



APPALACHIAN VOICES

Bringing People Together To Protect the Land, Air, Water and Communities of the Southern Appalachians

UPDATE: Extent of Mountaintop Mining in Appalachia as of 2008

Summary: A new study by Appalachian Voices shows that 10% of the Central Appalachian region has been surface mined for coal and more than 500 mountains have been severely impacted or destroyed by mountaintop removal coal mining.

Previous assessments: Satellite-based mapping studies by Appalachian Voices in 2006 and by SkyTruth in 2007 resulted in total surface mining figures ranging from 750,000-800,000 acres in Central Appalachia. Quality control analysis of these studies, however, demonstrated that a significant proportion of mining was missed. Appalachian Voices' 2006 study also sought to determine how many mountain peaks and ridges have been lowered or destroyed due to mountaintop removal mining in Appalachia. Using a consistent methodology and definitions, 474 mountain ridges and peaks were identified as having been lowered by a minimum of 50 feet and in some cases as much as several hundred feet.

Study methodology: In early 2009, Appalachian Voices initiated a new study in an attempt to arrive at more current figures to within 95% confidence. High resolution aerial imagery from the USDA National Agricultural Imagery Program (NAIP) from the period of 2006-2008 was used to digitize surface mines from 60 sample plots selected at random from within the region. This area represented 3% of the total surface mining region and was digitized to 95% accuracy or better. This sample was used to extrapolate figures based on the 2006-2007 data.

Results: We found that **one in every ten acres of the study region has been surface-mined**. In some areas, this figure is much higher. For example, in Wise County, Virginia, intensive surface mining occurs on nearly 40% of the land area. All told, nearly **1.2 million acres** of land have been mined in the region. In terms of mountain peaks, **more than 500 mountains have now been severely impacted by mountaintop removal**. Below is a state-by-state breakdown of study results:

	<u>Acres affected</u>	<u>Mountaintops affected</u>
Kentucky	574,000 acres	294 mountains
Tennessee	78,000 acres	6 mountains
Virginia	156,000 acres	64 mountains
West Virginia	352,000 acres	136 mountains
TOTAL	1,160,000 acres	500 mountains

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