

Rockhound Guide to Selected Rock & Mineral Localities in Utah



Public Information Series #62
UTAH GEOLOGICAL SURVEY
a division of
Utah Department of Natural Resources
Design: Vicky Clarke
1999



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LAND OWNERSHIP

The rock and mineral collecting localities described here are on Utah's federal, state, and private lands for the casual collector. Because permission or permits are required in some cases before you can begin collecting rocks and minerals, land ownership must be determined first. Land ownership maps can be obtained from any U.S. Bureau of Land Management (BLM) field office or the Natural Resources Map & Bookstore (see State Agencies). To obtain the telephone number and address of the nearest BLM field office, you can call the Salt Lake City BLM office (see Federal Agencies). Once land ownership is established, collectors must follow all rules and regulations established by the owners of these lands.

FEDERAL LANDS

About two-thirds of Utah's lands are managed by the Federal Government. Most of this land is managed either by the BLM (open to rockhounding) or U.S. Forest Service (open to rockhounding with a permit). Collecting is strictly prohibited on other federal lands, such as: national parks, national monuments, tribal lands, military reservations, dam sites, wildlife refuges, wilderness areas, and lands withdrawn from mineral entry for other reasons.

U.S. Bureau of Land Management (BLM)
In general, the rockhounder may collect reasonable amounts of rocks and minerals from

unrestricted BLM property for recreational purposes or personal use. Petrified wood can be collected for personal non-commercial uses, in which the maximum limit is 25 pounds plus one piece per person a day and cannot exceed 250 pounds per calendar year. Due to restrictions on collecting petrified wood on some public lands, please check with the local BLM office before you begin collecting. If rocks, minerals, or petrified wood are collected to be sold, a permit must be obtained from the local BLM office. The use of explosives and power equipment, such as tractors, bulldozers, plows, or power shovels, is strictly forbidden.

U.S. Forest Service
Rock and mineral collecting on these lands requires a permit. Although collecting is allowed in most ranger districts and the permits are free, collecting rules vary, so check with the various districts before collecting (see Federal Agencies).

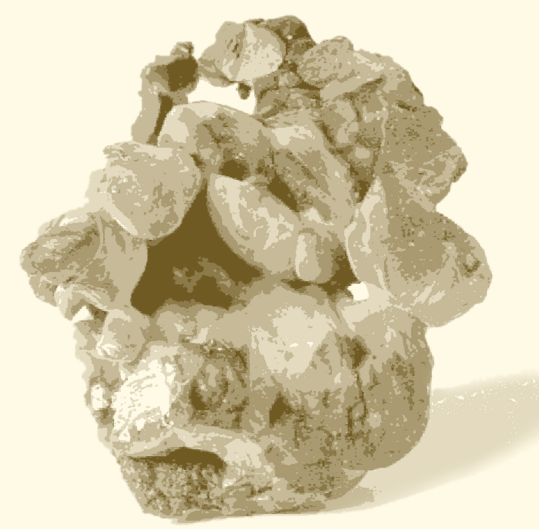
STATE LANDS

Most state-owned property is managed by the School and Institutional Trust Lands Administration (see State Agencies) and an annual rockhounding permit is required to collect on these lands. A fee is charged for this permit. Rockhounding may collect up to 25 pounds plus one piece per person per day, up to a maximum of 250 pounds per year. Collecting is also allowed on lands administered by the Division of Forestry, Fire and State Lands if you obtain permission from the Division

through the Salt Lake City office (see State Agencies) or area offices in Logan, Vernal, Richfield, Moab or Cedar City. However, collecting is prohibited on lands that are administered by other state agencies, such as the Division of Wildlife Resources, Division of Parks and Recreation, and Department of Transportation.

PRIVATE LANDS

On private land or land encumbered by mining claims, the collector must get the permission of the owner before removing any rocks or minerals. Collectors may collect on the surface of mining claims provided that their actions do not endanger others or materially interfere with prospecting or mining activities. Site-specific land-ownership maps may be found at the recorder's office in the county in which you intend to collect.



SUGGESTED READING

Some of these suggested books and maps can be found at university libraries, the U.S. Geological Survey, and the Natural Resources Map & Bookstore operated by the Utah Geological Survey. These references will help you find other rock and mineral collecting localities in Utah.

Butler, B.S., Loughlin, G.F., and Heikes, V.C., 1920, The ore deposits of Utah: U.S. Geological Survey Professional Paper 111, 672 p.

Callaghan, E., 1973, Mineral resource potential of Piute County, Utah and adjoining area: Utah Geological and Mineral Survey Bulletin 102, 135 p.

Cashion, W.B., 1967, Geology and fuel resources of the Green River Formation, southeastern Uinta Basin, Utah and Colorado: U.S. Geological Survey Professional Paper 548, 48 p.

Doelling, H.H., 1980, Geology and mineral resources of Box Elder County, Utah: Utah Geological and Mineral Survey Bulletin 115, 251 p.

Eardley, A.J., 1962, Gypsum dunes and evaporation history of the Great Salt Lake Desert: Utah Geological Survey Special Study no. 2, 27 p.

Gwynn, J.W., 1963, Mineral and water resources of Utah: Utah Geological and Mineral Survey Bulletin 73, 185 p.

Mackin, J.H., 1954, Geology and iron ore deposits of the Granite Mountain area, Iron County, Utah: U.S. Geological Survey Mineral Investigations Map MF-14, scale 1:12,000.

Mackin, J.H., 1968, Iron ore deposits of the Granite Mountain area, Iron County, in Ridge, J.D., editor, Ore deposits of the United States, 1933-1967: American Institute of Mining Engineers, Graton-Sales volume, New York, v. 2, p. 922-1010.

Stowe, C.H., 1979, Rockhound guide to mineral and fossil localities in Utah: Utah Geological and Mineral Survey Circular 63, 79 p.

Williams, J.S., 1958, Geologic atlas of Utah, Cache County, Utah Geological and Mineral Survey Bulletin 64, 98 p.

Wilson, J.R., 1995, A collector's guide to rock, mineral, and fossil localities of Utah: Utah Geological Survey Miscellaneous Publication 95-4, 148 p.

SOURCES FOR INFORMATION AND PUBLICATIONS

Federal Agencies:

U.S. Geological Survey (USGS)

Earth Science Information Center
2222 West 2300 South
Salt Lake City, UT 84119
Phone: (801) 975-3742
Fax: (801) 975-3740
E-mail: grnebeker@usgs.gov
Internet: <http://www.usgs.gov>

You can order USGS publications here, or some of them may be purchased at the Natural Resources Map & Bookstore (see State Agencies).

U.S. Forest Service

125 South State Street
Salt Lake City, UT 84138
Phone: (801) 524-5030
or contact any local district ranger.
Internet: <http://www.fs.fed.us>
Updated collecting regulations.

U.S. Bureau of Land Management (BLM)

324 South State Street
Salt Lake City, UT 84103
Phone: (801) 539-4001
Fax: (801) 539-4230
Internet: <http://www.blm.gov>

Updated collecting regulations and permits, and land ownership information.
Call to request a list of field offices for permits and updated regulations.

State Agencies:

School and Institutional Trust Lands Administration

675 East 500 South, Suite 500
Salt Lake City, UT 84102
Phone: (801) 538-5100
Fax: (801) 355-0922
Internet: <http://www.tl.state.ut.us>

Utah Geological Survey (UGS)

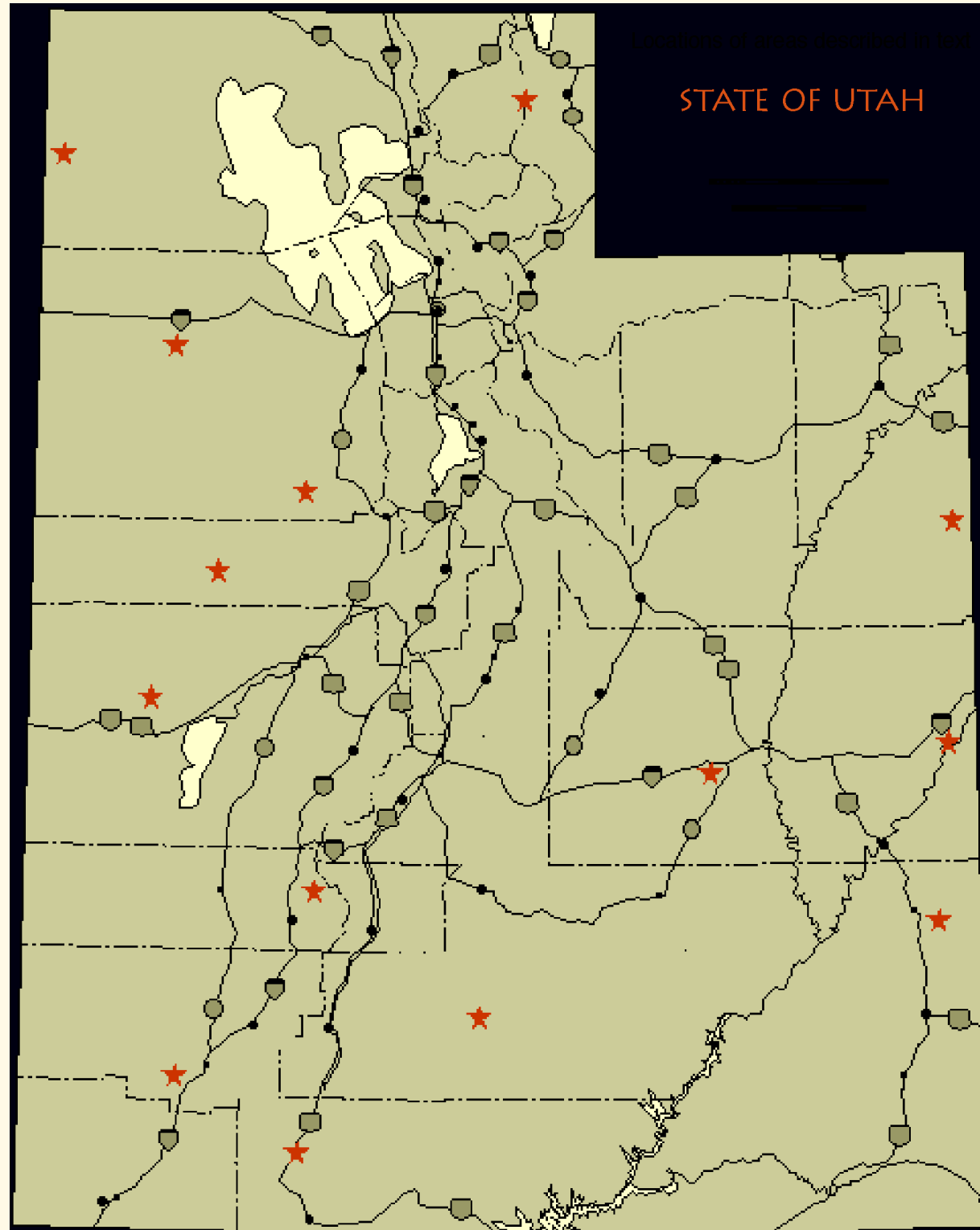
1594 West North Temple, Suite 3110
P.O. Box 146100
Salt Lake City, UT 84114-6100
Phone: (801) 537-3300
Fax: (801) 537-3400
Internet: <http://www.ugs.state.ut.us>

Division of Forestry, Fire, and State Lands

1594 West North Temple, Suite 3520
P.O. Box 145703
Salt Lake City, UT 84114-5703
Phone: (801) 538-5555
Fax: (801) 533-4111
Internet: <http://www.nr.state.ut.us/slf/slfhome.htm>

Natural Resources Map & Bookstore

1594 West North Temple
P.O. Box 146100
Salt Lake City, UT 84114-6100
Phone: (801) 537-3320
Toll Free: 1-888-UTAHMAP
E-mail: nrugs.geostore@state.ut.us
Internet: <http://www.maps.state.ut.us>
USGS and BLM maps at various scales,
plus publications on geology, minerals, mining,
and rockhounding.



GUIDE TO SELECTED ROCK AND MINERAL LOCALITIES IN UTAH

Here are some selected locations for collecting rocks and minerals in Utah. Many more collecting locations can be found listed in other publications (see *Suggested Reading*). Site numbers listed here correspond to the numbered locations on the map.

NO. 1: LUCKY STAR MINE AREA, CACHE COUNTY

Rocks and Minerals: Copper, lead, zinc, galena, cerussite, smithsonite, sphalerite, malachite, azurite, barite, calcite, dolomite, quartz, pyrite, and limonite.

Directions: From Hyrum, take Utah Highway 101 up Blacksmith Fork Canyon toward Hardware Ranch. Near milepost 13 turn left onto the gravel road that goes up the Left Hand Fork. At about 5.6 miles is a major intersection. Stay to the right, and 0.8 mile farther you will pass Gray Cliff Spring on the left side of the road. The mine dump is about 2.1 miles beyond this spring. If you reach another large spring, Lime Spring, on the left side of the road, you have gone too far. Because of the steep slope and narrow canyon, the dump is not visible from the road. It is marked by a few small debris piles on the roadside where material has washed down from above. The slope on which the mine dump is located has several flat-sided spires of rock projecting from the hill. The use of a 4WD or high-clearance vehicle is recommended.

Other Information: Quartz crystals, up to 1 inch in length, occur in the dump material along with pyrohedrons of pyrite that have been replaced by limonite creating pseudomorphs. Aggregates of curved rhombohedral dolomite crystals are common on the dump. Malachite and azurite are not abundant, but can easily be found. Small masses of oxidized galena, up to 2 inches in diameter, are scattered through the material and can be recognized by their high specific gravity when you hold a piece. Lead, silver, and copper ore were produced in the area in the early 1900s.

Maps: Logan 1:100,000; Boulder Mountain 1:24,000.

Sources: Williams (1958) and Wilson (1995).

Land Ownership: Cache National Forest.

NO. 2: LUCIN DISTRICT, BOX ELDER COUNTY

Rocks and minerals: Copper, lead, zinc, limonite, goethite, jarosite, hematite, native silver, calcite, and alunite.

Directions: The Lucin mining district is located along the western boundary of Box Elder County. This site is reached from Montello, Nevada. A short distance north of Montello is a dirt road that heads southeast across the valley. Follow this road for several miles and take a road to the left (north) that heads towards the mines which are on a low hill at the foot of the range. The open-pit mine at Copper Mountain, above Tecoma Hill, is a visible guide.

Other Information: Several old mines are situated in the area around Regulator Canyon, including the Black Warrior, Copper Mountain, Mineral Mountain, Tecoma Hill, and Walker Tunnel mines. Minerals were discovered in 1868. Between 1886 and 1894 these mines were active. Look on the old mine dumps for mineral specimens.

Maps: Newfoundland Mountains 1:100,000; Patterson Pass 1:24,000.

Sources: Butler and others (1920), Doelling (1980), and Wilson (1995).

Land Ownership: BLM public lands and mining claims.

NO. 3: KNOLLS, TOOELE COUNTY

Rocks and Minerals: Gypsum and oolitic sand.

Directions: Take the Knolls exit from I-80, approximately 80 miles west of Salt Lake City, and go south on the old highway. The dunes are found on both sides of the road in this vicinity. Stay away from fenced areas that are posted with the "Unexploded Ordnance" signs from the nearby bombing range.

Other Information: The climate is hot and dry during summer and cold during the winter. Winds are usually blowing. The dunes are composed of lightly compacted gypsum sand containing some oolites.

Maps: Bonneville Salt Flats 1:100,000; Knolls 1:24,000.

Sources: Eardley (1962), Gwynn (1963), and Wilson (1995).

Land Ownership: BLM public lands and mining claims.

NO. 4: LOOKOUT PASS, TOOELE COUNTY

Rocks and Minerals: Wonderstone (picturestone), parapierrrotite, stibnite, and quartz.

Directions: From Utah Highway 36 south of Tooele, take the Pony Express Road west across Lookout Pass. On the west side of the pass at a distance of 9.7 miles from the pavement, a road to the left leads south into Little Valley. At a distance of about 4 miles is a small road on the right that was bulldozed by a mining company who drilled this location. This road leads up the ridge and is probably blocked, unless drilling is occurring. Usually there is a place to pull off the road and park. The mineral locality is a very small area at the crest of the ridge. Look for signs of digging.

Maps: Rush Valley 1:100,000; Lookout Pass 1:24,000.

Source: Wilson (1995).

Land Ownership: Mining claims.

NO. 5: TOPAZ MOUNTAIN AREA, JUAB COUNTY

Rock and Minerals: Topaz, red beryl, bixbyite, pseudobrookite, hematite, spessartite garnet, chalcedony, amethyst, ilmenite, fluorite, calcite, cassiterite, and durangite.

Directions: Drive approximately 5 miles southwest of Lynndyl on U.S. Highway 6 to the Brush Wellman beryllium plant. Turn west and proceed about 37 miles on a hard-surface road to a sign on the north side of the road which points to Topaz Mountain. Turn and proceed north and then west into a "cove" at the base of the mountain.

Other Information: Topaz crystals are scattered in the sand and on the hillsides. These will be water-white, bleached by the sun. They can be located by looking for a bright reflection. The angle of the morning and afternoon sun makes them easy to find. Most of the topaz is of somewhat poor quality. Before they are exposed to the sunlight, the crystals are light amber color. Unexposed specimens are found in pockets in the white rocks. It may be necessary to break open the rocks to expose the pockets. Other less common minerals are:

Red beryl. This mineral is found in cavities at Topaz Mountain. They are imperfectly shaped six-sided crystals about 1/4 inch across.

Pseudobrookite. This mineral occurs in black needle-like clusters up to 1/2 inch in length. Crystals are very rare and highly prized by mineral collectors.

Bixbyite. This mineral is a very rare oxide of iron and manganese with only a trace of iron. It has beautiful black metallic luster and occurs in shiny cubes (1/4 inch) which look as though the corners have been sliced off. This locality is where it was first found and named for Maynard Bixby of Salt Lake City.

Spessartite garnet. This garnet is a rare variety. Easily recognized by its deep reddish-brown color and 12-sided dodecahedral form, it is often found in clusters.

Maps: Fish Springs 1:100,000; Topaz Mountain East, Topaz Mountain, and West Dugway Pass 1:24,000.

Sources: Wilson (1995).

Land Ownership: BLM public, private, and state lands; and mining claims. Do not collect on marked claims in this area.

NO. 6: PAINTER SPRINGS AREA, MILLARD COUNTY

Rocks and Minerals: Quartz, orthoclase, garnet, diopside, vesuvianite, chalcopyrite, and molybdenite.

Directions: From Delta, proceed west on U.S. 6/50 about 60 miles and take the gravel road to the right near milepost 33. It should be marked with a sign indicating "Painter Springs, 10 miles." At 9.4 miles an intersection with a water tank is reached. Turn east toward the mountain and continue for 1.8 miles to Painter Springs. A 4WD or high-clearance vehicle may be necessary to cross the wash just below Painter Springs.

Other Information: Collecting is recommended along the edge of a pink granite intrusion, where different rock types are in contact with each other. Typical skarn-type minerals can be found in this area, and orthoclase crystals can be found up to 2 inches long in the center of the intrusion. These crystals are not abundant and will require some walking and a great deal of searching.

Maps: Tule Valley 1:100,000; Notch Peak 1:24,000.

Sources: Stowe (1979) and Wilson (1995).

Land Ownership: BLM public lands and mining claims.

NO. 7: SHEEPROCK CANYON, BEAVER COUNTY

Rocks and Minerals: Alunite, amethyst, acanthite, calcite, cerargyrite, fluorite, limonite, pyrite, sericite, tellurides, and quartz.

Directions: The Sheepprock Canyon area of the Newton mining district is in the Tushar Mountains approximately 10 miles north-northeast of Beaver. Best access is U.S. Highway 357 north out of Beaver for 7 miles where an unimproved road leads northeast to the Indian Creek area. Follow this road north, east, and then south for a little more than 4.5 miles to where it forks. Take the southeast road to the left which leads to the Sheepprock Canyon area, about 2.5 to 3 miles.

Other Information: The alunite deposit lies at the west base of the mountain occupying a hill some 350 feet above the slope. The Sheepprock gold mine is to the northeast, the Rob Roy mine to the north. Several other old mines are in the vicinity.

Maps: Beaver 1:100,000; Pole Mountain and Beaver 1:24,000.

Sources: Callaghan (1973), Stowe (1979), and Wilson (1995).

Land Ownership: Fishlake National Forest.

NO. 8: IRON SPRINGS MINING DISTRICT, IRON COUNTY

Rocks and Minerals: Magnetite, siderite, calcite, apatite, amethyst, sphene, pyroxene, quartz monzonite, and hematite.

Directions: Take Utah Highway 56 west out of Cedar City for about 20 miles to a road that turns right. The dumps from several iron mines are clearly visible along Highway 56 and side roads that lead to Iron Springs and Desert Mound.

Other Information: Washes along the road to Desert Mound contain abundant magnetite crystals and nodules. Magnetite also occurs as octahedrons up to 3/4 inch in vugs in the iron mines west of Cedar City. Collecting on mining dumps is allowed where not fenced off. Associated with the magnetite are siderite as rhombohedrons and sphene to 1/4 inch, calcite as curved rhombohedrons to 1/4 inch, and apatite as light-green prisms to 1/2 inch. White apatite pseudomorphs of unknown composition can also be found. The Iron Springs district is a famous mining district in which magnetite occurs as replacement of limestone. Fissures also contain magnetite along with accessory pyroxene, apatite, calcite, and hematite. The magnetite is derived from quartz monzonite intrusions.

Maps: Cedar City 1:100,000; Cedar City NW, The Three Peaks, and Desert Mound 1:24,000.

Sources: Mackin (1954, 1968), Stowe (1979), and Wilson (1995).

Land Ownership: BLM public lands and private lands.

NO. 9: MUDDY CREEK AREA, KANE COUNTY

Rocks and Minerals: Septarian nodules.

Directions: To obtain directions and permission to collect, contact Joe's Rock Shop, Box 149, U.S. 89, Orderville, UT 84758, telephone (435) 648-2425, or Wiley Berry at Tetla Septarians, 195 South Center, Orderville, UT 84758, telephone (435) 648-2310. Tetla Septarians is wholesale only. Joe's Rock Shop and several other shops are open to the public in Orderville. The collecting areas are all under claim by Wiley Berry and Joe's Rock Shop. Both claim holders are willing to let people collect on their claims, but because these nodules must be dug from deep below the surface, it is unlikely that anything other than scraps of nodules left over from commercial digging operations can be recovered. Stay away from all equipment and highwalls left at the diggings. Pack all your litter out.

Other Information: This Utah locality is famous for the thousands of septarian nodules that have been mined and sold to the public, primarily through shops and wholesalers in Orderville. These nodules are very attractive because they are commonly hollow with pleasing yellow calcite crystals contrasting with the gray limestone.

Maps: Kanab 1:100,000; Mt. Carmel and Orderville 1:24,000.

Sources: Wilson (1995).

Land Ownership: Mining claims.

NO. 10: BLUE SPRUCE CAMPGROUND, GARFIELD COUNTY

Rocks and Minerals: Agate and jasper.

Directions: Go north out of Escalante and across the Escalante River.

Agates are found near the right side of the fence and cattle guard. Go north for 19 miles to the Blue Spruce campground. Jasper can be found in the gullies about 0.5 mile north of the campground.

Other Information: From the campground you can drive east approximately 5.5 miles, and agates are scattered along both sides of the road to where it joins Utah Highway 12 west of Boulder.

Maps: Escalante 1:100,000; Escalante 1:24,000.

Sources: Stowe (1979) and Wilson (1995).

Land Ownership: Dixie National Forest.

NO. 11: JOE WILSON WASH, SAN JUAN COUNTY

Rocks and Minerals: Agate.

Directions: Starting at La Sal Junction, drive south 4.1 miles on U.S. Highway 191 to Joe Wilson Wash. Joe Wilson Wash approaches the highway from the northeast and crosses under it and continues to the west. Park at the crossing of the wash and the highway and walk up the wash for approximately 1/4 mile. Large pieces of agate are found in the bottom of the wash.

Maps: La Sal 1:100,000; La Sal West and La Sal Junction 1:24,000.

Sources: Stowe (1979) and Wilson (1995).

Land Ownership: BLM public lands.

NO. 12: WEST OF GREEN RIVER, EMERY COUNTY

Rocks and Minerals: Agate.

Directions: Go west 11 miles from Green River to the Junction of I-70 and Utah Highway 24. In the immediate area of the junction, west of Highway 24, agate can be found. About 4.2 miles south of the junction (about 0.5 mile before the San Rafael River bridge), a road to the east leads about 1 mile to another agate area.

Description: Agate is locally called "grape" agate because the pieces have bubble-like protrusions on the outside.

Maps: San Rafael Desert 1:100,000; Jessie's Twist 1:24,000.

Source: Stowe (1979) and Wilson (1995).

Land Ownership: BLM public lands.

NO. 13: HOTEL MESA AREA, GRAND COUNTY

Rocks and Minerals: Agate.

Directions: Take Utah Highway 128 northeast from Moab. Continue for 3 miles after crossing the Colorado River until you see some buildings on the right side of the road. The mountain on the west side has several areas where large amounts of colorful agates can be found.

Maps: Moab 1:100,000; Cisco 1:24,000.

Source: Stowe (1979) and Wilson (1995).

Land Ownership: BLM public lands.

NO. 14: HELLS HOLE CANYON, UINTAH COUNTY

Rocks and Minerals: Hydrocarbons (oil-impregnated rock).

Directions: Take Utah Highway 45 south from Bonanza approximately 3.5 miles to a bridge crossing the White River; proceed on Highway 45 and 207. Turn left (east) on a primitive road past corrals, approximately 0.8 mile down canyon to the outcrop of the Mahogany Zone of the Parachute Creek Member of the Green River Formation (an oil shale horizon).

Other Information: Dirt roads south of Bonanza can be dangerous during and immediately following rainstorms.

Maps: Seep Ridge 1:100,000; Weaver Ridge 1:24,000.

Sources: Cashion (1967), Stowe (1979), and Wilson (1995).

Land Ownership: BLM public lands and state lands.

A list of Utah's rock, gem, and mineral clubs is available at the Natural Resources Map & Bookstore or at the Utah Geological Survey web site (see State Agencies).

If you visit any of these localities and have comments or suggestions, please let us know.