Maine. Don't be too selective at first, and don't worry if you can't identify each stone you find, right at the mine. A visit to the State Museum in the State House at Augusta will enable you to compare your treasures with very fine labeled specimens of all the minerals you will encounter in the field.

Included in the booklet is a list of Maine minerals and gemstones which would provide a comprehensive collection. Such a collection could be completed with visits to but a few of the many prospects in Maine, and doubtless you'd pick up specimens not on the list.

Mineral and gemstone collections make interesting exhibits for students to take to science class. Most Maine high schools have collections which were provided by the Geology Division of the Department of Economic Development.

We feel that a word of warning is due any who contemplate a Maine treasure hunt such as we have described. It could alter your whole future. Some people, especially those who are allergic to hobbies, have never been the same after their first gemstone collecting jaunt. Seeking nothing more than a day of good, clean sport and fun, they have ended up with a hobby to pursue for the rest of their lives.

There have been a few instances, even, of enthusiasts who gave up their jobs and became lapidaries. Some of these have done quite well in their own little businesses of cutting and polishing gemstones and setting them in jewelry.

But don't worry. These are extreme cases. The percentage is stacked in favor of your having a wonderful time with your family and taking home something to remind you, always, of one of the more memorable days of your treasured Maine vacation.

**Some Facts about the Rocks**

Most of the gemstones that you will be prospecting for are found in a special kind of rock formation known to the geologists as a PEGMATITE.

This pegmatite rock occurs in fairly large pea-pod shaped bodies, often a half a mile or more in length. Most of the rock in the pegmatite pod is made up of two very common minerals — QUARTZ and FELDSPAR. They appear as white or tan colored glassy material having shiny faces and occasional sharp edges.

The interesting and valuable gemstones usually occur as small blobs, crystals and masses scattered randomly through the pegmatite. Of greatest interest are the GEODES or gem pockets that occasionally are uncovered in the quarry walls. These pockets have provided the richest gem finds in New England. A good sized tourmaline gem pocket uncovered a few years ago in Oxford County produced gemstones valued at several thousands of dollars, Mt. Mica has also yielded gemstones.

If you are in Eastern Maine near any of the old metal mines of Hancock or Washington Counties,
a collecting trip for metal ore specimens may be included in your holiday plans. The specimens you will be looking for are the sulphide ore minerals of copper, lead and zinc. When fresh, these minerals have a shiny metallic luster, like that of new money. Their colors vary from dark steely grey to bright brassy yellow. In most cases, however, these minerals have been covered with a brown, rusty colored layer which hide 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 pastel shades. Exotic shapes and colors of these mineral carbonates are valuable as collectors items.

**A Brief Description of Common Maine Minerals and Gemstones**

**The Micas.** The mica family of minerals appear always as thin, transparent plates of glassy material that occur as “books” of plates lodged in feldspar masses. It is commonly called ‘isinglass’, and has been used for a long time as stove and oven windows. It is also used as radio tube filament mounts. Chemically, the micas are composed of complex amounts of silica, aluminum, and iron.

Muscovite is the light colored mica, usually light brown, yellow or glassy colored. It gets the name muscovite from Moscow, Russia, where large quantities were mined many years ago. Muscovite occurs in almost all pegmatite bodies, in plates ranging from the microscopic up to over a foot in diameter.

Biotite is the dark colored black, brown or dark green mica. It is almost as common as muscovite; and in large brightly colored plates is a very attractive collectors specimen.

Lepidolite is a purple colored, lithium-rich mica, usually occurring in masses of tiny plates. The muscovite book-form of plates is almost never seen in lepidolite. It is the most colorful of the micas and is often indicative of nearby beryl or tourmaline crystals. Black Mountain in Rumford is an excellent collecting locality for lepidolite.

**Quartz.** This is perhaps the most common of all mineral crystals. It is composed of silicon oxide. Valuable specimens are those which occur as good clear crystals of different varieties.

Glassy quartz crystal occurs in glassy, clear and colorless crystals showing very smooth, diamond like facets. It is quite hard and cannot be scratched by a knifeblade. Among the best specimens are those which have facets coming to a point on one end. Massive, non-crystal quartz is the most common mineral you will find in pegmatites.

Rose quartz is a pink to deep rose colored variety of quartz which frequently occurs as a massive glassy stone which breaks up in fractures with a rippled pattern similar to the fracture pattern of a glass ball. Richly colored specimens are the most prized of this variety.

Smoky quartz is a dark brown, smoke colored variety of quartz, often occurring in fine, well de-
veloped crystals. A good crystal group of a smoky quartz is a much valued gemstone. The lupudist may cut choice gemstones from crystal fragments.

Tourmaline. This gemstone is one of the loveliest minerals occurring in Maine. It is 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.

Tourmaline occurs in several distinctive colors. The black variety, called schorl, is the most common. Green tourmaline is the most attractive variety, often occurring in gem quality. The green variety occasionally has a pink (watermelon) or white (cucumber) core, and looks like Christmas stick candy. Tourmaline crystals sometimes occur in a radiating mass looking exactly like a sunburst. Such a sunburst specimen is quite rare and if found should be added to your collection.

Vesuvianite. This chemically complicated silica mineral occurs as a brown or very dark green crystal, and is found most often near limestone beds. It is usually in well developed rectangular or blocky shaped crystals, and is not quite as hard as quartz. The Goodhall Quarry in Sanford (York County) is an excellent place to find this mineral stone, and being quite rare and interesting, will make a worthwhile addition to your Maine collection.

Garnet. This is another complicated silica mineral, but one of the most common gemstones found in Maine. It is usually in ruby red to brown colored, semi-rounded crystals showing dozens of four sided facets. Different varieties of garnet occur in many colors, but always quite dark in shade. Gem varieties, clear and unfractured crystals, are rare but may be found with patient looking. A good clear crystal will make a fine ring stone. Minot, Maine, at the Pitts-Tenney Mine, produces fine cinnamon garnet specimens with wernerite and sphene in diopside gneiss.

Metal Ore Specimens. There are four principal metal ore minerals found in Maine. They are all in the chemical family known as sulplhides, that is, a combination of the metal and sulphur. The four mineral specimens you will find are:

1. Pyrite — iron sulphur
2. Galena — lead sulphur
3. Sphalerite (Yellow jack) — zinc sulphur
4. Chalcopyrite — copper sulphur

Most of the localities where the metal specimens are found occur in the eastern part of the State, in the Blue Hill area of Hancock County and the Lubec-Eastport area of Washington County. There were scores of old mines dotting these areas and the waste dumps where valueless material was left are the best places to look for specimens. The most difficult part of the search for these specimens is finding the location of the mine. It is recommended that the local townspeople be asked about the whereabouts of the old mines. Once on the dumps, there will be little trouble finding specimens.

Pyrite. This iron mineral forms in shiny, brass colored cubes or many faceted semi-rounded shapes. It is the most common of the sulphide family found in Maine. Pyrite which often looks like gold specks, is the "fools gold" which led so many old time prospectors down the wrong road.
Galena. Galena, the lead sulphur mineral, is a steely gray metallic colored mineral which always occurs in perfect cubes. No matter how finely that you break up a galena specimen, each piece will have a cubic shape. In technical language, galena is said to possess 'perfect cubic cleavage'. This mineral is found most often in eastern Washington County and near Acton in York County.

Sphalerite. The zinc ore mineral looks the least like a metal ore mineral of all the common ores. It occurs as a glassy brown or yellow colored mineral usually as 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. The copper sulphide mineral is much the same color as pyrite but has a yellower, brighter appearance than the iron mineral. Chalcopyrite rarely occurs in good crystals; but rather as massive blobs, streaks or veinlets in the rock.

Gold. Gold is where you find it, and when you do, there will be no mistake about it. 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.

Principal Gemstone and Mineral Localities in Maine

This booklet lists, with locality maps and descriptions of the minerals, several of the more important localities where good collecting has been reported. There are scores of other localities equally as attractive but the few given here will provide a practical starting point for gemstone collecting. The individual quarries have been listed, with the owner's name and address at which permission may be obtained. Good luck.

1. TOPSHAM-BRUNSWICK AREA  Map 1
   Sagadahoc County
   Consolidated Quarry
   Consolidated Feldspar Division
   International Minerals & Chemical Co.
   Topsham
   Fisher Quarry
   Donald Direnzo
   Topsham Feldspar Company
   Topsham
   Staples Quarry
   Russell Garland, Topsham
   Wm. Willes Quarry
   Harriet Fisher, Brunswick

   The quarries in this area are located about 4 miles north of Topsham village on Route 24. Clear red garnets, green tourmaline and rare smoky quartz crystals have been found in gem quality at these quarries, the Fisher Quarry, nearest the river, is perhaps the most promising pros-
pect of the four. Gem topaz has been occasionally found in this locality.

Take the left fork off Route 24, 3 miles from Topsham, at the sign pointing the way to the Topsham Feldspar Company. Go across the Cathance River, stopping if you wish to see the first feldspar mill in Maine, the Topsham Feldspar Mill, located right on the river. At the top of the next hill, one mile from the mill, turn left on a dirt road, go by a small grinding mill, bearing left and thence to the quarries.

2. RUMFORD AREA

Oxford County

Black Mountain Quarries. There are many old pits and quarries ranged along this mountain top which provide excellent prospecting for gemstones and exotic mineral specimens. Lepidolite, pink tourmaline, spodumene (a lithium mineral, much like feldspar) and a rare variety of white beryl are among the minerals that you will find here.

As enticing as the fine collecting, is the remarkable view that you may have of all the nearby mountain peaks. Black Mountain is on the far eastern edge of the White Mountain Range, and the sunset pictures of the Presidential Range to the west are breath-taking in their beauty.

To get to the collecting areas, 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 2 miles into the mine road leading off to the left toward the prospects. The mine road is car passable for part of the way to the largest quarry. Old Beryl prospects are on the left side of the road after you cross the Rumford line. This is a privately owned 100-acre lot open to the public for prospecting or doing geologic research, but not for mining or blasting. Owner, S. Perham, W. Paris, Maine.

3. THE PARIS-HEBRON LOCALITIES

Oxford County

Foster Mine
Bell Minerals Company, West Paris
Haverinen Quarry
Bell Minerals Company, West Paris
Mills Quarry
Bell Minerals Company, West Paris
Mt. Marie Mine
Bell Minerals Company, West Paris

On a range of hills a few miles northwest of Hebron, there are several large inactive quarries, all owned by the Bell Minerals Co. The company does not prohibit mineral collecting in their pits and dumps. Direct permission is not required.
Among the gemstones found on the dumps and quarry walls are gem beryl, garnet, tourmaline and good quartz crystals. The rare minerals columbite and tantalite and pollucite are also found occasionally at this locality.

The quarries are reached by road 10 miles southeast of Paris Hill (near Paris village). Seven miles out of Paris you cross Stony Brook. Shortly after, there is a high hill on the right. Here there is a sharp left turn; at this turn, take a dirt road leading off to the right, by a farm and up a hill into the quarry area. A well marked trail leads to the prospects.

4. RUBELLITE MINE, Hebron
   Stearns Bryant, Winthrop
   This is a fine locality for collecting gem beryl specimens, rutile, pollucite (cesium ore), and vari-colored tourmaline, and most important it is the principal locality for fluorescent pegmatites actively being quarried. Several large, gem stock watermelon tourmaline specimens have been reported from here. Permission from the owner must be obtained. The Bryants have fluorescent minerals for sale at their store.

   The mine is 2 miles north of the Western Maine Sanitarium on Route 119-A. It is located exactly on a steep ridge very near the right hand side of the road, a few hundred yards north of a church and burying ground.

5. MOUNT MICA, Paris
   Oxford County
   Mr. & Mrs. Ralph Spencer, Buckfield
   The Mount Mica Mine is an important stop on any Oxford County prospecting trip, although frequent collecting keeps the place picked quite clean. There are at least two large pits and dumps available for collecting. Tourmaline and gem beryl, lepidolite and many other exotic specimens are found here. Mount Mica Mine is most famous for its great variety of minerals; few other pegmatite prospects are equal to it in variety of specimens offered.

   The mine is located less than 2 miles from Paris village on the road to North Buckfield. It is precisely 1.3 miles on the North Buckfield Road measured from the intersection of the two streets which lead easterly in the village. A sign on a trailer parked beside the road reads "Mt. Mica, Newly worked 1965 & 1966".

6. BENNETT QUARRY, Buckfield
   Oxford County
   Mrs. Blanche Bennett, Buckfield
   About 3 miles beyond the Mt. Mica Mine on the North Buckfield road, is the Bennett Quarry. It is on the unpaved part of the road which passes a church and school just before reaching the Bennett home. The quarry which is on a very high hill behind Mrs. Bennett's home is noted for the variety of gemstones of high quality found there. Apatite, amblygonite, gem beryl, lepidolite, manganese minerals, topaz and tourmaline (gemstock) have
been reported during the last few seasons of collecting. The Bennett Quarry will be easy to find by asking any local citizen where Mrs. Bennett’s brick house is to be found.

Mrs. Bennett should be contacted for permission to enter and collect.

7. TAMMINEN QUARRY AND HARVARD QUARRY
   Nestor Tamminen    Stanley Perham
   West Paris        West Paris
   Greenwood, Map 4   Oxford County

These quarries have been operated sporadically for feldspar during the past decade, but are now inactive. They have a fairly rich suite of good minerals and gemstones which are easily obtainable. Gemstock tourmaline and beryl, good clear and smoky quartz, amethyst and citrine (yellow quartz) are among the specimens reported from these quarries. The quarries are in very fine vacation country, and are easily accessible from the highway. New work has been done in 1966.

The quarries may be reached by going west on Routes 117-118 out of Norway village. Continue on Route 118 around the south end of Pennesseewasssee Lake. About 1/3 of the way up the lake road on Route 118 is a right hand fork marked with an intersection triangle. Take this right hand fork for 6 miles until you reach the unimproved section. Shortly after leaving the unimproved section, you will find a right hand road climbing a steep hill. The Tamminen residence is a short way up this right hand road. The quarries are very near their house.

8. BUMPUS QUARRY, Albany    Map 5
   Oxford County
   Six and one half miles south of Bethel on Route 5, 1 mile beyond the Town House Corner, is the Bumpus Quarry, famed as the most important locality for fine rose quartz in New England. Much of the good quality rose quartz costume jewelry stock has come from this quarry. The quarry has also been mined for several years for ceramic feldspar; at present the owners are working it. There are several large signs on the highway which call attention to the quarry location.

   In addition, gemstock golden beryl of fine quality, as well as tourmaline, clear quartz and other exotic specimens are reported. Permission is necessary to enter the property, and a small entrance fee is charged.

9. STONEHAM-STOW LOCALITIES    Map 6
   Oxford County
   These collecting quarries are in and near the White Mountain National Forest, one of the finest and most scenic camp grounds in the State.
   Lord Hill Prospect, Stoneham
   On unowned property of the White Mountain National Forest
   Deer Hill Mines, Stoneham
   Harry Eastman
   Western Maine Forest Nursery
   Fryeburg
Harndon Hill Prospects, Stoneham
Consolidated Feldspar Division
International Minerals & Chemical Co.
Topsham

This collecting area is most important as the principal amethyst (which is in the quartz family) locality in the State. Specimens of Stoneham amethyst are in all the principal museums in the East. In addition, gemstock topaz and pale blue aquamarine stones are frequently found. At the Lord Hill Prospect, golden beryl, smoky quartz and gem topaz are the specimens to look for. Apatite, clear quartz crystals and columbite have also been reported from Lord Hill. It is at the Deer Hill Mines that the most valuable and beautiful amethyst crystals have been found. They are very clear and deeply colored. Gem garnet, smoky quartz and interesting pyrite formations have been found.

To reach the prospect area, take Route 113 north from Fryeburg to Stow (about 15 miles). Turn east at Stow, across the Cold River Bridge for 3 miles to the end of this road. Then turn left and go 4 miles to a fork. Take the left fork for about 5 miles and you are in the prospect area. Because the quarries are away from the road, it would be well to ask directions from local residents for the exact locations. Millard Chandler, the Fire Warden, is a mineral collector and knows the region well.

This trip should be made as a weekend camping trip. The country is unspoiled and beautiful, providing a wonderful traffic free holiday in the mountains.

Permission should be obtained from Mr. Eastman before entering the Deer Hill Mine area.

10. MOUNT APATITE MINES,
Minot-Poland Area
Androscoggin County
Consolidated Feldspar Division
International Minerals & Chemical Co.,
Topsham

There are several fine collecting localities in the Mount Apatite area. It is the most important gem tourmaline source in New England. Although there are fewer good specimens found today than were picked up in the past, every year some new and exciting finds are turned up. Small pockets (or geodes) are still being discovered that make a trip to Mount Apatite an exciting adventure. In addition to the tourmaline, purple apatite, beryl, garnet lepidolite and spodumene specimens of value have been reported every year.

The area is 2 or 3 miles east of Minot, just north of Route 121. To reach the area, take Routes 121-11 west from Auburn to Haskell's Corners, about 4 miles from Auburn center. Turn right at the Corners and go about 1 mile on this road. The quarries are on both sides of the road in a range of low hills. A right hand dirt road leads to the principal collecting area. Local residents will be able to give you specific directions. Pulsifer Mine owner, Florian Couture — Permission is required from Mr. Couture, who lives at 110 Birch Street, Lewiston, Maine.

11. GOODHALL VESUVIANITE LOCALITY, Sanford
York County

This is the best known vesuvianite locality in the State. The mineral occurs as a massive body at
the contact between granite and limestone rock masses. Rich brown vesuvianite specimens as well as molybdenum ores and scheelite (a fluorescent mineral) may be found both on the walls and on the dumps nearby.

The pit is located on the Goodhall Farm about 1.5 miles east of Sanford center on School Street. The farm is very easily located on the left side of School Street as you go out of Sanford.

**Metal Ore Deposits**

Although there are scores of abandoned lead-copper-silver mines scattered throughout eastern Maine, two areas stand out as the most easily accessible and productive of worthwhile mineral specimens. These areas are the Blue Hill Copper Deposits in Hancock County and the Pembroke Copper-Lead-Zinc Mines in Washington County.

12. **ACTON SILVER AREA**

York County

There are about 20 small abandoned mines and pits in this area. The entire deposit zone lies in a narrow 2 mile belt, just south of South Acton. Lead, silver and zinc sulphide specimens may be found in the narrow quartz stringers still exposed on hillsides. The old dumps are also excellent places to find ore specimens. Occasionally ruby silver minerals (argentite) are found. These are dark red, shiny crystals usually found in small openings in a quartz rock vein.

The Acton metal ore mineral specimens in quartz make very attractive and interesting stones for a collection. Since the old mines are easily accessible and near to resort areas, this should be an early stop on your mineral collecting itinerary.

To reach the mine area, go north from East Lebanon through North Lebanon village for 2 and ¾ miles, taking the right fork at that point. The mines are 2-3 miles up on the right side of this road. Some of the dumps are visible from the road.

13. **SWIFT RIVER GOLD PANNING,**

Byron

Oxford County

We’ll admit it. There’s more gold in Fort Knox than there is in them thar hills of Maine. But you can take samples of Maine gold home with you. Probably there isn’t a place anywhere where you can pan gold as easily as you can in Maine—and have as much fun doing it. The whole family can make a day of it, with a picnic beside a cool mountain stream thrown in for good measure.

You don’t need a burro or a six-gun and you don’t have to let your whiskers grow to be a typical Maine gold panner. You can park your car beside the road and walk into the stream without a guide or a prospector’s license. A fishing license is likely to come in handy though, for you’ll be in the famed Rangeley Region right in the middle of some of the best lake and brook fishing in the world. Rumored gold finds have been reported from more than thirty localities in Maine. Many of these are unconfirmed and no large claims have
been recorded. There's one locality, however, where amateurs have consistently panned gold, year after year. And that's the place we recommend for you.

The Swift River tumbles out of the newly-named Longfellow Mountain Range of the Appalachians to join the Androscoggin River at Rumford, some 25 miles to the south. It's within sight of State Highway 17 much of the way. Best places for gold panning are the Stockbridge Branch flowing from the east just above the town of Byron, and the West Branch and Berdeen Stream near Houghton. (Incidentally, there's a height of land about ten miles above Houghton where you can sit in your car and enjoy one of the most gorgeous panoramas of forest, mountain and big-lake scenery in the East.)

Swift River gold occurs in flakes weighing about one gram and in nuggets the size of a pin head. It's found in eddies, streambank gravel and grass roots, and in rock crevices. It is believed to be of glacial origin. With pick, shovel, sluicebox and a strong back it is possible to finance a whole summer's vacation, tenting out. For a day's fun in search of a most unusual souvenir a small shovel or trowel, a wash basin and a plenty big picnic lunch will provide all the equipment necessary.

14. PEMBROKE AREA

Washington County

There are several old mines and prospects in the area, the largest of which are the Big Hill and Pembroke Mines. They were operated for copper, lead, zinc, and silver at the turn of the century.

15. BLUE HILL AREA

Hancock County

These old mines and dumps represent some of the earliest mining in New England. There are at least twenty abandoned mines and pits in the 2/3 mile strip between Second and Third Ponds on Route 176. You may collect several interesting minerals, including galena, chalcopyrite, silver ore and azurite and malachite (copper carbonate ores). These latter specimens are very attractive and colorful. Azurite is a brilliant blue specimen and malachite, the more common, a bright peacock green. The collecting area may be reached a few miles out of Blue Hill, southwest on Route 176. Most of the prospects are within walking distance of the ponds. Except for possible trespass, no permission is needed to explore and collect on the dumps.