

November 12, 2004

Content Analysis Team,
Attn: Roadless State Petitions
USDA Forest Service
P.O. Box 221090,
Salt Lake City, UT 84122

Dear Forest Service Chief Bosworth,

On behalf of our 5000 members who reside in the United States of America I am writing you to oppose the proposal to repeal the Roadless Area Conservation Rule. Please accept this letter as official public comment for the roadless area management state petition proposal [Docket Number: 04-16191].

The Xerces Society is a nonprofit organization dedicated to protecting the diversity of life through the conservation of invertebrates. For three decades, the Society has been at the forefront of invertebrate conservation, harnessing the knowledge of highly regarded scientists and the enthusiasm of citizens to implement conservation and education programs in the United States.

A substantial amount of scientific information collected from both aquatic and terrestrial environments has demonstrated the importance of roadless areas in protecting the nation's wildlife, fisheries, and water resources. Roadless areas are critical because they represent the least human-disturbed habitats in an almost universally disturbed landscape. As such, they act as de facto refuges for numerous sensitive plant and animal species, reservoirs of genetic material, and benchmarks for experimental restoration efforts in intensively managed landscapes. Streams flowing out of roadless areas typically provide supplies of the purest water, untainted by chemical pollutants and within the cool temperature range required by many aquatic invertebrates which act as food for many native fish species.

Most roadless areas are dominated by steep slopes, high elevations, and unstable or highly erosive soils and the ecological risks associated with developing these areas are extremely high. There is a direct and significant relationship between road density and impairment of water quality which negatively impacts aquatic invertebrates, such as mussels and insects as well as fish. (Lee et al. 1998, McIntosh et al. 1994 and Erman 1996). Roads also indirectly affect ecosystems by providing access to hunters, resulting in hunting and mortality (legal and illegal), rare plant and animal collection, snag

removal for firewood, human ignited fires, illegal waste disposal, increased development, and introduction of exotic species (Noss and Cooperrider 1994).

The converse of the impacts of roads are the benefits derived from roadless areas. Given that the majority of land area is roaded the national forests remaining roadless lands possess exceptional ecological value. Unlike designated wilderness areas, most of which are situated at elevations above the most productive forest lands, many of the remaining roadless areas include important forest habitat. Recent scientific literature emphasizes the importance of unroaded areas greater than 1,000 acres as strongholds for the production of fish and other aquatic and terrestrial species, as well as sources of high quality water (Henjum et al. 1994; Rhodes et al. 1994). There is a growing consensus among academic and agency scientists that existing roadless areas - irrespective of size - contribute substantially to maintaining biodiversity and ecological integrity on the national forests.

Insects and disease have been cited as one reason to log in roadless areas. But according to Forest Service data few inventoried roadless areas are at risk of insect infestation. Roadless areas are often complex ecosystems comprising of varying age class that can naturally withstand insect infestations. Habitat fragmentation may make these areas more susceptible to insect and disease invasions. Several studies have linked roads to greater incidence of diseases and insects. Hagle and Schmitz (1993) found that soil damage resulting from logging with heavy equipment can increase the susceptibility of future forests to insects and disease. Also according to Schowalter and Means (1989) a diversity of predators is important for preventing pest outbreaks. Old growth and roadless areas with greater diversity of composition, structure and predators are predicted to be less vulnerable to pest outbreaks than forest simplified through management.

In sum the Roadless Rule is a vital tool for protecting biological diversity. As Paul Ehrlich and E.O. Wilson stated (1991) the first step to (preserve biodiversity) ... would be to cease developing any more relatively undisturbed lands. These roadless areas contain incredible biological diversity that harbor unique species found nowhere else on earth. From jumping slugs in old growth forests of the Pacific Northwest to caddisflies and other aquatic insects that are only known from a single place in some high mountain streams in the Sierra Nevada these areas are vital for the maintenance of biological diversity. Some roadless areas may also harbor important pollinators such as native bees. Native bees are vital to the pollination of many wild plants and crop species. Recent evidence also shows that farms near wild areas received better pollination from wild bees.

I urge you to keep the Roadless Area Conservation Rule intact in the Lower 48 states and Alaska's Chugach National Forest and reinstate the rule in the Tongass National Forest.

Thank you for consideration of my comments on this crucial national forest conservation issue.

Sincerely,

Scott Hoffman Black
Executive Director

Literature Cited

Ehrlich P. and E. O. Wilson "Biodiversity Studies: Science and Policy," *Science*, vol. 253 (Aug. 16, 1991): 761.

Erman, N. 1996. Status of Aquatic invertebrates. In Sierra Nevada Ecosystem Project: Final Report to Congress. Volume II. Wildland Resources Center Report Number 37

Hagle, S. and R. Schmitz. 1993. Managing root disease and bark beetles. In: T. D. Schowalter and G.M. Filip, eds. *Beetle-pathogen Interactions in Conifer Forests*. Academic Press, New York, NY. Pp.209-228.

Henjum, M. G., Karr, J. R., Bottom, D. L., Perry, D. A., Bednarz, J. C., Wright, S. G., Beckwitt, S. A., and Beckwitt, E. 1994. Interim protection for late-successional forests, fisheries, and watersheds: National forests east of the Cascade Crest, Oregon and Washington. Eastside Forests Scientific Society Panel.

Lee, D. C., Sedell, J. R., Rieman, B. E., Thurow, R. F., and Williams, J. E. 1998. Aquatic species and habitats. *Journal of Forestry* 96(10):16-21.

McIntosh, B. A., Sedell, J. R., Smith, J. E., Wissmar, R. C., Clarke, S. E., Reeves, G. H., and Brown, L. A. 1994. Historical changes in fish habitat for select river basins of eastern Oregon and Washington. *Northwest Science* 68:36-53.

Noss, R. F. and Cooperrider, A. Y. 1994. *Saving Nature's Legacy*. Island Press, Covelo, California.

Rhodes, J. J., McCullough, D. A. and Espinosa, F. A. 1994. A course screening process for potential application in Endangered Species Act consultations. Submitted to National Marine Fisheries Service, NMS/CIA Inter-agency Agreement 40 ABNF3.

Schowalter, T.D., and J.E. Means. 1989. Pests link to site productivity in the landscape. In: D.A. Perry, Ed 1989. *Symposium Proceedings: Maintaining long term productivity in Pacific Northwest forests*. Corvallis, OR. Timber Press, Portland OR.