collections. This is a practice that has to be discontinued immediately, as is violates IRS laws for non-profit institutions. Deaccessioned items intended for sale must be sold at public auction, and the uses
of the proceeds are highly restricted. Because early record-keeping in the Museum was very limited, it is difficult to tell whether or not these specimens were truly accessioned in the first place; nevertheless, Museum and Society assets in the public trust may not be sold in the gift store.

GOVERNANCE

The Board of the Amelung Gem and Mineral Society serves as the governing body for the Geode Museum. The Board consists of a director, two at-large members, a president, vice-president, and secretary/treasurer. Elections are held annually and the positions are staggered; each term runs for three years. All positions are voluntary and uncompensated. The president of the Board is considered to be the de facto executive director of the Museum, which causes some confusion. The governance structure of the Society needs to be reviewed and formalized with a clear delineation of responsibilities and expectations for each position. The Board does not currently include an advisory committee focused on collections issues.

It is very important to clarify these positions and their lines of authority, and to give the Museum administrator true authority to manage the museum and to make decisions about its day-to-day operations. The Society should be the employer, fundraiser, and sponsor of the Museum; the Museum staff should direct the Museum and provide curation, education, gift shop management, and program direction. The Board president should not be expected to act as the director of the Museum as well; this sets up a very problematic ethical situation. Most of this review is outside the scope of this assessment. A MAP Governance Assessment is highly recommended as the Museum and Society grow and change. In any event, the Society should certainly set up a collections advisory committee to assist the administrator with the management of the Museum’s collections.

ADMINISTRATION AND FINANCE

STAFF

Currently, the Museum is staffed by the Museum administrator, its sole paid position, who is helped by volunteers from the Society and interns from local high schools and colleges. The administrator reports to the Society Board. There is not a clear delegation of authority from the Board to the administrator; prior to her employment, the Museum was wholly volunteer-managed by members of the Society.

The administrator is charged with the decisions related to the care and use of all collections. Repairs, preparation, conservation treatments, staff and volunteer training, and documentation of the specimen collections are all included in the administrator’s responsibilities. Other Society
members may assume responsibility for the general maintenance of the building, but do not
normally take care of the storage areas. There is no dedicated staff position at any level for any
of the following jobs: collections manager, preparator, registrar, educator, data entry/archivist,
exhibits specialist, or development.

Areas of critical concern for the administrator and Board include the lack of time and
manpower available for full computerization and accessibility of collections records; backlogs of
specimens which have not yet been processed (and concern about unseen deterioration which
may occur in such situations); lack of an educational specialist for visiting classes and teachers
at the pre-college level; and lack of resources to deal with these shortages in staffing. There is
no budget for collections care per se other than the administrator’s salary.

Clearly, as the Museum moves into its expanded facilities, there needs to be an expanded
staffing plan. Of the positions listed above, the educator and the collections manager have the
greatest chance of attracting ready endowment funding. Education positions in particular can
be funded through grant avenues not always taken into account by dedicated science
museums. A development specialist should put together a coordinated Federal and corporate
grant application strategy to provide the broadest possible scope of funding.

The Society membership is the greatest asset that the Museum and its programs have, as noted
by the museum administrator. Recruitment and retention of new members is critically
important at this time. Many rock enthusiast groups founded in the 1940s and 1950s have long
since closed because the membership waned and no new members were attracted. The Society
is already a notable survivor in its field because the members saw the importance of a museum
and of education programs from the beginning. Expanding its membership will, among other
benefits, provide new volunteers to assist with the Museum and its programs.

**FINANCE**

Several Board representatives expressed concerns about the Museum’s fiscal health. Not all of
the Board and Society members interviewed were fully aware of the Museum’s non-profit
status, and it appears that, over the years, the nature of the Museum’s tax-exempt status had
been misunderstood. Some members asserted that the Society (and by extension the Museum)
were fully private with no non-profit status. There seems to be no doubt that, under California
state law⁴, the Museum is a 501(c) (3) organization. The administrator and Board president
might well find it useful to consult a non-profit expert to review the Society’s filings and Form
990, and to put together a clear statement of non-profit status for Society members.

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⁴ State of California Department of Commerce filing, Corporation Division—Certificate of Incorporation under California
The Society and Museum have benefited from a few large donations and bequests from generous friends and supporters, but day-to-day operations funding is very tight. The Museum and Society are located in a small city very much affected by recent economic downturns, and raising admission fees or program charges may have a damaging effect on attendance and support. While financial and related advice are beyond the scope of a collections MAP, it is worth suggesting that the Society look at grant and corporate funding strategies to augment its assets, and to seek endowment and naming opportunity funds from community and private donors. A development expert may be able to put together a comprehensive plan for seeking sustainable outside support.

Currently, income is generated by admissions fees and gift shop income, program fees, and facility rental charges. Some donated rocks and minerals are reserved for gift shop sale rather than for addition to the Museum’s collections. A few large donations from private collectors and benefactors have been received over the years.

As the Museum refines its collections plan, it may decide that some collections are outside its scope and mission. Because the Society and Museum are in fact non-profit entities, there are strict limits on how and when collections items can be deaccessioned and sold, and on what such funds can be used to purchase. In no event should deaccessioned collections specimens or materials be sold in the Museum’s gift shop. Guidelines for the sale of deaccessioned materials are provided by AAM.

**RISK MANAGEMENT AND EMERGENCY PREPAREDNESS**

The Museum administrator has discussed the development of a full institutional emergency preparedness plan. From a risk management point of view, the major problems facing the Museum include external factors (tornadoes and other windstorms, occasional heavy rains and hail, and seismic risks), and structural factors with the older building. At the moment there is no detailed plan to deal with disasters that affect the building. A disaster plan is required for accreditation.

California is well-known for the suddenness and severity of storms, particularly in the spring. Flooding from such storms is also a risk.

The Museum plan should address both man-made and natural disasters (from building failure and human error to weather, seismic and catastrophic events). Every staff member should have copies of the plan, be empowered to notify emergency services directly, and know where copies of the plan are located at various points in the building. The plan should be kept current and updated. Emergency preparedness drills need to be conducted; there is already a schedule for testing emergency notification systems.
The Museum needs to maintain supplies to cope with emergency situations. A consortium with other regional museums and cultural institutions may be set up for bulk purchase and secure storage of these supplies. Region-wide disasters, notably storms and fire, can affect this area greatly. Supplies should be inventoried regularly.

Local emergency preparedness coordinators (fire department, city, county government, etc.) must have copies of the emergency preparedness plan, be consulted in the development of the plan, and be informed about the special nature of the buildings and collections. The Museum should have regularly scheduled inspections by the fire department and recharges of fire extinguishers. There is an in-house fire suppression system in the collections area.

A disaster plan must distinguish between strategies used to keep a disaster (usually man-made) from occurring in the first place, and strategies set up to mitigate the effects of disasters which cannot be avoided (usually structural or natural).

The first responsibility of the Museum is to ensure the health and safety of everyone in the building at the time of the disaster. Collections, exhibits, and buildings are secondary. After human concerns are met, the effects of a disaster can be evacuated, prioritized (using a triage system), and treated as far as possible. Preventive conservation, including the selection of good storage cases, well-planned or upgraded building design and materials, and thorough documentation with offsite backups will reduce both damage and response time.

Before a disaster has a chance to happen: All staff and volunteers should be trained in standard First Aid and CPR (including infant CPR) with annual renewals. Some designated staff members should be qualified in advanced First Aid or EMT training, in order to assist with proper evacuations or carries as needed. Any disaster response plan should have the input, approval, and understanding of all staff members. Evacuation drills are important; skills that are not practiced are not skills, and reading is no substitute for doing. Finally, good relations with enforcement and emergency personnel, set up in advance and maintained during normal times, will reduce some of the confusion and anxiety in a disaster.

Risk assessment and risk management planning will help the Museum and Society identify and correct structural, storage, and procedural problems that are the most likely to cause serious problems if left uncorrected. An understanding of the types of disasters that may occur will also be valuable. Plans for transportation and off-site storage or temporary transfer of materials should be made in advance. Finally, a video or photographic record of the Museum in normal times will form a valuable baseline for evaluating the extent of disaster damage (a concern of conservators and insurers alike).

During the crisis: response should be made according to existing disaster plans as much as possible. Circumstances will alter this response. Much depends on whether the problem is indoors or outdoors, or whether it occurs during or outside business hours. All staff members
should know whom to call, when to evacuate, and how to keep panic from spreading. A building disaster may cause the loss of electricity, water, and access to normal evacuation routes; alternate plans must be part of the response plan. A community-wide disaster may limit the number of staff members who can reach the Museum.

Immediately after the crisis (usually the first 48 hours): this is the time when the Museum management may not be in charge of the situation. As the scope of the disaster becomes clear (does it affect only the Museum, the area, the community, or the region?), the availability of staff members will be affected. Law enforcement and emergency response personnel may legitimately control the scene until it is considered to be safe for staff to reenter the building. This is a decision best reached by professionals (e.g. police, fire department, and engineers). Points to be considered may include structural and electrical hazards, health hazards from fumes or leaks, and the chance of immediate reoccurrence (especially in cases of criminal activities, earthquakes or subsidence, or storms). The Museum staff should be able to account for everyone in the building or affected by the disaster. If it is possible, a Museum staff member should make a video or photographic record of the damage immediately after occurrence and continue it all through the next stages.

When the building or affected area can be reentered: this is when assessment of damage to objects and buildings begins. Evaluation of damage to collections, cases, work areas and building fabrics may all be necessary; again, circumstances will dictate how extensive this needs to be. Nothing affected by a disaster should be overlooked. This is the time when collections and storage materials are usually removed for treatment and off-site storage as needed. All damaged materials should be documented through the video or photographic logs for reference and for the use of experts.

At this point, damage control may involve the hiring of preparators, conservators, or other professionals. The Museum management should know whom to call in the region. A large-scale disaster may overload these people; again, good relationships set up in advance help tremendously. Damage should be prioritized under a triage system: the materials that cannot be helped by any attention, those that are stable without immediate attention, and those which will only survive with immediate attention. The last category should be cared for first; the first should be documented as a loss. The conservator may want to work with and train the Museum staff to deal with the second category on their own as appropriate.

After materials are back in place: the response does not end there. The staff should prepare a list of all the materials affected by the disaster and an overview of deteriorative changes to check for at regular intervals (monthly, annually, at the five-year mark, etc.). Changes that cannot be detected at first may turn out to be especially serious in the long run: these include factors such as slow-growing molds, drying and splitting open of book spines and wooden joints, flaking of pigments and stone and ceramic surfaces, rusting and corrosion of metals, blanching of paintings, and toxic substances released by wetting. The effects of too-aggressive
drying or other treatments may also become apparent. All these should be documented and treated.

At this time, the disaster policies and procedures should be reviewed and updated. Changes to the building may necessitate changes in evacuation plans; collections may be moved to safer areas; visitor access may be modified. A review of what works and what does not should be made. The disaster response plan should not be set in stone, but should be upgraded as often as necessary to reflect ongoing changes in circumstances.
**ACTION PLAN**

**SHORT-TERM**

- All fluorescent fixtures must have UV-filtration sleeves to reduce exposure
- As collection is sorted, begin boxing items or creating envelopes for storage within cases for collections off exhibit.
- Check mineral collections for the presence of radioactivity and mercury vapors. Isolate problem specimens as appropriate. Radon detectors are also recommended.
- Continue rehousing and reboxing fragile materials with archival storage products.
- Cover or box any collections objects which are stored on open shelving.
- Do a pH test of existing collections objects.
- Do not prop any outside doors or windows in the building open.
- Invest in pH-testing materials to check storage materials.
- Monitor the building for cracks and deterioration, especially at the contact of the base and the walls. Correct problems noted as needed.
- Provide staff and volunteers with as many training opportunities as possible.
- Purchase at least one datalogger for monitoring temperature and relative humidity in collections/exhibit areas.
- Remove and properly store any items stored on tops of cases and tables.
- Review each sub-collection. Work with Society supporters to get advice on the political sensitivity of any materials to be deaccessioned.
- Set priorities for which staff positions should be added first.
- Set up a task force for strategic planning and for establishing a collections advisory committee on the Society board.
- Set up off-site storage for copies of Museum documents and diskettes, and fire-proof cabinets for original documents.
- Start a pest monitoring program using non-bait/non-pheromone traps. Any materials found to be infested should be treated insofar as possible by freezing or by creating anoxic enclosures.
- Upgrade and expand the Museum’s Web presence.
- Upgrade storage supplies and door closures.
- Write a collections management policy and a collections plan for Board approval.
- Write and implement a complete disaster plan.

**MEDIUM-RANGE**

- Develop the strategic plan to cover at least a 5-year period with a clear vision statement.
• From this, develop funding and naming opportunities for endowed staff positions.
• Create a community advisory board with the mission of overseeing the implementation of all stages of the plan.
• A consortium of museums in the region should be formed for the purpose of investing in environmental monitoring equipment for group training and use.
• Datalogger systems with small strategically placed sensors will aid in giving a long-term view of the building environment in both the new and older parts of the Museum structure.
• Purchase gasketed, locking steel storage cases as needed to replace wooden cases and other inappropriate storage units. Transfer collections removed from storage to these cases. Pad and support all objects in cases.
• Insofar as possible, isolate specimens from HVAC vents.
• The Museum areas should be surveyed to see if better lighting is needed. There should be no area of the collections/exhibit areas which cannot be lit as needed, in order to facilitate cleaning and pest control measures.
• Invest in a UV monitor to check the efficiency of all UV filters.
• Pest monitoring software will enable the staff to put together a long-term picture of the nature and scope of any infestations.
• Complete deaccessioning of problem items, returning or resolving temporary or "permanent" loans, and establishing ownership of abandoned loans. Get legal advice to resolve ownership of collections if problems arise.

LONG-TERM

• Continue to expand staffing to the full level defined in the strategic plan.
• Continue to expand volunteer opportunities.
• Develop an integrated database program that the collections manager can use to track the location, use, conservation history and other activities affecting each collections object.
• Invest in climate-controlled steel storage cases for any parts of the collection determined to be especially RH-sensitive.
• Upgrade building HVAC systems as needed.
• Work with an architectural surveyor to determine the building security plan and best building locations for exhibiting and storing collections.
• Continue environmental monitoring as a dedicated collections management activity, to prevent new problems and to make sure that isolation of problem materials remains effective.
• Continue pest monitoring and use of the monitoring results to improve collections care.
REFERENCES

STAFFING


For volunteer training: refer to the Paleontology Certification Program, Denver Museum of Natural History for a model of how to bring community amateur collectors into productive association with the Museum collections program. The National Museum of Natural History, Smithsonian Institution, also offers one.

STRATEGIC PLANNING AND GOVERNANCE

Some examples of strategic plans can be found at:

Society Board members may wish to take advantage of the resources offered by the Museum Trustees Association at http://www.mta-hq.org/about.html.

PROFESSIONAL MUSEUM ORGANIZATIONS

http://www.aam-us.org/: American Association of Museums. Of particular interest for its accreditation program, which should be considered as a key long-term goal of the Museum.

BUILDING

A separate architectural assessment is needed in the foreseeable future to address some of the older building's concerns. You can contact the American Institute of Conservation to get information on skilled architectural conservators who can conduct this survey.

FUNDING RESOURCES AND PROGRAMS

The following is a partial list of Federal granting agencies of interest to the Museum as it develops its plans and programs. State and local initiatives should be explored as well.

A number of Federal sources can be accessed through the AAM site:

DeMouthe, J. F. (2006). Natural Materials: Sources, Properties, and Uses. Butterworth - Heinemann Series in Conservation and Museology, 384 p. [A guide to natural materials in all their various forms, both natural and as they are likely to be found in collections.]
Embry, P. G. (1987) Mineral curators: Their appointment and duties. Mineralogical Record 18, 389-390. [A brief, but insightful, analysis of (and commentary on) the duties and responsibilities of a mineral curator. This document was formally adopted by the Commission on Museums (IMA).]
Feldman, R. M., Chapman, R. E., and Hannibal, J. T. (eds.) (1989; reprinted 1997) Paleotechniques. The Paleontological Society, Special Publication no. 4, 358 p. [Great listing of chemical and mechanical preparation techniques that are applicable to rocks and minerals as well as fossils.]
discussion of the philosophical and ethical considerations. See also the editorial "Mineral specimen repair and restoration: An attitude check" by Kile and Wilson in the same issue.


Sinkankas, J. (1972) Gemstone and Mineral Databook. Winchester Press, 346 p. [A good source for information on the properties of minerals including data on cleaning and preserving minerals and detecting faked specimens.]


In addition, the following are highly recommended:

Characteristics of Excellence for U.S. Museums

Public Trust & Accountability
- The museum is a good steward of its resources held in the public trust.
- The museum identifies the communities it serves, and makes appropriate decisions in how it serves them.
- Regardless of its self-identified communities, the museum strives to be a good neighbor in its geographic area.
- The museum strives to be inclusive and offers opportunities for diverse participation.
- The museum asserts its public service role and places education at the center of that role.
- The museum demonstrates a commitment to providing the public with physical and intellectual access to the museum and its resources.
- The museum is committed to public accountability and is transparent in its mission and its operations.
- The museum complies with local, state, and federal laws, codes, and regulations applicable to its facilities, operations, and administration.

Mission & Planning
- The museum has a clear understanding of its mission and communicates why it exists and who benefits as a result of its efforts.
- All aspects of the museum’s operations are integrated and focused on meeting its mission.
- The museum strategically plans for the use and development of its collections.
- The museum’s collections-related research is conducted according to appropriate scholarly standards.
- Guided by its mission, the museum presents accurate and appropriate content for each of its audiences.
- The museum uses techniques, technologies, and methods appropriate to its educational goals, content, audiences, and resources.

Leadership & Organizational Structure
- The governance, staff, and volunteer structures and processes effectively advance the museum’s mission.
- The governing authority, staff, and volunteers have a clear and shared understanding of their roles and responsibilities.
- The museum’s governing authority and staff think and act strategically to acquire, develop, and allocate resources to advance the mission of the museum.
- The museum engages in ongoing and reflective institutional planning that includes involvement of its audiences and community.
- The museum establishes measures of success and uses them to evaluate and adjust its activities.

Collections Stewardship
- The museum owns, exhibits, or uses collections that are appropriate to its mission.
- The museum legally, ethically, and effectively manages, documents, cares for, and uses the collections.
- The museum's governing authority and staff think and act strategically to acquire, develop, and allocate resources to advance the museum's mission and goals.
- There is a clear and formal division of responsibilities between the governing authority and any group that supports the museum, whether separately incorporated or operating within the museum or its parent organization.

Education & Interpretation
- The museum clearly states its overall educational goals, philosophy, and messages, and demonstrates that its activities are in alignment with them.
- The museum understands the characteristics and needs of its existing and potential audiences and uses this understanding to inform its interpretation.
- The museum’s interpretive content is based on appropriate research.
- Museums conducting primary research do so according to scholarly standards.
- The museum uses techniques, technologies, and methods appropriate to its educational goals, content, audiences, and resources.
- The museum presents accurate and appropriate content for each of its audiences.
- The museum demonstrates consistent high quality in its interpretive activities.
- The museum assesses the effectiveness of its interpretive activities and uses those results to plan and improve its activities.

Financial Stability
- The museum legally, ethically, and responsibly acquires, manages, and allocates its financial resources in a way that advances its mission.
- The museum operates in a fiscally responsible manner that promotes its long-term sustainability.

Facilities & Risk Management
- The museum allocates its space and uses its facilities to meet the needs of the collections, audience, and staff.
- The museum has appropriate measures to ensure the safety and security of people, its collections and/or objects, and the facilities it owns or uses.
- The museum has an effective program for the care and long-term maintenance of its facilities.
- The museum is clean and well-maintained, and provides for the visitors’ needs.
- The museum takes appropriate measures to protect itself against potential risk and loss.