05/16/06 West side board meeting minutes

Meeting was opened by Stu Earnst

The meeting started outside since no one had the key to the building. Ed finally showed up and we went inside.

Kathy gave the treasurer's report.
The DNR sent the WSMC a bill for the lease on Walker Valley.

Wagonmaster:

- The Kalama trip was another great field trip. Nearly 50 people attended on each day. Lots of good material was found and the weather was fantastic. Longview Fiber had requested that all our holes be filled in prior to leaving. The attendees left the area in better shape than when they arrived.
- The First Creek collecting area will definitely have limitation on the number of vehicles that will be allowed per trip. There will be vehicles designated to ferry people from the gate to the collecting areas. We will be allowed to park inside the gate. The land owners have stated that the property will be sold in the next year or two, negotiations are underway.
- The larger clubs will have to start sponsoring some of the field trips. Ed no longer has the time (or energy) necessary to organize the larger Wagonmaster trips. We really need the clubs to step in and take ownership or else we'll have fewer and fewer trips each season.
- Mike also stated that the Cherry Creek is gated about 3 miles from the petrified wood locality.

Old business:

- The board still needs to review the analysis of our insurance policy and take appropriate steps.
- The Council discussed how to handle the "field trip deposit fees" of no shows or people who cancel on short notice. The board agreed that the money should be placed into the in the general fund to defray insurance and field trip organization expenses. It was agreed that the deposit would be forfeited if a cancellation came within seven days of the scheduled field trip. This would allow the fieldtrip leaders to contact people on the waiting list. Comments on these suggestions are welcome. The issue will be brought up at the next combined meeting in August and a policy written after a consensus has been reached.

New business:

- A committee needs to be formed to create a set of guidelines for organizing the Wagonmaster field trips needs to be written which would help the member clubs act as sponsor. The guidelines should include information on obtaining keys, contacts for the landowners or government agencies, insurance forms and requirements, release forms, etc.
- Ed needs help keeping the map booklets up to date. He mostly needs help researching access changes, road changes, and editing the maps and directions. A small committee could take over the bulk of the work and free Ed to act as an advisor. We really need to spread this activity over several clubs since Ed is the only one who knows "everything" about making the maps.
- The Kalama and First Creek areas are being "overused" by rockhounds. This is because the landowners are getting requests for access from several clubs during the collecting season. The clubs need to co-ordinate their field trips with the Mineral Council so that we have only one or two trips per season to these popular sites. If this continues for much longer we will lose all access to these areas because the landowners are already complaining. It is their land and we are only guests, we should not abuse their hospitality.

Meeting adjourned,
Submitted by Glenn Morita, Secretary Pro-tem

Where Did the Word Come From?

The word "Lapidary" comes from the Latin word Lapis, meaning Stone. Lapidaries flourished in Assyria, Babylonia, and Egypt more than 6,000 years ago. Lapidaries (craftsmen who cut, polish, and engrave stone) used a sapphire point in cutting until about 3,000 BC when the Assyrians and Babylonians introduced the bow drill. Before the 1300,s, most gems were cut en cabochon, that is, they were polished smooth and closely retained the original size and color of the stone.

The word "Gem" comes from the Latin word "Gemma" meaning bud. The story of precious stones is much like that of the blooming of flowers. Like tiny buds that burst into beautiful blossoms, dull lumps of mineral matter can be cut and polished into brilliantly flashing of beautifully glowing gems. Gems may be cut in a number of different ways, depending on changing fashions in jewelry and on the particular type of gem. Hardness, color, brilliance, rarity, and demand determine the value of gems.

In recent years, synthetic gems of good quality have been produced in the laboratory. The Egyptians made simple imitation of costly stones by coloring glass.

from The Rear Trunk & others via The Petrified Digest 2/06

And the Mountain Moved:

Scientists Study How Heart Mountain Shifted

17 May 2006
Science Daily

"Moving mountains" has come to mean doing the impossible. Yet at least once in the past, one mountain relocated a fair distance away. This feat took place around 50 million years ago, in the area of the present-day border between Montana and Wyoming. Heart Mountain was part of a larger mountain range when the 100 km (62 mile) long ridge somehow became detached from its position and shifted about 100 km to the southwest. This 'migrating mountain' has garnered interest from geologists and geophysicists around the world who have tried to solve the mystery behind the largest known instance of land movement on the face of any continent.

Dr. Einat Aharonov of the Weizmann Institute's Environmental Sciences and Energy Research Department, working in collaboration with Dr. Mark Anders of Columbia University in New York, recently published a paper in the scientific journal Geology that offers an explanation for the phenomenon.

Aharonov and Ander's explanation is based on dikes – vertical cracks in the rock that fill with hot lava boiling up from deep in the earth. In Heart Mountain, these dikes formed a passage for the lava, three kilometers deep, through the limestone aquifer (a porous, water-soaked layer). There, the sizzling lava would have heated the water to extreme temperatures, causing tremendous fluid pressures.

The scientists developed a mathematical model (based on the number of dikes in the mountain and their structure) that allowed them to calculate the temperatures and pressures that would have been created deep within the base of the mountain. The results showed that the infiltrating hot lava would have turned the water in the aquifer layer into a sort of giant pressure cooker, releasing enough force to move Heart Mountain from its original spot to its present site.

Pow Wow Trip
April 21-23, 2006

My oh my, what a trip! Sometimes things are even better than I can imagine, and imagination is the key. The PowWow Rockhound Club has a yearly group camping & fun center held near Mattawa. The camping is located at the boat launch area, which is not the best camping area, but it does provide ample space for all. With the tents, campers, trailers, fifth wheels, motor homes, and then the ones that are there for the potluck or breakfast, a large space is required.

Both mornings the wind was present, but so what. Saturday morning one group left for the Diatomaceous pit for the Opal, while another group headed up to Saddle Mountain to find some Petrified wood. The weather cooperated, the sun was out (which means the sun was on) and I don't think there was a single bad word all day.

After an enjoyable day of collecting, most went back to the boat launch for a potluck feast. Before the food had a chance to help some sleep, out came the prizes. At the PowWow gatherings there is a drawing, and if you're a lucky winner the prizes are very cool.

Sunday morning breakfast we put some fuel in the oven, and all were off again. This is a good trip for any new or experienced hunter-gatherer. Maybe you'll see me behind the next rock you move. Happy diggings, and remember the Rock Hound Motto.
Ken MRGC

From Stone Age News 05/06

Minerals Of The Ancient World

by Vivien Gornitz

The Roots of Civilization
Long before the dawn of civilization, our human ancestors made hunting tools and weapons from chert, flint, quartzite, and obsidian. Axes and mauls for hammering, pounding, and grinding were shaped from tough, hard, massive rocks like basalt (or diabase), diorite, gneiss, granite, and jade. Powdered hematite, ochre, and manganese oxides (or charcoal) served as pigments for realistic and well-executed Ice Age cave paintings. Mineral resources contributed greatly to the development of ancient technology. Starting with the Bronze Age, metals, initially derived from the native elements - gold, silver, copper, and meteoritic iron - and later from various ores, were crafted or cast into tools, weapons, jewelry, and coins. Clays were molded and fired into pottery and ceramics. Quartz sand and other naturally-occurring ingredients were fused into glass. Attractive, colorful crystals and stones were used for adornment, healing, and status.

Ancient Gemstones
Gemstones, such as chalcedony, carnelian, sard, agate, amethyst, quartz, as well as the more exotic lapis lazuli, turquoise or hematite were polished into beads and other ornaments. Gem seals were intricately and skillfully engraved with mythological scenes using hard abrasives, such as corundum and magnetite. Ancient lapidaries avoided unnecessary cutting in order to preserve the weight (and value) of the stone and its presumed mystical powers. Color often held greater significance that the actual stone itself. Much of King Tutankhamen's magnificent gold jewelry, for example, is inlaid with colored glass or faience-a bluish-green ceramic material-instead of genuine stones. To the ancient Egyptians, red (carnelian, jasper, or red glass) variously represented fire, blood, sun, hence life itself, but also anger, destruction, and the desert. Blue symbolized heaven, the primordial flood, water, thus life, rebirth, and fertility. Lapis lazuli was the primary blue gemstone, often

simulated by blue glass or faience. Green (malachite, bluish-green turquoise, amazonite) indicated vegetation, life, and resurrection. Yellow (gold, electrum - a gold-silver alloy, also ochre or orpiment pigments) signified the sun. White (chalk, gypsum, shell) symbolized purity. Black obsidian) stood for the night, death, destruction, and the underworld, but by association with the dark, fertile soil of the Nile Valley also connoted fertility and resurrection. Hematite amulets and seals, to the Assyrians and Babylonians, gave power over one's enemies, presumably because of hematite's red streak that evoked blood and tire. However, hematite (and ilmenite) slabs were polished into mirrors in Pre-Columbian Mexico.

Altered or manufactured stones have a long history. The Romans, by heating light-colored chalcedony, converted the limonite or goethite inclusions in microcrystalline silica to a darker, more desirable reddish-brown hematite (a treatment still performed today). Agates and other porous stones were dyed by boiling in acidic honey, a precursor to the sugar-acid process perfected in Idar-Oberstein, Germany in the 19th Century. The Egyptians baked steatite (soapstone or talc (H 1)), transforming it into enstatite (H 1), for scarabs and other amulets. Egyptians, and later Romans, frequently substituted glass or faience for turquoise and other gemstones.

Precious minerals were traded over long distances. For over 5,000 years, nephrite jade derived from sources near Khotan and Yarkand in central Asia made its way into China. Lapis lazuli from Badakhshan, Afghanistan spread across the Near East from Mesopotamia to Egypt. Deposits in the Sinai Peninsula supplied ancient Egyptian turquoise. Persian turquoise was extensively used throughout the Near East and India. In the Americas, turquoise from Cerrillos, New Mexico and other southwestern U.S. deposits traveled far to the south into Mexico. Jadeite from the Motagua Valley, Guatemala appeared throughout - Mesoamerica. The Romans acquired diamonds from India, sapphires from Sri Lanka, emeralds from "Cleopatra's mines" in the Sinai and Habachtal, Austria, peridot from St. John's Island in the Red Sea, zircon from India, and pearls from the Persian Gulf and the Red Sea.

Metals and Ores

Native metals, such as gold, copper, silver, and more rarely iron, attracted attention because of their shiny luster and malleability. These were the first metals to be exploited, initially from placer deposits. Over 3,000 years ago gold deposits were being worked in the Taurus Mts., Anatolia (modern Turkey), also the Eastern Desert, Egypt, and Nubia (Sudan), and much later by Celtic and Roman times in Ireland, Brittany, southwestern France, and Iberia (Spain). The Sican culture in Peru (700-1400 A.D.) created many gold objects, including masks and knives. The Incas and Aztecs also fabricated many beautiful gold artifacts, most of which were melted down for bullion by the Spanish conquistadors.

Some of the oldest silver mines include Beycesultan, Anatolia and Tepe Sialk, Iran (5th millennium B.C.), Siphnos Island in the Aegean Sea, and Mahmutler mine, Anatolia (3rd millennium B.C.). Silver was also utilized in ancient Egypt for millennia. Laurion, Greece was a major classical source of silver, which as at many other deposits was derived from lead ores, such as galena, PbS. The Romans worked lead-silver mines at Sierra Morena, Spain, also other deposits in Asia Minor, the Danube region, and Pampailly, France, where silver occurs as minute inclusions of argentite, Ag2S, in galena. In the New World, major silver deposits were found in Mexico and Peru. In North America, indigenous peoples made tools from native copper deposits in the Keweenaw Peninsula, Michigan and Coppermine River, Canada.

The first widespread use of metals for tools and weapons appeared in the Bronze Age. Pure copper is too soft and therefore is alloyed with other metals, such as tin to make bronze. Curiously, many of the oldest known bronzes from Europe through India, with few exceptions, contain significant quantities of arsenic, with trace amounts of lead and nickel. Other than the relatively rare occurrences of native copper, the red metal was probably extracted from minerals such as tenorite, cuprite, malachite/azurite, which were fired at fairly low temperatures in a reducing atmosphere, using charcoal. These minerals are typical of secondary (oxidized) deposits, which may have also contained copper and other base metal arsenates. At a later date, sulfide vein deposits supplied copper ores.

From BEMS eTumbler 05/06

Fire Agate

(Agate with Goethite and Limonite inclusions that cause the stone to be iridescent)

This iridescent agate is found in California, Arizona, and Mexico. A magnificent gem, it shows vivid opal like colors when worked by a skilled lapidarist. The agate has many layers of clear agate interspersed with the layers of fire which are orderly platelets of an iron mineral. Warm, red browns are most characteristic of the ground color of the fire layers, but when polished, the red, green, orange, and sometimes violet fire fairly leaps out of the stone.

The author of an article in the September, 1984 issue of the Lapidary Journal notes: "We used to visit Tule Hill in Mexico, which was a major fire agate site, soon after the mineral caught on with the rockhound community. By that time, the major deposits in California and Arizona had been depleted by those field collectors who recognized the beauty and value of the material 40 years ago or so. Fire agate is suitable for creative and exciting jewelry, but it has not yet caught on to any great extent. But there is no doubt that it is one of the most exotic gemstones."

From The Pebble Trails, 05/06

Beach Sand

Beach sand does not come from the ocean, but from the adjacent mountains and streams that empty into them. Rock eroded and carried by streams, is constantly being ground into finer and finer particles, until it is deposited along the stream and at its mouth, as sand.

In the Monterey Bay area, there are several types of sand on the beaches, differing from beach to beach. The coarse gravels are derived from granitic outcrops. The dark silt in one area is from local mudstones. The white sugary sand, prized for use in glass and ceramics, comes from old sand dunes. A few isolated beaches are a mixture of coarse granite grains and shell rubble. Coarse sands result in steep beach faces. Finer sand produce a flatter beach.

Winter storms sweeps sand away, sometimes exposing bedrock. Spring and summer tides carry it back as sand bars, or is lost in offshore canyons.

From The RoadRunner via The Petrified digest 04/06