



VIRTUAL GUIDED NATURE WALK

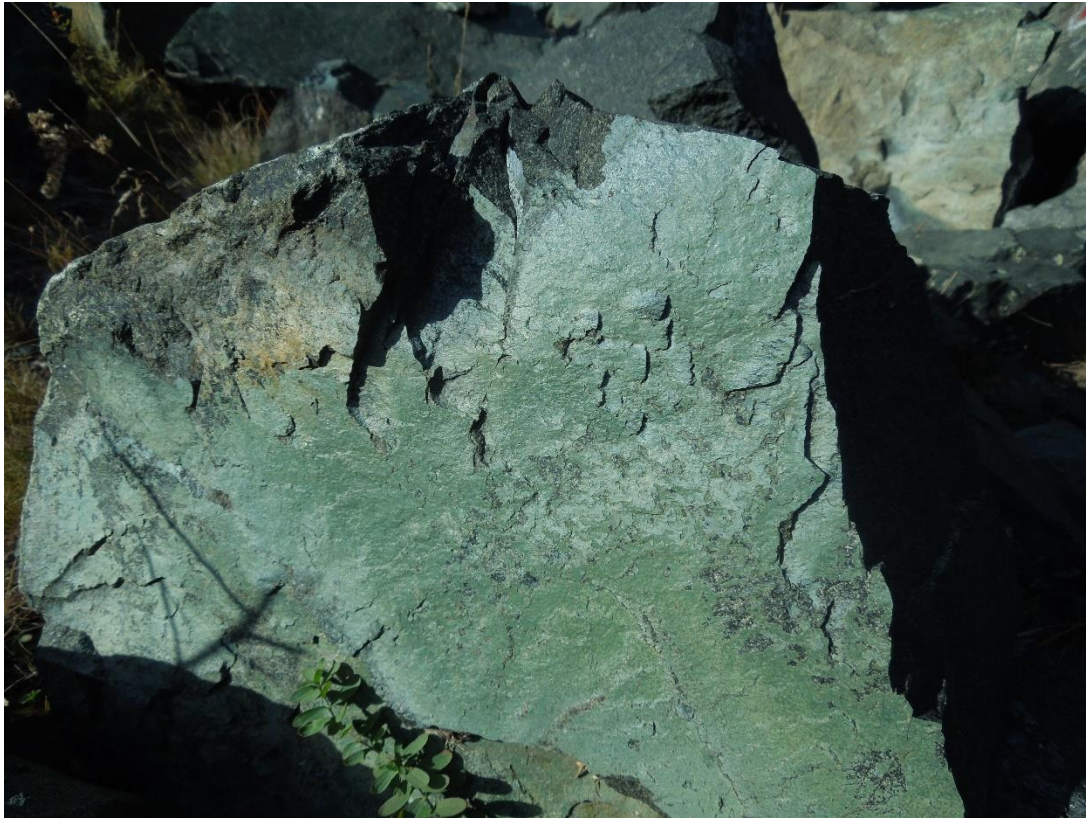
PINE HILL GEOBOTANICAL PRESERVE



Please help us conserve this area which has been set aside for low impact, nature-oriented activities and scientific research. This preserve presents special challenges. After a substantial portion was quarried and carried away, the area became the target of thoughtless vandalism. This history is especially ironic as the site is also a key piece of Maine's geological heritage—of national and international scientific significance. Visitors are asked to respect rare plants by leaving pets at home. Please leave plants and wildflowers for others to enjoy. Do not remove, collect rock samples or deface the rock. Climbing the quarry face is not recommended. The rock is unstable and loose.



What Is So Special About This Place? Although locally known as the Serpentine Quarry, geologist Roger Hooke explains that the uncommon rock here is known as serpentinized peridotite. Peridotite is a coarse-grained igneous rock consisting mostly of the mineral olivine, an iron-magnesium silicate. Hot fluids and sea water circulating through the rock altered the olivine to serpentine which when sheared smears out and gives the rock a green sheen almost like an enamel finish.



A new trail up the left side of the quarry leads through mixed woodlands.



The unique chemistry of the rocks makes soil conditions here extremely harsh. Low levels of all major plant nutrients and high levels of magnesium, iron, chromium and nickel, toxic to many plants, make this a challenging place. The plants that do succeed here are often distinct from their closest relatives growing on more normal soils. They may be smaller or bloom earlier. Pine Hill provides a unique opportunity to study the role of natural selection in plant species diversification. To protect rare plants, please stay on the trail.

The trail to the right, east, of the quarry is a short, steep and difficult scramble while the leisurely trail through the woodlands at the left has only a couple of moderately steep places. Either way, once you reach the top the views of the bridge and Caterpillar Hill are rewarding.





The view from the top of the quarry was once predominantly cleared farmland. Today the climb takes you past several of the large white Pines which give the hill its name. White spruce and northern white cedar line the trail.



The unique geologic features and plant and animal - and human - responses here give a perspective on time worth pondering.



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Photo Credits

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