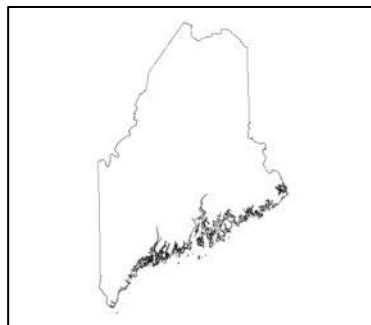


Maine Geologic Facts and Localities
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How much snow is out there anyway?



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Introduction

Each winter the Maine Geological Survey participates in a survey to monitor Maine's snowpack. On schedule, staff of the Maine Geological Survey visit specific sites across the State to measure the depth and water content of the snow on the ground. The sites have been carefully selected according to their slope, tree cover, and exposure to wind and sun direction so that they are free of local effects such as drifting and excessive melting.



Snow Survey Methods

Marc Loiselle, a hydrogeologist with the Maine Geological Survey, is shown here measuring the depth and water content at a site. A calibrated hollow tube is pushed down through the snow to the ground. The snow depth can be read on the outside of the tube.

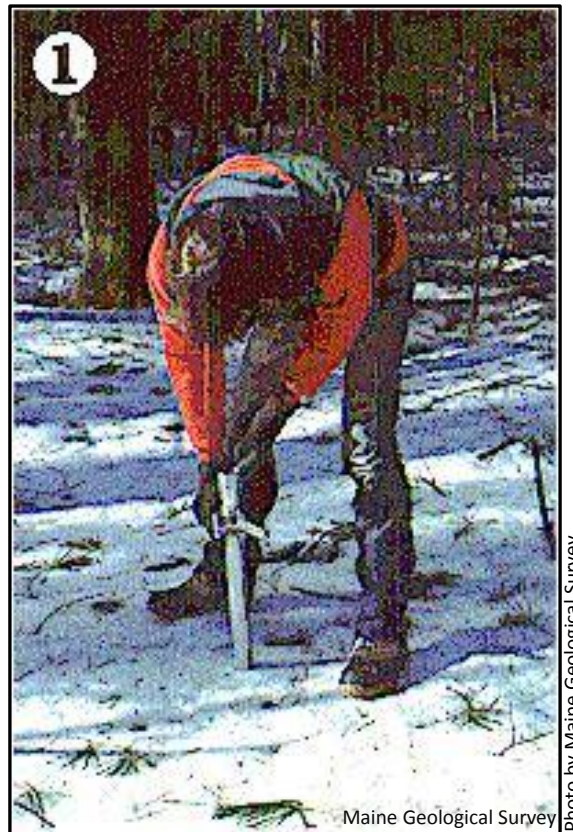


Figure 1. Marc Loiselle demonstrates step 1.

Snow Survey Methods

The tube, with snow still inside, is pulled up and weighed with an instrument resembling a fish scale. Its weight indicates the water content, which is much greater for compact, icy, refrozen snow than for new, light, fluffy snow.

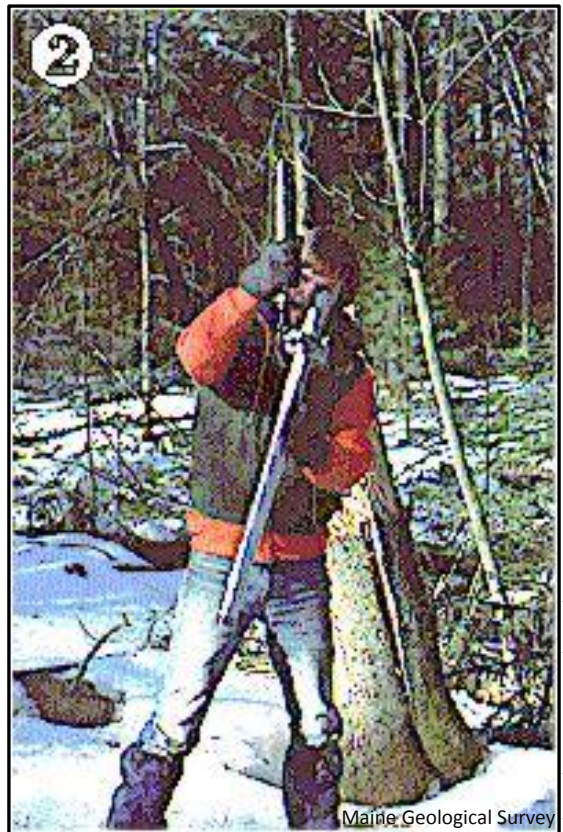


Figure 2. Marc Loiselle demonstrates step 2.

Snow Survey Methods

About ten such measurements are taken at each 1-acre site and recorded in a notebook. Results are compiled at the Maine Geological Survey and analyzed on a GIS computer mapping system.

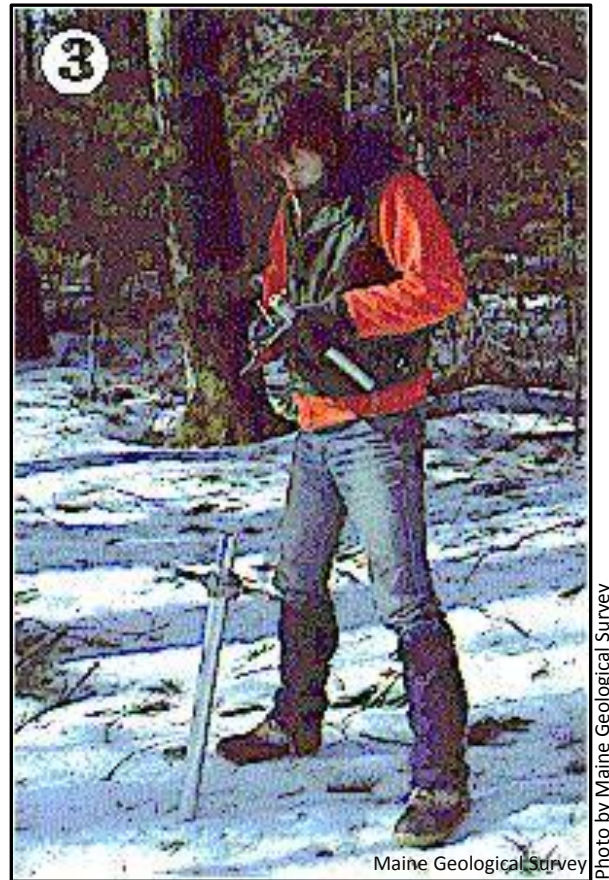


Figure 3. Marc Loiselle demonstrates step 3.

Snow Survey Methods

Snow surveys are done about every two weeks from late February to mid-April when there is greatest danger of flooding from snowmelt. The state snowpack maps are issued within days of each survey so that dam operators can regulate water levels and emergency officials can be prepared for flood hazards. This is a collaborative effort involving agencies of federal, neighboring state and provincial governments, and private industries.

Snow survey maps may be viewed at the [Maine Emergency Management Agency website](#).

