Species: ***Ochotona princeps obscura* / Big Horn Mountain pika**

Criteria	Rank	Rationale	Literature Citations
1 Distribution within R2	**A**	Although *O. princeps* occurs on most if not all National Forests in the Rocky Mountain Region, the subspecies *O. p. obscura* is isolated completely to the Big Horn Mountains and Bighorn National Forest. Isolation likely has been (i.e., the population has exchanged very few if any individuals with adjacent populations) for several thousand generations. Confidence in Rank **High**	Beauvais, G. P. 2000. Mammalian responses to forest fragmentation in the Central and Southern Rocky Mountains. Pages 179-201 *in* R. L. Knight, F. W. Smith, S. W. Buskirk, W. H. Romme, and W. L. Baker. Forest fragmentation in the Southern Rocky Mountains. University of Colorado Press, Boulder, Colorado. Clark, T. W. and M. R. Stromberg. 1987. Mammals in Wyoming. University Press of Kansas. Lawrence, Kansas. Hafner, D. J., and R. M. Sullivan. 1995. Historical and ecological biogeography of Nearctic pikas (Lagomorpha: Ochotonidae). Journal of Mammalogy 76:302-321. Hall, E. R. 1981. The mammals of North America. Second edition. John Wiley and Sons, New York, New York. Long, C.A. 1965. The mammals of Wyoming. University of Kansas Museum of Natural History Publication 14: 493-758. Smith, A. T., and M. L. Weston. 1990. Ochotona princeps. Mammalian Species 352:1-8. Smith, A.T. 1999. American pika (Ochotona princeps). Pages 678-680 IN: D.E. Wilson and S. Ruff, editors. The Smithsonian book of North American mammals. Smithsonian Institution Press, Washington, D.C., in association with the American Society of Mammalogists.

Species: ***Ochotona princeps obscura* / Big Horn Mountain pika**			
Criteria	Rank	Rationale	Literature Citations
2 Distribution outside R2	**A**	The full species *O. princeps* ranges throughout the high mountain ranges of western North America; however, the subspecies *O. p. obscura* is clearly isolated to just one mountain range (Big Horn Mountains) and 1 National Forest unit (Bighorn National Forest). Isolation likely has been (i.e., the population has exchanged very few if any individuals with adjacent populations) for several thousand generations. Confidence in Rank **High**	(see citations for criteria 1)

Species: ***Ochotona princeps obscura* / Big Horn Mountain pika**

Criteria	Rank	Rationale	Literature Citations
3 Dispersal Capability	**B**	Dispersal is not well understood, but dispersal across lowlands and forested areas appears to be rare and is likely the main contributor to population isolation and subsequent subspeciation. Occupation of and dispersal through areas below upper timberline are infrequent. Confidence in Rank **High**	Beauvais, G. P. 2000. Mammalian responses to forest fragmentation in the Central and Southern Rocky Mountains. Pages 179-201 *in* R. L. Knight, F. W. Smith, S. W. Buskirk, W. H. Romme, and W. L. Baker. Forest fragmentation in the Southern Rocky Mountains. University of Colorado Press, Boulder, Colorado. Clark, T. W. and M. R. Stromberg. 1987. Mammals in Wyoming. University Press of Kansas. Lawrence, Kansas. Hafner, D. J., and R. M. Sullivan. 1995. Historical and ecological biogeography of Nearctic pikas (Lagomorpha: Ochotonidae). Journal of Mammalogy 76:302-321. Hall, E. R. 1981. The mammals of North America. Second edition. John Wiley and Sons, New York, New York. Long, C.A. 1965. The mammals of Wyoming. University of Kansas Museum of Natural History Publication 14: 493-758. Smith, A. T., and M. L. Weston. 1990. Ochotona princeps. Mammalian Species 352:1-8. Smith, A.T. 1999. American pika (Ochotona princeps). Pages 678-680 IN: D.E. Wilson and S. Ruff, editors. The Smithsonian book of North American mammals. Smithsonian Institution Press, Washington, D.C., in association with the American Society of Mammalogists.

Species: ***Ochotona princeps obscura* / Big Horn Mountain pika**

Criteria	Rank	Rationale	Literature Citations
4 Abundance in R2	**D**	This subspecies is typically assumed to be common; however, this evaluator (G. Beauvais) is unaware of any current data on which to base abundance estimates. Based on distribution and general habitat use, the Bighorn National Forest clearly supports the majority, if not the entirety, of this population. Confidence in Rank **Medium**	
5 Population Trend in R2	**D**	This evaluator (G. Beauvais) is unaware of any data on which to base trend estimates. Confidence in Rank **Medium**	
6 Habitat Trend in R2	**B**	Although habitat quantity has likely remained stable, trends in quality are more difficult to assess. Historically, heavy livestock grazing in alpine areas of the Big Horn Mountains likely reduced habitat quality substantially. More recently, the establishment of the Cloud Peak Wilderness Area and subsequent reduction in grazing pressure probably increased quality. The Bighorn National Forest clearly supports the majority of habitat, and the highest quality habitat, for this population. Confidence in Rank **Medium**	Clark, T. W. and M. R. Stromberg. 1987. Mammals in Wyoming. University Press of Kansas. Lawrence, Kansas. Smith, A.T. 1999. American pika (Ochotona princeps). Pages 678-680 IN: D.E. Wilson and S. Ruff, editors. The Smithsonian book of North American mammals. Smithsonian Institution Press, Washington, D.C., in association with the American Society of Mammalogists.
7 Habitat Vulnerability or Modification	**B**	Alpine environments in general are rather fragile and susceptible to disturbance. Livestock grazing, and to a lesser extent fire, are probably the primary threats to *O. p. obscura* habitat. Note that the majority of the habitat, and the highest quality habitat, for this subspecies lies within the Cloud Peak Wilderness Area, and thus is relatively well-protected. Confidence in Rank **Medium**	(see citations for criteria 6)

Species: ***Ochotona princeps obscura* / Big Horn Mountain pika**

Criteria	Rank	Rationale	Literature Citations
8 Life History and Demographics	**B**	Reproductive rate is somewhat low, likely due to energetic constraints. Also, this subspecies is restricted to essentially one island of habitat and does not exchange individuals with other population segments, suggesting that responses to environmental perturbations are limited. This could be especially important if predictions of global warming reduce habitat area and quality via upward migration of forested life zones. Confidence in Rank **Medium**	Beauvais, G. P. 2000. Mammalian responses to forest fragmentation in the Central and Southern Rocky Mountains. Pages 179-201 *in* R. L. Knight, F. W. Smith, S. W. Buskirk, W. H. Romme, and W. L. Baker. Forest fragmentation in the Southern Rocky Mountains. University of Colorado Press, Boulder, Colorado. Hafner, D. J., and R. M. Sullivan. 1995. Historical and ecological biogeography of Nearctic pikas (Lagomorpha: Ochotonidae). Journal of Mammalogy 76:302-321. Smith, A.T. 1999. American pika (Ochotona princeps). Pages 678-680 IN: D.E. Wilson and S. Ruff, editors. The Smithsonian book of North American mammals. Smithsonian Institution Press, Washington, D.C., in association with the American Society of Mammalogists.

Initial Evaluator(s):	
Dr. Gary P. Beauvais, Director, Wyoming Natural Diversity Database - University of Wyoming.	**Date: 30 May 2001**

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.

ATTACHMENT SS2

Colorado NF/NG	**Known**	**Likely**	**Kansas NF/NG**	**Known**	**Likely**	**Nebraska NF/NG**	**Known**	**Likely**	**South Dakota NF/NG**	**Known**	**Likely**	**Wyoming NF/NG**	**Known**	**Likely**
Arapaho-Roosevelt NF			Cimmaron NG			Samuel R.McKelvie NF			Black Hills NF			Shoshone NF		
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												Thunder Basin NG		
Rio Grande NF														
Pike-San Isabel NF														
Comanche NG														