

SPECIES: Scientific [common]	<i>Hesperochiron californicus</i> [California Hesperochiron]
Forest:	Bridger-Teton National Forest
Forest Reviewer:	Rose Lehman
Date of Review:	1/25/2020; 3/27/2021
Forest concurrence (or recommendation if new) for inclusion of species on list of potential SCC: (Enter Yes or No)	No

FOREST REVIEW RESULTS:

1. The Forest concurs or recommends the species for inclusion on the list of potential SCC:
Yes___ No_X_
2. Rationale for not concurring is based on (check all that apply):
Species is not native to the plan area _____
Species is not known to occur in the plan area ___X___
Species persistence in the plan area is not of substantial concern _____

FOREST REVIEW INFORMATION:

1. Is the Species Native to the Plan Area? Yes X No___
If no, provide explanation and stop assessment.
2. Is the Species Known to Occur within the Planning Area? Yes ___ No X
If no, stop assessment.

Two occurrences outside Bridger-Teton National Forest in Green River Basin west of Fremont Lake.

Although the entirety of Bridger-Teton National Forest has not been floristically inventoried, some areas within and adjacent to Bridger-Teton National Forest have been surveyed over the years. This species was not documented during these survey efforts:

- Afton Front Research Natural Area Bridger-Teton National Forest (Fertig and Jones 1994a)
- Horse Creek Research Natural Area Bridger-Teton National Forest (Fertig and Jones 1994b)
- Swift Creek Research Natural Area Bridger-Teton National Forest (Fertig and Jones 1994c)
- Sensitive plant surveys and status of rare plant species on Bridger-Teton National Forest, 1997-1998 (Fertig 1999)
- Rare Species and Riparian Vegetation of the Snake River Basin in Wyoming (Jones et al. 2001)
- Survey for *Stephanomeria fluminea* on the Bridger-Teton National Forest (Markow 2004)
- Wyoming Plant Species of Concern on Caribou-Targhee National Forest: 2007 Survey Results Teton and Lincoln counties, Wyoming (Mancuso and Heidel 2008)
- A Floristic Inventory of Grand Teton National Park, Pinyon Peak Highlands, and Vicinity, Wyoming U.S.A (Kesonie and Hartman 2011)
- Blackrock Creek Wild and Scenic River Botany Survey (Johnson 2011)
- Sensitive and rare plant species inventory in the Salt River and Wyoming Ranges, Bridger-Teton National Forest (Heidel 2012)

- Teton to Snake Fuels Management Project Botany Report and Biological Evaluation (Englebert 2013)
- Botany inventories in select fens of the Caribou-Targhee and Bridger-Teton National Forests (Heidel 2019).

Table 1. All Known Occurrences, Years, and Frequency within the Planning Area

Year Observed	Number of Individuals	Location of Observations (USFS District, Town, River, Road Intersection, HUC etc.)	Source of Information
1995	Unknown	Outside BTNF: Green River Basin: ca 5.5 air mi N of Pinedale. Marshy grassy meadows.	Collector Thomas Cramer (Rocky Mountain Herbarium 2019)
2000	Unknown	Outside BTNF: Green River Basin: 1 mi W of Willow Lake Road. Dry meadow with hummocks and small to large depressions in dense, black clays.	Collector Charmaine Delmatier (Rocky Mountain Herbarium 2019)

a. Are all Species Occurrences Only Accidental or Transient?

Yes ___ No X

If yes, document source for determination and stop assessment.

b. For species with known occurrences on the Forest since 1990, based on the number of observations and/or year of last observation, can the species be presumed to be established or becoming established in the plan area?

Yes ___ No X

If no, provide explanation and stop assessment

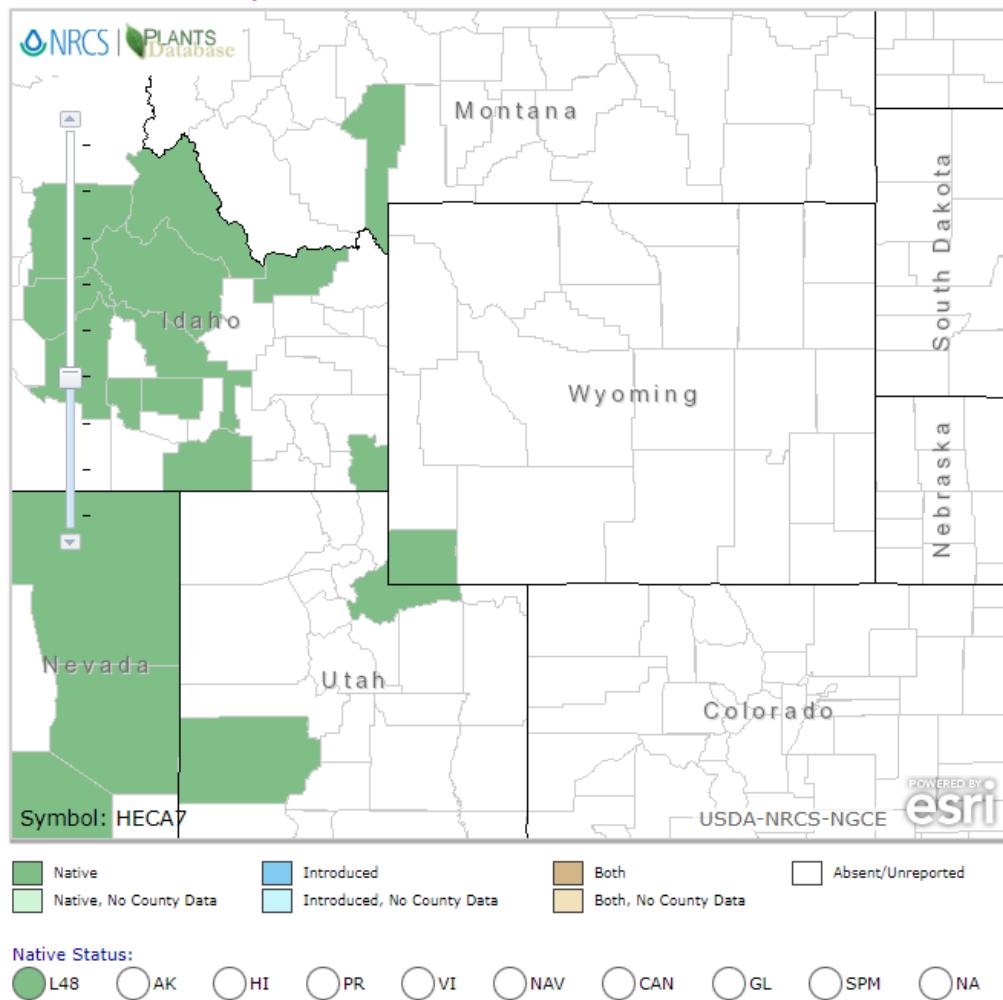
c. For species with known occurrences on the Forest predating 1990, does the weight of evidence suggest the species still occurs in the plan area?

Yes ___ No ___

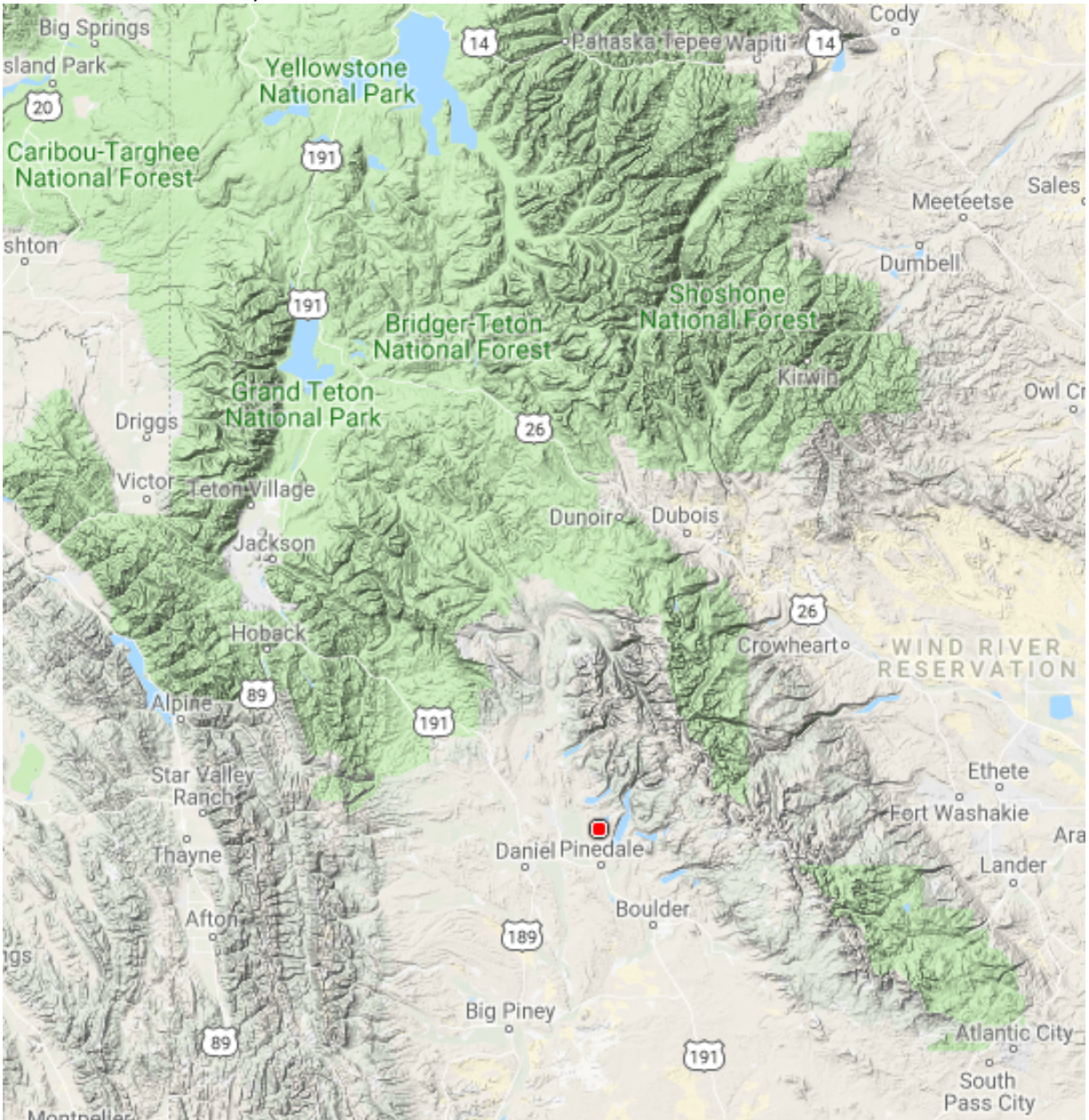
Provide explanation for determination

If determination is no, stop assessment

d. **Map 1.** *Hesperochiron californicus* range in Wyoming and surrounding states (NRCS 2019).



Map 2. *Hesperochiron californicus* occurrences in BTNF vicinity (WYNDD 2019; Rocky Mountain Herbarium 2019).



3. Is There Substantial Concern for the Species' Capability to persist Over the Long-term in the Plan Area Based on Best Available Scientific Information?

Table 2. Status summary based on existing conservation assessments

Entity	Status/Rank (include definition)
NatureServe Global Status	G4—Apparently Secure <i>Uncommon but not rare; some cause for long-term concern due to declines or other factors.</i>
NatureServe State Status	S1—Critically Imperiled At very high risk of extirpation in the jurisdiction due to very restricted range, very few populations or occurrences, very steep declines, severe threats, or other factors.
State of Wyoming	Plant Species of Concern <i>Species vulnerable to extirpation at the global or state level due to:</i> <i>a. their rarity (e.g., restricted distribution, small population size, low population density)</i> <i>b. inherent vulnerability (e.g., specialized habitat requirements, restrictive life history)</i> <i>c. threats (e.g., significant loss of habitat, sensitivity to disturbances)</i>
WYNDD	Peripheral Medium Wyoming Significance
USDA Forest Service	Not listed
USDOI FWS	Not listed
USDOI BLM	Not listed
IUCN	Note listed

Table 3. Status summary based on best available scientific information.

Criteria	Rationale
Distribution on the Bridger-Teton National Forest	No known to occur on the forest.

Criteria	Rationale
Abundance on the Bridger-Teton National Forest	Unknown.
Population Trend on the Bridger-Teton National Forest	Unknown.
Habitat Trend on the Bridger-Teton National Forest	Unknown.
Threats to the Species and its Habitat on the Bridger-Teton National Forest	Unknown.
Life history and demographic characteristics of the species	California hesperochiron is a low-growing perennial herb with a woody taproot. The 5-several flower stems are slightly shorter than the leaves, each with a single flower at the top. Flowering and fruiting period is from May to June. Range is from Washington to southern California, east to western Montana, western Wyoming and northeastern Utah.
Date: August 25, 2019 Reviewer: Julie Remp	

Summary and Recommendations

References

- Fertig, W. and Jones, G.P. 1994a. Establishment Record for Afton Front Research Natural Area within Bridger-Teton National Forest, Teton County, Wyoming. Prepared for the U.S. Forest Service.
- Fertig, W. and Jones, G.P. 1994b. Establishment Record for Horse Creek Research Natural Area within Bridger-Teton National Forest, Teton County, Wyoming. Prepared for the U.S. Forest Service.
- Fertig, W. and Jones, G.P. 1994c. Establishment Record for Swift Creek Research Natural Area within Bridger-Teton National Forest, Teton County, Wyoming. Prepared for the U.S. Forest Service.
- Fertig, W. 1999. Sensitive plant surveys and status of rare plant species on Bridger-Teton National Forest, 1997-1998. Report prepared by the Wyoming Natural Diversity Database, Laramie, Wyoming.
- Fertig, W. 2000. Status of Plant Species of Special Concern in US Forest Service Region 4 in Wyoming. Prepared for the U.S. Forest Service, by the Wyoming Natural Diversity Database, University of Wyoming. Laramie, WY.
- Heidel, B. 2012. Sensitive and rare plant species inventory in the Salt River and Wyoming Ranges, Bridger-Teton National Forest. Wyoming Natural Diversity Database. Laramie, WY.
- Heidel, B. 2018. Wyoming plant species of concern, March 2018. Wyoming Natural Diversity Database, Laramie, WY. Accompanied by Wyoming plant species of potential concern, with tables of additions and deletions.
- Heidel, B. 2019. Botany inventories in select fens of the Caribou-Targhee and Bridger-Teton National Forests. Report prepared for the USDA Forest Service – Region 4 by the Wyoming Natural Diversity Database - University of Wyoming, Laramie, Wyoming.
- Jones, G.P., R.S. Smith, W.F. Fertig, D.A. Keinath, M.L. Neighbours, L.A. Welp and G.P. Beauvais. 2001. Rare Species and Riparian Vegetation of the Snake River Basin in Wyoming. Prepared for the U.S. Bureau of Reclamation, by the Wyoming Natural Diversity Database, University of Wyoming. Laramie, WY.
- Kesonie, D. and Hartman, R. 2011. A Floristic Inventory of Grand Teton National Park, Pinyon Peak Highlands, and Vicinity, Wyoming U.S.A. Journal of the Botanical Research Institute of Texas 5(1) pages 357 – 388.
- Markow, S. 2004. Survey for *Stephanomeria fluminea* on the Bridger-Teton National Forest Prepared for the Bridger-Teton National Forest and the Region 4 Forest Service Office, by the Wyoming Natural Diversity Database, University of Wyoming. Laramie, WY.
- Mancuso, M. and B. Heidel. 2008. Wyoming Plant Species of Concern on Caribou-Targhee National Forest: 2007 Survey Results Teton and Lincoln counties, Wyoming. Prepared for Caribou-Targhee National Forest by Wyoming Natural Diversity Database, Laramie, WY.

National Resources Conservation Service (NRCS). 2019. Internet website: <https://plants.usda.gov>.

NatureServe. 2019. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. Internet website: <http://explorer.natureserve.org>.

Rocky Mountain Herbarium Specimen Database. 2019 University of Wyoming, Department of Botany. Laramie, WY. Internet website: <http://rmh.uwyo.edu/data/search.php>. Accessed July 2019.

Wyoming Natural Diversity Database (WYNDD). 2019. Wyoming Natural Diversity Database; Data Explorer. Laramie, WY: University of Wyoming