

OREGON'S GLASS BUTTES . . . Prehistoric Munitions Factories

By Eugene Heflin

282 N. 11th St.,
Reedsport, Oregon

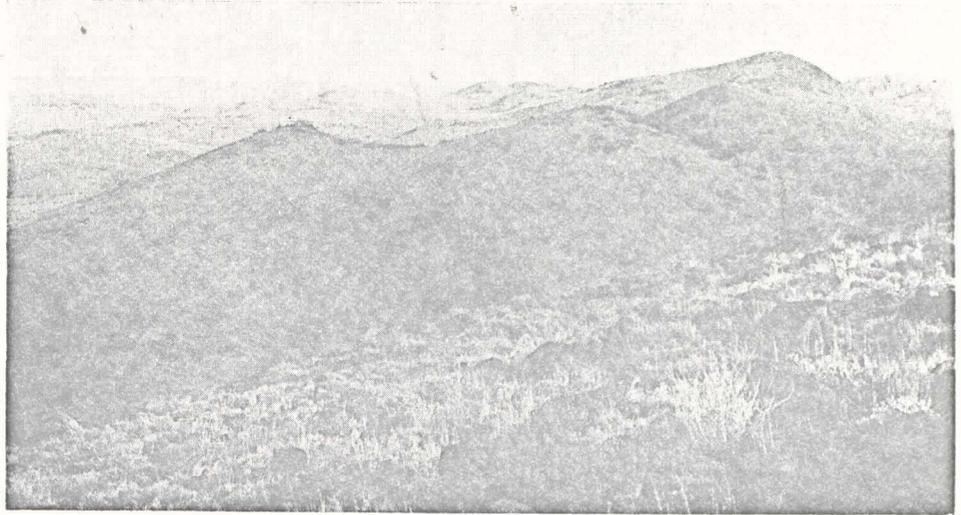
More than 13,000,000 years ago, when the mountains were still rising in the western part of what is now North America, a series of volcanic explosions broke out. It was during the earlier part of the Tertiary period of geologic history that two large volcanoes and several smaller cones were born in what is now the northeast part of Lake County, Oregon. Molten rock pushed out through fissures onto the surface and chilled so rapidly minerals had no chance to form and the result was a glassy stone known as obsidian.

Today these same volcanic peaks, known as the Glass Buttes, long defunct and so terribly eroded and dissected they no longer resemble volcanic craters, tower almost 2000 feet above the desert floor, everlasting monuments to a prehistoric past. They can be seen for miles when approached from the west or east on U.S. Highway 20 between Bend and Burns, Ore. And although visited by many every year, these buttes have as yet not been thoroughly explored and there is much to be learned about them. Volcanic glass covers nearly 50 square miles, the largest deposit of gem quality obsidian in the world.

Ancient man in eastern Oregon knew of the Glass Buttes, as well as the historic Bannocks and Paiutes, and evidence of their lithic activities is scattered in many places along the sage-covered slopes and around the rhyolitic rock outcrops. Large chunks of volcanic glass were broken into suitable blanks from which to chip or hammer out arrowheads, spearpoints, and knives. Larger weapons and knives were hammered out with an elkhorn hammer by percussion methods, while smaller weapons were chipped out by pressure with deerhorn tools. The gem quality of the Glass Butte obsidian was well known by most Pacific Northwest Indian tribes, and often long journeys were made in order to obtain it. Beautiful red and black knives, some as long as 36 inches, were manufactured in the buttes for trade and in use in ceremonies. Eastern Oregon obsidian was so well known and so much in demand even the Mound Builders of Ohio used it, obtaining the raw material through the Indian trade routes.

Two years ago Ray Vincent of Creswell, Oregon, and I, while on a trip to Glass Buttes, discovered several old Indian workshops on top of one of the dikes, or spurs, about 350 feet up the west butte on the northeast side. The deposits of chips in these workshops often were three feet deep or more. By excavation and screening of some of these workshops, broken and intact knives and spearpoints were discovered, some more than 10 inches long.

Freshly exposed surfaces of volcanic glass will absorb water from the atmosphere to form hydration layers. The U.S.



A general view of the Glass Buttes.

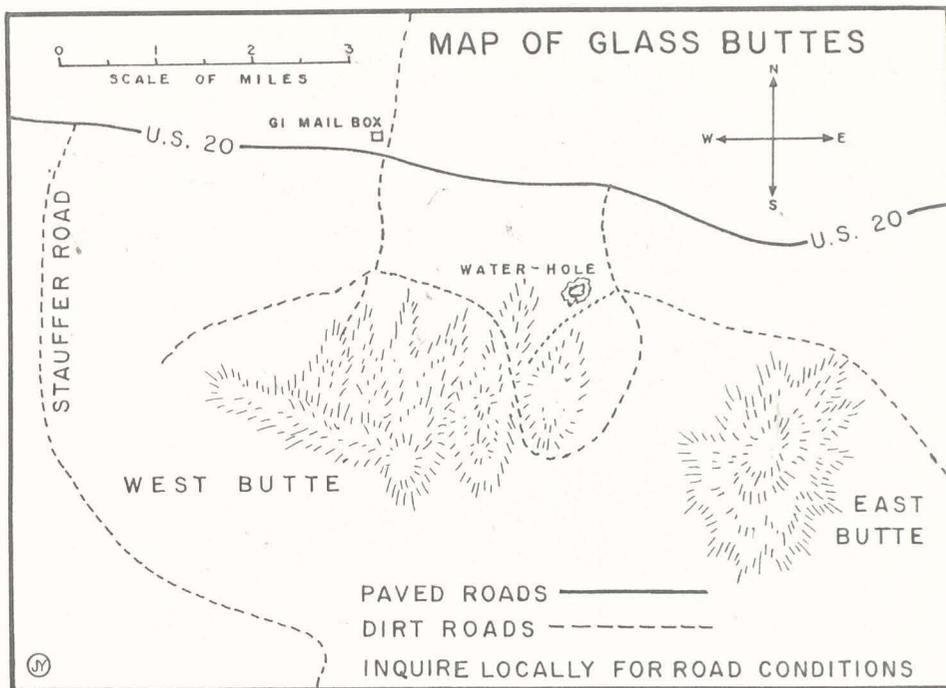


Obsidian knives found at the site where they were made. These were broken.

National Museum in Washington, D.C., had developed a system for checking the age of obsidian. So I sent two samples of Glass Butte artifacts, as well as one from Fort Rock Valley, which is southwest of the buttes, and one from Cougar Mountain, which is northeast of Fort Rock to them for testing. The hydration of the Glass Butte material showed 1.50 microns of hydration, or an age of 800 years; the Fort Rock specimen was 3.6 microns or 2400 years old; and that of Cougar Mountain 5.7 microns or 4500 years. However, some scientist have claimed the system is not accurate enough, so the obsidian from the Glass Buttes could and possibly is, going by the age of the craters themselves, millions of years old.

Whether one desires artifacts or choice obsidian the Glass Buttes are the locale in which to locate either of the two. Any Oregon road map will have the Glass Buttes marked on them. Better still consult a Gem Hunter's Northwest Atlas, or a map of Lake County. The Glass Buttes are about 80 miles east of Bend and 45 or 50 west of Burns on the south-side of the highway. One entrance to the buttes is just south of the highway and the G I Ranch mailbox. Another is about a mile or so east.

The area can be visited during spring, summer or fall, but heavy snows blanket the buttes in the winter. During spring and summer months keep a sharp lookout for rattlesnakes around the rock outcrops, the ravines, and the only waterhole in the region. Even though you might be a brave one, don't be foolish; take a snake-bite kit along, snake leggings or boots, or a good .22 pistol loaded with shot shells.



MAP OF THE GLASS BUTTES AREA.

One year I killed a rattler in the Glass Buttes in the month of November.

Geographically this area is a part of the Great Sandy Desert, which is a vast sheet of pumaceous dust and sand that extends to the central part of Crook County to the north and far into Harney County on the east. Fissured underlying andesitic and rhyolitic sheets of lava and many dry stream channels are characteristic of this part of the country, and there

are miles upon miles of nothing but bunch-grass, sage, and scattered junipers. Days are warm to downright hot, but nights are usually cold. Good advice would be to not sleep on the ground, if camping out, unless you don't mind scorpions and snakes.

The nearest place to stay, if one is minus camping equipment, would be Hampton, a bus-top ten or 15 miles west of the Glass Buttes on U.S. 20. Here is

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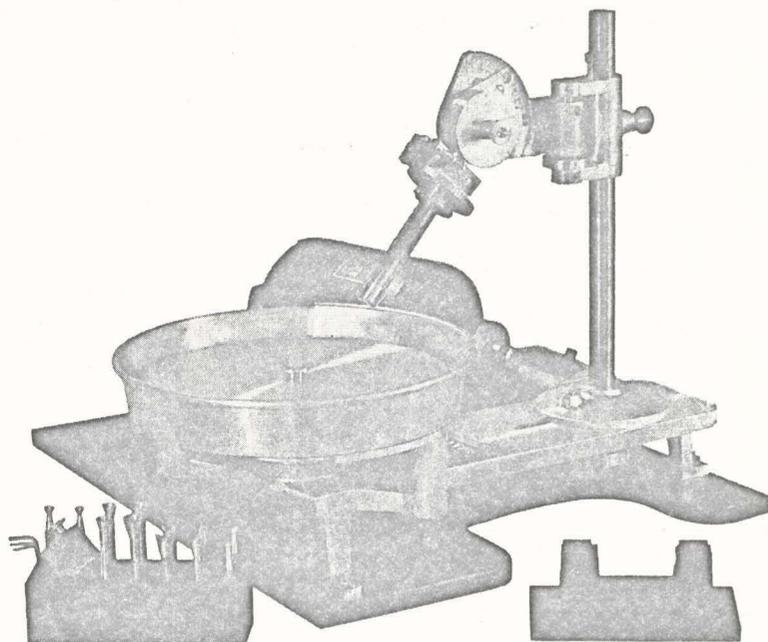
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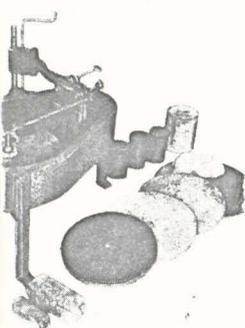
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Practically all types of obsidian are to be found in the Glass Buttes.

a six-unit motel, with fixtures that only work part time; a cafe that isn't too clean, and only has poor to middling food; and a filling station that is filthy. It has always been my luck to find things at their worst here. One time the electricity was off, and there were no lights or steam heat. Once I needed gas, and pumps weren't operating. Still another time all the employees at the cafe got drunk and customers were ignored. And the last time I made the mistake of stopping there, I was desperately in need of a hot bath, having been digging in Crook County for two days and was getting real "gamey." The proprietor did not tell me the water was off until I found out for myself, after having paid him for a room and visualizing a good relaxing bath. So obsidian

hunter let your judgment be your guide if you stop at Hampton while exploring the area.

Spend several days at the buttes, if possible. One day isn't sufficient, the region is so vast. Be sure and fill all water canteens, thermos, or desert water bags before heading for the buttes. The only water found there is a manmade water-hole used by antelope, cattle, coyotes, deer, and bobcats and keep an eye open for rattlesnakes, especially in the "cool of the evening."

Although some of the roads have been widened and graded in part, for the most they are rough, with many extrusions of volcanic rock that could rip out a pan of a low-built car. One road crosses the flats just north of the lower slopes of the west butte and meanders to the southeast and crosses some of smaller cones on the east and comes out on the south between the east and west. Another heads straight south to within walking distance of the north slopes of the east butte, then takes off to the east. This is one road I have never followed past the east butte. A good jeep or a Tote Gote helps a great deal in this area.

The only man who really knew this vast, fantastic region of choice volcanic glass was P. L. Forbes of Bend, who has been dead for several years. He trapped in the area and was the original discoverer not only of the gem quality obsidian in the buttes, but also of the old Indian workshops. But one does not have to be an expert to find obsidian there; it can be spotted easily. The supply will never be depleted. Cores and chunks are found in the dry washes, and weathered pieces extrude from the sage covered slopes. Glass Butte obsidian is fracture free and is used in sphere cutting. One will find choice pieces of red and black, brown and black, red, mottled red and black, mottled brown and black, black, snowflake, rainbow, gold sheen, silver sheen, and green.

On one ridge is an outcrop of double-flow obsidian, the result of two separate flows, one black, the other red, that came together to form one flow, but which chilled on contact and did not mix.

In some places of the lesser cones of the Glass Butte range, the sage is six feet high. One has to push his way through. In many places there are deep holes where obsidian has been mined.

Higher than 500 feet the exposed obsidian seems to play out and more rhyolitic rock seems to take over. At times one will also come across old obsidian flows which have taken up water and have changed from a glassy luster to a dull one.

Another place to hunt choice obsidian, if one does not want to prowl the buttes themselves, would be to take the Stauffar road which runs to the south and east just west of the old cones. Drive for about six miles until you come to the top of a juniper-clad ridge. One can start in anywhere here and find choice obsidian for a great distance in either direction. Huge chunks that may appear to be just rock because they are weathered, if broken open, will usually prove to be the finest grade of obsidian.



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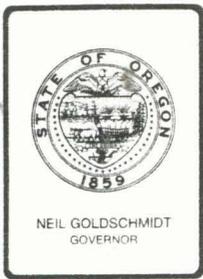
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October 14, 1987

Barbara Gover
Lake County Chamber of Commerce
Courthouse
513 Center
Lakeview, Oregon 97630

Dear Ms. Gover:

Enclosed is a copy of the October issue of Oregon Geology.

Sincerely,

Jerry J. Gray
Economic Geologist

JJG:ab

Enclosure



9/3

Jerry,

Received very irate telephone call from Barbara ~~Gover~~ (sp?), Lake County Chamber of Commerce. Most upset that no one in Lake County (media, chamber, county commissioners) was notified about the sunstone basalt removal - they wanted press coverage. Don has also gotten some flak on this. I told her you would call her and at least give her information on the Salem ceremonies. Best coordinate your response with Don (he's ducking low).

Ron

Chamber of Commerce 947-⁶⁰⁴⁰~~2249~~



Ron Rice of Newport turns square blocks of stone into highly polished spheres. He holds a square block which, after 26 precision cuts and many hours of labor, will become a sphere like those in his display case. The cutting

is a slow and careful job of approximately eight to 10 hours. The stone is then ground in several steps, using a special machine. The entire process takes around 48 hours.

Beauty in stone

By David Lehman
News-Times Writer

The annual gem and mineral show sponsored by the Oregon Coast Agate Club is proof that art is not found only in museums.

Enthusiasts from across the state gathered in the Newport Armory Friday through Sunday to view displays of carefully polished gems and minerals.

Ray Wolley of Ray's for Gems traveled to Newport from Veneta with his friend and fellow collector, Floyd Kostad. Kostad has been a collector for 25 years, and Wolley has collected for 44 years.

"We have been on a lot of rock collecting trips together," said Kostad. Wolley added, "in a lot of them, we should have left the rocks in the woods!"

The two collectors set up a large display of finished items and thin sliced rocks ready for crafting into objects of beauty. The unfinished pieces were displayed in small trays containing water. The water brought out the colors in the rocks and gave prospective purchasers an idea of how the pieces would look when finished.

"A lot of people are getting too old to go out and carry the rocks home," Wolley said. "They can come here and buy them at a reasonable price."

Wolley also set up a display case of designs found in polished Montana agates. Images of mountain vistas, lone fir trees, and different animals could be found in the

polished finish of the stones. Wolley was awarded the people's choice award for his display.

Ron Rice of Newport specializes in creating spheres. He starts with a square piece of rock and makes cuts, turning each face into an octagon. The cutting is a precision job that takes from eight to 10 hours and involves 26 cuts, Rice said.

The stone is then ground in several steps using a special machine that rounds rough edges off the stone. A final polishing step rounds out the finished product and results in a faultless shine. The polishing step takes from four to 12 hours, depending on the stone, and the whole process from start to finish takes around 48 hours, according to Rice.

Rice has been collecting rocks and polishing spheres for more than two years. His craftsmanship has won him awards at a number of shows recently. At the Newport show he took first overall for the spheres and second place for the club displays.

"I stepped in with both feet, all the way up to my neck," he said.

Rice does not usually sell his spheres, although he will cut spheres for \$15 per inch if supplied with the rock.

Pointing to a clear sphere of Arkansas crystal mounted in his display case, Rice noted he had nearly 60 hours of work in the creation. He picked up the unfinished piece on a trip to Arkansas.

Several displays of

craftsmen at work also drew the interests of those attending the show. Don Serafin brought his faceting machine from Portland to demonstrate cutting gemstones. The machine utilizes a diamond-impregnated wheel to grind a precision finish on a gem.

Serafin said a craftsman needs to know his materials to bring out the best finish in a gem. He has been cutting gems for the past nine years, after picking up the machine at an estate sale.

Food is an essential part of any event, and Violet Pullam has been supplying the Gem and Mineral Show with food for the past 26 shows. She is a member of the Oregon Coast Agate Club and had a show case full of opals for the show.

Pullam was assisted by members of the First Christian Church youth group. Pullam said the club charges just enough to put on next year's show.

Pullam has worked with opals for close to 35 years. She said opal is fragile and requires care to keep it from shattering. The show case included a small glass of water to keep moisture in the case. Without the moisture, the opals would shatter under the hot display lights.

When working with opal, Pullam keeps water running over her work to keep the material cool. The work requires a great deal of patience. "It is slow but easier than you think - once you get the hang of it," she said.



Ron Rice was awarded first place for his display of spheres and second place in club Arkansas crystal in the center of his display case represents close to 60 hours of work. Rice picked up the unpolished pieces on a trip to Arkansas. The spheres were lit by small bulbs under the display case, causing them to glow like mystical crystal balls.

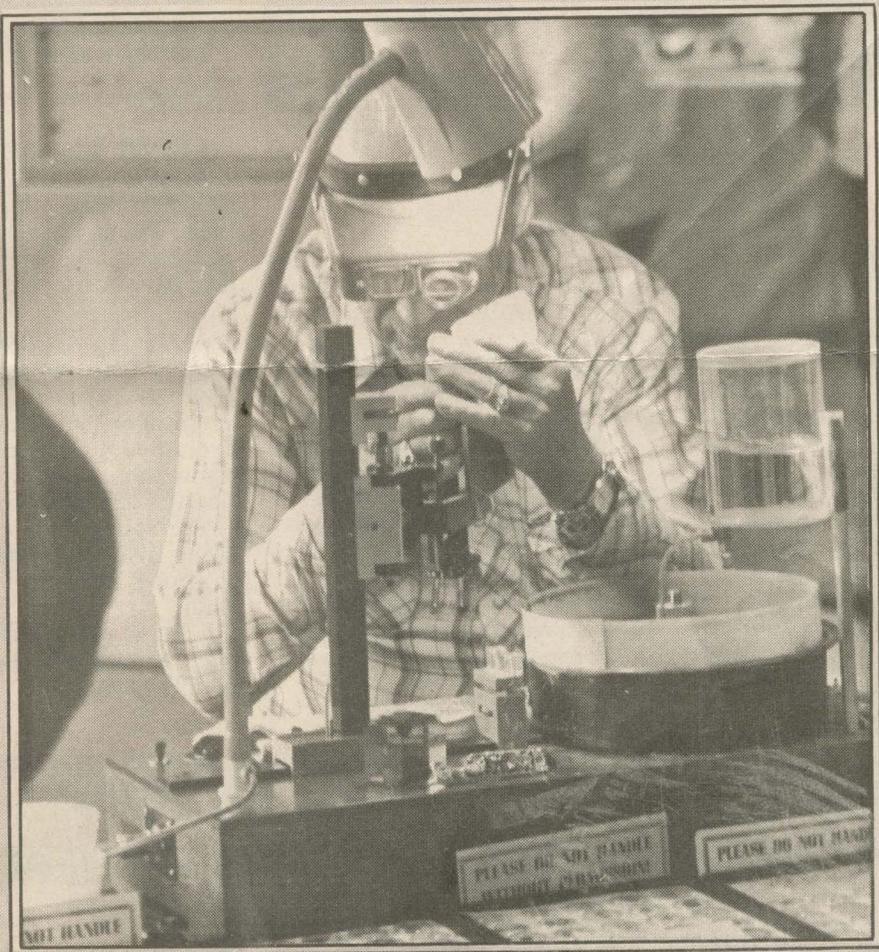
Photos by David Lehman



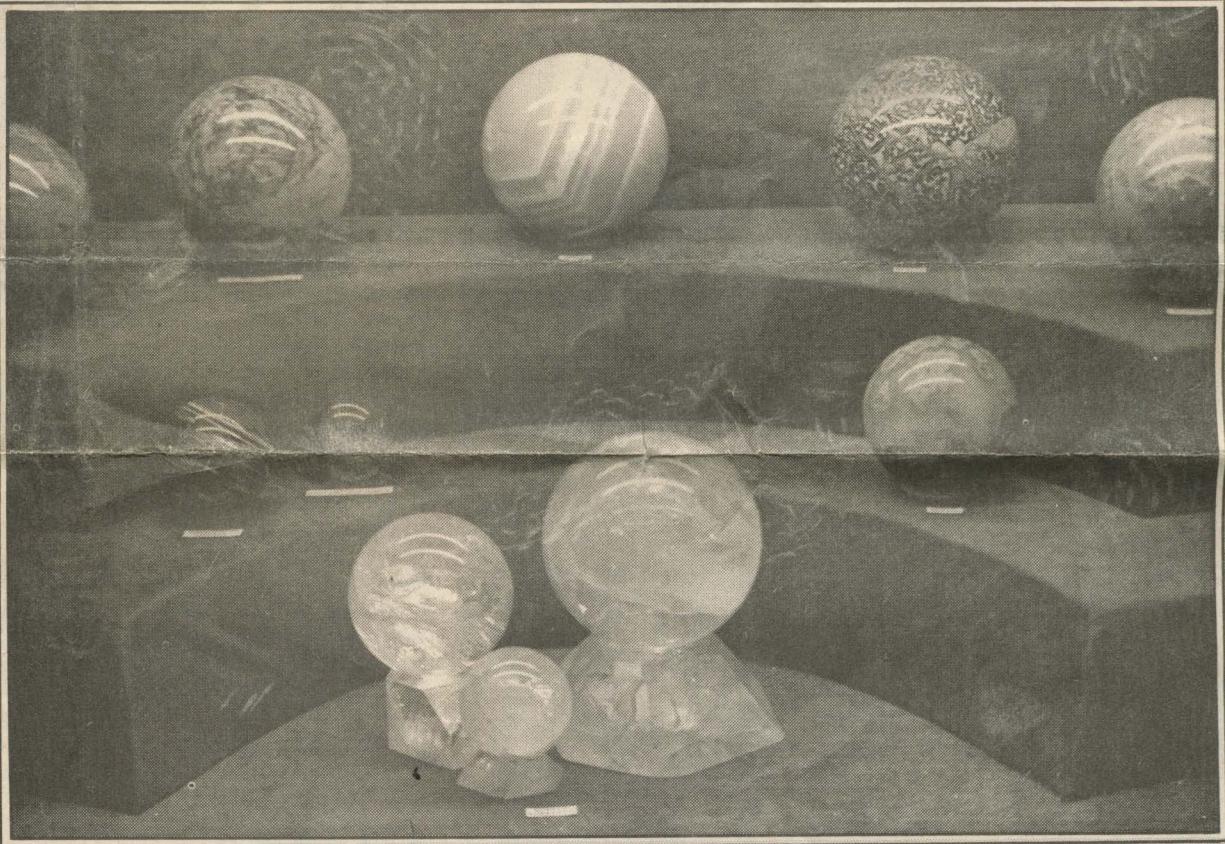


Violet Pullam has been supplying the Gem and Mineral Show with food for the past 26 shows. She is a member of the Oregon Coast Agate Club and polishes opals. Pullam was assisted by members of the First Christian Church youth group. Standing behind Pullam are her helpers - Tonya Jackman, left, Lisa Johnson, Candace Jones and Lili Golding.

Photos by David Lehman



Don Serafin of Portland brought his faceting machine to last weekend's gem show to demonstrate his precision craft. The machine utilizes a diamond-impregnated wheel to grind a precision finish on a gem. Water cools the work to keep it from cracking. He has been cutting gems for the past nine years, after picking up the machine at an estate sale.



Ron Rice was awarded first place for his display of spheres and second place in club displays. Arkansas crystal in the center of his display case represents close to 60 hours of work. He picked up the unpolished pieces on a trip to Arkansas. The spheres were lit by small light bulbs under the display case, causing them to glow like mystical crystal balls.

Gem hounds find hobby investment

By BARBARA CURTIN
Correspondent, The Oregonian

Like many families, the Elkins of Prineville have a safety deposit box at the local bank. But theirs is filled not with stocks, savings bonds or deeds — it's filled with a lot of rocks.

The rocks include polished bits of jasper, agate and petrified wood.

"My father calls it his Social Security," said Judy Elkins, the second generation at The Elkins Gem Stones store. "He doesn't trust the government, but he figures he can sell off a few stones at a time for his retirement."

The Elkins are part of a small but growing number of people who collect semiprecious stones, minerals and petrified wood not just as a hobby but as an investment. Sources are disappearing quickly, they say, and nature will not restock them for millions of years.

Dan Rigel, a Grants Pass lapidarist with a worldwide clientele, says that's certainly true of his specialty, petrified wood.

"It's becoming very hard to find, especially when you adhere to the law," he said. "The surface matter is gone, and unless you know an area, you don't know what's under the ground. The old fellows are very careful not to let their maps out. When they die, those locations are lost."

Rigel said he recently returned from the annual Tucson Gem and Mineral Show, where thousands of professionals and hobbyists traded their wares. He's convinced that petrified wood is a valid investment. "A piece that has been cut and polished by an expert is better than money," he said. "The price goes up faster than anything, except maybe gas."

Other gem and mineral dealers echo Rigel's anecdotes of amazing price increases.

Oregon's Priddy plume and Carey plume agate used to fetch \$5 for a small slice 10 years ago, said Miss Elkins; now their price is \$100. A 6-foot petrified oak log was a curiosity when the Elkins found it in the mid-'60s; recently they turned down an offer of \$1,500 for it.

An 18-pound chunk of Biggs picture jasper, dug 10 years ago near the Columbia River, is affectionately known in the family as "Mama's new Mustang," because its selling price would buy a new compact car.

Carolee Ownbery, owner of The Bangle Tree in Bend, recalls the rubellite tourmaline she bought for \$85 a carat in 1976. "I knew that it came from a mine in Maine that was all played out, and that no more would be available," she said of the semiprecious stone. "When I was offered a particular color and



Photo by BARBARA CURTIN

GRACE IN AGE — Rock dealer Judy Elkins sits on 1,000-pound piece of petrified wood. Wood is considered investment by some, but nature isn't keeping up with the demand.

shade, I bought all I could. Recently I sold the next-to-last for \$500 a carat. I don't know if I want to sell the last one."

Many of the dealers save the best pieces they find for themselves.

"There's \$3,000 in this box," said Miss Elkins, displaying a shoebox casually stuffed with polished bits of agate, "but our good stuff is put away in the bank."

Shirley Quant of Prineville wishes he'd had that idea years ago. "If we'd have hung onto the best stuff, we'd be worth a million," he said, sighing.

Although the dealers say that stones and semiprecious gems have been good to them, most stop short of recommending them to others as an investment. An untrained buyer may not be able to judge quality and may have trouble selling a piece later on, said Mrs. Ownbery.

"The value may be there, but if you can't find a good market, it's not an investment," she said. "The only way to sell the best minerals is through the rockhound market, and sometimes it takes awhile to turn money that way."

Elizabeth Lidstrom of Prineville, an authority on crystallized mineral specimens, said few of her customers are serious investors. "What happens in the future, no one knows," she said. "They have been good for some people, but anything is a gamble."

For most rockhounds, their hobby remains a good excuse to get outdoors and meet other "pebble pups." A few sales at a powwow or rock shop may bring enough money to pay for gas and polishing equipment.

THE (PORTLAND) OREGONIAN
MARCH 1, 1981
COMMODITY SECTION:
(NONMETALLIC)
STATE ARTICLE FIRM:
(OREGON)

GEMSTONES Crystals

March 12, 1970

Mrs. Roberta Symons
Ashwood
Oregon 97711

Dear Mrs. Symons:

Sorry to delay so long in answering your inquiry, but I have been thinking about your questions. I have come up with a few things, but I'm not sure just how practical they might be; maybe the marketplace will tell.

For minerals, about the only place I know of where large attractive crystals can be found is the calcite deposits in Malheur County. There large crystals of clear to cloudy calcite occur filling vertical veins sometimes 10 to 25 feet wide and over a fairly extensive area. The area is in the southwestern corner of the Mitchell Butte quadrangle, about 5 miles west of the Owyhee Reservoir. One of the deposits is in the NW $\frac{1}{4}$ sec. 28, T. 23 S., R. 43 E. The enclosed Xerox copy locates one of the larger deposits; there are others in the area. To get into the area you would have to go to Vale, then take the Sand Hollow Road to about 15 miles south of the Burns-Vale Highway.

A rock that I think is very distinctive and attractive is the lithophysal tuff (the one with all the bubbles) exposed in cuts where the road zigzags up the hill just a few miles east of Highway 97 on the Ashwood Road. This rock and the area are described in U.S. Geological Survey Bulletin 1161-D, Geologic Reconnaissance of the Antelope-Ashwood Area, North Central Oregon, by Dallas Peck.

Another attractive rock is the diktytaxitic basalt (porphyritic basalt with very large feldspar crystals) that is found in the Steens Mountain area. It is the massive flow that caps the range, and the float can be found in nearly all the canyons draining to the east. Similar basalts can be found along Highway 395 below Abert Rim.

One more interesting rock is the fresh lava from the Diamond Craters area south of Malheur Lake in Harney County. This is very fresh lava with all kinds of interesting flow textures, something not normally available in the East.

I hope to be dropping through again this summer for some of your cold water and good ice cream.

Sincerely yours,

R. G. Bowen
Geologist

RGB:lk
Encl.

Amber

March 14, 1972

Mrs. Ruby O. Lytle
340 Lincoln Street
Salem, Oregon 97302

Dear Mrs. Lytle:

Your letter addressed to Oregon State University has been referred to us.

We know of no amber deposits in the State although, as you point out in your letter, you would certainly think there should be some somewhere. Quite possibly amber has been found but in isolated instances and never in sufficient quantity to call attention to the material. The only suggestion I could make would be to get in touch with the Oregon Agate and Mineral Society and just possibly some of their members might be able to help you. We would like to recommend that you write to Mr. Albert Keen, 4138 S.W. 4th Avenue, Portland, a long-time member of the Society.

Sincerely yours,

Ralph S. Mason
Deputy State Geologist

RSM:lk

OSU

CORVALLIS, OREGON 97331

OREGON STATE UNIVERSITY

DEPARTMENT OF GEOLOGY

March 1, 1972

Mrs. Ruby O. Lytle
340 Lincoln Street, South
Salem, Oregon 97302

Dear Mrs. Lytle:

I have no knowledge of an Oregon occurrence of amber. However, I am taking the liberty of sending your letter to the State of Oregon Department of Geology and Mineral Industries, 1069 State Office Building, Portland. They know far more about such matters than we do and may be able to answer your questions.

Sincerely,

Harold E. Enlows
Acting Chairman

pb
cc: DOGAMI ✓

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MAR 2
DEPT. OF GEOLOGY
& MINERAL IND.

C O P Y

28th February, 1972

Oregon State University
Corvallis ,Oregon
Attention Geology Dept.

Dear Sir:

Some years ago the geology dept. supplied me with illustrations and excellent material on ginkgo. I had already accumulated a large amount of material on the subject. As a result I sold the piece to a good slick eastern magazine.

Usually, I have written only simple little nature articles.

Now this is what I am asking your department:

Has ancient resin of any kind, including real amber been found anywhere in Oregon?

Wishful thinking, perhaps, as the market I have in mind goes for Oregon related topics.

Can you help me? Surely with all our minerals -- and fir trees -- petrified resins must have been found. Pine trees, too, with their drippings.

Thank you most sincerely for any information.

When we lived in Bend, I recall the huge pine tree in the front yard with the continual drippings of pitch along the trunk. Little droplets, they were.

Again, thank you for any assistance.

Enclosed is return envelope.

Sincerely yours,

Ruby O. Lytle (Mrs. K.D.)
340 Lincoln St. So.
Salem, Oregon 97302

Ruby O. Lytle (Mrs. K.D.)

March 7, 1976

Mr. LaVern Schumann
RFD #1, Box 13
Black Earth, Wisconsin 53515

Dear Mr. Schumann:

Thank you for your letter inquiring about opals in Oregon. Although the State is widely recognized for its quartz family gemstones such as the "Thunderegg," Oregon has not been a source for many opals of gem quality. We have just checked with several experienced rockhounds familiar with the State and they report that only a few finds of opal have been made. Most opals in this part of the world are dug in Virgin Valley, just over the State line in northern Nevada.

Nearly all of the semiprecious stones produced in Oregon come from part-time operations and we know of no regularly operating commercial venture. If you should wish to communicate with a local dealer in semiprecious stones, we offer the following: Leo J. Beckman, Oregon Rock Specialties, 6201 S.E. Overland Street, Milwaukie, Oregon 97222.

Sincerely yours,

Ralph S. Mason
Deputy State Geologist

RSM:lk
Encl.

Harold Deem

LaVern Schumann



ROUGH AND CUT GEMSTONES - WHOLESALE - RETAIL

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Dr. R.E. Corcoran, State Geologist
State Dept. of Geology and Mineral Industries
1069 State Office Bldg.
1400 S.W. Fifth Avenue
Portland, Oregon 97201

March 3, 1976

Dear Mr Corcoran:

Mr. M.E. Ostrum Wis. State Geologist has recommended that I contact you for the following information.

I would like information on the precious Opals of your State. Along with Geology and Map information.

I am told fine grade Opal has been found on Hart Mountain near Anderson Creek. I would like information on that area and any other area. *can't find*

Is any mine operating at this time that you know of? And is any of the Opal of the Black type?

I will appreciate any information you might send me.

Thank you.

Opal Butte near Depue

Yours Truly,
LaVern Schumann
LaVern Schumann

RECEIVED-PTLD
MAR 8 - 1976
DEPT OF GEOLOGY
& MINERAL INDUS.

April 12, 1976

Wilma Bonsanti
Oregon Statesman
P.O. Box 2149
Salem, Oregon 97301

Dear Wilma:

Here is a leaflet which describes how thunder-eggs are formed. Also enclosed are some tear sheets from our Bulletin 64, Mineral and Water Resources of Oregon. Since the eggs are composed of silica which has been deposited in rock cavities, the difference between them and the common ordinary agates and opals found along our beaches and stream banks is really very small. Thunder eggs are usually larger and often display several types of bandings, a considerable variation in color, and may or may not have a crystal-lined cavity in the center.

Most agates found on our beaches have been wave polished and rounded but in general they preserve much of the original shape of the cavity in which they were formed. These cavities, incidentally, are fossil bubble holes which became trapped in the molten lava shortly after it was poured out over the surface of the land.

Petrified wood is the end product of a replacement of the cellulose in the original wood by silica. The silica is normally derived from the surrounding lavas which covered the tree during an eruptive period.

Marine fossils usually consist of the shells and bones of animals which may or may not have been replaced by silica. The abundance of fossils at the present beaches is largely due to the rapid erosion of old marine rocks by wave action. Lack of vegetative cover is also a factor in the ease of finding, but not the abundance of the fossils.

Although there seems to be a popular belief that all geologic processes were confined to some period in the dim past, it should be noted that minerals are growing, fossils are forming, and earthquakes and volcanic eruptions occurring just as frequently now as they did years ago.

Sincerely yours,

Ralph S. Mason
Deputy State Geologist

RSM:lk
Encl.

ROCK SHOPS

January 3, 1966

Mr. F. W. Webster
R.F.D. #1
Wiscasset, Maine

Dear Mr. Webster:

Thank you for your letter requesting addresses of rock shops or individuals selling semiprecious gem material for cutting.

We would like to suggest that the following shops might be able to supply the material you desire:

Belmont Gem Supply
3326 S.E. Balmont
Portland, Oregon

Portland Stone & Lapidary Co.
220 S.W. Alder Street
Portland, Oregon

Bud's Barn of Agates
5733 N.E. Portland Highway
Portland, Oregon

The Rocketeria
5935 N.E. 32nd Avenue
Portland, Oregon

Ed's House of Gems
7712 N.E. Sandy Boulevard
Portland, Oregon

You may also wish to write Mr. Albert J. Keen, 2715 N.E. 41st Avenue, Portland, Oregon, who is an active member of the Oregon Agate and Mineral Society.

Sincerely yours,

Ralph S. Mason
Mining Engineer

RSM:lk
Encl.

Wiscasset maine

Dec 27 1965

State of Oregon,
Dept of Geology & Mineral Industries,
1069 State Office Bldg., Portland, O.R.

Dear Sir -:

I have wanted for some time to secure a few specimens of Oregon minerals such as Petrified wood, agates, jasper, opal and such like

Would you please let me have the names of a number of places where I might be able to get some of this material this could be either private individuals or so called Rock Shops or specimen shops that have this for sale if I can get a catalogue I can select about what I want

I would like to get some cutting material, such as Banded, moss, plume and such like in agate, and others

I will certainly appreciate your helping in any way you can

271522415X
of Ken

Cordially

F. W. Webster

Wiscasset

Maine

R.F.D.#1

5935-
3 E 2nd Ave

RECEIVED

JAN 3 1966

STATE DEPT. OF GEOLOGY
& MINERAL IND.

Sunstones

November 10, 1967

Mrs. John A Maiefski
Route 2, Box 505-A
Coos Bay, Oregon

Dear Mrs. Maiefski:

We have received your letter of November 6 and want to thank you for your kind remarks concerning the Ore Bin. Occasionally we receive criticism which we do not like to publicize but fortunately that is in the minority.

Most of us here have a better knowledge of minerals than we do of snakes so I'll proceed with your request concerning the "sunstones" and conclude with snakes.

The sunstones found in Lake County have been identified as labradorite feldspar. They occur in a porphyritic expanded textured basalt (containing void spaces between some of the feldspar crystals) and associated soil developed on the basalt. As far as we have been able to determine the yellowish and clear crystals are of the same composition.

I have seen crystals up to an inch by half an inch long but have heard of others. They are found over a wide area varying from a few miles north of Plush to about 20 miles south. They are also found in a larger area beginning a few miles east of the series of lakes in an area of about 15 x 50 miles. The presence of loose feldspars would be dependent upon the degree of weathering of the rock and other local conditions. Exactly the spots to look will have to be determined by experience. We have not personally seen the mineral location. You might contact Eugene Heflin at 282 N. 11th Street, Reedsport. He has collected a number of sunstones.

Regarding the cutting or polishing of these gems, they can be faceted or cut cabashon. You might contact a local agate cutter for that information. Faceting is done by some but we do not have information on this.

Snakes are not much of a problem in that one rarely sees one; possibly once or twice a year one of our geologists will come upon one. It is wise to be on the lookout, however, and carry a snake bite kit and have some good instructions. In hot weather the snakes are lazy and hate to move, but generally they will get out of your way. They generally stay in rocky areas and in cool weather may be found on a trail or flat rock soaking up whatever sun is available. In general be careful and treat all snakes as dangerous.

We hope this information will be helpful to you.

Sincerely,

H. G. Schlicker
Geologist

HGS:lk

Coos Bay, Oregon

Nov. 4 - 1967

The Ore Ben.
Portland, Oregon.

Dear Sir:

Just a note to tell you how much we enjoy your little magazine especially the issues about the Coos Bay Area.

Can you tell me something about the Sunstones which are found north of Plush Ore. we didn't get very many because a bad rain & wind storm came up just as we got there so we just took a coffee can & took the dirt & everything & left. we have about 20 small pieces. we've been told there are several shades of them. are they all found in this area, if so can you give me a general idea where each is.

We would like to go back next spring but I am worried about rattlesnakes.

Can you tell me how early in spring and how late in fall they are out.

I can't find anything about this in any of the reptile & wild life books I can find. Everyone I ask tells me different.

I'm so deathly afraid of snakes I nearly die when I see one. Evidently hunting sunstones is a rather "Low down job" and if a person came on a rattler in the sagebrush while he's down on his hands and knees you wouldn't have much chance getting away before you got struck.

Anything you can tell me about this will be greatly appreciated.

Also are all the sunstones as small as ours. One man told us they are cracked up in the rock they come from like this. Someone else said you can find them up to 5 inches long & 2 to 3 inches across. Who is right Please answer. I am enclosing a stamped

addressed envelope,
also my subscription
for another year.
Do you know of a
booklet telling how
to make gems out of
them.

Thanks very much

Mrs John A Maiefski

R# 2. Box 505-A

Cross Bay,
Oregon

Earth Treasures, Inc.

GEM TILE

TM.

Division

April 17, 1991

Earth Treasures currently produces a collection of over 40 semi-precious gem material tiles from resources worldwide. Other semi-precious materials are being reviewed for future production. Please see our attached brochure.

Our current focus is on fine lapidary materials of the western United States. Of special interest are:

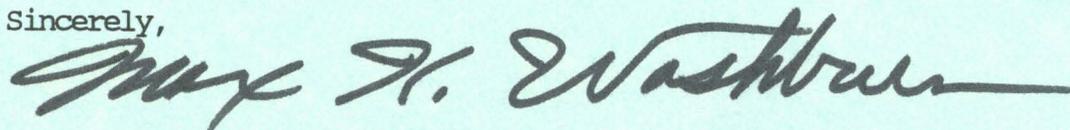
Agate	Obsidian	Unakite	Idocrase	Labradorite
Jasper	Rhodonite	Zoisite	Maraposite	Fancy Silicates
Jade	Aventurine	Thulite	Fancy Marble	Fancy Rhyolite

Your assistance is needed in locating quality new or lesser known semi-precious gem materials to review for our Gem Tile Collection. Please help in our search by supplying information in as many of the following areas as possible:

1. Names of gem material experts on your staff or in your region (professionals or hobbyists).
2. A list of semi-precious gem materials/locals in your region.
3. Names and descriptions of unusually fine semi-precious gem materials from your area that are suitable for slabbing and cutting tiles and that are mined or can be mined commercially.
4. Names of miners of these materials in your area or referrals to these miners.
5. List of important books, papers or articles on lapidary/ornamental stone in your region.
6. Locations of important collections of these lapidary materials on public display or names of collectors with outstanding collections.
7. Names of any lapidary shops that currently produce tiles of semi-precious lapidary materials or that have done so in the past.

Thanks for your interest and assistance in this research. Please write, call collect, or FAX questions or information.

Sincerely,



Max K. Washburn

P.O. Box 36878 - Houston, TX 77236-0878, USA

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Rare and exotic gem materials from around the world are being offered for the first time in solid gemstone tiles and in inlay tiles. The **Gem Tile** Collection includes the most desirable gems in exquisite colors and patterns, now available in standard tile sizes and at reasonable prices. Custom tiles and slabs will also be available. Breathtaking beauty, elegance and prestige previously reserved for palaces and museums is now available for fine homes and businesses.

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Malachite
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Rhodonite
Rhodochrosite
Amazonite

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Trims

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Windows
Tables
Screens

G E M  T I L E

T.M.

Earth Treasures, Inc.

P.O. Box 36878 · Houston, Texas 77236-0878 USA

Phone (713)776-2544 Fax (713)666-3276

Diamonds ♦ Gemstone Tiles ♦ Colored Gemstones

February 7, 1991

Beverly Vogt and Jerry Gray
State of Oregon, Department of Geology and Mineral Industries
State Office Building, 1400 SW Fifth Avenue
Portland, Oregon 97204

Dear Bev and Jerry:

Thank you for the opportunity to talk with you at the open house yesterday afternoon. As you know, the Pacific Mineral Society held a regular meeting last night. I briefly discussed the DOGMAI's upcoming relocation to the new State Office Building, and relayed the gist of our conversation concerning your possible need for volunteers in that new setting.

The Pacific Mineral Society has given me approval to further explore with the DOGAMI the possibility of our involvement with you on a volunteer basis. Specifically, the membership would be interested in further exploring opportunities with the "gift shop" and in designing and maintaining the rock, mineral and fossil displays for which the DOGAMI will furnish space and cases.

In our earlier conversation, you asked that I indicate to you the possible areas for which our club might offer support on a volunteer basis. I believe that the "gift shop" and display cases are two definite areas of interest. In addition, as the DOGAMI further defines its needs and volunteer's roles, the Society would certainly entertain requests for additional involvement.

I hope this will give you a starting point to gauge our early involvement with your upcoming relocation and expansion. I will look forward to working with you in the near future to accomplish your goals, and I hope to hear from you soon.

Sincerely,



Jon Gladwell, for
Pacific Mineral Society
3235 SE 56th
Portland, Oregon 97206-2007
(503) 771-4123 or 230-6591



OREGON GEM STONES

• 6844 S.W. 33RD PLACE
• PORTLAND, OREGON 97219

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- MAIL ORDER EXCLUSIVELY
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- THE FINEST U.S. AND IMPORTED CUTTING ROUGH -

June 9, 1971

Representative Al Ullman
House of Representatives
Washington, D. C.

Dear Mr. Ullman:

On August 3, 1970, I filed a mining claim in Lake County, Oregon (T 33 S, R 24 E, S 15, 10 and 3) on the discovery of a feldspar crystal variety, Calcic Labradorite, for which there was an existing market for faceting purposes. Assessment work was done and filed on September 23, 1970, for the year 1970-71.

On October 8, 1970, much of the area surrounding ours and adjacent claims (of which there are four) was withdrawn from further mineral entry by the Bureau of Land Management. Since that time, the BLM District Office in Lakeview, Oregon, has informed us (verbally) that our claims will be invalidated after action they plan to take after July 1, 1971. Not only that, but they have repeatedly told rock collecting groups and individuals that they are going to take this action, leaving the impression that our claims are now invalidated, when in fact, they are not.

I have established a market for these stones (enclosed is our wholesale list). The wholesale prices range from \$2.00 per gram to \$2.00 per pound depending on the quality. I have on hand about 1,500 grams at \$2.00 per gram, 4,000 grams at \$1.00 per gram, 50 lbs. at \$12.00 per lb., 100 lbs. at \$6.00 per lb. and about 1,000 lbs. at \$2.00 per pound. Plus, many individual crystals valued from \$10.00 to \$200.00 each.

I think that I have presented a clear and factual picture of what has occurred. I can support all statements with the correct documents. I am actively mining this claim now and would like to ask whatever help you can give to correct the situation.

Enclosed is a copy of a letter recently received from the BLM.

Yours truly,

R.E. Rodgers
Claim Holder



United States Department of the Interior

M-13056 (943.1)

BUREAU OF LAND MANAGEMENT

Oregon State Office
729 N.E. Oregon Street (P.O. Box 2965)
Portland, Oregon 97208

JUN 7 1971

Mr. R. E. Rodgers
6844 S. W. 33rd Place
Portland, Oregon 97219

Dear Mr. Rodgers:

The Bureau of Land Management has, as part of its duties in administering Federal lands, the responsibility to determine the validity of all unpatented mining claims if they are in conflict with Federal programs. If an examination indicates that the mining claims are invalid, legal proceedings will be initiated to cancel them.

This office is presently interested in determining the validity of the Bytownite Number 1 mining claim which was located by you in 1970 in sections 10 and 11, T. 33 S., R. 24 E., W.M., Lake County, Oregon. This claim was recorded in the Lake County Mining Records in Volume 17, pages 357-358.

Part of the validity determination should consist of a mineral examination of the claim by one of our mining engineers, accompanied by the claimant or his representative. This will allow the claimant an opportunity to point out any features of the claim that should be considered in the validity determination, such as the quality and quantity of valuable minerals present on the claim.

We would, therefore, like to arrange for a joint examination of the claim at your convenience some time after July 1, 1971. Arrangements for the examination can be made by contacting the Oregon State Office of the Bureau of Land Management by phone or mail:

Oregon State Office
Bureau of Land Management
729 N.E. Oregon Street (P.O. Box 2965)
Portland, Oregon 97208

Telephone: 234-3361, Extention 4016

Sincerely yours,

Acting Chief, Division of
Technical Services

SUNSTONES -- CALCIC LABRADORITE

As with all good stones, high quality sunstones are becoming difficult to collect in quantity. We personally collected these stones over several years and now are offering what is probably the largest assortment of colored sunstones available to the faceter.

This stone has sold under the name Sanidine which now appears to be an inaccurate classification. Most authorities agree that the proper name is Calcic Labradorite which is much rarer than Sanidine. This stone has a minimum hardness of 6.5, some are much harder. For a complete description see The American Mineralogist, Vol. 51, p. 177.

1. Field Run Stones. These are all packaged as they come in from the field so you get a random sample. Some will be pink, only rarely red or green. Sizes are generally from 5mm to 35mm, some larger. \$6.00 per pound, postpaid.
2. Large Stones. Mostly clear stones, almost all will facet at least one carat. Some will cut out to 15 or more carats. There will be an occasional pink one. \$6.00 per 1/2 lb. \$10.00 per lb. postpaid.
3. Pink Stones. All will facet at least 3/4 carat, some to 3 carats. The rough stones are from 1 gram to 3 grams each. \$5.00 (minimum) for 5 grams; one oz. \$25.00. Postpaid.
4. Red and Green Stones. Assorted red and green, only rarely bi-color. All will cut at least 3/4 carat, some to 3 carats. These are extremely rare stones. \$10.00 per 5 grams (minimum order); \$50.00 per one oz. Postpaid.
5. Small Colored Stones. Mostly red and green. Most will cut smaller than 3/4 carat. Only \$.50 per gram, minimum order 10 grams \$5.00. One lot 425 grams \$185.00. Postpaid.
6. Individual Stones. Large (to 60mm) stones, mostly clear. Excellent for cutting a show specimen. \$1.00 each, minimum 5 stones \$5.00.
7. Tumbling Stones. Mostly clear, excellent stones for baroque jewelry because they take a high polish. There will be some faceting quality stones in this mixture that we missed in sorting. \$2.50 per lb. postpaid. Instructions for tumbling will be furnished on request.
8. Cut Stones. All standard brilliant cut only. A 6 $\frac{1}{2}$ mm stone is about 1 carat. Clear stones to about 5 carats, \$15.00 per carat. Pink stones to about 4 carats, \$25.00 per carat. Red or green stones 3/4 to 3 carats, \$50.00 per carat. Please allow three weeks for delivery of cut stones.

All sunstones postpaid. Please note minimum amounts for numbers 3, 4, 5, and 6. All prices are net to dealers.

All sunstones are guaranteed and returns must be made in 10 days.

Diamond Blades

The best blades available are Felker Golden Rimlocks. These have been thoroughly shop-tested throughout the world. Discounts: 10% on 1 to 3 blades, 15% on 3 or more. All postpaid. We will mail these directly to your customer if you wish.

FELKER DI-MET GOLDEN RIMLOCK PRICE LIST

Size	List Price	Size	List Price	Size	List Price
4" x .020"	\$10.80	9" x .040"	\$22.10	16" x .064"	\$53.20
4" x .025"	11.00	9" x .050"	24.90	16" x .075"	66.00
6" x .025"	12.20	10" x .032"	21.60		
6" x .032"	13.40	10" x .040"	24.10	18" x .064"	59.80
6" x .040"	15.00	10" x .050"	26.80	18" x .075"	70.50
		10" x .064"	30.40		
		12" x .040"	29.40	20" x .064"	62.10
		12" x .050"	32.90	20" x .075"	78.20
8" x .032"	17.20	12" x .064"	36.00	24" x .075"	98.60
8" x .040"	19.20			24" x .105"	138.50
8" x .050"	21.40	14" x .050"	37.30		
		14" x .064"	41.80	30" x .105"	172.50
		14" x .075"	57.80	36" x .105"	258.00

OREGON GEM STONES

BOB AND
JIM RODGERS
PHONE 244-3387

6844 S.W. 33RD PLAC
PORTLAND, OREGON 97219

3-1972

SANDY'S ROCK SHOP
ASHWOOD, OREGON

New Biggs Picture Jasper	\$3.00 lb.
Morrisonite in the Rough	.65 lb.
Butterscotch with lt. glue jaspagate	.75 lb.
Paulina Red Moss	1.00 lb.
Keegan Tube & Plume Agate	1.00 lb.
Feather agate	.50 lb.
Friend's Thundereggs	.85 lb.
Friday's Thundereggs	.60 lb.
Rine agate	.60 lb.
Agatized wood	1.00 lb.
Assorted table top material	.25 lb.

Dealers - 50 lbs. & over

Morrisonite	.50 lb.
Butterscotch	.60 lb.
Paulina Red Moss	.30 lb.
Keegan's Tube & Plume Agate	.30 lb.
Friend's Thundereggs	.50 lb.
Friday's Thundereggs	.50 lb.
Rine agate	.50 lb.
Agatized Wood	.75 lb.
New Biggs Picture Jasper	2.00 lb.

All Material Postage & Freight EXTRA

*I advertise in Gem & Minerals
and Lapidary Journal
and ship from 1 lb to 100 -*

Mason

COPY

STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

1069 STATE OFFICE BUILDING
PORTLAND 1, OREGON

July 28, 1965

To: Staff
From: H. G. Schlicker
Subject: Rock Shops Cutting and Polishing Agates

Often customers bring in agates and inquire of a place to have them cut or polished. The following persons will reportedly cut and polish agate material. The rates are not known but assumed reasonable.

Roy's Agate Shop
Roy Ridihalgh, Owner
10221 S.E. Harold
Phone: 774-7249

A. J. McWilliams
2704 S.E. 141st Avenue
Phone: 761-3469

Cuts agates - any size
Polishes

Cuts agates up to 6"
Polishes

HGS:lk

SOUTHEAST NEWS

Class Again Rock, Rarity Shop Now Open

has gone up for securities and

previous success in conducting the Center of the higher education division issued "tus"—for a re-

or the initial quickly oversubscription closed at a second session and it too was

ne many additional for the special "core" has been Thursday night, 21, according to Tosh, coordinator and public ad-

the new session S. Black, Black & Co., who one of the earliest fall. Richard Merrill Lynch, & Smith, director class.

ups Slate

Smorgasbord

annual smorgasbord by Wichita will be from 5 p.m. to 10 p.m. on Sunday, Nov. 4., at the school, 6031 SE

Recently moved from Newport and now established in Portland is a rather unique shop called "The Coles," a nationally famous rock and rarity shop located at 9515 SW Barbur blvd.

Owners Bert and Pat Cole have developed the handling of stones and rarity items into a retail and wholesale business which has gained national prominence along the way.

"We're considered one of the outstanding shops of this type in the country, and are very well known for our coverage, quality and reasonable prices," Cole remarked.

At Cole's, the merchandise is numerous and varied. Featured items include rockhounding equipment, supplies and materials, fine gemstone "rough" and slabs, hand-crafted jewelry, Indian artifacts, minerals, fossils, oddities, curios, myrtlewood, monkey pod wood, unusual gifts, marine items, wood-carvings, gemstone carvings, antique weapons, and gold coins—to name a few.

The Coles invite area residents to come in and get acquainted anytime during the seven days the shop is open. Hours are 9 a.m. to 9 p.m., Monday and Friday; 9 a.m. to 6 p.m. Tuesday, Wednesday, Thursday and Saturday, and 10 a.m. to 4 in the afternoon on Sundays. Phone number at The Coles is CH 4-4163.

HY

HIGHWAY 50-95 ROCK SHOP

WEST STAR ROUTE, FALLON, NEVADA

PAUL KENT

Dec. 12, 1961

Dear Sirs;

I have secured a few fine specimens of Orpiment & Realgar. They range in size from 2 lbs. to 40 lbs.

The specimens are all well crystalized, very beautiful golden yellow with red Realgar streaks. They are among the finest ever mined.

I am offering them @ 1.25 lb.

If interested in one or more, state sizes. They will be shipped open account, subject your ~~account~~ approval, 2% 10 day P.O.B.

STATE DEPT. OF GEORGE

Sincerely
Paul Kent

HUDSPETH

Recreation Unlimited

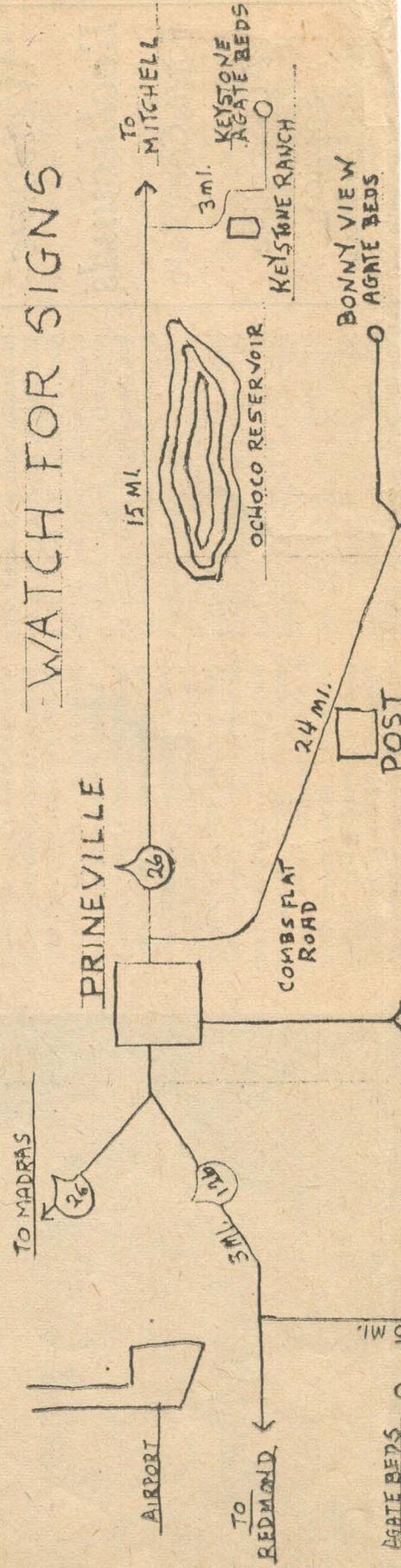
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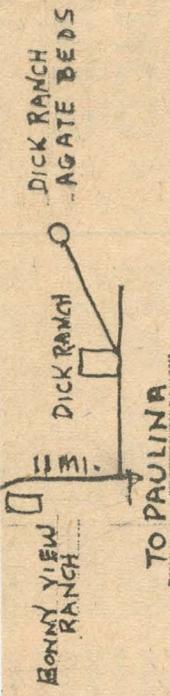
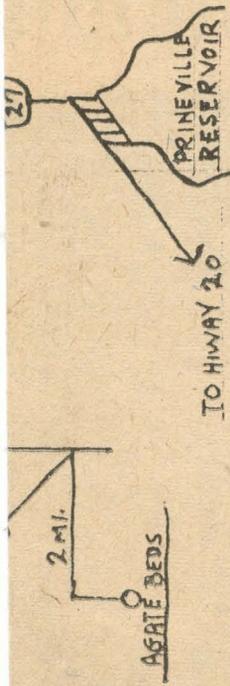
Rockhounds

After two years of detailed planning, Recreation Unlimited Agate beds are open to the public on a pay as you dig basis. Four major areas are now ready and others are in the development stage. These Agate beds feature: Red moss, Green moss, White moss, Petrified wood, Morrisonite, Jasper, and Thunder eggs.



BEN WOODWARD, Recreation Unlimited Manager, pictured with boulder of pure Jasper and Red Moss, estimated to weigh one ton. The find is on Recreation Unlimited's Three Springs Agate bed.





RECREATION UNLIMITED OFFERS MEMBERSHIP FOR:

1. **DEER HUNTING:** Thousands of acres of prime mule deer habitat on Recreation Unlimited lands. Hunter success is high. Annual and Seasonal memberships available.
2. **FISHING:** Memberships available for fine Trout fishing on private lakes. Rainbow, Kamloop, Brown and Eastern Brook—500,000 trout will be stocked in 1961. Thousands of Rainbow trout planted this year in the Deschutes River, at the Recreation Unlimited Trailer Park and camping area at Camp Abbot, 16 miles south of Bend. Daily memberships available.
3. **ANTELOPE:** Seasonal memberships for antelope hunting on Hudspeth Land and Livestock lands in Area No. 1. Antelope hunting subject to Game Commission special licensing.
4. **UPLAND GAME BIRDS:** Recreation Unlimited will plant 1,000 pheasants on Hudspeth Crooked River ranches for Fall shooting. Fine Quail hunting available too.
5. **MIGRATORY WATERFOWL:** Ducks and Geese by the thousands use Hudspeth Camp Abbot ranch, south of Bend and Hudspeth ranches along the Crooked River.
6. **AGATE BEDS:** See information on this page. RECREATION UNLIMITED offers Annual Memberships or Seasonal Memberships, as well as Family Plans.



PETRIFIED, AGATIZED log found on Recreation Unlimited's Keystone Agate Bed. Other agatized trees are scattered through the area and offer the Rockhound some exceptional color tones.

Recreation Unlimited

FOR INFORMATION
WRITE: RECREATION UNLIMITED, P. O. Box 55
 Prineville, Oregon Phone HI 7-7134
 Offices located on No. Main Street in Prineville

Early Day Indians Were First Rock Hounds In Area

If you have the idea that collecting and finishing agates and other rock materials is a "fad" taken up in just the past twenty or thirty years or so, better think again. There were rock-hounds in this area long before the white man stepped foot on Central Oregon soil!

Evidence of this statement can be found in any large Indian artifacts collection . . . and especially in the arrowheads and spear points, many of which are made out of agate or other gem rock.

Indians from the various tribes would trade raw chunks of rocks, sometimes passing a rock from tribe to tribe, resulting in its ending up hundreds of miles from its native source. The importance of agate to the early day Indian is also testified in the fact that raw chunks of good material have been found in graves, put there to allow the Indian's spirit to make his own

arrows and spears in the "Happy Hunting Grounds."

Harry Bowen and Mel Crawford, members of the Prineville Mineral Society, are among several Indian artifacts collectors in Prineville, but probably have the most complete and interesting collections that can be found in the Central Oregon area. Both men are also well versed in Indian lore and legends and have made studies of the Northwest Indian history and archeology.

Bowen, a Bureau of Reclamation employee, has been collecting and studying Indian artifacts for the past 10 years. He has given many talks to groups on the subject, has worked with the University of Washington on the Indian lore study and currently has part of his collection on exhibit at the Sacajawea Park Museum. He estimates that there are 4000 arrowheads alone in his huge artifact collection.

Crawford began his first collection at the age of seven, when his family lived on a ranch near The Dalles, an area rich in Indian artifacts. He built up a commendable collection of arrowheads when just a small boy, but the collection was stolen by a ranch hired hand and never recovered. His second collection now includes almost 1000 arrowheads (or points as collectors term them) among hundreds of other items. He also has had artifacts on display at various museums.

Both men state emphatically that the local area has much to offer the artifacts collector, even

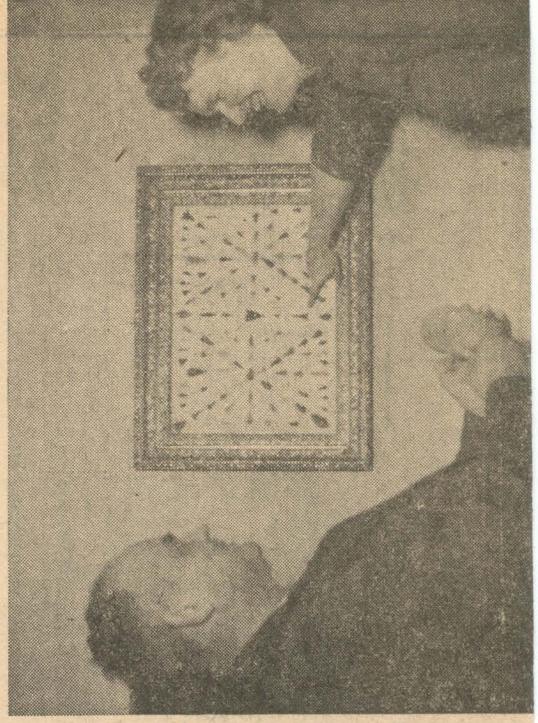


A VERY SMALL PORTION of the huge collection owned by Harry Bowen is shown above. In the foreground are arrowheads, spearheads, scrapers and pipes. Behind the framed displays are pestles (grinding stones) and stone bowls. Bowen has one of the largest collections of Indian artifacts in the Central Oregon area. (Central Oregonian photo)

Indian and the Indian depicted on TV these days is "purely coincidental." Very few of them were war-making . . . they were too busy getting food in order to keep themselves and their families alive.

Their pride shows in the beautiful workmanship found in the arrowheads and other relics which modern craftsmen find impossible to imitate and which cause one to pause in wonder at how the Indians accomplished such precision work with the crude tools and methods they had to work with.

Families often styled their points a particular way, putting their own form of identifica-



Welcome
Rockhounds
For a Complete
Automotive
Service
Get Acquainted with

BILL LEVENS

BILL'S ENCO

HUMBLE OIL

- Lubrication
- Goodyear Tires
- Pickup & Delivery

Across from the Ochocho Inn

HI 7-7683
150 E. 3rd St.

though the early day Indian had no permanent camp sites here. The early day Indians roamed through this country in the summertime, after game, berries, roots and materials for their tools and hunting equipment. They traveled in family groups, and camped in caves, under overhanging rocks or in summer "houses" which could be easily carried with them. They were a peaceful people, according to Bowen and Crawford, with a great love of their families. Actually, they say, any similarity between the real American

on them. Bowen and Crawford state that quite often they can learn about a tribe or family just by studying the arrowheads they used. However, not all arrowheads that can be found are in good workmanship. Points running the scale from crude all the way up to skilled craftsmanship can be picked up over the entire state. Many points of fine workmanship have been found in the Sisters and Paulina areas.

Places to look for Indian artifacts are on most any pumice pocket or sandy area and in caves and overhangs where the rocks above have been blackened with smoke. A tip off for any camp ground, the two men said, is a flat stone of volcanic basalt with an indentation in the top, where the Indians ground roots for their food. The artifacts may be found by sifting the dirt, pumice or sand with No. 3 or 4 screen.

As far as the immediate local area is concerned, very few pestles and bowls have been found here, as they were difficult to transport and the Indians left them in their permanent camp sites.

Another evidence of the early day Indian that can be found in the local area are pictographs... colored pictures painted with dyes on cliffsides and rocks. No one has yet been able to translate these story pictures. Specific areas where they may be found are: Marks Creek, Ochocho Dam, Paulina, Juniper Canyon and Lower Crooked River near Smith Rocks.

BWARE OF SNAKES

There are rattlesnakes in some areas of Crook County. So hikers are cautioned to use care when traveling through sagebrush or rocky areas.

ROCKHOUNDS

Ambitious?

We will show you polished samples from Crook County's free claims — Supply you with free maps — and tell you in which hole to dig.

Want to take it easy?

Come early — bring your lunch — spend the day digging in our hundreds of tons — 10c a pound — \$9.00 a hundred pile. You'll find Sheep Creek, Maury Mt., Obsidian and many others.

Notice to Pow-Wowers

Watch Pow-Wow Bulletin Board at Fairgrounds for our Pow-Wow Special.

THE ELKINS

833 S. MAIN

MEL AND JEAN CRAWFORD stand before one of their beautifully displayed arrowhead collections. The display includes "points" gathered in various parts of the state and many from the Central Oregon area. Many of the arrowheads are made from agate and are highly varied in their sizes and shapes. (Central Oregonian photo)

WILD GOLDFISH

There are goldfish in Ochocho Creek! In fact, at the Prineville-Redmond Railway Junction there are literally hundreds of the flashy golden fish, which got their start years ago when a local resident planted them in the creek.

PARKS

The City of Prineville maintains five parks covering a total of 14½ acres. They are complete with playground equipment and picnic facilities. A summer recreation director is hired to organize and co-ordinate recreation activities.

We're Shouting
Our Welcome

to all

ROCKHOUNDS



DRIVE IN AND TRY
OUR DELICIOUS

BROASTED CHICKENS

OR A

PAPA BURGER — MAMA BURGER
or BABY BURGER



Ice Cold ROOT BEER



We Accept CALL-IN ORDERS TO GO

A & W DRIVE-IN

498 W. 3rd

LOTS OF PARKING FOR CARS AND TRAILERS

WHILE YOU EAT

HI 7-7144



Welcome to:

RECREATION UNLIMITED
Dick Ranch Agate Beds

The turn-off to Recreation Unlimited's Dick Ranch Agate Beds is plainly marked on the left hand side of the Prineville-Paulina highway, 35 miles from Prineville. Watch for signs and red streamers directing you through the ranch property to the agate beds.

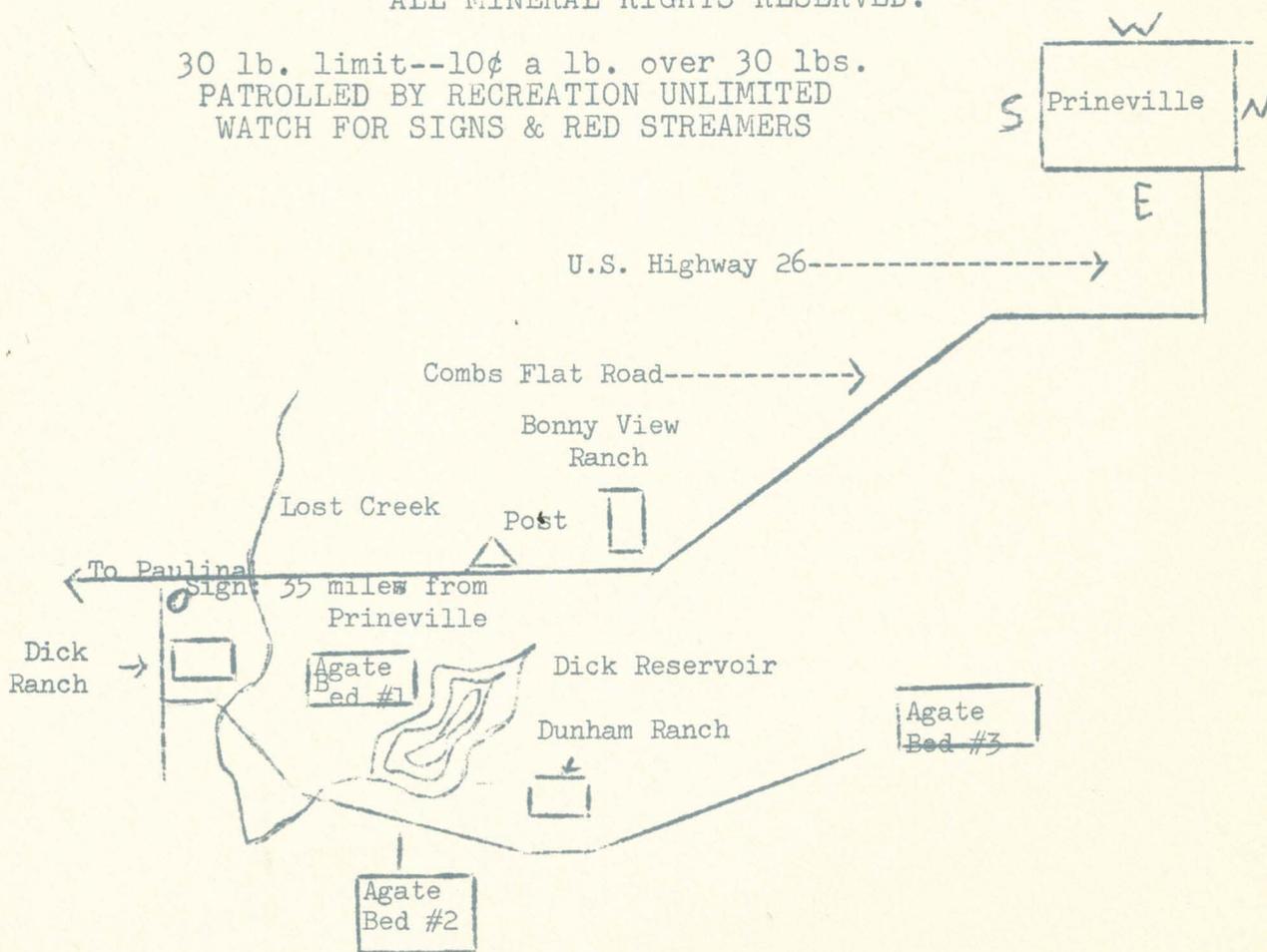
The Dick Ranch Agate Beds consist of "float", including Petrified wood, Agatized wood, White moss, White plume, Jasper, Thunder eggs, Nodules, as well as other agate. Exploration shows buried limb casts and tree trunks.

The #1 location on the map starts at the road, and there is a wide variety of wood and agate up the slopes. The #2 location is in the yellow hills by the reservoir, and features limb casts, Petrified wood and Agatized wood. Location #3 features a variety of Nodules and Eggs; some with a light blue color is available, too.

Roads are easily accessible by automobile--carry your own water--be prepared to do some digging. Watch for signs and red streamers--please close gates, if found closed.

ALL MINERAL RIGHTS RESERVED.

30 lb. limit--10¢ a lb. over 30 lbs.
PATROLLED BY RECREATION UNLIMITED
WATCH FOR SIGNS & RED STREAMERS



RETAIL PRICE LIST
FOR
FAMOUS AGATES FROM THE
FRIDAY AGATE BEDS

CUTTING SLICES Price per sq. inch, agate counted only;
however, the Rhyolite boarder is left on, because one may
want to polish the slice for a specimen.

BLUE PICTURE From world famous picture agate beds.
25 cents per sq. inch.

RED MOSS AGATE From a light shade of pink lace to
a rich red moss. 40 cents per sq. inch.

GREEN MOSS AGATE Long thin streamers of moss or a
dense green area of plume like moss. 35 cents per sq. inch.

BLACK OR BROWN MOSS AGATE Feather-like streamers of
brown or black moss on a clear agate background. 40 cents
per sq. inch.

YELLOW MOSS AGATE Dense yellow moss on clear back-
ground. Very Scarce. 40 cents per sq. inch.

PLAIN AGATE A nice blue agate, some have beautiful
wavy bands or Turtle-back design. Only 20 cents per sq.
inch.

THE UNUSUAL FOR THE ADVANCED OR BEGINNER

WHITE MOSS AGATE Beautiful white streamers in a
light blue or a deep blue background. Only a few
pieces of this choice agate has been found. Makes beaut-
iful ring stones. 75 cents per sq. inch.

ROCK HOUND'S SPECIAL (limited time, Hurry)

CHOICE SLICES 5 slices (unpolished) \$4.50

BEGINNER'S ASSORTMENT 25 good sized slices. \$6.25

If you wish slices polished please add 15 cents per sq.
inch.

THUNDER EGG HALVES FOR SPECIMENS The agate center is measured only, not the outside diameter of the stone.

1 $\frac{1}{2}$ x2	Polished	1.50	Unpolished	.75
2x2	"	2.00	"	1.15
2x3	"	3.00	"	1.50
3x3	"	4.00	"	2.00
Over	"	6.00	"	3.50

THE ABOVE PRICES ARE FOR THE FAMOUS PICTURE AGATES. IF YOU WANT A BEAUTIFUL MOSS AGATE SPECIMEN PLEASE STATE SO AND ADD FIFTY CENTS TO THE PURCHASE PRICE OF THE STONE, ANY SIZE, POLISHED OR UNPOLISHED.

Do not send any postage; we pay postage anywhere within the United States or Territories.

SORRY AT THIS TIME I'M UNABLE TO FURNISH ROUGH NODULES.

Minimum order 1.00 one dollar.

MAKE ALL CHECKS OR MONEY ORDERS OUT TO

Paul R. Weinheimer
PAUL'S AGATREE
5111 N. E. 72nd ave.
Portland 18, Oregon

WHEELER COUNTY

HARNEY COUNTY

EGGS - OPAL Near Spray

JEFFERSON COUNTY

Bothwell-Swanson-Friday Comm'l. Agate North of Madras

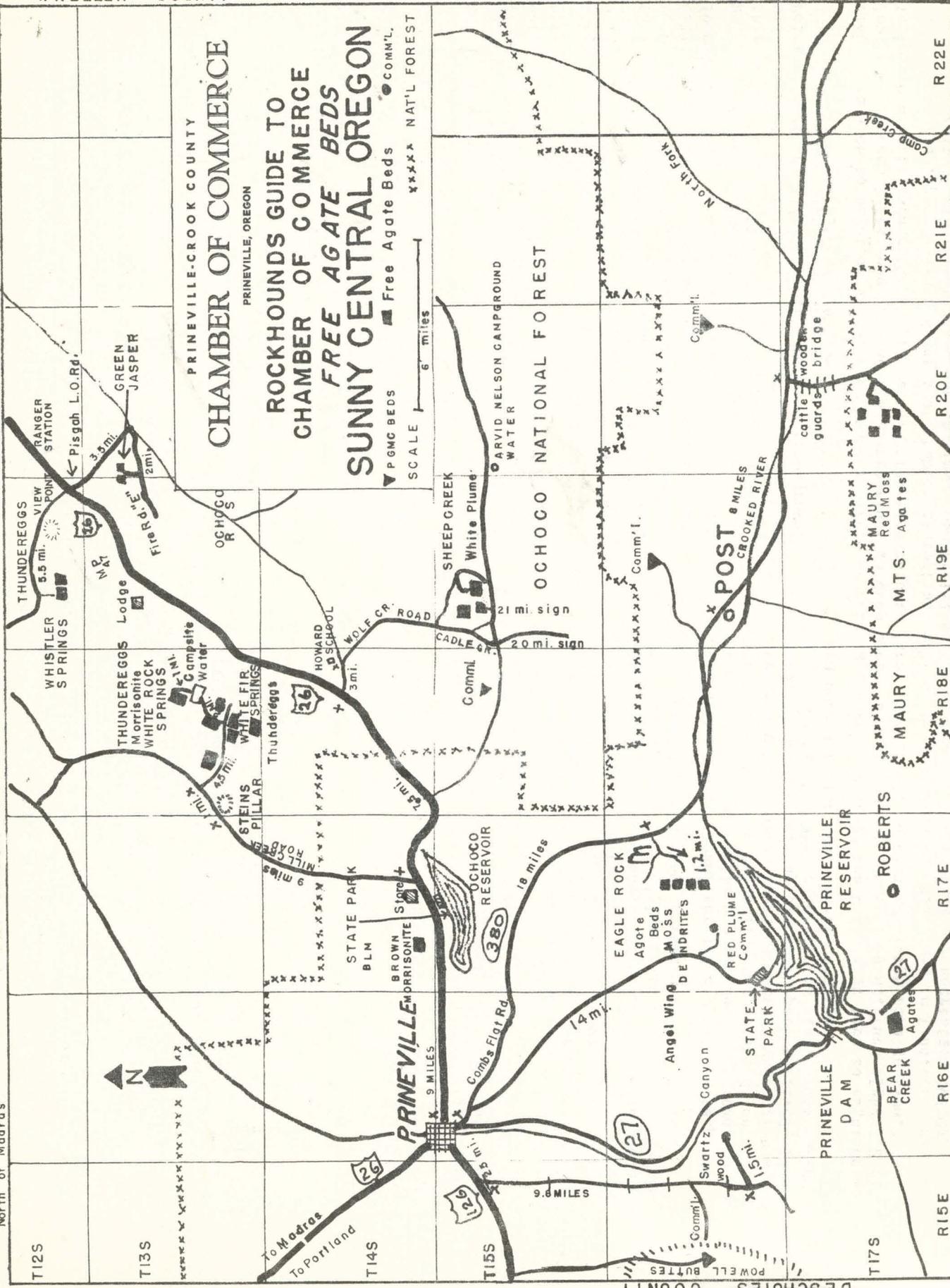
PRINEVILLE-CROOK COUNTY

CHAMBER OF COMMERCE

PRINEVILLE, OREGON

ROCKHOUNDS GUIDE TO
CHAMBER OF COMMERCE
FREE AGATE BEDS
SUNNY CENTRAL OREGON

▼ PGMC BEDS ■ Free Agate Beds ● COMM'L.
SCALE 1" = 6 miles ***** NAT'L FOREST



LIMB GASTS - T195 R20E NORTH U.S. 20-M.P. 53
Pine Creek Campground Water
Wiley Flat Campground Water

I. CHAPPELL

PRINEVILLE CROOK COUNTY CHAMBER OF COMMERCE FREE CLAIMS FOR ROCKHOUNDS

The Chamber of Commerce, because of its interest in rockhounding and to provide good agate and rock diggings, have filed claims and made available areas in Central Oregon where you can dig and not be trespassing.

All claims are open to the public with certain restrictions. No heavy power equipment, pneumatic tools, tractors permitted in areas. All explosives forbidden in claim areas. No truck larger than a pickup permitted in area....violation may restrict all vehicles from diggings.

Since all our claims are on public lands, which include Bureau of Land Management and National Forests, you are to observe best of conservation practices. All holes and trenches must be backfilled upon leaving area. Any help you may give to stop erosion in digging areas will help keep claims open to the public.

CHAMBER OF COMMERCE MEMBERS MAKE THESE CLAIMS POSSIBLE - YOUR EXPRESSION OF APPRECIATION WELCOMED.

BROWN MORRISONITE-POCHOCO LAKE-U.S. 26 8 miles east of Prineville. Park car off highway at Milepost 26 and proceed on foot 3/4 mile, past first cave to second cave in rimrock. Drift picks, bars, shovels required. Consists of jasp-agate material in shades of brown.

WHITE FIR SPRINGS - Morrisonite & thundereggs. Follow U. S. 26 east of Prineville 9 miles, turn north at store on Mill Creek road 10 miles...turn right across bridge 4 1/2 miles to junction of road. Continue straight ahead for several hundred yards. Prospectors picks & shovels required.

WHITE ROCK SPRINGS - Blue agate, scenic thundereggs Turn left at junction from White Fir Springs 2 miles to campsite; water available. Only high clearance vehicles can proceed to diggings, 1 mile. Prospectors picks and shovels recommended.

SHEEP CREEK-WHITE AGATE, PLUME, DENDRITES. Follow U.S. 26, 1 1/2 miles east of Prineville, angle right on gravel road 3 miles, turn right on Wolf Creek road due south to Sheep Creek sign or Cadle Creek rd. to Arvid Nelson road, turn left to 21 mile sign. Tools heavy hammers drift picks, several chisels, shovel. Boulders ledge formation.

WHISTLER SPRINGS-THUNDEREGGS - Blue agate, and scenic thundereggs - Follow U. S. 26 east of Prineville past milepost 49 to Ranger Station and road sign to View Point to left. Go. 5.5 mi. turn left on narrow gravel road to diggings. Prospectors picks and shovels.

LIMB CASTS - White and blue agate. From Chamber office proceed east across railroad track to first turn to right, Follow paved road past Post past milepost 43..turn right on Camp Creek Road 12.1 mi. to Bear Creek Rd. Turn right 5.2 mi to Van Lake Road. Turn left 6.8 mi. to well travelled cutoff. Turn right .8 mi. to diggings-rough road go slow.

This map includes 520 acres of Chamber claims, all proven. Hard digging material easy to find....
Easy digging material harder to find. Commercial claims by private individuals and recreation (PGMC)
Unlimited consists of several hundred acres.

GREEN JASPER BEDS - Follow U. S. 26 east of Prineville past milepost 49 to Pizgah Lookout road. Turn right for 3 1/2 miles to Old Mitchell Road, proceed right for short distance to Fire Road "E" and proceed 2 miles; turn right and follow trail to diggings. Tools; drift picks-bars-shovels; mostly float which has been buried

EAGLE ROCK - Agate, dendrites, moss, and angel wing. From Chamber office proceed east on U. S. 26 cross rail road tracks to first street.....turn right and follow paved road southeast 18 miles to Eagle Rock, two large monoliths. Turn right past rocks and bear left 1.2 mi. sharp incline. Various times of year cars may proceed to top of plateau. 4 claims in area. Angelwing found at southern part of claims. Prospectors picks, bars & shovels recommended.

MAURY MOUNTAIN- RED, GREEN AND YELLOW MOSS. From Eagle Rock proceed on paved road 8 mi. east of Post, mile post 33, turn right on gravel road over wooden bridge, over 5 cattle guards, to first road to right past Ochoco Natl. Forest sign. Proceed one mile, bear right another mile to diggings. Six claims in this area. Drift picks bars, shovels. All ledge formation, hard digging.

BEAR CREEK - Moss, dendrites and crystal, white plume. From center of Prineville proceed due south down Main Street 20 miles over Prineville Dam, continue on south over new road to point where contact is made with old road. Turn sharp left up old road..park car....diggings west Bear Creek. When reservoir is high, cross stream bed near junction and walk to diggings.

ROCK HUNTING RESERVE PLAN CALLED ILLEGAL

Filing of claims by the Weiser Chamber of Commerce to reserve a section near that city for exclusive use of rock hunters apparently isn't possible under department of interior regulations, Weiser reports say. John Glass, who with his wife had found a large agate crystal near Weiser last month, had proposed such a filing to reserve lucrative rock ground for digging of specimens by so-called rock hounds.

Regulations governing the staking of mining claims as stated in public law 167 hold that common varieties of deposits can not be filed upon. Requirements for a claim are that it must be shown that the deposit can be extracted, removed and marketed at a profit.

WALLACE MINER, February 25, 1960

The Mineralogist

A NATIONAL MAGAZINE DEVOTED TO MINERALOGY,
GEOLOGY, GEMMOLOGY AND THE COLLECTOR
DR. H. C. DAKE, Editor : F. S. YOUNG, Business and Advertising Manager

701-4 COUCH BUILDING
PORTLAND, OREGON

October 27th 1939

RECEIVED
OCT 28 1939

STATE DEPT OF GEOLOGY
& MINERAL INDS.

Earl K. Nixon,
Oregon Bureau of Geology,
Portland, Oregon.

Dear Mr. Nixon,

Enclosed is an article which appeared in the Newport,
Oregon Press.

I thought same may be of interest to you since it
states the number of people who gain a living (full time) from the
gem cutting industry at Newport, Oregon.

If each of these 18 people earn say \$ 100.00 per month,
it would mean over \$ 20,000 a year, for those who are on FULL TIME.

I just had a letter from the new organization at
Newport, the Newport Agate Society, they state they have a membership
of over 80 people.

You may keep the enclosed clipping, I have in mind it
might be of some help to you in the future when estimating the gem
stone production in Oregon.

Yours Very Truly,

H.C. Dake
H. C. Dake

702 Couch Bldg.
Portland, Oregon.

Agates

Agate Hunting on an Oregon Beach

By ERNIE PYLE

NEWPORT, Ore., Oct. 10.—Would you believe that there are people who travel clear across the United States and spend the winter in this town just to go out on the beach every day and hunt for rocks?

Well, it's true. They are agate hunters.

An agate, as you know, is a pretty rock. It is extremely hard, and when you cut through it or polish it you're



likely to find any picture from Whistler's Mother to The Battle of Waterloo, all drawn out for you by nature.

An agate in the raw looks just like any other rock. That's where the fascination of agate collecting comes in. You don't know till you stagger home and polish up your rocks on a grinder what magnificence you have uncovered that day.

Agates are by no means rare,

They are, I believe, found in every state and practically every country on the globe. They're found on sea coasts, in mountains, on the desert. And yet, despite all this munificence, this little town comes about as near being the agate capital of America as any place you could name.

For 75 miles, up and down this beach, are found the greatest variety of agates anywhere.

There are five agate-processing and selling shops in this town. At least a dozen and a half people make their full-time living from agates, and others exist partially from agates. Agate hunting and selling has been a business here for more than 50 years.

Agate hunters fall into two groups—the professional and the amateur. The professional goes at it coldly and without that wild look in his eye. But the amateur—ah, there you have a man with butterflies in his heart! His hobby knows no compunctions.

Newport's greatest amateur, probably, is a kindly, gentle ex-newspaper printer named Will Grigsby. He and Mrs. Grigsby came to Newport

four years ago. For 18 years he had been a printer on the Kansas City Star.

He has hundreds and hundreds of beautiful agates on shelves in his house; he has a shed full of whirling wheels for grinding and polishing; in the yard lies a ton or two of waste and discarded rock; he trades rock collections with people all over the country.

Another agate collector is James F. Baird, the Mayor of Newport. But the white-feverish heat has worn off Mayor Baird. There was a time when he had every agate wrapped up in a separate cloth and got them out every night and studied them. But now they're just dumped in pasteboard boxes, and he sees them only when some interested stranger comes along.

* * *

Agate-hunting is seasonal. The best time for beach agates is from February to the beginning of summer. Winter storms bring in the rocks.

Probably the most fascinating and the best-liked by tourists is the "moss-agate." It is simply a weird little formation of mossy tendrils, sometimes hundreds of them, around which transparent rock has formed. It is the moss agate that produces the fantastic pictures.

A rather rare specimen is the "water agate." This is a rock with a cavity in the center. There is water in this cavity, and in the water is an air bubble. When you hold the rock in front of a light bulb you can see the bubble move back and forth, like the bubble in a spirit level.

Will Grigsby says the average among hunters is about one "water agate" out of every 1,000 rocks picked up. But he seems to have a knack. He has found more than 200 of them.

They really aren't of much value. They'll dry up inside if you aren't careful. Will Grigsby keeps his in a bowl of water.