Physiographic Provinces

The discovery of precious tiny opal in a well 7 miles northeast of Pullum in 1890 led to the first significant recovery of gem materials in Washington. Mine buildings were erected, and operations commenced in July of 1891 in what became known as Gem City.

According to the U.S. Bureau of Mines, Washington State is within the top 10 producers of gem stones in the nation. Petrified wood, agates, crystals, and fossils are eagerly sought by the 10,000 or more hucksters of the state. Rock-hounding — the collecting of rocks, minerals, and fossils — and jewelry making are important economic activities in the state.

In recent years, professional collectors have recovered crystals from Washington localities that are now housed in many museums including the Smithsonian. The most notable were bright red zircon crystals from Green River that are the finest in the world. Spectacular crystals of amethyst and quartz (Danny Mound), auriferous (Mount Spokane), garnet (Vesper Peak), and pyrite (Spruce Peak) are far by the best in the nation.

Peak years for metal production were 1940 to 1970. The Holder mine, in Chelan County, produced 10.6 million tons of copper, silver, and zinc. Perl Ore Zone was known for its large lead-zinc mines, which produced up to 18 million lbs. of lead and 22 million lbs. of zinc annually. The Knob Hill mine at Republic, in Ferry County, is still a significant producer of gold. Two large uranium mines were in operation northwest of Spokane, in Stevens County. In terms of dollar value, the mining of industrial minerals, such as basalt, clay, diatomite, dolomite, granite, limestone, silica, and sand and gravel, far exceeds that of metals. Coal mining has again achieved prominence in the state. Open-pit mines near Cle Elum, in Lewis County, produce 4 to 5 million tons of coal annually.

GEMS AND MINERALS OF WASHINGTON

BY ROY FATTIE
WASHINGTON STATE MINERAL COUNCIL
1983

Revised 1995

GEMS AND MINERALS OF WASHINGTON

CASHMERE

Chelan County Historical Society
Pioneer Village
Winthrop, WA 98862
Cahmmerly Y. L. S. Cashmury 888S6

Cle Elum
Cle Elum Historical Society Museum
361 Second Street
Cle Elum 98812

Columbia
Columbia Historical Society
137 N. Wenatchee
Columbia 98814

Couer de Alene
Couer de Alene Historical Society
131 Main Street
Coeur de Alene 83814

Goldendale
Manitowish Museum of Fine Arts
Goldendale

La Conner
La Conner Historical Society
La Conner 98257

Moses Lake
Moses Lake Museum
Moses Lake 98837

Toledo
Mount St. Helens National Volcanic Monument
Visitor’s Center
Toledo 98949

Olympia
St. Martin’s College Museum
Olympia 98501

State Capital Museum
211 West 21st
Olympia 98501

Puyallup
Paul H. Kintner Memorial Museum
250 4th Avenue NE
Puyallup 99351

INFORMATION CENTERS AND MUSEUMS WITH COLLECTIONS OF ROCKS, MINERALS, GEMS, AND MINING HISTORY

Roslyn
Roslyn Historical Society Museum
P.O. Box 65
Roslyn 98941

Seattle
Pacific Science Center
Seattle 98109

Pullman
Pullman Historical Society
Pullman 99163

University of Washington
Thomas Burke Memorial Washington State Museum
Seattle 98105

Spokane
Chopawtsi Historical Society
Spokane 99204

Tacom
Washington State Historical Society
215 North Stadium Way
Tacoma 98403

Vancouver
Ginkgo Petrified Forest Interpretive Center
Ginkgo Petrified Forest Park
Vancouver 98690

Wenatchee
North Central Washington Museum
Wenatchee 98801

Wilbur
Wilbur Museum
Big Bend Historical Society
Wilbur 99185

Yakima
Yakima Valley Museum
Yakima 98901

Yakima History Center
2105 Topaz Drive
Yakima 98902
GEMS AND MINERALS OF WASHINGTON

BY BOB FATTIE
WASHINGTON STATE MINERAL COUNCIL
1983

Revised 1985

STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES
BRIAN J. BOYLE, Commissioner of Public Lands

ART STEAMS, Supervisor

DIVISION OF GEOLOGY AND EARTH RESOURCES
RAYMOND LASMUNIS, State Geologist

The discovery of precious fire opal in a well 7 miles northeast of Pullman in 1889 led to the first significant recovery of gem materials in Washington. Mine buildings were erected, and operations commenced in July of 1891 in what became known as Gem City.

According to the U.S. Bureau of Mines, Washington State is in the top 10 producers of gem stones in the nation.

Petrolized wood, agates, crystals, and fossils are eagerly sought by the 10,000 or more rockhounds of the state.

GEMS AND MINERALS OF WASHINGTON

In June 1975 the 44th Legislature of the State of Washington designated petrified wood as the state gem because of its beauty and abundance. It is collected by visitors and displayed around the world, thus promoting Washington recreation and travel.

Petrified wood is found throughout the state and is symbolic of our early forests. It represents a period of geological time when extensive volcanism buried great forests with volcanic ash and basaltic lava.

Ginkgo Petrified Forest State Park, located near the center of the state at Vantage, is surrounded by major petrified wood collecting areas. The park contains fossil woods, the remains of living trees, such as fir, hickory, sequoia, oak, cypress, and pine, as well as rare types such as Ginkgo which have died, if any, living relatives.

Carnhime: Chelan County Historical Society, Pioneer Village and Wilbur Carey Historical Museum East Wenatchee
Cashmere: Chelan County Historical Society, Pioneer Village and Wilbur Carey Historical Museum East Wenatchee

Calleul: Chelan County Historical Society Museum 361 Second Street Cashmere

Cordille: Stevens County Historical Society Museum 137 N. Wenatchee

Couer City: Chelan, Lake, and Okanogan Interagency Center Sun Lakes State Park Couer City 98818

Goldenb: Mount St. Helens National Volcanic Monument Tourist Center

La Conner: La Conner Historical Society La Conner

Moses Lake: Adams East Museum Filth & Balloon Moses Lake 98837

Olympia: Mount St. Helens National Volcanic Monument Tourist Center Tooele 98891

Puyallup: Paul H. Kravitz Memorial Museum 204, 490 Avenue NE Puyallup 98371

Roslyn: Roslyn Historical Society Museum P.O. Box 55 Roslyn 98841

Seattle: Pacific Science Center Seattle Center

Spokane: Chaffey Casino Memorial Museum West 23rd St. 1st Avenue Spokane 99204

Tacoma: Washington State Historical Society 219 North Stadium Way Tacoma 98403

Vantage: Ginkgo Petrified Forest Interpretive Center Ginkgo Petrified Forest State Park Vantage 98950

Waterville: Douglas County Historical Society Museum Waterville 98858

Wenatchee: North Central Washington Museum Wenatchee 98810

Wilbur: Lilac Museum Wilbur 98856

Yakima: Yakima Valley Museum Yakima Valley Historical Museum 2105 Turner Drive Yakima 98902
GEMS AND MINERALS OF WASHINGTON

In June 1975, the 44th Legislature of the State of Washington enacted Senator Wally Brown's Senate Bill 533 creating the Washington State Mineral Council. The purpose was to develop and promote a nine-state program for the exploration, development, and processing of minerals and gemstones in the Pacific Northwest. The program provides for the production of gem and mineral products and by-products, the initiation of the marketing of gem and mineral products and by-products, the development of new gem and mineral resources, and the promotion of the gem and mineral industry in the Pacific Northwest.

The Washington State Mineral Council has established a Gem and Mineral Festival to be held in Washington, D.C., on the first Saturday in June. The festival features exhibits of gem and mineral specimens from throughout the state, as well as the presentation of lectures on various aspects of gem and mineral science. The festival also includes a Gem and Mineral Sale, which offers a wide variety of gem and mineral products for purchase.

The Washington State Mineral Council is a non-profit organization dedicated to the promotion and development of the gem and mineral industry in Washington. The council is governed by a board of directors, which is composed of volunteer members appointed by the Washington State Mineral Council. The council is supported by donations from individuals, businesses, and other organizations.

The Washington State Mineral Council is committed to the conservation and preservation of gem and mineral resources. The council is also committed to the education of the public about the importance of gem and mineral resources and the role they play in our society. The council is dedicated to the development of new gem and mineral resources and the promotion of the gem and mineral industry in Washington.
GEMS AND MINERALS OF WASHINGTON

IN 1982, the 46th Legislature of the State of Washington designated the gemstone as the Official Gemstone of Washington. The state gemstone is the obsidian. Obsidian is a volcanic glass that is found throughout the state in a variety of colors and designs. The obsidian is often used in jewelry and other decorative items.

In addition to the gemstone, Washington is also known for its mineral resources. The state is home to a variety of minerals, including gold, silver, copper, and coal. These minerals are often found in the state's mountains and valleys, and are mined for their commercial value.

The state of Washington is home to a variety of geological features, including volcanoes, mountains, and valleys. These features have shaped the state's landscape and have contributed to its rich history.

Washington is also known for its wildlife, including bears, elk, deer, and birds. The state's natural beauty and diverse wildlife make it a popular destination for visitors and outdoor enthusiasts.

In conclusion, Washington is a state rich in natural resources, including gemstones, minerals, and geological features. The state's diverse landscape and unique wildlife make it a wonderful place to explore and experience.
A ROCKHOUNDER’S CODE OF ETHICS

I WILL respect both private and public property and will do no collecting on privately owned land without permission from the owner.

I WILL keep informed on all laws, regulations and rules governing collecting on public lands and will observe them.

I WILL, to the best of my ability, ascertain the boundary lines of property on which I plan to collect.

I WILL not use firearms or blasting materials in collecting areas.

I WILL cause no willful damage to property of any kind, such as walls, fences, buildings, etc.

I WILL leave all gates as found.

I WILL build fires only in designated or safe places and will be certain they are completely extinguished before leaving the area.

I WILL discard no burning materials – matches, cigarettes, etc.

I WILL fill all excavation holes which may be dangerous to livestock.

I WILL not contaminate wells, creeks or other water supplies.

I WILL cause no damage to collecting material and will take home only what I can reasonably use.

I WILL support the Rockhound Project H.E.L.P. (Help Eliminate Litter, Please) and will leave all collecting areas devoid of litter, regardless of how found.

I WILL cooperate with Field Trip leaders and those in designated authority in all collecting areas.

I WILL report to my Club or Federation Officers, Bureau of Land Management, or other proper authorities, any deposit of patented or other material on public lands which should be protected for the enjoyment of future generations and for public, educational, and scientific purposes.

I WILL appreciate and protect our heritage of natural resources.

I WILL observe the “Golden Rule,” will use Good Outdoor Manners and will at all times conduct myself in a manner which will add to the stature and public image of Rockhounds everywhere.

PHYSIOGRAPHIC PROVINCES

OLYMPIC MOUNTAINS
OKANOGAN HIGHLANDS
PUGET LOWLANDS
WILLAPA HILLS
CASCADE RANGE
COLUMBIA BASIN
BLUE MOUNTAINS

HAZARDS

Rockhounding, like most outdoor activities, is not without certain hazards. The roads leading to digging sites may be used by heavy trucks carrying logs, gravel, livestock, or other products. Unimproved roads can be dangerous when wet, muddy, or snowy. It always pays to inquire about road and traffic conditions before going into unfamiliar territory. Rattlesnakes may be found in certain areas during the warm months. Watch out for them in rock slides and around camp areas, under old buildings, logs, etc. Prompt medical treatment is advisable if bitten. Wood ticks are found in the springtime in sagebrush and similar areas where they can hang on the tips of bristly twigs. Ticks can carry spotted fever and other infections. They should be removed promptly and the bites treated.

Rockhounds may unknowingly create hazards through careless digging. Undermining the roots of trees is both destructive and dangerous, as it may cause the tree to fall. Tunneling through unexploded soil or under overhanging banks that may care in on the digger is unsafe practices. Deep or steep-sided pits or trenches should be filled upon completion of digging, as they pose a hazard to both man and beast.

Eye protection should be used when pounding on rocks or an outcrop. Do not stand near someone that is breaking rock.