

1-1-1970

Dig Me. The Great State of Maine Minerals & Gems

Maine Department of Economic Development

Follow this and additional works at: https://digitalmaine.com/decd_docs

Recommended Citation

Maine Department of Economic Development, "Dig Me. The Great State of Maine Minerals & Gems" (1970). *Economic and Community Development Documents*. 76.
https://digitalmaine.com/decd_docs/76

This Text is brought to you for free and open access by the Economic and Community Development at Digital Maine. It has been accepted for inclusion in Economic and Community Development Documents by an authorized administrator of Digital Maine. For more information, please contact statedocs@maine.gov.

BIBLIOGRAPHY

Rand, John R., 1957: Maine Pegmatite Mines and Prospects and Associated Minerals, Maine Geological Survey, Department of Economic Development.

Morrill, P., 1963; Mineral Guide to New England, Winthrop Mineral Shop, Winthrop, Maine.

Perham, Frank C., et. al., 1965; Nubble, Waisanen, Tamminen and Harvard Mines, Guidebook to Field Trips in Southern Maine, 57th Annual Meeting. New England Intercollegiate Geological Conference, 118 pp. figs. plates, October.

Doyle, Robert G., 1962; Maine Mineral Collecting, Geological Survey, Maine Department of Economic Development.

THE MICAS. The mica minerals appear as a thin, transparent glassy material that occur as "books" of plates lodged in feldspar masses. It is commonly called 'isinglass.' Muscovite is light colored mica, usually brown, yellow or clear. It occurs in almost all pegmatite bodies, in plates ranging from microscopic to over a foot in diameter. Biotite is black, brown or dark green mica. It is almost as common as muscovite. Lepidolite is a purple, lithium-rich mica, usually occurring in masses of tiny plates, the muscovite book form of plates is almost never seen in lepidolite. It is often indicative of nearby beryl or tourmaline crystals. Black Mountain in Rumford is an excellent collecting locality for lepidolite.

QUARTZ. Perhaps the most common of all mineral crystals, valuable specimens are those which occur as good clear crystals of different varieties. Glassy quartz crystal occurs in colorless crystals showing very smooth, diamond like facets. It is quite hard. Among the best specimens are those having facets coming to a point on one end. Massive, non-crystal quartz is the most common mineral found in pegmatites. Rose quartz is a pink to deep rose colored variety. Smoky quartz is a dark brown, smoke colored variety, often occurring in fine, well developed crystals.

TOURMALINE. It is one of the loveliest minerals occurring in Maine; a glassy stone, always having a long pencil-like shape, with many parallel lines running down its length. It is as hard as quartz, but much more brittle. Schorl, the black variety of tourmaline, is the most common. Green tourmaline, often gem quality, occasionally has a pink (watermelon) or white (cucumber) core. Tourmaline crystals sometimes found in a radiating mass; such a sunburst specimen is quite rare.

VESUVIANITE. This silica mineral is a brown or very dark green crystal, found most often near limestone beds: usually in well developed rectangular or blocky shaped crystals. The Goodhall Quarry (no. 10) in Sanford (York County) is an excellent place to find this mineral.

GARNET. Garnet is one of the most common gemstones found in Maine. It is usually found in ruby red to brown colored, semi-rounded crystals showing dozens of four sided facets. Different varieties occur in many colors, but always quite dark in shade. Clear and unfractured crystals are rare.

METAL ORE SPECIMENS

There are four principal metal ore minerals found in Maine.

(1) Pyrite -- iron sulphur; (2) Galena - lead sulphur; (3) Sphalerite - zinc sulphur; and (4) Chalcopyrite - copper sulphur. Most specimens are found in the eastern part of the State, in the Blue Hill area (no. 11) of Hancock County and the Lubec-Eastport area (no. 12) of Washington County. There were scores of old mines dotting these areas and the waste dumps are the best places to look for specimens.

PYRITE. This iron mineral forms in shiny, brass colored cubes or many faceted semi-rounded shapes. Pyrite which often looks like gold specks, is the "fool's gold."

GALENA. A steely gray metallic colored mineral which always comes in perfect cubes. Galena is said to possess 'perfect cubic cleavage' and is found most often in eastern Washington County and near Acton in York County.

SPHALERITE. Of all the common ores, the zinc ore mineral looks the least like a metal. It is a glassy brown or yellow color, usually a four-sided crystal. Sphalerite and galena are usually found in the same deposit. The minerals are usually covered with a rusty brown stain which is easily washed off.

CHALCOPYRITE. Chalcopyrite is much the same color as pyrite but is yellower and brighter in appearance. Chalcopyrite rarely occurs in good crystals; but rather as massive blobs, streaks or veinlets in the rock.

GOLD. It has a 'heavy golden' color and in flakes shows a mirror-like shine. It will gleam like no other stone when it appears in a pan full of gravel. The Swift River tributaries are the best places to pan for the shiny stuff.

THIS VACATION PLANNER

describes some of the most-notable rocks, metal ores, and gemstones often found in Maine and the places where these are likely to be uncovered by "rock-hounds". Both lapidary experts and beginners "dig Maine", fascinated with the prospect of what might show up in their search.

* * * * *

One in a series of Vacation Planners programmed by the Maine Department of Economic Development, available from 78 Gateway Circle, Portland, Maine 04102. Prospective visitors to Maine are interested in the "facts", and these brochures are designed with this in mind. We would appreciate receiving your comments.

published by
Department of Economic Development
State House, Augusta, Maine 04330

Appropriation Number 1230



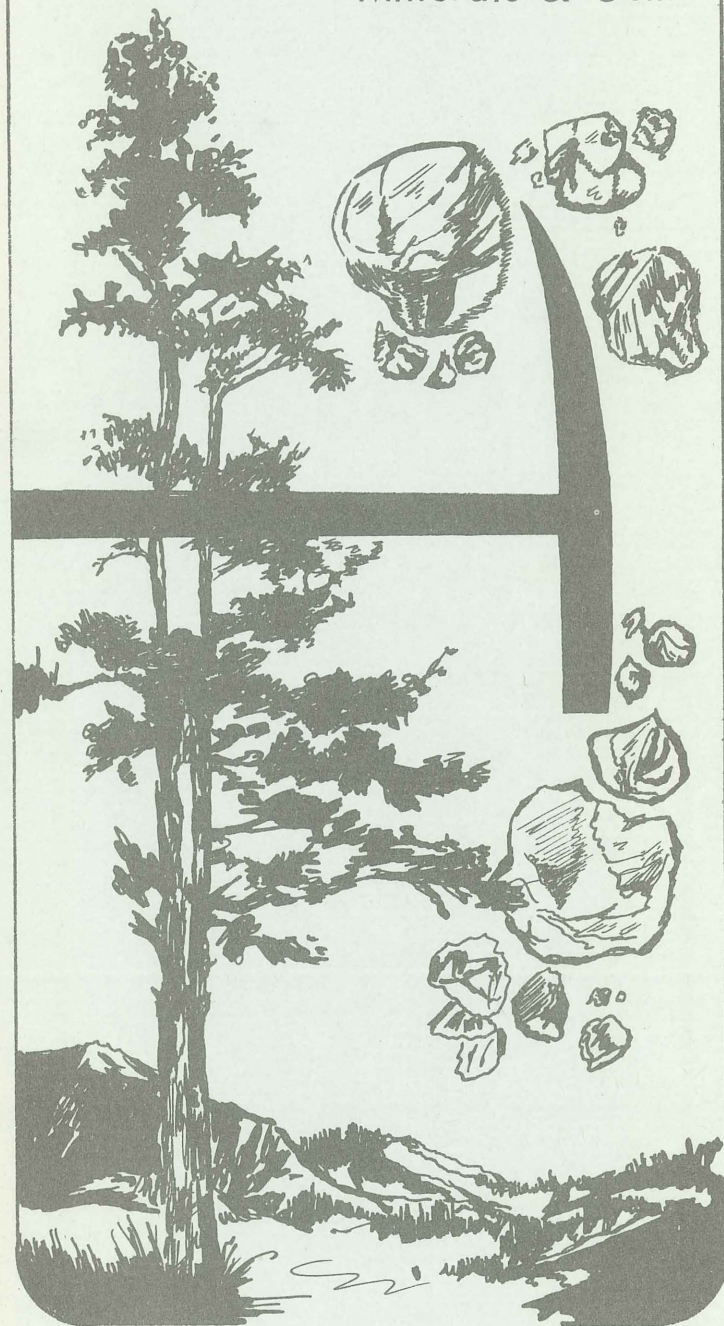
M₃ Maine, Economic Development Dept.

D60.32:9

C. 93

Dig Me.

The Great State of Maine
Minerals & Gems



JA 23 '70 VACATION PLANNER 9

An Exciting Experience

Gemstone collecting provides all of the famous features of the Maine vacation, with something extra; it combines the thrills of a treasure hunt for the whole family with exercise in the good Maine sunshine, and it provides something of value to take back home.

In Maine, "rock hounds" search for gold and such semi-precious gemstones as beryl, garnet, topaz and tourmaline. No elaborate equipment — all you need for an expedition are stout shoes, a good hammer, a small pick and a desire to be outdoors.

Waste dumps containing quartz and feldspar are the most likely places to search for gemstones. The gemstones appear in the host rocks as vari-colored chips or blobs. The good gemstones are brittle. Care must be used in breaking them loose with your hammer.

Most of the gemstones that you will be prospecting for are found in a special kind of rock formation called pegmatite. This occurs in fairly large pod shaped bodies, often a half a mile or more in length. Most of the pegmatite pod is made of quartz and feldspar.

Gemstones usually occur as small blobs, crystals and masses scattered through the pegmatite. Geodes or gem pockets occasionally are uncovered in the quarry walls. These pockets have provided the richest gem finds in New England.

Include in your plans a collecting trip for metal ore specimens, near any of the old metal mines of Hancock or Washington Counties. The sulfide ore minerals of copper, lead and zinc, when fresh, have a shiny metallic luster. Their colors vary from dark steely grey to bright brassy yellow. In most cases, these minerals have been covered with a brown, rusty colored layer which hides the true character of the specimen. Often the metallic copper minerals are dissolved by rain and ground water. When they are dissolved they form other minerals called carbonates; which are blue or green colored stones often showing beautiful shades.

Robert G. Doyle, Director
Science, Technology & Mineral Resources Div.
Maine Department of Economic Development

PUBLICATIONS AND INFORMATION SOURCES

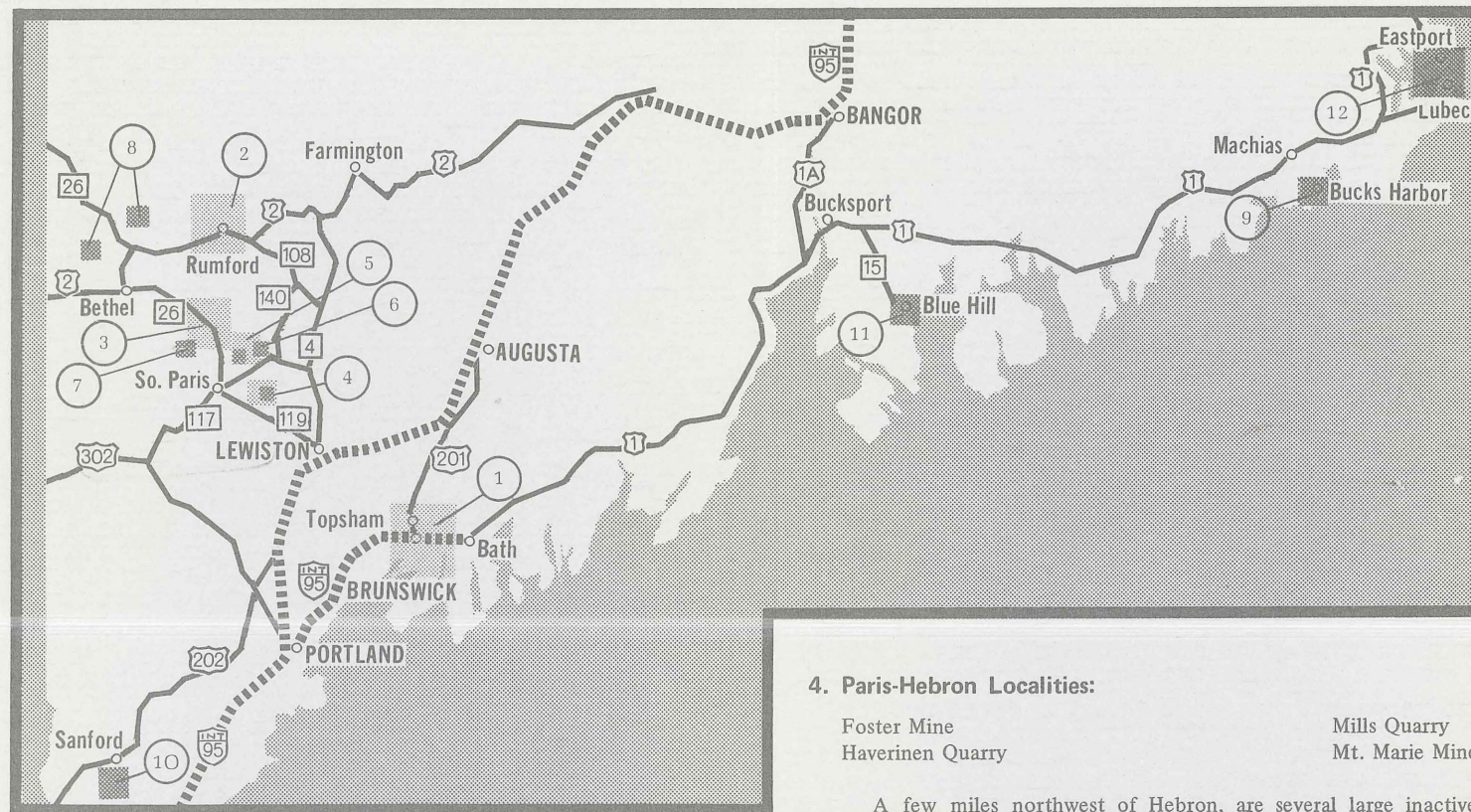
Other Information and Publications about Maine:

Maine Department of Economic Development
State Office Building, Augusta, Maine 04330
Maine Publicity Bureau
78 Gateway Circle, Portland, Maine 04102

State of Maine Information Center
48 Rockefeller Plaza, New York City, N. Y. 10020
State of Maine Information Center
Laurentien Hotel, Dominion, Montreal, Canada

Other Information Centers:

Jct. of U. S. Rt. 1 & Me. Turnpike, Kittery, Maine
Bass Park, Bangor, Maine
U. S. Rt. 302, Fryeburg, Maine (summer only)
Maine Turnpike, North
Cumberland, Maine (summer only)
Internat'l Bridge, Calais, Maine (summer only)
All Local Chamber of Commerce Offices



PRINCIPAL GEMSTONE AND MINERAL LOCALITIES IN MAINE:

There are scores of other localities equally as attractive but the few given here will provide a practical starting point.

1. Topsham-Brunswick Area:

Consolidated Quarry Fisher Quarry Staples Quarry

The quarries in this area are located about four miles north of Topsham on Route 24. Clear red garnets, green tourmaline and rare smoky quartz crystals have been found in gem quality. Fisher Quarry is perhaps the most promising prospect. Gem topaz has been occasionally found in this locality.

2. Rumford Area:

There are many old pits and quarries along the top of Black Mountain which provide excellent prospecting for gemstones and unusual mineral specimens. Lepidolite, pink tourmaline, spodumene (a lithium mineral) and a rare variety of white beryl. Go north out of Rumford on Route 120, along the Swift River, for about 10 miles. At Roxbury Notch turn left on a dirt road into the hills. It is two miles into the road leading off to the left toward the prospects. Old beryl prospects are on the left after you cross the Rumford line.

3. Rubellite Mine:

This is a fine locality for gem beryl, rutile, pollucite (a cesium ore), vari-colored tourmaline, and the principal area for fluorescent pegmatites actively being quarried.

4. Paris-Hebron Localities:

Foster Mine
Haverinen Quarry

Mills Quarry
Mt. Marie Mine

A few miles northwest of Hebron, are several large inactive quarries. Among the gemstones on the dumps and quarry walls are gem beryl, garnet, tourmaline and good quartz crystals. The rare minerals, columbite, tantalite and pollucite, are found occasionally.

5. Mount Mica:

Frequent collecting keeps the place picked. Tourmaline, gem beryl, lepidolite and many other good specimens are found. This mine is most famous for its great variety of minerals; few other pegmatite prospects are equal to it.

6. Bennett Quarry:

The quarry is noted for the variety of gemstones of high quality found there: apatite, amblygonite, gem beryl, lepidolite, manganese minerals, topaz and tourmaline (gemstock).

7. Tamminen Quarry and Harvard Quarry:

These quarries have been operated for feldspar during the past decade, but are now inactive. They have a fairly rich suite of good minerals and gemstones: gemstock tourmaline and beryl, good clear and smoky quartz, amethyst and citrine.

8. Newry:

Excellent collecting exists in this area for tourmaline, apatite, beryl, rose quartz, etc.

9. Jasper - Rhyolite:

The red beaches (Jasper Beach) in this area provide a scenic setting for collecting prolific accumulations of red rhyolite which make excellent polished specimens.