Detecting Gypsy Moth Defoliation in Virginia and West Virginia

IGETT NSF

Topic: Environmental management, invasive species

Problem Statement: Gypsy moths have defoliated large tracts of forestland in Virginia and West Virginia, resulting in a significant loss in the value of the forests. Because of their remoteness, many of the affected areas remain undetected.

Level: Intermediate/advanced

Software: ArcGIS and ENVI

Description: Students use satellite images to identify the forest defoliation caused by gypsy moth larva. The project study area covers the highland mountain areas of Virginia and West Virginia in the 2001 growing season, as both satellite images and other proof of defoliation are available for that year.

Key words: gypsy moth, invasive species, forest defoliation, forest health, forestry, Blue Ridge Parkway





