

Partnerships in Restoration and Education in Glacier National Park

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When native vegetation is disturbed by construction activities or impacted by over-use, the consequences include denuded ground, invasion by exotic plants, displacement of animals, and reduced ecological and aesthetic value. Glacier National Park faces continued and expanding pressure from such activities. Current visitation is nearly 2 million people annually. This increased visitation results in increased disturbance to park lands in the form of soil erosion and vegetation loss and increased impact from service-related construction activities such as road rehabilitation and utilities and maintenance repairs that involve ground disturbance. Over the past 12 years Glacier has developed a comprehensive restoration program to restore structure, function and plant diversity to these impacted areas. Indigenous plant material is used to maintain genetic integrity and native soils and plants are salvaged prior to disturbance and stored for replacement and replanting whenever possible. Seeds and cuttings are collected annually and propagated in the Park's native plant nursery and revegetation crews implement 30-40 restoration projects annually.

Since 1986 Glacier National Park has utilized partnerships in the planning, design, construction and revegetation of eight major road rehabilitation projects along the historic Going-to-the-Sun Road (GTSR). Using these relationships as a model we have expanded our partnerships to facilitate the continued success and expansion of our restoration program. These partnerships include the Federal Lands Highway Administration, local school districts, the US Forest Service, the Natural Resources Conservation Service, the Montana Conservation Corps, other national parks and collaborations between the various divisions in Glacier including Integrated Pest Management, Maintenance, Trails, Backcountry Rangers, Interpretation and Cultural Resources to name a few. These partnerships play an important role in the successful completion of our restoration objectives and expand in scope as

Proceedings of the Conference: Native Plant Propagation and Restoration Strategies. Haase, D.L. and R. Rose, editors. Nursery Technology Cooperative and Western Forestry and Conservation Association. December 12-13, 2001. Eugene, OR.

we broaden our relationships with other agencies, educational organizations, and state and local programs.

Perhaps the greatest challenge in the restoration process is to insure that this work provides a lasting solution to resource degradation. To that end, Glacier has embarked upon an exciting cooperative relationship with several local schools to engage students in the Park's restoration program as advocates and practitioners. Utilizing funds provided through the Natural Resources Preservation Program and the Recreational Fee Demonstration Program, Glacier provided seed money to assist with the construction of two cooperative greenhouses at neighboring schools on either side of the Park. These greenhouses serve as laboratories for students while providing needed native plant materials for restoration projects. 'Parks as Classroom' grant funds allowed us to hire a seasonal education specialist to assist in the development of a workbook for teachers/park staff, that ties our educational activities to state required science curriculum. Through this Resources Stewardship and Education program, we provided classroom and field ecological and restoration activities to over 900 students last season. These students participated in site evaluation, monitoring, seed collection, plant propagation and restoration projects. In addition, we sponsored several student internships and developed plant production and restoration ecology curriculum for two tribal colleges. In conjunction with

this curriculum development we provided actual classroom instruction for three environmental science classes throughout the school year, including Plant Propagation by Seed, Asexual propagation and Habitat Restoration.

We have been very fortunate to work with Tom Landis, National Nursery Specialist, and Kas Dumroese, plant physiologist for the US Forest Service to include our propagation protocols for over 225 species native to Glacier in their Native Plants Network Protocol Database. Our staff have worked closely with local Forest Service personnel to provide restoration planning, seed collection and plant materials production for rehabilitation work in the Bob Marshall Wilderness and other forest service lands adjacent to the park's boundaries. In addition, we have provided consultation to other agencies and National Parks through work details. We recently completed restoration plans for wetland mitigation projects on Salish Kootenai tribal lands in conjunction with the Federal Highways and the Montana Department of Transportation, as well as restoration planning for Rocky Mountain National Park.

We continue to value our long-term partnership with the Natural Resources Conservation Service and the Bridger Plant Materials Center in Bridger, MT. We have worked together under a cooperative agreement since 1986. Bridger staff provide valuable technical advise in regards to restoration planning and implementation as well as plant materials production,

seed collection, cleaning, increasing, storage and distribution. We have come to rely heavily on these folks and credit our success to their continued involvement in our program.

One of our most beneficial relationships has been with the Montana Conservation Corps. Each year we utilize several crews throughout the summer to assist us in accomplishing a wide variety of projects that require diligence, dedication and tenacity to complete. Our projects this year were arduous in nature and took these crews well off the beat path up into remote high country locations. We are able to utilize this MCC program to address a backlog of resource projects that would remain uncompleted without their participation.

Through this process of creative partnering, we continue to provide for the preservation of the park as well as providing for visitor enjoyment. With the collaboration of various agencies, individuals, educators, students and peers, we are able to work together in an exchange of ideas, energies and resources that makes a positive and lasting improvement to our program and our public lands.