The Environmental Assessment for the Black Hills National Forest Spruce Management Plan does not consider the American Three-toed Woodpecker (*Picoides dorsalis*), which seems like a considerable oversight given its sensitive conservation status in South Dakota and in the Black Hills and its tight relationship with spruce forests containing large, mature trees and snags. We will use the remainder of this letter to highlight the conservation status of the American Three-toed Woodpecker in the Black Hills, its close ties to spruce forests, and the likely impacts of the spruce management plan on populations of this species of high conservation concern.

One of the undersigned (David Swanson), along with several students and colleagues, has conducted substantial research on the Black Hills population of the American Three-toed Woodpecker, culminating in the Ph.D. dissertation of Dr. Amanda Ervin, *Habitat Selection, Nesting Success, and Genetic Structure of the American Three-toed Woodpecker (Picodes dorsalis) Population in the Black Hills of South Dakota*, published in 2011. This work was funded through a state wildlife grant from the South Dakota Department of Game, Fish and Parks (SDGFP). This program focuses on providing scientific assessments to inform conservation of Species of Greatest Conservation Need (SGCN) within the state. The American Three-toed Woodpecker qualifies as a Species of Greatest Conservation need in South Dakota as listed the SDGFP *South Dakota* *Wildlife Action Plan* (<https://gfp.sd.gov/wildlife-action-plan/>). The criteria for SGCN classification from the *South Dakota* *Wildlife Action Plan* include …

1. State or federal listed species for which the state has a mandate for recovery (listed as threatened or endangered)
2. Species that are regionally or globally imperiled and for which South Dakota represents an important portion of their remaining range
3. Species that are regionally or globally secure and for which South Dakota represents an important portion of their remaining range
4. Species with characteristics that make them vulnerable, including any of the following
	* are indicative of or depend on a unique or declining habitat in South Dakota
	* require large home ranges/use multiple habitats
	* depend on large habitat patch sizes
	* depend on an ecological process (such as fire) that no longer operates within the natural range of variation
	* are limited in their ability to recover on their own due to low dispersal ability or low reproductive rates
	* have a highly localized or restricted distribution (endemics)
	* concentrate their populations during some time of the year

The American Three-toed Woodpecker is listed as South Dakota conservation status S2, which is defined as “imperiled because of rarity or because of some factor(s) making it very vulnerable to extinction” in the state (<https://gfp.sd.gov/UserDocs/nav/SD_SGGN_list_as_of_1_May_2023.pdf>). The American Three-toed Woodpecker is not listed as a sensitive species for Region 2 of the U.S. Forest Service, but this is due to the inclusion of mountainous areas in Wyoming and Colorado, where the species is more common, within Region 2. Within the Black Hills National Forest, American Three-toed Woodpeckers are much less common and, hence, because of the limited range of spruce forests within the Black Hills and the low population size, the species is listed as a SGCN for South Dakota. Finally, the genetic structure of the Black Hills population of American Three-toed Woodpecker differs from that of other Rocky Mountain and North American populations (Ervin 2011), suggesting that the geographic isolation of the Black Hills population limits gene flow with other populations. The Black Hills population, therefore, is likely to represent a relict population that was once part of a larger metapopulation but is now isolated by restricted gene flow between other Rocky Mountain populations. Because of these genetic differences, the Black Hills population is likely to be of significant conservation concern to the overall biodiversity of the American Three-toed Woodpecker as a species.

Several studies have documented a tight relationship between American Three-toed Woodpeckers in the Black Hills and spruce forests (Giroir et al. 2007, Ervin 2011, Mohren et al. 2016, Drilling et al. 2018). These studies have identified the greatest abundance of American Three-toed Woodpecker in spruce forests, particularly those with large trees and snags (Ervin 2011, Mohren et al. 2016). For example, Mohren et al. (2016) documented a positive relationship between occurrence of American Three-toed Woodpecker and spruce area with peak occupancy at 66% spruce in the surrounding landscape, especially if those forests included large spruce trees and snags and some aspen. In addition, large spruce trees and snags are used in higher proportion than their availability for foraging by American Three-toed Woodpecker in the Black Hills (Ervin 2011), suggesting that such habitat elements are important for locating sufficient food resources. American Three-toed Woodpeckers also select large spruce trees and snags in high proportion for nesting substrates, although aspen within spruce stands are also heavily used as nesting substrates (Ervin 2011). Home ranges of American Three-toed Woodpecker during the nesting season are also restricted to areas dominated by spruce forests (Ervin 2011).

The proposed spruce management plan will remove spruce forests on 30,000 acres of Black Hills National Forest lands, with concentrated removal of pole (7 to 9-inch dbh) and sawtimber (> 9-inch dbh) spruce trees and snags. Given that research indicates that this forest type is preferred for home range selection, nest site selection, and foraging activity by American Three-toed Woodpeckers, the spruce management plan is very likely to negatively impact populations of this Species of Greatest Conservation Need in the Black Hills. We, the undersigned, therefore, urge consideration of the impacts of the spruce management plan on American Three-toed Woodpecker as an important element of the Environmental Assessment and oppose the spruce management plan in its current form.

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