

Monitoring Vegetation Change at Craters of the Moon

Visitors to Craters of the Moon National Monument, Idaho, are typically struck by the barren, seemingly lifeless panorama that engulfs them. No doubt their first thought is that the area is aptly named. Although once a dynamic area (the last volcanic eruptions probably occurred about 2,000 years ago), to the casual observer little, if any, ecological or geological change seems to be now taking place. The landscape and vegetation appear at first glance to be both timeless and stable. Indeed, early ecological research on plant succession on the younger lava flows supported this viewpoint.

Things are not, however, always as they appear. Recent changes in the densities of one of the major plant species, limber pine, on the numerous cinder cones of the monument have been dramatic. Increases in the densities of limber pine of up to 4% a year in some areas have been documented in a study by the Cooperative Park Studies Unit (CPSU) at the University of Idaho (UI) which is examining vegetation change in the monument.

This study was prompted by the discovery of a detailed set of old photographs taken by Robert Limbert during his 1922 exploration of the area. The sites of the original photos were located, which permitted retaking of an exact duplicate of Limbert's photos. These sites have become part of a network of permanent photo points being established in the monument. Comparative photographs taken at different times provide one of the easiest, and, in many ways, one of the most exciting and rewarding ways to monitor ecological change. The UI study has since been involved in an extensive search for other old photos which will allow the monitoring effort to be expanded. This, in itself, is a rewarding endeavor. It is always amazing how much old photo documentation is available on National Park System areas, even those as isolated as Craters of the Moon.

We hope to publish a complete report of this work by the end of the year. We also hope to incorporate our results into the park's interpretive program to help explain the concept of global ecological change. Our belief is that the visiting public does not give much thought to the fact that ecosystems change. We hope to make this point clearer by illustrating that change does occur, even in the seemingly timeless landscape of Craters.

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1922 Photograph by Robert Limbert



1988 Photograph by Gerald Wright