The Friends of Mt. Tabor Park (FMTP) was organized as a non-profit group* in 2000. Our purpose is to improve and help maintain Mt. Tabor Park for the benefit of individuals, organizations and the Park Bureau; to identify and help solve problems; and to participate in park planning projects. By joining FMTP, your tax-deductible annual dues go directly to assisting with our programs and expenses. Members receive the FMTP newsletter, Tabor Times, which is published every six months. Visit us at taborfriends.org for more information.

- $15 Douglas Fir (basic membership)
- $25 Linden
- $50 Red Leaf maple
- $100 Red Alder
- $250 Madrone
- $500 Sequoia

<table>
<thead>
<tr>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street Address</td>
</tr>
<tr>
<td>City, State, Zip Code</td>
</tr>
<tr>
<td>Phone Number</td>
</tr>
<tr>
<td>e-mail</td>
</tr>
</tbody>
</table>

Mail this form and a check payable to FMTP to: FMTP, 7705 SE Market Street, Portland, OR 97215

*FMTP is a 501(c) 3 nonprofit organization.

Thank you to our neighbors at Warner Pacific College for underwriting the printing of this brochure.

Printed July 2015.
GEOLGY OF MT. TABOR

TECTONIC SETTING

Mt. Tabor is one of several volcanoes in the Portland area. Volcanic activity is a result of subduction; the oceanic Juan de Fuca tectonic plate is pulled beneath the overriding North American plate. Magma is generated at great depths below the surface and rises upward through the crust. If it breaks the surface, it erupts as lava. Most of our familiar volcanoes of the Cascade Range: Mt. Hood, Mt. St. Helens, Mt. Adams and Mt. Jefferson are a type of volcano called stratovolcanoes generated from the magma of this subduction process. The Boring lava volcanoes (see below) were created by small amounts of magma that passed through an unusual path of fractures and erupted to the west of the Cascade Range in the Portland basin.

BORING LAVA VOLCANOES

Mt. Tabor is made from Boring lava, so named for the cluster of vents located near the town of Boring, Oregon. The familiar peaks of Mt. Scott, Mt. Sylvania, Larch Mountain, Rocky Butte, Kelly Butte, Mt. Tabor, and many others are considered extinct, although the Boring lava field could erupt again someday. Ages for these volcanoes have been measured to be between 3 million and 57,000 years, making an eruption on average about every 15,000 years. The youngest dated outcrop of Boring lava is Beacon Rock in the Columbia River Gorge. Mt. Tabor has been dated at about 200,000 years in age. A variety of volcanic types may be viewed in the Boring lava peaks.

Shield volcanoes such as Larch Mountain, volcanic plugs such as Beacon Rock, and cinder cones are some of these features.

STRUCTURE AND VOLCANIC FEATURES OF MT. TABOR

Mt. Tabor was formed as magma intruded a subsurface chamber, pushing up through the sedimentary rock that covered the Portland basin. This layer, known as the Troutdale formation, consisted of deposits made by the ancestral Columbia River. Mt. Tabor is a cinder cone, born as lava and gas erupted at the surface, and volcanic rock fell around the vent in a pile. This vent can be seen on the NW flank of Mt. Tabor. The adjoining hill to the north was a surface flow of lava that issued from the base of the cone. After the volcanoes became extinct, exciting geologic changes continued to occur. Massive Ice Age floods thundered down the Columbia Gorge and inundated the Portland basin numerous times, ending about 12,000 years ago. Examples of their power can be seen in the craggy Beacon Rock and the ragged shape of Rocky Butte in Portland. Mt. Tabor was also in the line of the destructive flood waters and underwent some battering, but the torrent was not high enough to destroy the cone at the surface.

LOOKING AT ROCKS ON MT. TABOR

Two distinctly different types of rocks can be found on Mt. Tabor. On most of the surfaces are rounded cobblestones. Some of them are quite beautiful, with several color variations such as white, grey, black, red and buff. The breakage surfaces of many of the cobbles reveal that they are composed of fused sand grains. This is quartzite, and the ancient Columbia River transported these rocks from their original emplacements in Idaho and Montana. These are part of the Troutdale formation and visitors will see that the cobbles are embedded in the soil of the hill like berries in a mold of gelatin.

A look at the exposure of rocks behind the amphitheater and basketball court reveals a very different type of rock—red or black with lots of air bubbles and rough in texture. This exposure is a cross section of the cinder cone, visible in the cover photo, which is a view into the amphitheater.

GEOLOGICAL SOCIETY OF THE OREGON COUNTRY PLAQUE

Members of our local geological society campaigned to save the cinder cone on Mt. Tabor from being completely quarried for gravel in the early part of the twentieth century. They erected a commemorative plaque above the old quarry (now the park...