



CENTRAL OREGON ROCKHOUND GUIDE

Experience Central Oregon's Geode Wonderland



Welcome to Prineville Crook County, a geode wonderland!

Rockhounding has been a pastime for all ages to enjoy throughout the summer and fall months here. Rock enthusiasts come from all over the country to dig into our sand and soil and pull nodules of thunder eggs and agates from the ground.

Rockhounding in Crook County provides many different landscapes and opportunities to find your own precious stones. From the shade of a pine filled forest to the desert juniper and sage, we have rockhounding sites to meet any experience you're looking for.

The Crook County rockhounding sites range in every kind of difficulty level. From simply finding rocks on the surface, to digging holes around tree roots and other rocks. Remember that rockhounding is always an adventure. Sometimes you find something, sometimes you don't. Enjoy the day, the drive and the experience. A precious stone is one that is precious to you.

ROCKHOUNDING



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KNOW BEFORE YOU GO

What to Bring with you

T00LS

Use non-mechanized hand tools such as shovels, picks, chisels, gads, rock (lapidary) hammers and crowbars. No mechanized equipment or explosives may be used, although metal detectors are acceptable.

Buckets or bags are helpful to carry your rockhounding finds back to your vehicle.

Spray bottles with water and rags are helpful to clean off your findings while in the field.

Flashlight for agate hunting, to check if the stone is translucent.





CLOTHING

Always wear proper protective equipment: Gloves, sunglasses and/or clear glasses, and closed toe shoes. These are recommended for most locations and are necessary for Glass Butte.



Rockhounding is mostly a rugged and dirty pastime. Footwear should be serviceable and adequate for hiking in rugged terrain, digging and weather conditions. Boots are recommended.

Wear clothes you can get dirty in. A change of clothing is helpful to keep the dirt from getting all over your vehicle for your drive home.

Bring hats, hair ties and sunscreen, as well as extra clothing in case there is a change of weather.



WATER. FOOD & FUEL

All rockhounding locations are remote. Bring food and water, including extra supplies for a day away from civilization.

Summer can be hot and dry while rockhounding. Bring extra water to fight dehydration.

Always fuel up before leaving town.

MAPS & PHONES

Most of the rockhounding locations do not have reception, so make sure you have all the maps you need ahead of time. Download your planned destination area in Offline Maps in Google maps and pull up directions on your phone while still in reception. You can also download area maps in Avenza Maps and Gaia GPS.



Be sure to have at least one printed map in case you lose access to those on an electronic device.

Bring your charger with you since looking for reception can drain your phone

Safety

Always tell someone where you are going and when you plan to be back.

FIRST AID. MEDICAL FACILITIES & SAFETY MEASURES

Bring First Aid supplies with you. There is always a chance for an injury when using tools, so make sure you have supplies to clean and bandage a wound.

FOR EMERGENCY MEDICAL CARE: St. Charles Prineville - Open 24/7, located at 384 Southeast Combs Flat Road in Prineville. Phone number: 541-447-6254.

For less emergency medical needs, Prineville, Redmond and Bend offer Urgent Care options that can be found online.

Rattlesnakes may be found in certain areas during the warm months. Watch for them in rock slides, around damp areas and out in the sun. Prompt medical treatment is always advisable if bitten.





In the spring, wood ticks are found in the sagebrush and timber fringe areas, where they can hang on the tips of bushy twigs and transfer to any person or animal that brushes past. Ticks can carry spotted fever and other infections. They should be removed promptly, and the bites should be treated.

Be prepared for extreme weather conditions including rain or snow at any time of the year. Temperatures in the winter can drop below freezing and summertime temperatures can be over 100°F.

Check your vehicle to ensure you have a spare tire and tire tools with you in case something happens outside of reception. Some roads are pretty rocky and could possibly pop a tire.



ROAD CONDITIONS

Some of the roads may be rough and rocky, with branches and/or ruts.

Mud and snow can also make traveling roads difficult, and or dangerous. Please take precautions before traveling roads that appear to be in a hazardous state, as getting stuck in an area with no phone service is dangerous.



Closed for the season - Winter and spring can be a volatile season on forest roads, and in bad weather roads may be closed on short notice.





DOGS



In general we recommend leaving your furry friend at home for your rockhounding adventure. We understand that is not always possible, so here are some tips for a safe trip.

All rockhounding areas are not gated and are home to wildlife. Protect your pets by keeping them under control at all times.

Expect to see cattle. All collection sites are also free-range cattle zones including both cows and bulls. Do not let your dogs go near any cattle.

Your dog might need to wear booties. The pads/paws of dogs can be cut or burnt while rockhounding. Glass Butte has shards of glass mixed into the terrain and the ground of many of the other locations can heat up to dangerous temperatures in hot months.

The hot weather and sun can also create an unbearable situation for your dog. Bring water and shade and do not leave your dog in the car on a hot day.

Snakes and ticks can be found at many of the rockhounding locations. Check your dog for ticks and keep a lookout to not have a run-in with snakes.

BE CAREFUL WITH FIRE

Fire is an ever-present danger in the dry country east of the Cascades. During particularly dry seasons, the public land agencies apply fire restrictions to protect users and the resource. Check for current fire conditions and rules before venturing out.

Follow safe fire rules everywhere:

When fires are allowed, only start a fire in an existing fire ring. Keep your fire small.

Before you leave your campfire, stir the ashes and coals with water. Keep mixing until you're sure it's out cold! Feel all ashes and coals with bare hands to make sure the fire is out. Smoke only inside vehicles on surfaced roads (use ashtrays), when stopped in cleared areas at least 2 feet in diameter and in occupied camps.

Keep your vehicles off of dry grass and brush - heat from the exhaust can start fires.

Finally, always follow the Rockhound Code of Ethics. Doing so will ensure a pleasant experience for all users of the public lands,



ROCKHOUND'S CODE OF ETHICS

Rockhounds, both as individuals and collectively as members of clubs, pride themselves on their good manners in the field. They know that maintaining their good reputation is important in order to keep the welcome mat out at collecting sites. This code of ethics is in general use throughout the rockhounding community and is posted here for your information.

- I will respect both private and public property and will do no rockhounding on privately owned land without the owner's permission.
- # I will keep informed on all laws, regulations or 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 use no firearms or blasting material in rockhounding areas.
- I will cause no willful damage to property of any kind fences, signs, building, etc.
- 🖈 I will leave all gates as found.
- I will build fires in designated or safe places only and will be certain they are completely extinguished before leaving the area.
- 🖈 I will discard no burning material -- matches, cigarettes, etc.
- * I will fill all excavation holes which may be dangerous to people or livestock.
- 🖈 🛮 I will not contaminate wells, creeks, or other water supplies.

- I will cause no willful 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 collection areas.
- I will report to my club or federation officers, Bureau of Land Management, US Forest Service or other proper authorities, any deposit of petrified wood or other material on public lands which should be protected for the enjoyment of future generations for public educational and scientific purposes.
- I will appreciate and protect our heritage of natural resources.
- A 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.





The majority of rock and mineral collecting sites are lying on the federal lands managed by BLM (Bureau of Land Management) or U.S. Forest Service.

According to U.S. Forest Service and BLM, collecting rock and minerals as a hobby does not require any permits while the materials are for personal, non-commercial use. Hand tools (pick, shovel, rock hammer) are only allowed.

The U.S. Forest Service limits amounts of specimens up to 10 pounds. Some lands within the National Forest are closed for collecting due to wilderness designation. Contact the U.S. Forest Service for up-to-date information.

According the BLM, one person may remove not more than 25 pounds plus one piece per day, but not to exceed 250 pounds per person during each calendar year. Quotas between two or more people may not be pooled to obtain pieces more than 250 pounds. These limits apply across all BLM-administered lands, not just the Prineville District.

Rockhounding is restricted in wilderness areas to the surface collection only.





ROCKHOUNDING LOCATIONS

NOTE: This section is an overview of the 4 areas that the rock-hounding areas are in. Then the guide goes into the breakdown of each area.

Area One

FISCHER CANYON BEAR CREEK

Area Activities:

CHIMNEY ROCK HIKE - On OR-27 south of Prineville, across from Chimney Rock Campground. Hike 2.6 miles round trip up to Chimney Rock with expansive views of the Crooked River Canyon and Cascades. The hike includes a moderate climb up a side drainage trail and some switchbacks,

BOWMAN DAM - Pull over when OR-27 crosses the dam to enjoy the view over Prineville Reservoir and the Crooked River. The amenities at the boat launch shortly after the dam include parking and restrooms.



Area Two

WHITE FIR SPRINGS WHISTLER SPRINGS

Area Activities:

CAMP AT WHITE ROCK - The campground is located 2.2 miles farther down the road from White Fir and has fire pits and a drop toilet.

CAMP AT WHISTLER CAMP AREA - The rockhounding spot is within this campground. There are no utilities, bring your own firewood and everything else you will need to camp.

HIKE INTO THE MILL CREEK WILDERNESS FROM EITHER THE WHISTLER SPRINGS ROCKHOUND AREA OR WHITE ROCK - 2.2 miles down the road past White Fir's rockhound location. Maps can be found online or at the Prineville Crook County Chamber and Visitors Center.

MOUNTAIN BIKE AT SCOTTY CREEK - Not technical, but a fun trail for most mountain bikers comfortable descending over 2,000 ft over 4.3 miles. The lower trailhead is shared with Cougar Creek trail. Many shuttle the trail, but there are loop options available. Look online for details or visit Good Bike in Prineville for maps and bike rentals.



Area Three

CONGLETON HOLLOW DENDRITE BUTTE MAURY MOUNTAIN

Area Activities:

STOP AT THE STORE IN POST to take a photo at the sign for "The Center of Oregon" and pick up their famous meatloaf sandwiches to bring with you.

GO FARTHER TO PAULINA to see their store and purchase a cold drink and some chips





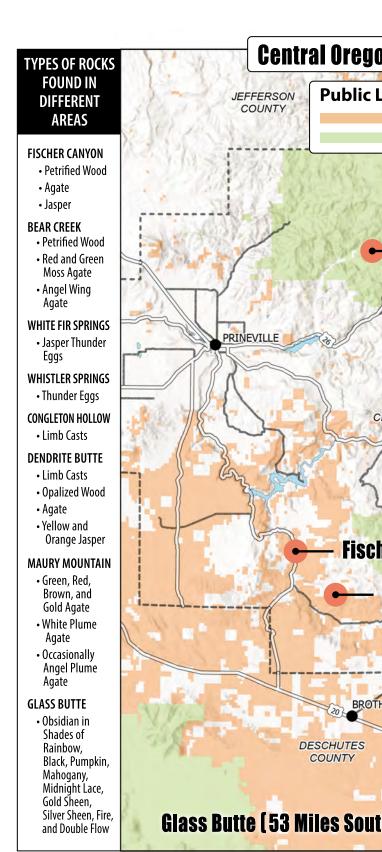
Area Four

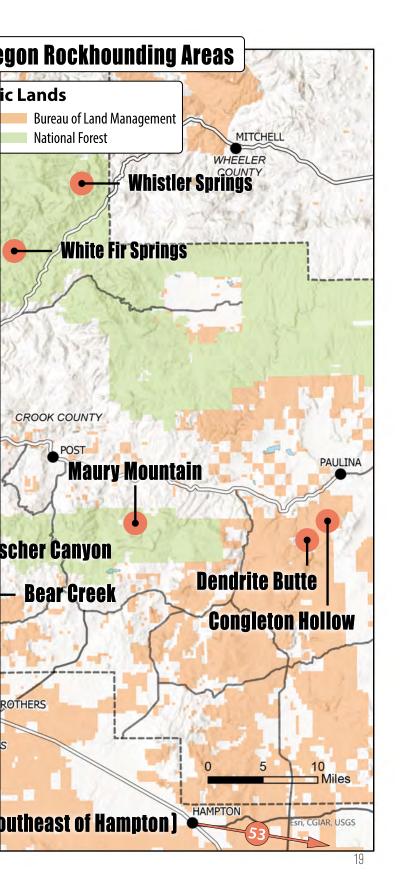
GLASS BUTTE

Area Activities:

CHICKAHOMINY RESERVOIR - There is a rest area in Brothers with restrooms, parking and a picnic area. Beyond the Glass Butte turnoff on Hwy 20 you can travel about 25 miles towards Chickahominy Reservoir. One of Eastern Oregon's most popular fishing spots, the reservoir is stocked once or twice a year with fingerlings and legal-size fish. The recreation site offers campsites, a fish cleaning station, drinking water, restrooms and a boat ramp.







LOCATION DESCRIPTIONS

Planning your Journey

BEAR CREEK

Rock / Materials:

Petrified Wood, Red and Green Moss Agate, and Angel Wing Agate

LOCATION DESCRIPTION: An abundance of petrified wood can be found at this site. Most of the wood is low grade, but has good preservation of growth rings and wood grain. Rockhounds willing to put forth the extra time and effort may find some colorfully agatized wood that will take an excellent polish. Small clusters of quartz crystals, agate and red and yellow jasper may also be found in the area.

ACREAGE OF SITE: The first site is 67 acres, with private property on the east side. Please do not drive or collect east of the existing fence line at this site. The second site is 474 acres and is surrounded by public land on all sides.

DIRECTIONS FROM FISCHER CREEK WAGON ROAD WITH OR-27:

Continue south, turning Left onto OR-27. Drive 3 miles to Bear Creek Road (do not turn on Little Bear Creek prior to Bear Creek Road). Turn Left onto Bear Creek Road and drive approximately 5.7 miles. Turn Left, going through a wire and wood gate, onto a rudimentary wagon road. Choose your destination, **using the map for directions.**

DIRECTIONS BACK TO PRINEVILLE: You can retrace your steps, or continue South on OR-27 to OR-20, Go West to George Millican Rd to OR-126 back to town.

*ROAD ACCESS/QUALITY: Drivable by most vehicles, although good clearance is helpful.



Wagon road will be muddy, potentially impassable when wet.

*GPS COORDINATES: 43.940728°, -120.619422°

- ***DO YOU NEED TO DIG TO FIND MATERIAL:** You can dig to find larger or complete pieces or skim the surface to find smaller or chipped off pieces.
- *HINTS ON WHERE TO DIG: Look where others have dug or choose similar looking spots.
- *HIKING EXPECTATIONS: Expect to get out of your car to look around and find collection areas. The terrain varies from flat to hilly.



WHISTLER SPRINGS

Rock: Thunder Eggs



LOCATION DESCRIPTION: Although this site has been worked by rockhounds for many years, quality thunder eggs can still be found by determined rockhounds. The thunder eggs are smaller than some other locations, but they have nice agate material and are good prizes. Abundant collecting sites can be found in the area. Rock outside color can have darker greenish tones and/or maroon lines of color.

SIZE OF SITE: 3 acres, all surrounding the road.

DIRECTIONS FROM HWY OR - 26:

From Prineville Chamber, the distance is 30.8 miles to the left turn. If coming from the White Fir Spring site, continue east 8 miles to USFS Road 27, turn left. Once on USFS Road 27, continue 2.4 miles to the Y in the road, going left (do not take the turn towards Lucky Strike Mine. In another 2.5 miles the pavement will end and the road gets narrower. In another 1.9 miles, the road will Y, go straight and do not turn onto Road 550. After another 1.2 miles, turn left towards the Wildcat Trailhead.

ROAD CONDITIONS: The road will continue with some camping areas, a hiking trailhead and dead end shortly after. This area is your destination! We recommend 4WD vehicles for the remaining road.

*ROAD ACCESS/QUALITY: Road is maintained when open, although after pavement ends the road is narrow and high clearance and 4x4 vehicles are recommended. Road can be muddy after rain and is closed in the winter due to snow.

*GPS COORDINATES: 44.496635°, -120.484239°

***DO YOU NEED TO DIG TO FIND MATERIAL:** Yes. Adequate tools are needed for breaking the ground rock.

*HINTS ON WHERE TO DIG: Look where others have dug or choose similar looking spots.

***HIKING EXPECTATIONS:** You can drive close to areas with lots of digging spots, or hike around and look for less explored areas. The terrain varies from flat to slightly hilly.



WHITE FIR

Rock:

Jasper Thunder Eggs

LOCATION DESCRIPTION: In a hilly forested area, the White Fir Springs area offers thunder eggs that are filled with colorful jasper in shades of red, yellow, and tan as well as a creamy white color. Look for chips and pieces of jasper where other rockhounds have been digging for potential leads.

SIZE OF AREA: 20 acres, mainly up the primitive road but does expand beyond.



DIRECTIONS FROM PRINEVILLE, S MAIN STREET: Take OR-26 East, go 22.7 miles. Turn left onto USFS Road 3550, passing over a cattle guard right away. In 0.3 of a mile, go over another cattle guard and pass an historic cattle loader on the side of the road. Soon after, go left at the Y in the road, following the Agate Beds sign. There is also a Forest Road 3350 brown skinny sign on the side of the road. At another 0.6 miles farther, go straight at the Y in the road and ignore all of the smaller off-shoot roads you pass. Continue straight for 3.8 miles, then either park along the road or turn right at the White Fir Springs/Agate Bed sign and drive up the more primitive road.

The road continues a short distance up, with rockhounding areas all around.

*ROAD ACCESS/QUALITY: Road is maintained when open and is drivable by most vehicles if you park on USFS Road 3550. High clearance is needed to drive the short road up into the collection area. Road could be muddy after rain and is closed in the winter due to snow.

*GPS COORDINATES: 44.407616°. -120.556540°

*DO YOU NEED TO DIG TO FIND MATERIAL: To find thunder eggs, yes. Small pieces left by other rockhounders can be found on the surface. Adequate tools are needed for breaking the ground rock.

*HINTS ON WHERE TO DIG: Look where others have dug or choose similar looking spots.

***HIKING EXPECTATIONS:** You can hike a very short distance to find areas where others have dug already or explore further to untouched spots. The terrain is hilly to steep.



FISCHER CREEK

Rock / Material: Petrified Wood, Agate, Jasper

LOCATION DESCRIPTION: This popular spot is best utilized by hiking away from your vehicle to find pieces of petrified wood, agate, and jasper while enjoying the scenic views of Central Oregon's high desert. Rock pieces are normally clear or white with sizes ranging from pebbles to larger pieces.



ACREAGE OF SITE: 640 Acres, surrounded by BLM administered land on all sides.

DIRECTIONS FROM PRINEVILLE: Take NE Main Street South, continue on this road and it becomes OR-27 south of town. The paved road turns to dirt at 28.3 miles. Continue south. Soon after passing Salt Creek Rd. there is a rudimentary wagon road on the left. Turn here and drive a short distance to cross a cattle guard. We recommend parking here to explore the area as the road only continues a short distance farther.





***ROAD ACCESS/QUALITY:** Road not maintained, muddy when wet, high clearance recommended although most vehicles could make it to park just beyond the cattle guard if the road is dry.

*GPS COORDINATES: 44.024866°, -120.688476°

***DO YOU NEED TO DIG TO FIND MATERIAL:** Small pieces can be found on the surface, although larger pieces can be found by digging.

*HINTS ON WHERE TO DIG: Past the cattle guard, including the main wash on the left are good areas, although the whole area surrounding the wagon road, including bothsides of OR-27 are open to rockhounding.

*HIKING EXPECTATIONS: The terrain varies from flat to a slight elevation gain. Terrain across the highway is flat but uneven.

CONGLETON HOLLOW

Rock: Limb Casts

LOCATION DESCRIPTION: Congleton Hollow has been a popular destination for rockhounds for many years, so little material remains on the ground surface. Rockhounds willing to take the time and effort to dig still find some fine limb cast specimens. Look where other rockhounds have been digging for potential leads. Limb cast pieces are translucent or clear to a slightly pinkish hue. Size ranges from pebble to fist width diameter pieces, Surface can be pit marked or round shaped.



ACREAGE OF THE SITE: 640 acres, surrounded on the west, north and east sides by BLM administered lands. Private property is located to the south of the site.

DIRECTIONS FROM PRINEVILLE:

Take Combs Flat Rd/OR-380 East out of town to milepost 51, about 50 miles. The marker is at the entrance to Congleton Hollow Road where you turn right. After passing the Congleton Hollow Road sign at the cattle guard, drive 4.3 miles to cross a cattle guard. Park in the turn out on the left. Rockhounding areas spread from the slopes on both sides of the road.

To get to other areas, continue straight on the road as it dips down and goes around a U-turn. There is a Y in the road and you can go either way, as the road does a loop with smaller, even more primitive road options. This whole area has material, especially in the river bed.

*ROAD ACCESS/QUALITY: Congleton Hollow Road is fine for most cars for the first 4.4 miles. Beyond that, and on any side road, vehicles with good clearance and 4WD are needed. Roads are not maintained and will be muddy when wet.

*GPS COORDINATES: 44,058440°. -120,013219°

*DO YOU NEED TO DIG TO FIND MATERIAL: Recommended. Tiny pieces can be found on the surface.

*HINTS ON WHERE TO DIG: On the hillsides, anywhere off the road before the cattle guard and down the road.

*HIKING EXPECTATIONS: Expect to hike up hillsides and down into river beds. Many will choose to not drive the roads and instead wander on foot for digging locations,



DENDRITE BUTTE

Rock: Limb Casts, Opalized Wood, Agate, Yellow And Orange Jasper

LOCATION DESCRIPTION: Also a long time popular destination, spread out over rolling treed grasslands. The rocky roads can stop some visitors from visiting, but the area can be fun for younger kids happy with looking for colorful rock pieces without digging. Visitors who want to take a long walk will be rewarded with lots of surface finds. The area has beautiful views.



ACREAGE/SIZE OF THE SITE: About 540 acres. Private property is located at the northeast corner of the site.

DIRECTIONS: From Prineville take Combs Flat Road (Hwy 380) east to Camp Creek Road between mileposts 43 and 44. Directly across from Camp Creek Rd is an abandoned farm house. Turn right on Camp Creek Rd and travel 9.2 miles on the paved road to a dirt road, FR 6574. Make an almost left hand u-turn onto the primitive road. Continue 1.9 miles on Road 6574 to a junction, go left. Drive 1.7 miles to a fork in the road and proceed to the right. Drive 0.5 miles to the next fork in the road and go to the left. Continue 1.1 miles to the first collection site, found spread out on the north side of the road. To reach the next collecting site, continue



driving another 0.7 miles and turn left. For the next 0.5 miles material can be gathered on the gentle slopes north and west of the road, all the way to the gate at the end of the road.

*ROAD ACCESS/QUALITY: Once you turn off the paved road, the rest of the driving is slow going on narrow, rocky dirt roads. The unpaved roads are not maintained and will be muddy when wet. Good clearance and 4x4 vehicles are necessary.

*GPS COORDINATES: 44.022616°. -120.059109°

*DO YOU NEED TO DIG TO FIND MATERIAL: Small pieces can be found on the surface. Digging can turn up larger finds.

*HINTS ON WHERE TO DIG: Look where others have dug or choose similar looking spots. At the higher side of the hill where the butte is on your left, you'll see where people have dug off both sides of the road. You can look almost everywhere within the site area.

*HIKING EXPECTATIONS: Expect to wander away from your vehicle, although some areas have a fence close to the road while other areas are open for a good hike. The terrain varies from flat to hilly.

MAURY MOUNTAIN

Rnck:

Green, Red, Brown, and Gold Moss Agate, White Plume Agate, and occasionally Angel Wing Agate

LOCATION DESCRIPTION: The Maury Mountains area produces beautiful but scarce varieties of moss agates with gold, green and red hues. Sometimes other types of agates are found. As with most well-known sites, very little material is available for collection on the ground surface. However, nice pieces of moss agate can still be found by rockhounds willing to take the time and effort to dig. Agate rocks could have darker green and darker red hues.

*HINTS ON WHERE TO DIG: Look where others have dug or choose similar looking spots. The whole area has potential.

*HIKING EXPECTATIONS: Collection site starts very close to parking. The area is not flat and requires some balance. There is little shade from the sun

ACREAGE/SIZE OF SITE: The whole hillside, about 7 acres. Focus on the areas that have juniper vs. pine trees.





DIRECTIONS FROM PRINEVILLE: Take Combs Flat Road (Hwy 380) east from Prineville and drive to milepost 33. From there, turn right on Forest Service Road 16 and drive approximately 4.3 miles to Road 1680. Turn right and continue 1.5 miles to Road 1690 and turn right again. Proceed 0.4 miles to a fork in the road. Stay to the right and continue 0.2 miles to the collection site. There is a Forest Service sign marking the agate beds.

*ROAD ACCESS/QUALITY: Maintained dirt road drivable for most vehicles. Snow can close the road in the winter.

*GPS COORDINATES: 44,078318°. -120,346466°

*DO YOU NEED TO DIG TO FIND MATERIAL: Yes. Bars, chisels and hammers are helpful to break through the hard rock terrain. Ground can vary from soft to hard and it can take time to find agate.

GLASS BUTTE

Rock: Obsidian in Shades of Rainbow, Black, Pumpkin, Mahogany, Midnight Lace, Gold Sheen, Silver Sheen, Fire, and double flow varieties are spread out through the area.

LOCATION DESCRIPTION: A trip to Glass Buttes is well worth the effort for the natural scenery and abundant gem-quality obsidian. Glass Butte is one of the largest obsidian deposits in the world with collection sites varying from flat open fields to steep hillsides with rocky outcroppings. The area is made up of Glass Butte and Little Glass Butte, with the sagebrush and juniper covered lowland hills between the two being where rockhounding takes place today. The numerous spots are accessed by several gravel roads of varying quality. Obsidian pieces vary from small chips to large rock size pieces.

CAUTION: Obsidian is extremely SHARP. Protective gloves are recommended. All dogs should wear protective booties or be left at home. If digging or breaking obsidian pieces apart, beware of sharp glass splinters flying through the air. To avoid severe eye damage, use safety glasses with side protection. Have a tire fixing kit and/or spare tire in case the glass on the road punctures your tire.

SIZE OF SITE: Approximately 36 square miles.



DIRECTIONS: From Prineville, travel south on Millican Road to Hwy 20. Once on Hwy 20, drive east and turn left on BLM Road 6540 near milepost 77 (13.5 miles east of Hampton). Refer to the detailed map to locate the many collection sites from BLM Road 6540



ROAD ACCESS/QUALITY: Roads are not maintained. The main road (BLM 6540) is wide and accessible for all vehicles. All other roads to collection sites require high clearance, are narrow and 4x4 is recommended. All roads could turn muddy when wet and be inaccessible.

GPS COORDINATES: 43.553680°, - 120.006179°

DO YOU NEED TO DIG TO FIND MATERIAL: In most cases no, plenty of obsidian can be found on the ground surface. Larger pieces might be found by digging.

HIKING EXPECTATIONS: Expect to hike away from your vehicle. Some collection areas are bigger than others so could require carrying collection buckets farther distances. Some collection sites are steep, so it is easier to park below and hike up to look for obsidian. Wear good shoes for walking on glass.

GEODES. ROCKS & MINERALS

What to Look for

THUNDER EGGS

Though thunder eggs appear as rocks, they can be easily identifiable by the abnormally round, rough, and bumpy brown-gray exteriors. Look for splashes of color on the outside that may yield a clue to its interior.

Generally, thunder eggs lie closely at the earth's surface, embedded in the clay of the tuff, where they were formed. Over time, the tuff has decayed to soft mud and clay, making rock-like thunder eggs noticeable.



REVEALING YOUR THUNDER EGG: To reveal thunder eggs, impressive internal crystal formation and colorful mineral patterns, they should be cut in half and polished. This can be done using a lapidary saw with a diamond coated blade in a water or oil bath.

PETRIFIED WOOD

Petrified wood is fossilized remains of ancient tree plants. During the long- term process, called petrification, the original wood structure is completely replaced with silica, quartz, pyrite, or another material such as opal. Unlike other plant fossils, which are typically impressions or compressions, petrified wood is a three-dimensional representation of the original organic material exhibiting preserved details of the bark, wood, and cellular structures.

SIZE & SHAPE: Most commonly are fist sized and smaller pieces, but larger can be found.

WHAT TO LOOK FOR: The identification of petrified wood can be a difficult task but can best be identified by the grain pattern of the annual growth rings, especially when viewed from an end where the circular form of the rings is apparent, or the surface of the specimen resem-



bles a tree bark. Local petrified woods vary from white to black, but browns are the most common color. Occasional specimens are colorfully agatized and take an excellent polish.

CLEANING UP PETRIFIED WOOD: If your wood is not very dirty, use warm water to clean away dirt. If needed, use a mild or natural cleaner like apple cider vinegar to remove dirt and grime. Do not use abrasive cloths, but something soft. You can then polish the wood with stronger grit pads to smooth the wood's surface. Finally, add a polish with a fine grit pad. The higher the number of the grit, the more luster you will add to your wood.

OBSIDIAN

Sharp and shiny, obsidian is very different from other rocks. Obsidian is natural glass that formed when molten magma cooled quickly. Depending on the otherminerals involved, a variety of colors and even patterns can form in the obsidian during the process.



Obsidian has been shaped into knives, spear or arrow points since the prehistoric population realized its potential. The ancient volcanic hills of Glass Butte hold a dazzling variety of gem-quality obsidian. The various varieties include mahogany, red, flame, midnight lace, jet black, pumpkin, brown, rainbow, gold sheen, silver sheen, green, lizard skin, snowflake and more.

SIZE & SHAPE: Obsidian comes in all shapes and sizes from flat glass chips to boulders. There are no two identical pieces, with shapes ranging from flat to flowing rounded contours. At Glass Butte, it is common to find small splinters up to fist size rocks, although this depends on thearea and type of obsidian you are looking for.

WHAT TO LOOK FOR: Obsidian is easy to see thanks to its mainly shiny appearance. Obsidian can have sharp edges, and rockhounds should be extra careful when picking pieces up to not cut themselves.

CLEANING UP YOUR OBSIDIAN: Many pieces of obsidian do not need any treatment and are enjoyed for their raw shape and shine. Others might only need a scrub brush cleaning to remove hard clinging dirt. Other pieces look dull and will need to be cut to access the shiny, glass like appearance. This can be done using a lapidary saw with a diamond coated blade in a water or oil bath.

Knapping is a popular practice involving flaking away portions of the obsidian to form the shape of an arrowhead, spear-head, or knife. Tools used include antler or stone to break away small pieces along the edge. Because obsidian is a glass type material, the broken edges become sharp. While knapping is not a cutting process, it can be used to shape the obsidian.



AGATE

Agate is a common rock formation, consisting of a wide variety of colorful uneven bands or patterns formed within volcanic and metamorphic rocks. The color banding can be white, gray, orange, brown, pink, green, purple, black, yellow, and multicolored. Green and blue hues are rare. Embedded minerals, mostly iron oxides are responsible for color tones. Other inclusions are manganese, chromium, celadonite, nickel, copper, and hematite. While normally low on monetary



value, agates can be used to create stunning jewelry, beads, vases, ornaments, and other artworks. This type of quartz is considered to be a semi-precious gemstone and Oregon is one of the most popular states for agate hunting. Agates have been thought of as having metaphysical powers by people for thousands of years. They have also been used for religious based ceremonies and for the healing and prevention of disease and health ailments.

SIZE & SHAPE: The average agate is less than 3 inches in diameter and agate pebbles can be heavier than they look due to their dense composition. You may wish to compare what you think to be an agate with other stones in close proximity. Check for a pit-marks surface in the of the rough

stone; agates sometimes form in rock, and they might also have been surrounded by softer rock that has since eroded away. Both situations can leave the agates with some pitting.

WHAT TO LOOK FOR: Most agates are translucent to some degree. A flashlight can be used to back-light the stone and spot any translucent edges. If the stone has been broken and you can see telltale traces of a quartz-like mineral along with the red, brown, and orange color that comes with many types of agate, there is a good chance that you have an unpolished agate. Check the stone for banding; banding is prevalent in agates, look for broken worn exteriors on the stone. The banding is a characteristic that is sought by many collectors and jewelry makers.

CLEANING UP YOUR AGATE: For best results use rock tumblers with the coarse grinding powder (available at most gem suppliers), allowing the tumbler to run up to one week is a great way to polish your smaller stones.



JASPER

Most jaspers formed when gases in volcano lava was trapped in rocks. As the gases escaped from the cooling and hardening rocks, hollows and cavities called vesicles were formed. Progressively the cavities became filled with silica-rich fluid and other mineral impurities such as iron oxides and hydroxides. Different flow patterns created a variety of jaspers in typesand color.

The name jasper is derived from the Greek word "spotted stone." Jasper mineral features iron oxides, hydroxides, and other impurities, which create unique color combinations: yellow, brickred, brown, mottled green, and, rarely, blue. Typically, jasper is spotted or striped, and multicolored. An adequate quantity of mineral impurities make jasper opaque; like agate jasper can be used to create stunning jewelry and decorative pieces.

SIZE & SHAPE: Varies from small pebble size to much larger fist size.

WHAT TO LOOK FOR: Look for shiny or dull colored rock. It comes in many forms, but most commonly has a smooth opaque appearance.

CLEANING UP YOUR JASPER: Generally, a rough jasper mineral looks dull and needs to be polished to reveal its unique color and shiny surface.



LIMB CASTS

If you bury any or all a tree in hot volcanic ash the wood will burn away but leave a cast, or impression, that then fills in over the ages with minerals including manganese, forming beautiful clear, blue, green, gray, or pink agates or other stones within the casts. The actual cast eventually break up and fall apart, leaving a stone in the shape of the tree pieces.



SIZE & SHAPE: On the surface, common to find smaller pieces but can dig for larger specimens.

WHAT TO LOOK FOR: Pieces are the shape of tree limbs or hark.

CLEANING UP YOUR LIMB CAST: Pieces can be cut and polished or kept in its natural shape, with cleaning the same as petrified wood.

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