



Lights and Shadows from the Dishman Hills, May, 1998

A BEDROCK STORY

While the Dishman Hills are best known for the fabulous hiking and ecology, there is another very interesting feature, the geology. For starters, the bedrock underlying the Hills is an ancient metamorphic rock called a gneiss (silent "g"), and at over a billion years old, weighs in as some of the oldest rocks in the State. Many eons of mountain building have left a rock that is twisted, fractured, and folded into something resembling swirled cake batter. The mineral mica is abundant in this rock, and overlying soils sparkle in the sunlight from all the tiny, flat mica crystals weathering out.

Through out the Natural Area metamorphic rocks are accompanied by a much younger rock, a 70-million year old granite. This igneous rock fills up fractures and faults in the older rock with a larger amount on the east side than on the west side. Off Dishman Road there is a granite quarry where this hard, durable rock was mined commercially in the old days. This granite is a testament to an active geologic process called "Continental Drift". The piece of the Earth's crust we are riding on is "drifting" to the west at about 2 inches per year. Our plate is overriding the thinner crust plate that makes up the Pacific floor, resulting in melting rock, volcanoes, and igneous intrusions such as granite. The action now is in the Cascade Mts., but in the past was here, under the east side of the State.

The present landform of the Natural Area is a relic of the globally famous geologic event that occurred during the last Ice Age, the great Spokane Floods. A number of times an ice dam formed from advancing continental glaciers, blocking the drainage and forming large lakes in Montana. When the ice retreated, the dam broke and the lakes drained catastrophically. Flood waters carrying a lode of rock and gravel channelled through the Spokane Valley at a depth of 400 to 500 feet. The Hills, a ridge of resistant gneiss and granite sticking out into the Valley, were in the way and were topped by the flood. The bedrock was carved into a fascinating topography of cliffs, ravines, and pothole ponds.

DONATIONS REAL SLOW

Donations for April came to only \$272 while expenses were \$64.19 for bulletin mailing and \$565.06 for taxes to Spokane County (mostly on the land donated to us--we are in the process of selling it since it is not part of the Dishman Hills. Then we will be free of most of the tax.)

Thanks to the following who have given permission to be listed here: Charles Gillingham, Helen Lininger, Barbara Lockwood, John Lorang, Janice Mahoney, Joy Peterson, Kent Richardson, Tom Rogers, D.K. Samish, Lois Smith and Jeanne Wilson. **Again many thanks.**

HILLS ARE LUSH AND GREEN

Though early May was nearly rainless, the weather was wet earlier, allowing for exuberant plant growth. Spring flowers are gone and early summer ones are appearing. Snowy clusters of buckbrush flowers brighten trailsides along with ninebark and the white of death camas (don't eat!). Some wild roses are appearing, scattered along with the blues of wild hyacinths, the reds of sticky geraniums and the pale pinks of wild onions. The yellows of biscuitroots are appearing, some with green seed pods. Less conspicuous is the graceful rough fescue grass, rather rare in our area.

On a recent hike birds seemed scarce, particularly nuthatches and chickadees but towhees were here as usual. A few male juncos were foraging, perhaps their mates were incubating. A great horned owl sat in a pine while its two young flew away. A raven croaked and a honking flock of Canada geese flew over. At the ponds only a whirligig beetle was seen. Where are the tadpoles? (Frogs seem to be in trouble nationwide.)

ORGANIZATION NEWS

We are a non-profit organization dedicated to saving natural areas in the Spokane region for public enjoyment and education. Call Michael Hamilton at 747-8147 with any questions. We will have our May meetings at Opportunity Elementary School, South 1109 Wilbur, the third Tuesday of the month at 7PM. During the summer months we meet at Camp Caro at the same date and time. You are cordially invited.

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