**Date Prepared:** June, 2002

**Species Common Name:** Shockley's Ivesia

**Species Scientific Name:** *Ivesia shockleyi* Wats.

**Suspected or Documented Occurrence on USFS Region 6 National Forests:**

Fremont National Forest: Documented

**Description:**

Stems 0.3-1 dm long; herbage pallid, densely glandular-puberulent, more or less hispid; leaves 0.2-0.7 dm long; leaflets 7-10 pairs, crowded, 1.5-3mm long, divided to base into 2-5 oblanceolate to rounded segments; cyme open, few-flowered, with filiform pedicels; flower tube disciform, yellow within, about 2.5 mm across; bractlets lance-oblong to ovate, very short; sepals 1.5-3.5 mm long; petals pale yellow, oblanceolate to oval, shorter than sepals; filaments linear-subulate, about 1 mm long; pistils usually 3; achenes brown, 2-2.5 mm long (Rittenhouse, 1991).

Stems subscapose from a densely cespitose caudex, glandular-pubescent, 2-10 cm high. Basal leaves numerous, 2-6 cm long; leaflets 8-12 pairs, crowded, 2-4 mm, long, cleft to the base into several obovate thick segments, densely glandular-pubescent and with a few scattered cilia, bristle-tipped; cyme open; hypanthium 3 mm broad, glandular-pubescent; sepals ovate, twice the length of the ovate bractlets; petals about equaling the sepals; stamens 5 (Abrams, 1990).

Field Characteristics: The identifying characteristics that separates Shockley's Ivesia from other Ivesia's is its open cyme, and the number of leaflet pairs (Rittenhouse, 1991).

Look Alikes: Other species occurring on the Lakeview Ranger District that look similar to Shockley's Ivesia are *Ivesia gordonii* and *Sibbaldia procumbens.* Both of these species occur in the same general area and habitat. *I. gordonii* has a tight capitate inflorescence while *I. shockleyi* has an open inflorescence. *Sibbaldia procumbens* has flowers, which are similar to *Ivesia* species but has leaves that somewhat resemble a strawberry (three leaflets) (Rittenhouse, 1991).

**Habitat and Distribution:**

Habitat: Shockley's Ivesia is high elevation (8,000-13,000 feet), and occurs in rocky and gravelly areas. The habitat for the population on Drake Peak is a rocky, scree area at the edge of a large cliff on the northeast slopes.. The elevation of this population is approximately 8,100 feet. Other habitat exists along the rocky ridge from Twelvemile Peak to the summit of Light Peak. This area was surveyed in 1991, but no plants were located (Rittenhouse, 1991). Another area of potential habitat is the rocky ridgetop of

Slide Mountain on the Paisley District. This elevation is only 7,700 feet at the top, so it may not be high enough, but potential habitat is present.

Distribution: The only population on the Fremont National Forest is located in the Lakeview Ranger District along the northeast slope of Drake Peak at the edge of a large rocky cliff. The population size is 2.81 acres.

Species wide, the range is described as in the Sierra Nevada and White Mountains from Placer to Inyo Counties. The population in Lakeview is either a relic population when this species had a much broader range, or is a new population that has somehow established itself here (Rittenhouse, 1991). However, since the seeds of this species are wind dispersed, the latter is highly unlikely.

**Abundance:**

Since this species only occurs in one location in Oregon, and is disjunct from the main range of the species, Due to this reproductive separation from the main population, speciation could occur after a long period of isolation resulting in a new species

Currently, there are no known threats to this species. Potential habitat (Light Peak, Slide Mountain and Crane Mountain front) should be surveyed for additional populations.

North Warner Mountains, 0.3 km E, NE of the summit of Drake Peak: it was on an exposed ridgeline above the head of Mapes Creek.
T38S, R22E, Section 3, SWNW and NWSW.
Elevation is 8170 feet, Slope 0-50 percent, Exposure: all.
Population covered approximately 3 acres when surveyed on August 16, 1985. The surveyors found 200-250 plants on an exposed ridgeline in bedrock soil. The vegetation type was stunted *Pinus albicaulis* and *Purshia tridentata*. Associated species (in order of abundance) were *Pinus ponderosa* (stunted), *Artemisia arbuscula, Poa sandbergii, Festuca idahoensis, Erigeron comopositus, Polemonium pulcherrimum, Senecio canus, Eriogonum umbellatum,* and *Penstemon davidsonii.* The population seemed to be stable. The majority of the plants found were in flower.

**Phenology:**

Shockley's Ivesia flowers beginning in mid- to late-July until sometime in August. To determine this species from other *Ivesia* species, it should be in flower.

**Habitat Associations:**

Associated species include *Galium serpenticum, Haplopappus macronema* var. *macronema, Erigeron compositus, Senecio canus, Polemonium pulcherrimum, Heuchera Cylindrica* var. *alpina, Leptodactylon pungens,* and *Pinus albicaulis.*

**Threats/Potential Impacts of Management Activities:**

Timber Harvest. The habitat is basically non-commercial timber land and the population is in a semi-primitive roadless area where no timber harvest is likely to occur.

Grazing: The habitat for this species is inaccessible to cattle and a long distance from water sources. Therefore, grazing by domestic livestock should not be a threat to this species.

**Mechanisms Providing for Species Conservation and Protection:**

The development of a conservation strategy should be included as a budget item to commence fiscal year 2003. Implementation will depend upon actual allocation of budgeted dollars.

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**References:**

Abrams, Leroy. 1990. Illustrated Flora of the Pacific United States, Washington, Oregon, and California, Volume II. Stanford University Press, Stanford, California. pg. 427.

Rittenhouse, Bruce. 1991, October 16. Status Report for *Ivesia shockleyi* on the Lakeview Ranger District, Fremont National Forest.

Shockley’s Ivesia