

-State Species Abstract-
-Wyoming Natural Diversity Database-

ELYMUS SIMPLEX VAR *LUXURIANS*
DUNE WILDRYE
Family: Poaceae

Status:

US Fish & Wildlife Service: None.
Agency Status: None.

Heritage Rank:

Global: G4?QT? State: S1
WYNDD Plant List: State Endemic
Very High Wyoming Significance

Description: Dune wildrye is a strongly rhizomatous, perennial grass with bluish herbage, often tinged with purple on the extremities. The 1.5 to 9 dm tall culms are mostly erect. The sheaths are hairless, and the old sheath bases are papery. The 1 to 4 mm wide blades are firm, usually rolled in at the margins, and hairless or with fine short or long hairs. The ligule is 0.3 to 0.5 mm long, squared off, and fringed with hairs. The spike is 6 to 20 cm long and up to about 8 mm wide, with a continuous rachis. The 11 to 25 mm long, 3 to 10 flowered spikelets are solitary or occasionally in pairs at some or all nodes of the rachis, and are usually slightly overlapping. The spikelets, including awns, are mostly 18 to 30 mm long. The rachilla is often elongate and visible between the florets. The glumes are mostly subequal, 5 to 16 mm long, rounded to somewhat keeled, nerveless or 1 to 3 nerved, and awn-tipped or with awns about 3 mm long. The 7 to 11 mm long lemma is hairless or occasionally has fine, short hairs and is tapered to an awn that is usually 7 mm or more long. (Dorn 2001, Welsh 1993, Cronquist 1979)

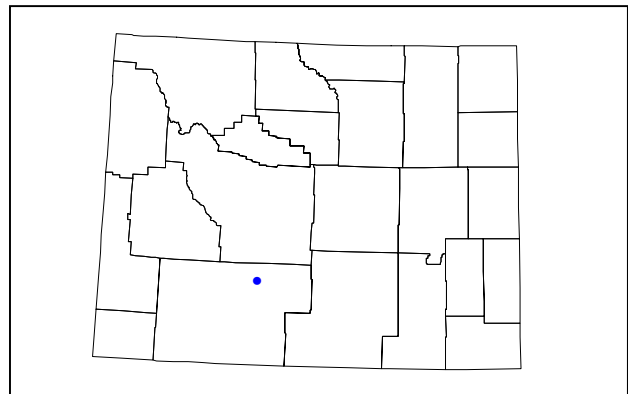
Similar Species: The spikelets of *Elymus simplex* var *simplex*, including awns, are mostly 10-18 mm long. The awn of the

lemma is usually 6 mm or less long. Cronquist et al. (1977) do not recognize these as distinct taxa. *Elymus salinus* and *E. triticoides* have lemmas with no awns or awns less than 2 mm long. *E. triticoides* also has mostly flat blades and spikelets that are usually paired at each node of the rachis.

Flowering/Fruiting Period: Flowering and fruiting occur throughout the summer months.

Distribution: The rangewide distribution of *Elymus simplex* var *luxurians* is only known from Sweetwater County, in the upper Green River basin.

Habitat: *Elymus simplex* var *luxurians* occurs in drifting sand dunes at 7130 feet.



Wyoming distribution of *Elymus simplex* var *luxurians*

Occurrences in Wyoming: There are two confirmed specimens, one representing a historical collection (1901) that cannot be relocated, and the other a 1960 collection that was more recently revisited.

Abundance: Not known. Populations may be locally numerous on sand dune habitats, but reliable census information is lacking.

Trends: Not known.

Protection status: Not known.

Threats: May be impacted by recreational activities in sand dune habitats. Effects of grazing on this rhizomatous species are not known.

Managed Areas: May occur on lands managed by the BLM Rock Springs Field Office. Potential habitat may exist in the BLM Rawlins Field Office District and Ashley National Forest (Flaming Gorge NRA).

References:

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