

ATTACHMENT SS2

REGION 2 SENSITIVE SPECIES EVALUATION FORM

Species: <i>Drosera anglica</i> / English Sundew			
Criteria	Rank	Rationale	Literature Citations
1 Distribution within R2	A	<p>English Sundew occurs on the Bighorn and Shoshone National Forests on the Big Horn and Beartooth Ranges in Sheridan and Park counties, Wyoming. It was recently documented in Colorado for the first time, on the San Juan National Forest (Wolf et al. 2006).</p> <p>In Wyoming (R2), this species is found in peatland settings including floating bogs, swamps, and sedge meadows, with soils that are saturated or in very shallow standing water at 6200-8920 feet. Its habitat is rare in the state.</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> • Clark and Dorn 1979 • Dorn 2001 • Fertig 1997, 1998 • Heidel 2011 • Heidel et al. in progress • Lemly 2007, Lemly and Cooper 2011 • Jones and Fertig 1999 • Rocky Mountain Herbarium 2013 • Wolf et al. 2006 • WYNDD 2015
2 Distribution outside R2	C	<p><i>English sundew is known from Eurasia and Alaska to California, east to Idaho, Wyoming, Colorado, and the Great Lakes. In Wyoming, it is also known outside Region 2 on the Yellowstone Plateau, Jackson Hole area and Teton Range, in Park and Teton counties.</i> To a lesser extent, it can also occur outside of peatland settings in thermally-influenced wetlands of Yellowstone National Park (Whipple pers. commun. 2010).</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> • Gleason and Cronquist 1991 • Hitchcock and Cronquist 1964 • Marriott 1991 • Rocky Mountain Herbarium 2013 •
3 Dispersal Capability	D	<p>Dispersal vectors are not known.</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> • -

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<p>4 Abundance in R2</p>	A	<p><i>Populations are often reported to be locally abundant, at least within small areas of suitable habitat. Densities as high as 15-19 plants per square foot have been observed in favorable sites. English sundew is known from 26 extant occurrences in Wyoming (most recently in 2010) and 1 historical record including new sites in Yellowstone National Park (Lemly 2007, Lemly and Cooper 2011). Additional populations may occur along the Wyoming/Montana border in the Absaroka-Beartooth Wilderness though most of the largest suitable habitat has been surveyed. Most of the occurrences are in Region 2 on the Shoshone National Forest and two are on Bighorn National Forest. It is currently ranked S3 in Wyoming, and S1 in Colorado.</i> Confidence in Rank High</p>	<ul style="list-style-type: none"> • Fertig 1997 • Fertig 1998 • Lemly 2007, Lemly and Cooper 2011 • WYNDD 2015
<p>5 Population Trend in R2</p>	D	<p>Populations are likely to be stable, although trend data are not available. It may experience large fluctuations in numbers between years (Wolf et al. 2006).</p> <p>It is unknown whether the smallest population as found in Bighorn National Forest, with slightly over 20 plants, is a relict population in decline, or a recently-colonization.</p> <p>Confidence in Rank High</p>	<ul style="list-style-type: none"> • Heidel 2011 • Wolf et al. 2006
<p>6 Habitat Trend in R2</p>	AB	<p>Some areas of suitable habitat have probably been lost in the past century.</p> <p>Confidence in Rank Medium</p>	<ul style="list-style-type: none"> • -

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7 Habitat Vulnerability or Modification	B	The floating mat habitat of this species is sensitive to hydrological change in the watershed. During the drought years of the past decade, some of its floating mat habitat became anchored (Heidel personal observation). While numbers rebounded at the end of drought, this physical change could lead to successional change. Over-collection of this carnivorous plant for cultivation could be a potential problem. Known occurrences in Wyoming are protected in Grand Teton and Yellowstone National Parks, and the John D. Rockefeller Parkway. Three populations are in the Absaroka Beartooth Wilderness Area and the rest are on lands managed for multiple use by the Shoshone National Forest and Bighorn National Forest. More complete information on the threats and vulnerability of <i>Drosera anglica</i> habitat is presented by Wolf et al. (2006). Confidence in Rank High	<ul style="list-style-type: none"> • Clark and Dorn 1979 • Fertig 1998 • Jones and Fertig 1999 • Marriott 1991 • Wolf et al. 2006
8 Life History and Demographics	D	English sundew is a carnivorous, perennial forb. It traps, digests, and absorbs insects by the gland-tipped hairs on its leaves. Flowering and fruiting occur from July through August. It has dormant seeds, and over-wintering dormant buds, called hibernacula. Additional information on the species, including life history stages, population structure, longevity, mortality, and seed biology, are not available. Confidence in Rank High	<ul style="list-style-type: none"> • Hitchcock and Cronquist 1964
Initial Evaluator(s): Joy Handley, Bonnie Heidel and Scott Laursen Update Evaluator(s): Bonnie Heidel Update Evaluator(s): Bonnie Heidel			Date: February 20, 2002 November 22, 2011 February 13, 2013 February 2015

National Forests in the Rocky Mountain Region where species is KNOWN (K) or LIKELY(L)¹ to occur:

¹ Likely is defined as more likely to occur than not occur on the National Forest or Grassland. This generally can be thought of as having a 50% chance or greater of appearing on NFS lands.

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<u>Colorado NF/NG</u>	<u>Known</u>	<u>Likely</u>	<u>Kansas NF/NG</u>	<u>Known</u>	<u>Likely</u>	<u>Nebraska NF/NG</u>	<u>Known</u>	<u>Likely</u>	<u>South Dakota NF/NG</u>	<u>Known</u>	<u>Likely</u>	<u>Wyoming NF/NG</u>	<u>Known</u>	<u>Likely</u>
Arapaho-Roosevelt NF			Cimmaron NG			Samuel R. McKelvie NF			Black Hills NF			Shoshone NF	X	
White River NF						Halsey NF			Buffalo Gap NG			Bighorn NF	X	
Routt NF						Nebraska NF			Ft. Pierre NG			Black Hills NF		
Grand Mesa, Uncompahgre, Gunnison NF						Ogalala NG						Medicine Bow NF		
San Juan NF	X											Thunder Basin NG		
Rio Grande NF														
Pike-San Isabel NF														
Comanche NG														

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