Frasera pahutensis – Pahute green gentian Family: Gentianaceae (gentian)



Bloom Period: May-July

<u>Perennial</u>: No woody stems aboveground (herbaceous), 5-10 stems from a woody underground taproot, forms colonies

Leaves: 2-4 inches long oblanceolate basal leaves with a white margin, margin is somewhat wavy to scalloped

<u>Flowers</u>: Greenish/white to pale blue flower, flecked with dark purple and bluish stripes

Fruit/seed: Small, greenish pods ~0.5 inches with a pointed top that opens to release ~9 linear, orange-brownish seeds

<u>Uniqueness</u>: The plant only grows in Nye County, Nevada (endemic)

Location it was first identified (type locality): One mile east of Pahute Mesa Road, on the 19-01 Road, at headwaters of Lamb's Canyon, south rim of Pahute Mesa, Kawich Valley drainage, NNSS, Nye County, NV (Beatley & Reveal 1968)

Associated Vegetation: Pinyon pine, juniper, sagebrush

Clonal Colonies

Pahute green gentian forms colonies of 8-20 plants that are vegetative clones from a parent plant. Clonal plants are genetically identical to the parent plant which causes low genetic diversity within the population. The species can also reproduce sexually (pollination between plants), which increases genetic diversity, but the species most likely relies more on clonal reproduction.







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Habitat: Deep, loose, sandy or sandy-rocky soils; gravelly slopes and valley bottoms; gravelly volcanic soil derived from rhyolite tuff; also can colonize disturbed areas adjacent to undisturbed source populations

Distribution: NV (Nye County)

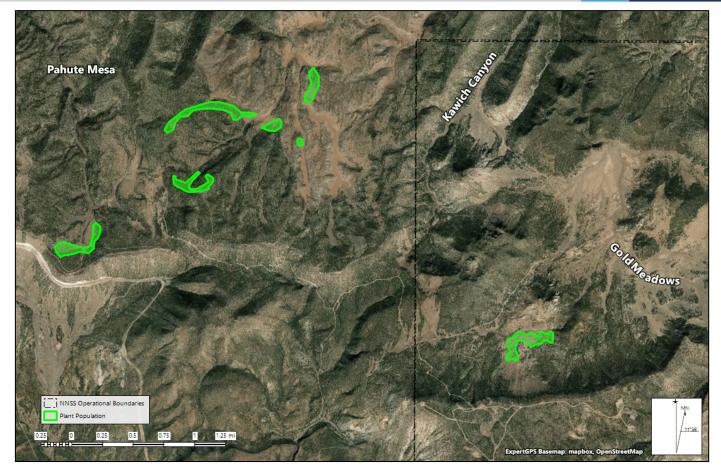
Elevation: 7,030-8,400 feet

<u>Threats on the NNSS</u>: Threats associated with underground nuclear testing (e.g., road cuts, land clearing) are no longer a concern; the species is adapted to deep, loose soils allowing it recolonize recently disturbed areas such as roads, but this requires an adjacent undisturbed source population; currently no known human threats

Protection Status (NV): No federal or state protections. Listed on the Nevada Division of Natural Heritage At-Risk Plant and Animal Tracking List and the Nevada Native Plant Society Watch List (<u>https://heritage.nv.gov/documents/ndnh-current-tracking-list</u>)

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Distribution on the NNSS: Pahute Mesa, Rainier Mesa (Gold Meadows); ~95 acres of habitat

Current Monitoring Goal: No current human threats; survey subset of populations once every 5 years

Contact 702-295-0393 if your activity might potentially impact this sensitive species