

**Species:**

Scientific Name *Fritillaria gentneri*  
 Common Name **Gentner's fritillary**  
 Taxonomic Group Vascular Plant  
 Geographic Area SW Oregon

**Index Result:**

**Less Vulnerable**  
**Confidence Moderate**  
 (based on entered data)  
 Date Assessed 5/27/2015  
 GRank G1  
 SRank S1  
 Assessor Lindsey Wise

Cave/Ground Water Obligate: No  
 Migratory area included in assessment: No

**Climate Change Vulnerability Index Values:** (greatest score shown when range was selected)

| Category  | Factor  | Score | Comments |
|---|---|-------|----------|
| Temperature Scope<br>(predicted increase)   | A >6.0F   | 0     |          |
|   | A 5.5F  | 0     |          |
|   | A 5.1F  | 0     |          |
|   | A 4.5F  | 0     |          |
|   | A 3.9F  | 5     |          |
|   | A <3.9F   | 95    |          |
| Hamon AET:PET Moisture<br>Metric Scope  | < -0.119  | 0     |          |
|   | -0.119  | 0     |          |
|   | -0.096  | 60    |          |
|   | -0.073  | 40    |          |
|   | -0.05   | 0     |          |
|   | >-0.028   | 0     |          |
| Sea level rise<br>Natural barriers<br>Anthropogenic barriers<br>Climate Change mitigation   | B1  | N     |          |
|   | B2a   | N     |          |
|   | B2b   | SI    |          |
|   | B3  | SI    |          |
| Dispersal/Movement<br>Historical thermal niche<br>Physiological thermal niche<br>Historical hydrological niche<br>Physiol. hydrological niche<br>Disturbance dependence<br>Ice/snow dependence<br>Physical habitat restrictions<br>Other spp create habitat<br>Dietary Versatility<br>Pollinator Versatility<br>Other spp for dispersal<br>Pathogen sensitivity<br>Competition sensitivity<br>Interspecific Relationship<br>Measured genetic variation<br>Bottlenecks<br>Plant reproductive system<br>Phenological response | C1  | Inc   |          |
|   | C2ai  | Inc   |          |
|   | C2aii   | N     |          |
|   | C2bi  | U     |          |
|   | C2bii   | SI    |          |
|   | C2c   | N     |          |
|   | C2d   | N     |          |
|   | C3  | N     |          |
|   | C4a   | N     |          |
|   | C4b   | U     |          |
|   | C4c   | N     |          |
|   | C4d   | N     |          |
|   | C4e   | U     |          |
|   | C4f   | U     |          |
|   | C4g   | U     |          |
|   | C5a   | U     |          |
|   | C5b   | U     |          |
|   | C5c   | U     |          |
|   | C6  | U     |          |
|   | Documented response<br>Modeled change<br>Modeled overlap<br>Modeled protected areas | D1    | U        |
| D2  |   | U     |          |
| D3  |   | U     |          |
| D4  |   | U     |          |

**Additional Notes:**

Climate and precipitation data from Climate Wizard using the A1B emissions scenario and ensemble average general circulation model. Historical = past 50 years; Future = mid-century (2050s). Species data from ORBIC database. Assessment performed in conjunction with the Element Rank Calculator.

**References:****Data sources and notes:**

Range map created using ArcMap Minimum Mapping Boundary-Convex Hull on ORBIC element occurrence data. Climate and precipitation data from Climate Wizard using the A1B emissions scenario and ensemble average general circulation model: Historical = 1951-2006; Future = mid-century (2050s); Hamon AET:PET moisture metric (Hamon 1961).

Detailed definitions of criteria and methodology can be found in the documentation at <http://www.natureserve.org/conservation-tools/climate-change-vulnerability-index>

**Legend and Definitions:**

|                                 |
|---------------------------------|
| <b>Affect to Vulnerability:</b> |
| GI = Greatly increase           |
| Inc = Increase                  |
| SI = Somewhat increase          |
| N = Neutral                     |
| U = Unknown                     |

**Index Scores:**

|  |
|--|
| <p><b>Extremely Vulnerable:</b> Abundance and/or range extent within geographical area assessed extremely likely to substantially decrease or disappear by 2050.</p> <p><b>Highly Vulnerable:</b> Abundance and/or range extent within geographical area assessed likely to decrease significantly by 2050.</p> <p><b>Moderately Vulnerable:</b> Abundance and/or range extent within geographical area assessed likely to decrease by 2050.</p> <p><b>Less Vulnerable:</b> Available evidence does not suggest that abundance and/or range extent within the geographical area assessed will change (increase/decrease) substantially by 2050. Actual range boundaries may change.</p> <p><b>Insufficient Evidence:</b> Information entered about a species' vulnerability is inadequate to calculate an Index score.</p> |
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**Citation:**

Oregon Biodiversity Information Center. 2015. Climate Change Vulnerability Index assessment for Gentner's fritillary (*Fritillaria gentneri*). Institute for Natural Resources, Portland State University, Portland, OR.