IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

Civil Action No. 1:04-CV-02026

BIODIVERSITY CONSERVATION ALLIANCE, *et al.*,

Plaintiffs,

v.

GALE NORTON, in her official capacity as Secretary of the Department of Interior *et al.*,

Defendants.

DECLARATION OF JEREMY NICHOLS

I, Jeremy Nichols, declare as follows:

1. I currently reside at 42A Fox Street, Denver CO 80223. I am currently on staff and a dues-paying member of Biodiversity Conservation Alliance ("BCA"), a nonprofit conservation group based in Laramie, Wyoming that has worked to protect wildlife and their habitats in the Rocky Mountain Region for over 10 years. I have been a staff member and member of BCA for over four years.

2. The mission of BCA, as can be seen on our website at www.voiceforthewild.org/about.html, is "to protect and restore biological diversity, habitat for wildlife and fish, rare plants, and roadless lands in Wyoming and surrounding states." BCA has supporters in Colorado, Wyoming, South Dakota, Nebraska, Utah, and several other states. BCA has a few hundred members and over 1,000 individuals and families on our concerned citizen mailing list. BCA was founded in 1994 to promote and achieve the conservation of natural resources and the protection of wildlife, fish, plants, and their habitats, primarily in the Rocky

Mountain west, including the Black Hills region of western South Dakota and northeastern Wyoming. BCA works to protect wildlife and habitat, and we advocate a sustainable way of life that fosters a clean, healthy environment.

3. I have visited the Black Hills region numerous times since moving to the Rocky Mountain region in 1998. I greatly enjoy visiting the Black Hills, a 1.5 million acre forested mountain range that straddles the South Dakota-Wyoming border, as they support a unique forested ecosystem that is literally surrounded by a sea of prairie. Called an "island in the plains," the Black Hills support a diversity of life that is not found in other forests. For example, many animals inhabiting the Black Hills exist nowhere else in the world. I have visited and will continue to visit the Black Hills on a regular basis because I deeply value and rely upon its naturally wooded areas, clean and fast-flowing waters, and the solitude and isolation provided by its more remote areas for my emotional and physical well-being. Upon my visits, I have camped, mountain-biked, hiked, backpacked, and observed numerous species of plants and animals in many areas of the Black Hills. I especially value the opportunity to view forest wildlife on the Black Hills. Along with my two and a half year old son, I plan to continue undertaking these activities on the Black Hills so that I may remain happy and healthy.

4. Unfortunately, the Black Hills have been and continue to be one of the most heavily exploited forest ecosystems in the United States. According to the U.S. Forest Service, which manages much of the Black Hills as the Black Hills National Forest, every acre of the forest has been logged at least once in the last century, with most areas logged over three to four times. The Forest Service also reports that over 8,000 miles of roads have been built on the forest. Mining activities have created extensive environmental problems, polluting streams and destroying mountains and forest habitat. Domestic livestock grazing is also prevalent, with most

private lands grazed all year long and most public lands grazed beyond acceptable limits. Several native species, including the black bear, blue grouse, and gray wolf, have been pushed to extinction in the Black Hills. Many other native species are declining toward extinction. Although small parts of the Black Hills still retain a naturalness that I enjoy and value tremendously, the massive exploitation that the Black Hills have experienced is deeply offensive. I find that I do not enjoy visiting areas of the Black Hills that have experienced heavily logging, mining, or other exploitative activities. The loss of wildlife diversity is especially disturbing. I have found that I most enjoy visiting those areas of the Black Hills that support higher levels of natural diversity, usually in areas that have remained relatively free of human disturbance for some time.

5. In my visits to the Black Hills, I especially seek to observe species that are rare in their native habitats. The Black Hills mountainsnail (*Oreohelix cooperi*), a rare species of land snail found only in relatively undisturbed areas of the Black Hills, is one of these species that I seek to observe and enjoy. The mountainsnail (all one word) is a genus of terrestrial mollusk found only in the Rocky Mountains of the western United States. The scientific name, *Oreohelix*, literally means "mountain-snail." The mountainsnail genus is diverse, with dozens of species reported from throughout the western United States. New species are reported in scientific literature relatively often. Because of their limited mobility and other unique environmental factors, many mountainsnail populations have evolved into distinct species. The Black Hills mountainsnail has evolved in isolation in the forested island of the Black Hills, becoming a distinct species that is found nowhere else in the world.

6. On my visits to the Black Hills, I have been fortunate enough to observe the Black Hills mountainsnail on several occasions. I observed the Black Hills mountainsnail in the summer and

fall of 2004 on two different occasions. I know I have observed the snail because I have extensively researched the species, including reviewing information documenting the locations of populations. These populations, called colonies, exist primarily in the northern Black Hills. I have observed colonies along Spearfish Creek, specifically near the town of Savoy, South Dakota, and along Little Spearfish Creek. I observed colonies near Roughlock Falls, which is along Little Spearfish Creek near the confluence with Spearfish Creek, and near the Rod and Gun Campground, which is along the north side of Little Spearfish Creek. The species is easily identified because it is a rather large land snail with a distinct appearance that separates it from closely related species. Where I have observed the snail, the surrounding forest has been relatively undisturbed. I have not observed the Black Hills mountainsnail in disturbed areas, such as in areas that have been logged, grazed by domestic livestock, or where a road has been constructed. I plan to continue to visit the Black Hills to observe the Black Hills mountainsnail in its native, undisturbed habitat.

7. In my extensive research of the Black Hills mountainsnail and its habitat, I have also found that the Black Hills mountainsnail is not only rare, but imperiled and in danger of extinction or endangerment. According to scientific information, by their very nature, snails are vulnerable to declines and extinction. They move slowly and thus cannot readily reoccupy habitat once populations are destroyed. They have been described as "effectively sessile" by scientists. In addition, they are dependent on moist environments, which in the arid west are relatively limited. Snails also are more vulnerable to predation, so cover is vital. In 1991 and 1994, the Black Hills mountainsnail was listed by the U.S. Fish and Wildlife Service as a category 2 Candidate species. Category 2 Candidate species were defined as species "for which information now in the possession of the [U.S. Fish and Wildlife] Service indicates that

proposing to list as endangered or threatened is possibly appropriate, but for which persuasive data on biological vulnerability and threat are not currently available to support proposed rules." 59 Fed. Reg. 58982. The category 2 Candidate list was discontinued in 1996. Two reports prepared in 1993 and 2002, respectively, further documented in detail the precarious status of the snail.

8. The 1993 report, entitled "Land Snail Survey of the Black Hills National Forest, South Dakota and Wyoming," was prepared by Dr. Terrence J. Frest and Edward Johannes under contract with the U.S. Fish and Wildlife Service and U.S. Forest Service and documented in detail the results of surveys in the early 1990's. In this 1993 report, Frest and Johannes explicitly recommended that the Black Hills mountainsnail be listed under the Endangered Species Act because of habitat loss and degradation and ongoing threats to the species. The authors stated:

> At present, none of the known colonies can be regarded as secure. Relatively few of them are large and most are in vulnerable situations, i.e. on floodplains subject to human modification, near existing major roads, or in areas that could be subject to roadside spraying, grazing, or logging. It is quite likely that this species occurred very commonly throughout lower Spearfish Canyon, Grand Canyon, and the limestone areas of the Rapid Creek drainage, as well as in the area around Deadwood and the limestone gulches between Spearfish Creek and Grand Canyon. It may also have been common on the intervening uplands. As noted in 1991 and in the site descriptions below, the species is now essentially extirpated from the uplands and most of Rapid Creek and Grand Canyon.

Among other activities, Frest and Johannes noted domestic livestock grazing on the Black Hills had destroyed and degraded colonies.

9. The 2002 report, entitled "Land Snail Survey of the Black Hills National Forest, South Dakota and Wyoming, Summary Report, 1991-2001," also authored by Frest and Johannes, this time under contract only with the U.S. Forest Service, further documented in detail the results of surveys both in the early 1990's, but late 1990's and early 2000's. The report reiterated concerns

expressed in the early 1990's, yet unfortunately disclosed that the status of the Black Hills mountainsnail had not improved in the intervening years. On the contrary, Frest and Johannes reported in 2002 that the status of the mountainsnail had worsened. Through extensive surveys, the Black Hills mountainsnail was reported from 39 sites in the Black Hills in the states of South Dakota and Wyoming by Frest and Johannes. Of the 39 colonies discovered in surveys by Frest and Johannes, only shells were found at 7 sites, showing that these sites had recently been extirpated. Two of these colonies became extirpated between 1993 and 2000. Additionally, the species had not been relocated from a historically reported colony in the Deadwood area despite survey efforts. Thus, Frest and Johannes reported only 32 extant Black Hills mountainsnail colonies are known to exist on the Black Hills. This represented at least a 20% reduction in the overall population of the species, although the decline is most likely larger as Frest and Johannes believe many extirpated sites were never identified. Of the 32 extant colonies known to exist, the species was found to be rare or uncommon at 18 colonies–56% of the extant population. The species was somewhat abundant or moderately common at 5 colonies, 16% of the extant population. The species was considered abundant or common at only 9 colonies by Frest and Johannes. The authors reported in 2002:

> No colonies were seen in heavily grazed or completely logged areas. As mentioned below and previously (Frest and Johannes, 1991), colonies appear to have been negatively impacted by road construction, grazing, logging, and major forest fires. Note loss of some 1991 and 1993 colonies documented herein. Colonies also avoid dry areas and open ground. At present, we do not regard any site as adequately protected.

10. The decline and imperilment of the Black Hills mountainsnail is of great concern. According to the reports by Frest and Johannes, snails are important environmental indicators and their declines are usually a sign of larger ecosystem health problems. In the case of the

Black Hills mountainsnail, its decline may be linked to forest health declines, brought on by extensive exploitation of natural resources. The snail has been compared to the "canary in the coal mine," a reference to the historic use of canaries in mines to monitor air quality. In addition, the Black Hills mountainsnail is an important link in local food chains. It is reported to be preyed upon by the Black Hills red-bellied snake, a rare subspecies of snake found only in the Black Hills. Birds, mammals, amphibians, and other reptiles are also believed to prey upon the snail. The snail is also an important decomposer, feeding primarily on plant waste (e.g., dead leaves) and in turn aiding the recycling of nutrients within forest ecosystems.

11. Out of concern over the future of the Black Hills mountainsnail, as well as the Black Hills, and to further the conservation mission of BCA, I prepared and submitted in September of 2003 a petition to list the Black Hills mountainsnail as threatened or endangered under the Endangered Species Act. The petition was submitted to Interior Secretary Gail Norton, former U.S. Fish and Wildlife Service Director Steven Williams, and to Regional and State of South Dakota U.S. Fish and Wildlife Service offices. This petition was submitted on behalf of myself, Biodiversity Conservation Alliance and its members, and several other groups, including Prairie Hills Audubon Society of Western South Dakota and Native Ecosystems Council—both Black Hills-based conservation organizations—Center for Native Ecosystems, and The Xerces Society, an international conservation organization dedicated to the protection of invertebrate species worldwide. The petition, which was 85 pages long, presented detailed scientific information documenting the status of the snail to justify listing under the Endangered Species Act and drew upon nearly 170 sources of scientific information. In preparing the petition, I made every effort to provide ample justification for listing under the Endangered Species Act in the hopes that the

U.S. Fish and Wildlife Service would have an easier time responding and making its final decision.

12. On November 21, 2003, I received a letter from the U.S. Fish and Wildlife Service acknowledging receipt of the petition. In this letter, the Service stated it would not be able to formally respond to the petition, however, until some undetermined time in the future. The Service also stated that, "Although recent surveys indicate that the population of this species is in decline, we see no compelling evidence to indicate that an emergency situation exists."

13. To this date, the Secretary of the Interior and the U.S. Fish and Wildlife Service have yet to issue a determination as to whether the petition to list the Black Hills mountainsnail under the Endangered Species Act presents substantial scientific information indicating the petitioned action may be warranted, which is commonly referred to as the "90-day finding." It has now been over one and a half years since the petition was received. To the best of my knowledge, the Secretary and the Service have no plans to issue a 90-day finding on the petition to list the Black Hills mountainsnail in the near future.

14. Scientists recommended protection under the Endangered Species Act is needed to stem declines and prevent the extinction or endangerment of the Black Hills mountainsnail, and even the U.S. Fish and Wildlife has recognized that populations of the snail are in decline.

15. The failure of the Secretary and the Service to issue a 90-day finding has irreparably harmed and continues to irreparably harm the Black Hills mountainsnail, my ability to derive pleasure and enjoyment and to continue to derive pleasure and enjoyment from observing the snail in its natural habitat in the Black Hills, as well as my ability to enjoy areas of high natural diversity in the Black Hills, and the conservation interests of Biodiversity Conservation Alliance and its members. The fact that the snail is an indicator of ecosystem health also indicates this

delay poses irreparable harm to the health of the Black Hills forest ecosystem, and in turn the wildlife, fish, plants, and people that depend on this ecosystem for their health and welfare. The snail is, like so many species, being held in bureaucratic limbo while populations languish without protection. The Endangered Species Act is meant to protect threatened and endangered species and the ecosystems upon which they depend. The delay in protecting the Black Hills mountainsnail ultimately poses irreparable harm to the entire ecosystem the snail depends on. The failure to issue a timely 90-day finding invariably stalls a process that will likely bestow strong protection on the species and the ecosystem it depends upon through listing under the Endangered Species Act. Until such time as a 90-day finding is issued, myself and Biodiversity Conservation Alliance will continue to be irreparably harmed.

Pursuant to 28 USC § 1746, I declare under penalty of perjury that the foregoing is true and correct.

Executed on this 22nd of March 2005.

Jeremy Nichols