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Air Photo Interpretation
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The Highlands region of New Jersey and New York is shown here in the upper half of the image (1). The Highlands region is mostly underlain by metamorphic and igneous rock, and is oriented southwest to northeast. It varies in elevation from its broad, flat-topped ridges and its narrow, deep valleys. The highest elevation is 1,496 feet between Vernon and Canistear in Sussex County, New Jersey. The dominant land cover for this region is deciduous forest, so the leaves here show their color sooner than the lower elevation areas south of the highlands. The orange hue of the region in the photo comes from the trees' autumn reds and yellows. The distinct line (2) separating the highlands region from the piedmont region south and east is the Ramapo fault. The New York City Metropolitan area can be seen at the bottom of the photo (3), as well as the Hudson River (4), narrowing and winding as it cuts through the Highlands.

The Highlands are a unique physiographic province of New Jersey. They have a different climate and are underlain with different bedrock than the rest of the state. This causes changes in their plant community, primarily by climate. Climate changes with elevation through adiabatic cooling, the change in the condensation point of water. As one ascends, climate changes as if the area was at greater latitude. At higher latitudes, plants are under greater stress because they suffer colder temperatures and decreased sunlight. This stress causes deciduous trees at higher elevation and higher latitudes to drop their leaves sooner than deciduous trees closer to the equator or at a lower elevation. This photo shows the delineation of the Highlands physiographic region of the Mid-Atlantic States, as well as two characteristics of that region, deciduous forest land cover and higher elevation.