

Biodiversity Analysis of Vegetation on the Nevada Test Site

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The Nevada Test Site (NTS), located in south-central Nevada, encompasses approximately 3,500 square kilometers and straddles two major North American deserts, Mojave and Great Basin. Transitional areas between the two desert types have been created by gradients in elevation, precipitation, temperature, and soils. From 1996 to 1998, more than 1,500 ecological landform units were sampled at the NTS for numerous biotic and abiotic parameters. The data provide a basis for spatial evaluations of biodiversity over landscape scales at the NTS. Biodiversity maps (species richness vs. species abundance) have been produced. Differences in biodiversity among ecoregions and vegetation alliances are presented. Spatial distribution maps of species' presence and abundance provide evidence of where transition zones occur and the resulting impact on biodiversity. The influences of abiotic factors, such as elevation, soil, and precipitation, on biodiversity are assessed.