

WESTERN SEEP FRITILLARY
(*SPEYERIA NOKOMIS*)

Navajo/Federal Statuses: NESL G3 / not listed under the ESA.

Distribution: Range extends across eastern UT, western CO, and northern AZ and NM. On Navajo Nation, known from <10 populations in Chuska Mountains and Defiance Plateau: Tsaille, Wheatfields, Whiskey Creeks, and two springs near Washington Pass; potential throughout Chuska Mountains and Defiance Plateau where appropriate habitat is present.

Habitat: Perennially wet meadows associated with seeps, springs, and streams variable in size (0.1 ha to >1.2 ha), relatively open, and dominated by grasses and with few shrubs. Violets (*Viola nephrophylla*), found in wet soils in shady areas beneath shrubs or within stream banks, are a necessary component of habitat as the host plant for larvae.

Similar Species: Atlantis fritillary (*S.atlantis*) very similar, but slightly smaller with darker upperside of wings; typical habitat is non-meadow streamsides, more enclosed with shrubs.

Phenology:

- 1.JUL-e.SEP: adult stage¹, mating/egg-laying
- 1.AUG-l.SEP: eggs hatch 12-24 days, larval stage
- e.SEP-e.MAY: larval diapause (overwintering stage ≥8 months)
- e.MAY-l.JUL: larval growth and pupation to adult
- ¹males emerge 1-2 weeks before females

Survey Method: ≥1 pedestrian survey for adults during 1 AUG-1 SEP; habitat evaluation may be done year-round.

Avoidance: No surface disturbance year-round within 60 m of occupied habitat; and upstream activities that impact water quantity and chemistry.

References:

- Hammond, P.C. and D.V. McCorkle. 1983. The decline and extinction of *Speyeria* populations resulting from human environmental disturbances (Nymphalidae: Argynnninae). *Journal of Research on Lepidoptera*, 22:217-224.
- Tilden J.W. and A.C. Smith. 1986. A field guide to western butterflies. Peterson Field Guide Series, No.33. Houghton Mifflin Co., Boston. (description, p.80)
- Vanderhorst, J.P. 1997. Element Stewardship Abstract, *Speyeria nokomis nokomis*. The Nature Conservancy.