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COMMENTS FROM DELMATIER

Draft Assessment Interdisciplinary Team
USDA, Bridger-Teton National Forest, Supervisor's Office
340 North Cache Street
Jackson, Wyoming 83001

August 13, 2025

RE: Proposed Changes for Plant Species of Conservation Concern, Draft Assessment, Update to 1990 Bridger-Teton National Forest (BTNF) Plan.

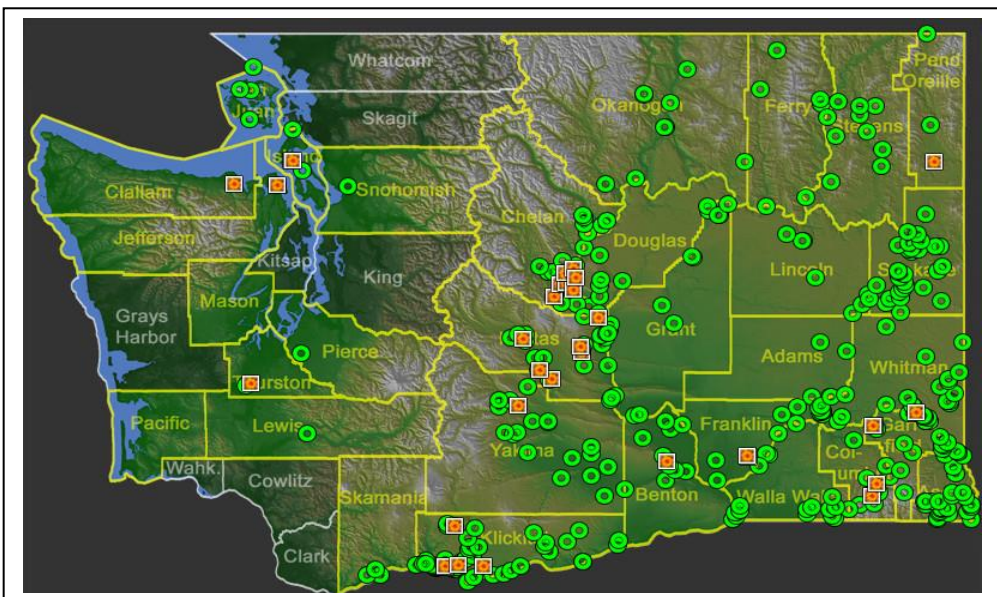
As with every Forest Plan Assessment, it is difficult to discern applicable criteria and concrete criticism that fit the needs and visions of a local and/or regional plan for multiple uses on specific public lands. As part of this large effort, I appreciate the opportunity to provide the following comments to support proposed changes to the BTNF list of plants considered for Species of Conservation Concern. Each federal agency, within its state or region, has a responsibility to oversee both immediate impacts and long-term solutions, and with an increase in multiple use issues, it is imperative to provide an integrated approach. For a large intermountain region of 34 million acres (USFS Region 4), BTNF oversees 3.4 million acres (10%). It is encouraging that BTNF is trying to align and integrate their forest responsibilities within Section 2(b) core purpose of the Endangered Species Act of 1973, as amended, [(ESA) (7 USC § 136, 16 USC § 1531 et seq.)] to conserve ecosystems. With the aid of public comment, federal agency personnel cooperation, and steered by a professional team, this comment period helps provide essential direction to protect and manage threatened, endangered, and sensitive species and their associated ecosystems. More importantly it will help establish crucial individual target objectives to offset impacts for critically imperiled species and from their possible extinction. The proposed list of only 14 plants represents a small sample size for the BTNF total management area with regards to its vast range in ecosystem and habitat variability from drier valley basins to fens to dry and wet valley and mountain meadows to mountain shrub communities to mixed coniferous forests to tall forb communities to fragile alpine environments. This makes it increasingly difficult to discern which conservation criteria support critical baseline information for the final decision-making process, which include but are not limited to degree of threat, local pressures to its population, flora and ecological contributions and sustainability, state and regional biological conservation contributions, cultural heritage, geological and hydrologic integrities, and important contributions to indigenous peoples.

Please accept this entire document as my official set of comments.

Proposed Change: Drop large-flowered triteleia (*Triteleia grandiflora*):

In general, the known distribution for the perennial large-flowered triteleia or blue-lily (*Triteleia grandiflora*) extends from western North America from north to south in British Columbia to California, and then extending eastward into Montana, Idaho, northern Utah, and western Wyoming (Flora of North America, FNA Vol. 26 Page 339,341, J. Chris Pires). For Wyoming, it is on the eastern periphery of its known range. As conservation concerns differ in each state, globally it is widespread and secure, with a ranking of G4/G5. It is not a state endemic (only occurring here) to Wyoming, nor even to this USFS Intermountain Region 4. There are other plants in the state that are specifically endemic to Wyoming and/or adjacent states and constitute a higher degree of rarity and responsibility. Additionally, large-flowered triteleia has a wider range in habitat than some of our more rare species. From Flora of North America (FNA Vol. 26 Page 339,341), author J. Chris Pires describes it as being found in grasslands, sagebrush, pinyon-juniper woodlands, pine forests and hills; from 100--3000 m.

In Washington, the Burke Museum Herbarium, University of Washington, author David Giblin generated a total distribution map for the state (below). The conservation status in Washington has been declared as one of no concern. Contributors to this assessment include Consortium of Pacific Northwest Herbaria, Oregon Flora, and E-Flora BC. Besides the above known habitats listed above, in Washington they also include prairies, grasslands, balds and forest openings, and areas that are seasonally dry.



Proposed Change: Add aromatic pussytoes (*Antennaria aromatica*).

Aromatic pussytoes (*Antennaria aromatica*) was first described by Erwin Evert in 1984 as a new Rocky Mountain alpine plant species (Evert 1984). The type locality is located approximately 15 road miles south of Red Lodge, Montana, along the Beartooth Highway (US 212), north of Quad Creek. Previously and since his discovery, there have been other locations documented in the northern Rocky Mountains. Aromatic pussytoes is usually restricted to subalpine and alpine limestone talus. A Rocky Mountain endemic, the majority of its distribution is known from Montana and Wyoming. It has been reported in adjacent Canada but not verified. There is only one known site in Idaho. The elevational gradient usually spans 8,000 to 10,800 feet. It is a low-growing perennial and can be distinguished from other common pussytoes with the presence of glands on the stem, leaves, and phyllaries (flowering head bracts). It also has a citrus/citronella scent when fresh leaves are crushed. Another distinguishing field characteristic is the terminal papery phyllary tips; which are usually tan to brown, sometimes whitish to light green. The shape of the basal leaves is often cuneate-spatulate and are covered with a gray pubescence as in many alpine plants. It stands no taller than three inches and each plant can house either female or male flowering heads. The staminate heads are smaller and darker in appearance, while pistillate heads are showier, somewhat whiter at the tips, and robust.

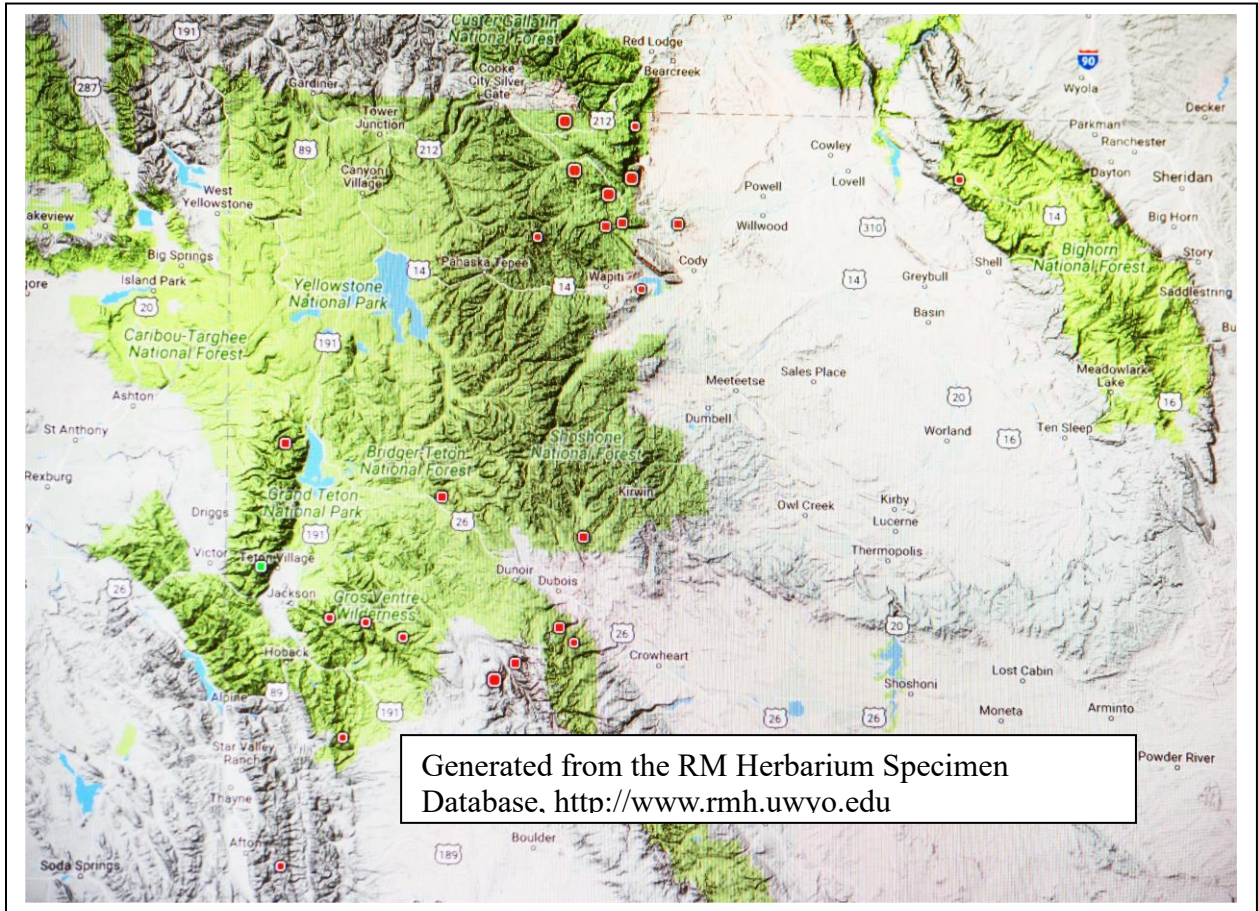
In his latest treatment of *Antennaria* in Flora of North America (FNA), Randall J. Bayer reports that it is “Known only from the northern Rockies, *Antennaria aromatica* is characterized by glandulosity, cuneate leaves, and odor of citronella in crushed leaves of living material. It is most closely related to *A. densifolia* of the Northwest Territories and Yukon (R. J. Bayer 1989c)”.

The number of individuals per population is undetermined, the number of remaining populations is decreasing, and the impact by climate change is currently an increasing ecological stressor. Adding to this group of limiting factors is an increase in human impact in alpine areas. Besides rising temperatures, changes in precipitation patterns are altering the life cycles of not only plants but their associated pollinators and fauna that depend on these ecosystems. The ability for an alpine ecosystem to recover is slow, difficult, and impacts last for many years (Brown et al. 1978; I. Auer et al. 2005).

The known distribution in Wyoming is limited to five counties (map below); Fremont, Lincoln, Park, Sublette, and Teton, (reported in Big Horn County). This

indicates two main clusters; Bridger-Teton National Forest and the Beartooth Range. In

Montana, there are two main clusters as well, just north of the Wyoming border continuing from the Beartooth Mtns into the Custer/Gallatin National Forest and then further north following the Rocky Mountains band into Flathead National Forest. Globally, Wyoming and Montana represent the main distribution.



For its continued existence in the wild, the populations in Wyoming and Montana have a high contribution rank to its survival and its intrinsic vulnerability needs to be reevaluated for future land management guidance. Alpine plant communities are located above tree line, highly distinguishable as mostly cushion plants, and are adapted to harsh high elevation solar radiation, high winds, and desiccation. These plant communities depend on annual snow accumulation, and with climate change, surviving with increased temperatures and changing annual total precipitation patterns, this is becoming increasingly challenging. With it being situated in an high alpine environment, endemic to Wyoming and Montana, and now with increasing human activity, this taxon needs to be treated as vulnerable until further determinations can be made.

Summary:

I am restricted, in time, to address other plant species on this list of 14, and ones that did not make the list by the deadline of August 24, 2025. Hopefully during the next public comment period, I can review and address other plant species as well.

For now, of the plant species included on the current list of 14, I recommend giving more scrutiny to those taxa that are endemic to Wyoming or to our region, and that have a higher conservation risk of surviving in the wild. By limiting the number of plant species to 14, it makes it difficult to offer responsible protection and management to those deserving to be included onto a larger list of vulnerable plant species.

Sidenote and Recommendation:

Conduct and promote an annual or biannual statewide status update of rare plant species to include stakeholders, academia, various interagency personnel, and the private sector. Historically, this is helpful with streamlining focus for both short-term and long-term land management decisions.

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