

- 1. Species:** White-veined arctic butterfly (*Oeneis bore*)
- 2. Status:** Table 1 summarizes the current status of this species or subspecies by various ranking entity and defines the meaning of the status.

Entity	Status	Status Definition
NatureServe	G5	
CNHP ^a	S3	
Colorado State List Status	NONE	N/A
USDA Forest Service		
USDI FWS ^b		
USDI FWS Critical Habitat	None	No occurrence of designated critical habitat within the planning area.
^a Colorado Natural Heritage Program.		
^b US Department of Interior Fish and Wildlife Service.		

The 2012 U.S. Forest Service Planning Rule defines Species of Conservation Concern (SCC) as “a species, other than federally recognized threatened, endangered, proposed, or candidate species, that is known to occur in the plan area and for which the regional forester has determined that the best available scientific information indicates substantial concern about the species' capability to persist over the long-term in the plan area” (36 CFR 219.9). This overview was developed to summarize information relating to this species' consideration to be listed as a SCC on the Rio Grande National Forest, and to aid in the development of plan components and monitoring objectives.

3. Taxonomy

Genus/species *Oeneis bore* (Esper 1789) is accepted as valid (ITIS 2016).

4. Distribution, abundance, and population trend on the planning unit [12.53.2,3,4]:

There is one record from the planning unit, in Hinsdale County on the north flank of Rio Grande Pyramid peak. It was discovered in 1996 during surveys for the Uncompahgre fritillary butterfly.

Table 2. Known Occurrence Frequency within the Planning Area (NRIS database)

Known Occurrences in the past 20 years	1
Year Last Observed	1996

5. Brief description of natural history and key ecological functions [basis for other 12.53 components]:

This species nests and feeds on grasses and sedges, typically in or near wet tundra or alpine bogs. Eggs are laid on dead leaves near grass and sedge food sources, the caterpillars require two years to reach maturity, hibernating overwinter as caterpillars twice during that time. Eggs are laid every-other year.

This species survives this far south on relict high-altitude tundra areas, further north it is more common on arctic tundra, even at low elevations.

6. Overview of ecological conditions for recovery, conservation, and viability [12.53 7, 9?, 10, 11, 12]:

This species is dependent on grasses and sedges growing on or near wet tundra bogs near tundra. On this unit all tundra is alpine tundra but the species is also found much further north on arctic tundra.

7. Threats and Risk Factors

As with many tundra relict species, climate change could be a threat – as temperatures warm, species can move north or uphill to cooler refuges. In the case of species that exist on tundra in the southern Rockies, moving uphill is not an option as local populations already only survive on mountain tops. It is possible that warmer temperatures could lead to a loss of alpine tundra on the GMUG. In this case, the Yellow-dotted alpine could be lost from the forest, although additional populations could continue to survive further north.

Additionally, this species is dependent upon monocot species – grasses, sedges, and rushes. Any actions that displace those species in favor of woody species or forbs could be a threat to this species.

8. Key literature:

Lotts, Kelly and Thomas Naberhaus, coordinators. 2016. Butterflies and Moths of North America. <http://www.butterfliesandmoths.org/> (Version 13 April 2016).

NatureServe. 2015. An online encyclopedia of life. Accessed online at: <http://explorer.natureserve.org/index.htm> [07/06/2015].