

Subject: August ADNRSS monthly report

ASSOCIATE DIRECTOR, NATURAL RESOURCE STEWARDSHIP AND SCIENCE
MONTHLY REPORT FOR AUGUST 1997

NEW DEVELOPMENTS

KATMAI ROCK EXTRACTION FOR ROAD Reconstruction of Katmai's Valley of 10,000 Smokes Road will begin later this year and continue through next summer. Due to the park's remote location, road surface and base material will be provided by an in-park extraction and crushing operation. The project will provide the park with material necessary to reconstruct the "Valley Road", and will stockpile 15,000 cubic meters of gravel. This volume will be enough for proposed DCP construction and at least 30 years of maintenance needs. Planning and analysis of the extraction and restoration operations were completed last year with assistance from the Geologic Resources Division in Katmai's Sand, Rock and Gravel Plan. In August, Division staff met on-site with the contractor, Denver Service Center, Federal Highways Administration, and Park staff to finalize specifications for the project. The group addressed construction camp location and layout; methods of tree and slash removal/disposal; depth and methods of topsoil removal storage and replacement; native seed collection and revegetation methods; bear protection measures; fuel storage and secondary containment; visual screening measures; recontouring of the main extraction area as well as other areas to be restored as part of the project. If all goes well, the park will reduce its overall area of unreclaimed disturbance and provide for decades of material use with little need for future reclamation.

PHYSICAL RESTORATION AT MORA WITH NATIONAL GUARD - - The Sunrise Campground was constructed in a subalpine meadow in Mount Rainier National Park in the early 1930 s, but later closed to protect sensitive natural resources. About 8,000 linear feet of highly visible roadway with associated cuts and fills remained, and vegetative recovery was poor on the cut slopes and road benches. Geologic Resources Division staff helped MORA develop plans and specifications to obliterate the road prism, restore original contours, reestablish original hydrologic patterns, and expose native topsoil and also helped to oversee plan implementation. The plans were put into place in August through a partnership with the 898th Engineer Brigade of the Washington National Guard. Guard engineers supplied heavy equipment and personnel for earthmoving. Having personnel on-site with expertise in landform evolution, restoration techniques, and heavy equipment applications maximized treatments by adapting designs to conditions at depth and assured that the park received the desired products. The park paid the Guard's fuel and meal costs. Canon USA and the National Park Foundation awarded the park a grant to cover these costs and revegetation efforts over the next 2-3 years. The Sunrise Campground Restoration Project is the first Signature Project that begins the countdown to the park's Centennial celebration in March 1999.

DISPRO SELECTIONS: Dr. Bill Hogsett (EPA-Corvallis) and Dr. Kathy Tonnessen (NPS-ARD), the program managers for the Demonstration Intensive Site Project, reviewed the 64 preproposals received from researchers to investigate the effects of environmental stressors on park ecosystems. They chose 32 of these for full proposal development

in the areas of UV-B effects on natural resources, nitrogen effects on terrestrial and aquatic systems, ozone effects on vegetation, and the ability to extrapolate from point environmental measurements to regional exposure statistics. These proposals will be peer-reviewed in November, with awards expected by the end of the year. Additionally, two parks have been added to the DISPro network, to bring the total number of park index sites to 14; added parks are Theodore Roosevelt and Hawaii-Volcanoes National Parks. An Interagency Agreement with the USGS-BRD has been initiated to design amphibian surveys in two pilot DISPro parks: Great Smoky Mountains and Big Bend National Parks. For information call Kathy Tonnessen, NPS-ARD, 303-969-2738.

DEER MANAGEMENT PUBLICATIONS The Wildlife Society's Summer 1997 Bulletin, Special Edition "Deer Overabundance" included 8 articles contributed by National Park Service biologists or cooperators whose research had been funded by the National Park Service. This special edition has been widely and enthusiastically received by the wildlife community and local, county, and state agencies and governments.

The National Park Service co-sponsored a symposium "The Science of Overabundance; the ecology of unmanaged deer population" in 1994. The proceeding of this symposium were recently published by the Smithsonian Institution Press, "The Science of Overabundance, Deer Ecology and Population Management". This is the first book to consider the management of deer populations from an ecosystem perspective, contending that since deer are unevenly dispersed within protected areas and the effects of high deer densities vary among reserves, different management options should be tested at the landscape level before being widely applied. The symposium and book contain numerous papers on white-tailed deer research that were supported by the National Park Service through the Inter-Regional White-tailed deer NRPP funding.

WASHINGTON MONUMENT SIGHTED AT SHEN While many park recorded high ozone readings this summer (see below), field staff at Shenandoah NP reported that they were able to see the Washington Monument and Capitol at least twice this summer from Skyline Drive. The legislative history of the park states that such views were part of the reason for establishing the park. Many skeptics have suggested in recent years that this anecdote was unbelievable. The park hopes to provide pictures to document that seeing is believing.

IPM COURSE The 40 Hour IPM Course held at the GRCA Albright Employee Development Center was a success, the course receiving the best evaluations yet. The Center did not have a training coordinator as in the past and we missed the service. We were fortunate in EQD's IPM intern, Christine Huang, came to the course to assist. This was especially true because due to the UPS strike and the resulting Postal Service jam, 27 boxes of training materials arrived on Thursday of the week long course, rather than the Sunday prior to the course starting. (DiSalvo, Cacek)

RARE BEE FOUND AT MEVE Regional IPM Coordinator Craig Hauke submitted a bee specimen for identification. This digger bee was detected (June 23, 1997) by the cultural resource staff of Mesa Verde National Park during a restoration of a historic kiva. The bee was drilling into historic fabric. The staff wanted to use wasp freeze as a means of control. However, because the bees are solitary each one would have to be located and individually sprayed. The bee was identified by Bee specialist Dr. Robert Brooks of the University of Kansas as *Anthrophora anthrophorodides*. To this date this insect has only been reported in one location: the San Rafael Desert in SE Utah. Finding it in MEVE is

extraordinary and Dr. Brooks plans to publish the occurrence next year. He is pursuing a collecting permit from the park. IPM unit specialists suggested that the park lay black window screening over the top of the kiva opening to prevent additional bees seeking ovipositional sites from entering. The screening need only be in place for a few weeks during the spring and is undetectable from the ground view. No insecticide was needed. (DiSalvo)

PROGRESS

CLARK FORK SUPERFUND Discussions are continuing on the Clark Fork Superfund Settlement. Representatives of the Environmental Quality Division s Environmental Response, Planning and Assessment Unit met in Denver with USEPA, Department of Justice, Office of the Solicitor, BLM and FWS in August to discuss this landmark action. Significant National Park Service interests are involved in the settlement due to the contamination of GRKO lands along the river. Valuation of damages and clean up levels continue as issues in this case. As a result of that meeting, briefings were held with the Director and Deputy Regional Director and the Superintendent on the cleanup remedies for the park unit. (Hamson, Dawson)

NATURAL RESOURCE STEWARDSHIP AND SCIENCE MEETING The new Natural Resources Advisory Group, along with regional and cluster representatives, attended the annual NRSS meeting in Portland, August 25 and 26, in conjunction with the Natural Areas Association meeting. The Natural Areas Association meeting was the forum for presenting Director's Natural Resource awards to: Zandy Hillis-Starr, BUIS - (Trish Patterson - SCA); Ken Czarnowski ROMO, Resource Manager; and Gary Davis, CHIS - Research award.

HIGH OZONE MEASUREMENTS

NEW WORLD MINE On August 17, 1997, officials from the Department of the Interior signed the Record of Decision on the joint Forest Service/Bureau of Land Management EIS that analyzed the withdrawal of 22,000 acres of Federally owned lands from new mining claim location and hard rock leasing in the New World mining district near Cooke City, Montana. The New World mining district lies about 2 miles northeast of Yellowstone where the signing ceremony took place. The environmental document showed that the mineral withdrawal was warranted to protect the outstanding natural resources of the Cooke City area and helps advance park protection efforts. This formal declaration furthers the President's already-imposed two-year moratorium on new claim location on Federal lands in the District. The President's original moratorium was, in part, intended to prevent expansion of the proposed New World mine and limit the amount of environmental damage that could have been caused by even larger scale mining in the sensitive sub-alpine and alpine environment. Although the mineral withdrawal environmental impact statement did not specifically analyze impacts of the proposed New World mine, it will allow for the subsequent withdrawal of lands that are taken into Federal ownership when (if) the acquisition agreement between Crown Butte Mining and the United States for the New World mine properties comes to fruition.

GRCA VISIBILITY IMPAIRMENT With concurrence from the Assistant Secretary's office and EPA's support, the DOI Deputy Chief of Staff, Susan Rieff, sent a letter to EPA on August 19, 1997, that reaffirmed and supplemented DOI's previous certification of visibility impairment for Grand Canyon NP. We informed EPA that we believe that there is sufficient information available to support a "reasonable attribution" finding concerning the Mohave Power Plant, located in Laughlin, Nevada,

just southwest of the Grand Canyon. EPA has the regulatory responsibility and authority to take action in response to this certification. Our letter initiates a fact-finding, negotiating and decision-making process, that will include identifying and analyzing various options for addressing the plant's contribution to visibility impairment. Related complicated issues involve the Department's tribal trust responsibilities (two Indian nations lease coal reserves that supply fuel to the power plant) and pending negotiations over reserved tribal and federal water rights. Contact Chris Shaver (303)969-2074)

OZONE EXCEEDANCES Preliminary July data from the NPS gaseous monitoring network of 33 stations, shows that ozone concentrations exceeded the national standard on 3 days at Joshua Tree National Park (149 ppb maximum). Three other parks (SEKI, SHEN, and GRSM) had ozone concentrations that exceeded 100 ppb. In August, preliminary ozone data showed that Joshua Tree had an exceedance of the 125 ppb National Ambient Air Quality Standard while Great Smoky Mountains exceeded the newer 8-hour average standard of 85 ppb, and 4 other parks (MACA, PINN, SEKI, and YOSE) had ozone concentrations that were above 100 ppb. Great Smoky Mountains and Mammoth Cave National Parks appear to have had several exceedances of the new 85 ppb, 8-hr average national standard for ozone. Most of the high ozone concentrations happened during the first week of August when the weather was hot for much of the country. Additional information is available from John Ray, 303-969-2820.