

WASHINGTON GEM JADE

By Lanny R. Ream

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The jade producing localities of Alaska, Wyoming, California, and British Columbia are well-known. Not so well known are the jade producing localities of Washington State. For many years a few rockhounds have been finding an occasional piece of jade in the streams in Skagit and Snohomish Counties.

Only recently have the sources of the jade been found and a few mines developed. In June of 1973, rockhounds were allowed to collect for the first time in one of these deposits. The mine lies in the western foothills of the Cascade Mountains about 7 miles west of Darrington, a small logging community northeast of Everett. Jade is found in serpentine at an elevation of 3,000 feet on the south side of Mt. Higgins.

Numerous clubs and individual collectors visited the deposit during the summer. Most collectors were rewarded with fine pieces of nephrite along with the spectacular view from the mine. I made my first trip to the deposit in May before it was opened to collecting. It was with much excitement that I drove up to the deposit with Fred Krapsicher, one of the owners. Fred was taking me to the deposit so that I could study the geology and sample the mine for a mineralogical study. Since that trip in May, I have been to the mine several times, often with rockhounds who were eager to collect jade.

The mine is owned by the Washington Gem Jade and Mining Company, and is operated by its president Earl "Lucky" Case and his partner Fred Krapsicher. Fred discovered the jade several years ago while prospecting for gold. He found a fibrous mineral in the serpentine and identified it as tremolite. Thinking of the possibility of an asbestos deposit he further prospected the deposit of serpentine only



Figure 4—A breathtaking view of Whitehorse Mountain as seen from the jade mine. Darrington is just out-of-sight to the left of the picture.

to find something better, nodules of nephrite. During this time Fred and Lucky became partners and their thoughts turned to developing their new found jade deposit. Attempts to verify the identification of nephrite led to many months of frustrations. Samples were sent to several dealers and collectors in California, Wyoming, and Alaska. Some of the dealers in apparent attempts to prevent competition told them that it was not nephrite; fortunately they soon found out that it was. Since then they have developed the mine and sold several tons of jade to dealers, rockhounds and lapidaries.

The deposit is a small serpentinized basic intrusion of undetermined age that is in contact with Pre-upper Jurassic age Darrington phyllite and early Tertiary age non-marine sedimentary rocks of the Chuckanut formation. Nephrite and serpentine are exposed in a steep, narrow ravine as shown by figure 1.

During the summer, rockhounds col-

lected pieces of jade that ranged in weight from less than an ounce to over 50 pounds, but the owners report that these are small pieces. Boulders of over 20 tons have been removed from the deposit, and presently there are two boulders exposed in the creek below the mine that weigh 8 to 10 tons each. These large pieces of jade are quite rounded, but pieces of jade can be found that are flat flakes or are angular to rounded nodules. Some of the various sizes and shapes can be seen in figure 2. To an uninitiated eye the serpentine and nephrite look similar, but I found the jade abundant and easy to identify after a short study of the serpentine and jade.

There is a wide range in quality and color in the jade; green to gray colors are the most abundant in the deposit. There are several shades of green that vary from grayish-green to nearly apple green. Grays are abundant in several shades including a very beautiful bluish-gray and a yellowish-gray. The greens and grays are often intermixed in beautiful color patterns. Much of the jade is quite translucent with the greens being more translucent than the grays. Chatoyant nephrite was found by many rockhounds. This rare type of jade is formed when the usually short felted mass of tremolite fibers that compose the nephrite are long and oriented so that they are parallel. The long fibers cause a chatoyancy of blue to grayish-green color. This type of jade can cut some very unusual and beautiful cabochons and slabs.

Other colors including white were found as were pieces containing gold or silver wires and flecks. These rare metals are most common in the darker green colored jade. Such pieces of jade make excellent cabochons or display slabs. Some pieces have abundant visible gold or silver flecks.

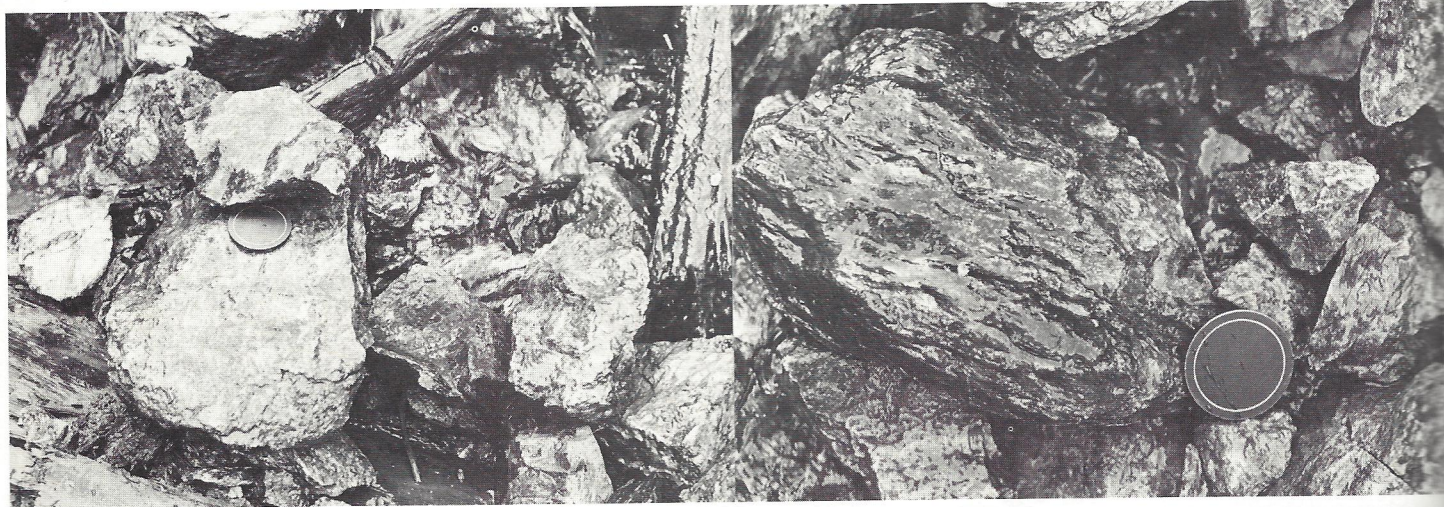


Figure 2, left—Various size pieces of jade and serpentine. The large piece and the two on the right are jade. Some of the remaining ones are serpentine and a few are jade. Except for the jade located at the top of the lens cap, they are lying just as they were found in the ravine.

Figure 3, right—A large nodule of jade surrounded by several pieces of jade and serpentine. Most of the jade can be recognized by their slickness. The material is wet from the water in the ravine, and making the stones appear shiny.



Figure 1—A view of the jade mine. Note the narrowness and steepness of the ravine and the overhanging rocks and trees. The main outcrop of serpentine and jade can be seen in the top of the photograph, but it extends under the loose material to the bottom of the ravine.

but most of them have only a few flecks showing. The gold is common in the mine and all slabs of green jade from the deposit should be checked for these beautiful yellow or white flecks. A few collectors reported finding jade with black dendrites. The dendrites on gray and green jade form

interesting pictures similar to good dendritic agate, except that the jade with the dendrites is not translucent. It does take a good polish and some good picture slabs and cabochons can be cut from it.

Collecting was allowed in the mine and
(Continued on Page 710)

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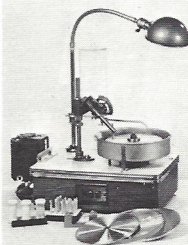
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Figure 5—Large blocks of sawn jade at the office of the Washington Gem Jade and Mining Company. Note the variations in the color and patterns of the large blocks.

in piles of the serpentine and jade that are located near the mine. Most rockhounds chose to do their collecting in the lower parts of the mine. Figure 1 clearly illustrates the danger of loose rocks, trees, and debris in the upper part of the ravine. After climbing up to the top of the ravine, I clearly respect the decision of the owners to request that collectors remain in the bottom part of the deposit.

Few visitors to the mine had trouble distinguishing the difference between the jade and serpentine after studying a few pieces of each. Most rockhounds had never seen jade in the rough, but an explanation accompanied by a few examples of the jade and of the serpentine was all that was necessary to aid the rockhounds in finding their own jade. The only tools that are needed to collect the jade are one's eyes and hands, but many rockhounds did use a pick or shovel to dig in the ravine to expose their prize specimens.

Most of the jade has enough material exposed through any serpentine that may be coating it to allow the quality and color of the jade to be seen. Weight allowances are made for matrix remaining on the specimen if it is excessive. Figure 3 shows a large jade nodule with pieces of jade and serpentine around it. It can be seen in this picture that there is very little matrix on the jade.

The jade takes an excellent polish and is easy to work. Lucky recommends chrome oxide for the polishing process, but he says that Linde A works well as does diamond. He also says that the jade is easiest to polish if it is not cut in oil. When cut in oil the jade tends to "orange peel" and is very difficult to polish. I found the material easy to polish to a very high gloss. It is extremely hard and tough and the polish works up very fast.

A 20 mile drive is required to get from Darrington to the mine which is reached by taking a forest service road that goes south from the highway about 5 miles west of Darrington. The road is a good gravel road, but logging trucks may be encountered and parts of the road are narrow. The road turns east along the south side of the ridge then crosses over to the north side of the ridge and heads west. It is crooked and dusty, but the scenery is magnificent. From the north side of the ridge some of the peaks of the North Cascades can be seen in the distance. The road crosses over to the south side of the ridge for the last few miles to the mine. The view from the south side is even more impressive. Whitehorse Mountain can be seen immediately

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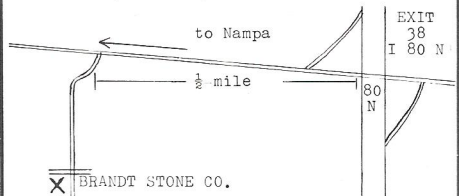
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across the valley of the Stillaguamish River (Fig. 4). This rugged peak reaches an elevation of 6,852 feet and is snow covered most of the year. From several places on the road, Puget Sound can be seen down the Stillaguamish River Valley. The scenery alone is worth the drive to the mine.

The Washington Gem Jade and Mining Company has an office on the northeast side of Darrington on the highway to Rock port. Blocks and slabs of jade are for sale at the shop. Figure 5 illustrates some of the large blocks of jade that have been trimmed or partially slabbed. Inside the shop can be found blocks of jade of many more colors including honey brown, orange, white and black nephrite, and white and imperial green jadeite. Most of these jades are from other deposits that are in nearly inaccessible mountainous areas that are nearby.

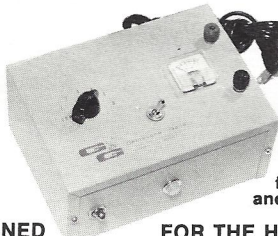
Rockhounds are welcome to collect at the mine on prearranged trips. Contact Bob Menser, Northwest Gem Tours, 2819 North Warner, Tacoma, Washington 98407. Be sure and plan a long vacation to take in more of the beauty of this area and the North Cascade Mountains. Rockhounds that come to this area for jade collecting will find many camping areas and places of interest. There are several forest service campgrounds within a few miles of Darrington on the Sauk, Stillaguamish, and Suitttle Rivers. Those rockhounds with trailers will find these campgrounds and the trailer park in the west end of Darrington quiet places to spend a few nights. From Darrington access is easy to numerous scenic areas and the new North Cascades Highway. No one will want to miss a trip over this new cross-state highway and its 5,477 feet high Washington Pass.

Acknowledgements

The author would like to thank Mr. Lucky Case for permission to sample and study the deposit and for his suggestions and information for this article. Mr. Fred Krapsicher's tour of the deposit and explanation and discussion of the surrounding geology was gratefully appreciated. ⊕

EDUCATION: What you sometimes get when your father sends you to college, but what you always get when you send your son to college. From "The Michigan Gem News," *Bulletin of the Michigan Gem & Mineral Society, Jackson, Michigan.*

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