



## Southern Idaho

The southern fringe of the Columbia Plateau contains some of the youngest lava flows in the Pacific Northwest. Along a line running from the California-Oregon border through southern Idaho to the Yellowstone National Park area, volcanism has created a very distinctive landscape.

The Snake River Plain has been proposed as a new category of volcanic landscape, a basaltic plains flow. This transitional feature is intermediate between the relatively flat plateau flood basalt and Hawaiian shield volcanism characterized by dome-shaped volcanoes. This new category of terrain is characterized by low-relief shield volcanoes and lava flow from point sources rather than linear fissures.

The Snake River flows out of western Wyoming (right-center side of image) and across the Snake River Plains. These plains, which appear as greenish-grey, contain a vast series of lava flows of Tertiary to Quaternary age. The relative ages of the lava flows can be determined by variations in the color of these features. The color of the flows lightens as their surfaces weather. Thus, younger flows (upper right) show up as varying shades of dark blue, whereas older flows (left-center) take on a lighter grayish hue. A portion of the distinctive blue-black lava flow on the image is preserved as Craters of the Moon National Monument. It is part of a recent lava flow which occurred 3,000-5,000 years ago. Older volcanic rocks occur south and west of the Craters of the Moon (gray area).

On this image, one must be careful when differentiating recent lava flows from water bodies because both are dark blue. For example, note the large water body located on the Salmon River (right center), Lake Walcott Reservoir.

The highly-dissected terrain in the upper left is the edge of the Rocky Mountains. The obvious textural difference between the relatively smooth, flat valley and the rugged, mountainous terrain indicates that the two regions are composed of different rock types. The valley plains consist of basalt lavas whereas the mountains are made up of granites known as the Idaho Batholith.

The fertile farmland that occurs along the Snake River appears bright red. This bright red color indicates vigorous vegetative growth. This area is known for its production of Idaho potatoes. Other crops produced in this area include corn, beans, beets, alfalfa, barley, and wheat. Most agricultural activity requires irrigation because the area receives limited precipitation. Contrast the bright red area along the Snake River with the darker red that occurs in the mountainous region on this image. The darker red colors are areas of Douglas Fir, spruce, and Ponderosa Pine.

This false color image was taken on August 27, 1972, using the Multi-Spectral Scanner (MSS). The scene I.D. is 1035-17525.

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