



United States
Department of
Agriculture

Forest Service

Northern Region



Native Plant Restoration

Program Accomplishments



Fiscal Year 2011

Region One Native Plant Program



Region One Initiative: Developing Forest and Regional Seed Management Plans for Native Plant Materials 2011 Accomplishments

In 2011, Region One continued its Seed Management Planning Initiative with the development of forest seed management plans for ten forests and a consolidated Region One Seed Management Plan. The effort represented four years of coordination and planning by forests in Region One. The Region One Seed Management Plans are the first comprehensive seed management plans developed by a US Forest Service region for shrub, grass, and forb material.

To develop the plans, coordination occurred internally with forest management and resource staff to identify needs, quantities, and timeframes for material development. In addition, coordination occurred across forest administrative boundaries to determine core species for shared development opportunities. Seed and propagule mixes were reviewed for policy compliance.

The seed management plans represent the native plant material needs for forest restoration work for a 5-year planning period. The plans will guide the collection and acquisition of source-identified native plant materials for both current and future revegetation work.

The Region 1 Geneticist contributed to and reviewed plan development. The USFS Coeur d'Alene Nursery and private growers will be partners in plan implementation. Seed management plans will need to be updated annually by forest native plant coordinators and funded through integrated restoration budgets.



Figure 1: Restoration needs were reviewed by resource specialists for a Gallatin NF project.

R1 Forests with seed management plans:
Bitterroot, Beaverhead/Deerlodge, Clearwater, Nez Perce, Flathead, Kootenai, Lolo, Lewis and Clark, Idaho Panhandle, and Gallatin NFs.

Year project initiated: 2008

Project completion: 2011

FY 2011 partners/collaborators:

- Region 1 Forests
- Region 1 Native Plant Program
- Region 1 Geneticist
- USFS Coeur d'Alene Nursery

Contact person & phone number:

Susan Rinehart, R1 Native Plant Program
Manager (406) 329-3669



Figure 2: Seed management plans will result in native plant materials being ready when needed for restoration work.



**USFS Region One
Federal Building
200 E. Broadway
Missoula, MT 59807**

Native Plant Program Regional Training Curriculum – *Soil Bioengineering and Native Plants Revegetation Course*

2011 Accomplishments

The Northern Region's Native Plant Program Five-Year Action Plan emphasizes training to achieve success in use of native plant materials. A training curriculum has been developed for revegetation practitioners to provide guidance in revegetation techniques for native plants. Training modules include a wide variety of topics such as project planning, design, implementation, and monitoring as well as technical topics in soils, mycorrhizae, fertilizer, mulches, compost, planting practices, nursery coordination, and development of appropriate seed mixes.

The 2011 training was attended by over 50 participants from four different states including state, federal, and Tribal representatives, county governments, local seed nurseries, industry reclamation consultants, and FS/BLM resource managers and specialists. The training has become a forum for the collaboration and sharing of ideas and information regarding native plant revegetation in the Northern Rockies and Northern Prairie ecosystems.

U.S. FOREST SERVICE TRAINING
ANNOUNCEMENT
**Soil Bioengineering and Native Plant
Revegetation**

April 25 -29, 2011
Location: Coeur d'Alene, ID



Year awarded: Initial funding was awarded in 2011.
Project completion: 2011
Report number: 1 of 1
Expenditures (through 6/2011):

- Funding for course development and delivery was \$45,000 (NFN3 funding).
- In FY11 \$45,000 was expended.
- Balance of \$0 remains.

Partners/contractors/cooperators: Reclamation Research Group LLC, Bozeman MT; Herrera Environmental Consultants, Seattle and Missoula, MT, Robert Wintergerst, R1 Environmental Engineer, Meredith Webster, R1 Soil Scientist
Contact person & phone number:
Susan Rinehart, Native Plant Program Mgr. 406-329-3669



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Federal Building
200 East Broadway
Missoula, MT 59833

Development of Seed Transfer Zones for Pearly everlasting and Rough bentgrass in Region One

2011 Accomplishments

The Five-Year Action Plan for the R1 Native Plant Program identified the need to develop seed transfer zones for core native revegetation species. In 2008 the multi-year R1 Seed Transfer Zone Study was initiated with 2011 representing its fourth year of implementation.

Each year, two species are selected for common garden study. In 2010, a forb, pearly everlasting (*Anaphalis margaritacea*), and a grass, rough bentgrass (*Agrostis scabra* var. *scabra*) were selected for study. R1 forests and grasslands collected wildland seed for the two species. The common garden study was initiated in summer 2011 for rough bentgrass at the USFS Coeur d'Alene Nursery. The common garden study for pearly everlasting will be initiated in 2012. The studies are under the guidance and direction of the Region 1 Geneticist and Region 1 Native Plant Program.

2011 Accomplishments: Phenology and morphology data was collected for rough bentgrass during the 2011 growing season. Crews from the Coeur d'Alene Nursery and various forests collected the data which involved seven species variables. This is the first year of data collection for this species. Pearly everlasting was readied for out-planting in common garden studies however plot establishment was delayed due to poor planting conditions and the need to protect seedlings. Out planting and data collection will begin for this species in 2012.

Year awarded: Initial award in 2009

Project completion: 2014

Report number: 1 of 4

Expenditures (through 10/2011):

- FY09 funding \$100,000 (NFN3 funding)
- Expended approximately \$70,000 from FY09 to FY11
- \$20,000 remaining for FY12 to FY13

Partners/contractors/cooperators: R1 Regional Geneticist, R1 Native Plant Program, USFS Coeur d'Alene Nursery, R1 Forests and Grasslands

Contact person & phone number:

Susan Rinehart, Native Plant Program Mgr. 406-329-3669
Dr. Mary Mahalovich, Regional Geneticist, 208-883-2350



Upper figure: Pearly everlasting, a forb commonly used for revegetation.

Lower figure: Rough bentgrass, a favorite revegetation grass found in forested habitats throughout the northern Rocky Mountains.



The study is a cooperative venture between the USFS Coeur d'Alene Nursery, the R1 Regional Geneticist, the R1 Native Plant Program, and R1 forests and grasslands.



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200 East Broadway
Missoula, MT 59833

Development of Seed Transfer Zones for Two Native Shrubs through Common Garden Studies in Region One

2011 Accomplishments

In 2008 Region One initiated its Seed Transfer Zone Study to determine seed transfer guidelines for core revegetation species. 2011 represents its fourth year of this effort.

Each year, two species are selected for common garden study. Red osier dogwood (*Cornus sericea* ssp. *sericea*) and shinyleaf spirea (*Spiraea betulifolia* var. *lucida*) were selected for study in 2009. R1 forests and grasslands collected wildland seed for the two species and the common garden study was initiated in 2010 at the USFS Coeur d'Alene Nursery under the guidance of the Region 1 Geneticist and the Region 1 Native Plant Program.

2011 Accomplishments: Phenology and morphology data was collected for red osier dogwood and shinyleaf spirea during the 2011 growing season. Crews from the Coeur d'Alene Nursery and various forests conducted intensive data collection to acquire information on eight species variables. This is the first year of data collection for these two species.

This initiative will contribute to our understanding of genetic variation in native species within their range in the northern Rocky Mountain Ecosystem and northern Great Plains. The results of the study will be used to develop seed transfer guidelines for Forest Service System lands in Region One as well as adjacent areas. Results will also be used to compare native genotypes to "restoration cultivars".

Year awarded: Initial award in 2009

Project completion: 2013

Report number: 2 of 4

Expenditures (through 10/2011):

- FY09 funding \$91,600 (NFN3).
- Expended approximately \$75,000 from FY09 to FY11.
- **\$16,600 remaining for FY12 to FY13.**

Partners/contractors/cooperators: R1 Geneticist, R1 Native Plant Program, Coeur d'Alene Nursery, R1 Forests and Grasslands.

Contact person & phone number:

Susan Rinehart, Native Plant Program Mgr. 406-329-3669
Dr. Mary Mahalovich, Regional Geneticist, 208-883-2350



Upper figure: Red osier dogwood, a shrub commonly used for riparian revegetation.

Lower figure: Shinyleaf spirea, another favorite revegetation shrub found in forested habitats throughout the northern Rocky Mountains.



The study is a cooperative venture between the USFS Coeur d'Alene Nursery, the R1 Regional Geneticist, the R1 Native Plant Program, and R1 forests and grasslands.



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Development of Seed Transfer Zones for Idaho fescue and bluebunch wheatgrass through Common Garden Studies in Region One

2011 Accomplishments

The Five-Year Action Plan for the R1 Native Plant Program identified the need to develop seed transfer zones for core native revegetation species. In 2008 the multi-year R1 Seed Transfer Zone Study was initiated. 2011 represents its fourth year of implementation.

The first species selected under this initiative were two grasses, Idaho fescue (*Festuca idahoensis*) and bluebunch wheatgrass (*Pseudoroegneria spicata*). During the 2008 field season, R1 forests and grasslands collected wildland seed for the species and common garden studies were planted in 2009 at the USFS Coeur d'Alene Nursery.

2011 Accomplishments: 2011 represents the third year of data collection for these two species. Data for bluebunch wheatgrass has undergone a quality control review with data analysis tentatively scheduled for 2012-2013. Idaho fescue will require an additional level of genetic testing and the date for data analysis for this species is contingent upon the findings of this review.



Upper figure: Aram Eramian collecting data with a personal data recorder at the common garden study plots.

Lower figure: Grass seedlings in the Coeur d'Alene Nursery greenhouses in early spring before out planting in common garden study plots

Year awarded: Initial award in 2008

Project completion: 2013

Report number: 2 of 3

Expenditures (through 10/2011):

- FY08 funding \$100,000 (both species) NFN3 funding.
- Expended approximately \$55,000 in FY08
- Expended approximately \$20,000 in FY09
- Expended approximately \$10,000 in FY10
- Expended approximately \$7500 in FY11

•\$7,500 remaining for FY11

Partners/contractors/cooperators: USFS Coeur d'Alene Nursery, R1 Regional Geneticist, R1 Native Plant Program, R1 Forests and Grasslands

Contact person & phone number:

Susan Rinehart, Native Plant Material Program Manager, 406-329-3669

Dr. Mary Mahalovich, Regional Geneticist, 208-883-2350

The study is a cooperative venture between the USFS Coeur d'Alene Nursery, the R1 Regional Geneticist, the R1 Native Plant Program, and R1 forests and grasslands



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Idaho Panhandle National Forests-

Developing a Native Plant Material Seed Procurement Plan

2011 Accomplishments

In 2011, the Idaho Panhandle National Forests (IPNF) completed a draft native plant materials (NPM) Seed Procurement Plan. This effort was conducted in conjunction with the Region's Native Plant Program. The Region 1 Geneticist reviewed plan development and the USFS Coeur d'Alene Nursery will be a partner in plan implementation. This effort was conducted region-wide with several other Region 1 forests. The NPM Seed Procurement Plan will allow the IPNF to successfully plan current and out-year needs for native plant material and contribute to collection and grow-out/increase for these species.

In future years, the IPNF will continue collection, grow out and increase of priority native revegetation species. These species will be grown out for increase at the Coeur d'Alene Nursery or by a commercial seed production nursery.



Seed collection crew member collecting bluejoint reedgrass seed in 2011.



Successful planting efforts using locally-adapted, site appropriate native shrub plugs. These plugs were propagated from shrub hedgerows at the USFS Coeur d'Alene Nursery,

Year project initiated: 2010

Project completion: 2012

Report number: 2 of 3

Expenditures (through 09/2011):

~ \$32,233 NFN3 funding

FY 2010 partners/collaborators:

Region 1 Native Plant Program Mgr.

Region 1 Geneticist

Coeur d'Alene Nursery

Contact person & phone number:

Jennifer Costich-Thompson 208-265-6626



Idaho Panhandle National Forests

S.O. – ATTN: Art Zack

3815 Schreiber Way

Coeur d'Alene, ID 83815

Lewis and Clark National Forest

FY11 Native Plant Material Accomplishments

FY11 NFN3 Projects:

- Developed a 10-year Lewis and Clark NFNative Plant Procurement Plan to determine current and future native plant needs for rehabilitation and restoration projects on the Lewis and Clark National Forest.
- The Native Plant Procurement Plan, updated annually, would assist the Forest in determining appropriate seed or plant material collections for grow-out and increase at the USFS Coeur d'Alene Nursery to meet future seeding and planting needs.

FY11 NFN3 Accomplishments:

- January 25-27, 2011 – Participated in the Northern Region Native Plant Seed Mix Meeting at the Regional Office (Missoula, Montana).
- April 13-14, 2011 – Participated in the Northern Region Native Plant Seed Procurement Plan Meeting in Coeur d'Alene, Idaho.
- Developed standard seed mixes utilizing a combination of native grasses, forbs, and shrubs appropriate for the Forest. A list of appropriate revegetation species was compiled to develop site-specific mixes. Mixes included: native dry site, native moist site, native high elevation site, native riparian, and native highly-disturbed site.
- Developed a 10-year Lewis and Clark NF Native Plant Procurement Plan utilizing information from the standard seed mixes (including cuttings, seedlings, and other plant material) and current and expected rehabilitation and restoration projects. Projects requiring restoration or rehabilitation with native plant material included road obliteration/restoration, watershed restoration, timber sale landings and skid trails, mineral reclamation, and wildland fire or fireline rehabilitation. Project information (location, size, implementation dates, etc.) was provided by district and forest engineers, hydrologists, fisheries biologists, wildlife biologists, geologists, fuels specialists, silviculturists, and botanists.
- Information in the 10-year Native Plant Procurement Plan will be updated annually as projects and native plant material needs change and plant material becomes available.
- The next step in the program is to begin seed and plant material collection of priority species for grow-out and increase at the nursery for current and future project work..



Photo by: Victoria Maassen, Botany Technician

Year awarded: 2011

Project completion: 2011 plus annual procurement plan updates

FY11 expenditures: \$12,265 (NFN3)

Contact: Tanya E. Murphy
406/791-7753

Lewis and Clark National Forest
1101 15th Street North
Great Falls, MT 59401
406/791-7700



Beattie Gulch Vegetation Restoration Project on the Gallatin National Forest

2011 Accomplishments

The Gallatin National Forest and Yellowstone National park acquired approximately 2,000 acres of abandoned farm lands over the past 20 years along the northern boundary of Yellowstone National park. Four hundred acres of this are targeted for restoration on the Gallatin National Forest. Beattie Gulch is the second in a series of four project areas. Restoration is intended to reduce exotic plants, re-establish native vegetation, and ultimately to restore and enhance wildlife habitat.

Since the turn of the century, a portion of Beattie Gulch had been tilled and irrigated as hayfields and more recently, agriculture production. Agriculture at the site ended after the Forest Service acquired Beattie Gulch from the Royal Teton Ranch through the Rocky Mountain Elk Foundation in 1999. Vegetation at the start of this project was mainly non-native grasses such as cheatgrass and weedy mustard species in previously plowed areas with a mixture of native grasses, forbs and shrubs in relic unplowed areas.

In 2009, contracts for the Beattie project were awarded and native local seed was collected by FS personnel and sent to the USFS Coeur d' Alene Nursery. The project included construction of two wildlife exclosures which were later. Also in 2011, a conservative adaptive reclamation strategy was adopted for this area due to harsh soil and climate conditions. This strategy includes limiting the amount of bare soil exposed at any one time and planting in strips to control wind erosion.

In spring of 2011, the contractor plowed and planted barley on 20 acres, sprayed weeds on 4 acres, and conducted several native grass trials to test revegetation options. Initial barley establishment was good for all strips however abrupt weather changes in June (no precipitation) adversely affected about ½ of the barley. In the fall of 2011, the contractor prepared a seedbed and planted winter wheat on approximately 12 acres, partly in areas where the barley had died out and partly to enlarge the total area being prepared for native grass establishment.

Summary of accomplishments in 2011:

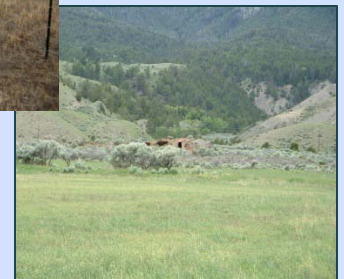
- Plow and plant barley (20 ac)
- Plow and plant winter wheat (12 ac)
- Weed treatments and spot seeding
- Test trials seeding native grasses
- Modification of fencing



Overview of Beattie Gulch Project area



Fence corner prior to fence modifications in 2011



Weedy mustard dominating lower portion of Beattie Gulch prior to project. Native vegetation and coke kilns in background.

Year awarded: 2009

Project completion: 2012

Report number: 2 of 4

Expenditures (through 10/2011): \$121 K (NFN3 funding) obligated to CDA Nursery/contractors

Partners: Northern Region Native Plant Program, Yellowstone National Park, NRCS, USFS Coeur d'Alene Nursery

Contractors: Troy Smith – Arrowhead Excavating (planting) and Menard Construction Inc. (fencing)

Contact person & phone number:

Tom Keck (406) 587-6714



Gallatin National Forest
PO BOX 130
Bozeman, MT 59771

Flathead National Forest

FY11 Native Plant Material Accomplishments

Using FY11 NFN3, NFWV, NFWF, WFHF and RAC funds we accomplished the following:

- We developed a forest Native Plant Materials Procurement Plan along with many other forests in the Region. This plan provides a focus for future seed collection efforts and restoration opportunities.
- Seed mixes were reviewed for compliance to the USFS Native Plant Policy (2008).
- In coordination with the weed program, we collected native grass seed from elk winter range habitat for grow-out and increase and also deposited biological control at the site for spotted knapweed.
- We collected shrub cuttings of elderberry, oceanspray, and rose species for grow-out in the fall.
- We purchased 1,663 upland shrubs from Great Bear Restoration for \$2,950 for revegetation on the Tally Lake District.
- We received 8,980 lowland shrubs from the USFS Coeur d'Alene Nursery for \$13,470 for revegetation on two districts.
- We spread 2,700 pounds of native grass seed from the Coeur d'Alene Nursery in burned areas and disturbed roadsides.
- We used the Montana Conservation Crew for shrub planting and seed sowing (\$7,700).

Using other appropriated dollars or federal funds, the forest accomplished the following:

- Spread approximately 800 pounds of native or native-variety grass seed on roadsides, landings, culvert removals, and other ground-disturbing activity areas, like ARRA projects, requiring erosion and weed-control ground cover. The species list was specified by the Native Plant Coordinator and distributed through Westland Seed Inc. in Ronan, MT under the name Flathead Seed Mix.



Figure 2. Seed collection area on Wedge Mountain.



Figure 1. Reconnaissance of riparian species at Stanton Lake.

Year awarded: 2011

Project completion: Ongoing

FY10 Expenditures:

\$24,000 (NFN3)
\$9,114 (NFWV)
\$8,400 (NFWF)
\$10,920 (WFHF)
\$7,300 (RAC)

Partners/Contractors/Coop: R1
Native Plant Program, Montana
Conservation Crew, USFS Coeur
d'Alene Nursery, Great Bear
Restoration

Contact: Chantelle DeLay
cbdelay@fs.fed.us



Flathead National Forest
650 Wolfpack Way
Kalispell, MT 59901
406-758-5331

Dakota Prairie Grasslands

FY11 Native Plant Material Accomplishments

Using FY11 NFN3 funds we accomplished the following:

- Reconnaissance and collection of approximately 500 vegetative divisions of inland saltgrass (*Distichlis spicata*) and alkaligrass (*Puccinellia nuttalliana*). Both species are salt tolerant and desirable for restoration of high salt oil/gas and rangeland sites. No genetically-local commercial sources for either species are currently available. Plant divisions were collected by Forest Service and Prairies Diversified nursery staff from five widely dispersed northern and southern sources across the Medora Ranger District.
- Transplanted divisions into production beds at Prairie's Diversified Nursery near Bismarck, ND. Nursery staff conducted transplanting as well as weed control during the 2011 growing season. Approximately 1200 square feet of production beds were established.
- Prairie's Diversified staff also grew seedlings of alkaligrass from Medora Ranger District seed and transplanted plugs into nursery rows for seed production.
- Ongoing work will involve assessment of seed productivity, weed control in nursery production plots, and development of techniques for establishing vegetative divisions of these two species on actual reclamation sites.
- U.S. Forest Service staff completed 28 vegetative transects on 10 recently restored well sites to determine plant species composition and cover and compare them to the actual seed mix installed. Transect data will be used to evaluate the success or deficiency of current restoration techniques and identify the need for other techniques or plant materials to compete effectively against invasive plants.

Below, collection of inland saltgrass rhizomes at South Gaylord site. Right shows early stages of nursery production rows of saltgrass and alkaligrass at Prairies Diversified Nursery



Typical oil well reclamation site, with seeded native grasses in foreground and portion of vegetation transect visible as yellow tape.

Year awarded: 2011

Project completion: ongoing

FY11 expenditures:
\$6,250 (NFN3)

Partners/contractors/coop:

Region One Native Plant Program,
Prairies Diversified, Bismarck, ND
(privately owned seed house and nursery)

Contact: Joe Washington
701-227-7814
jpwashington@fs.fed.us



Dakota Prairie Grasslands
Medora Ranger District
99 23rd Ave W
Dickinson, ND 58601

Custer National Forest

FY11 Native Plant Material Accomplishments

Using FY11 NFN3, NFWF, and NFWV funds we accomplished the following:

- Reconnaissance, assessment, and mapping of 12 potential sites for native plant revegetation projects beginning in FY13.
- Obligated \$11,438 to the USFS Coeur d'Alene Nursery for grow-out and increase of selected native plant species from the Custer NF.
- Continued working with forest specialists to develop project design criteria and determine site preparation needs.
- Evaluated NEPA needs with several Ranger Districts.

Figure 1 - 3. Examples of potential project sites.



Year awarded: 2011

Project completion: 2011

FY11 expenditures:

NFWV: \$10,000

NFN3: \$18,000

NFWF: \$8,000

Partners: Northern Region Native Plant Program, USFS Coeur d'Alene Nursery

Contact: Joe Vacirca
406-657-6200



Custer National Forest
1310 Main Street
Billings, Montana 59105
406-657-6200

Bitterroot National Forest

FY 2011 Native Plant Material Accomplishments

Using FY2011, NFN3 funds the Bitterroot National Forest accomplished the following:

- Developed a 5 and 10-year Seed Procurement Plan for the Bitterroot National Forest and began implementation of the plan.
- Collected seed from seven native grass and forbs species across several elevation bands for grow-out and increase. The material will contribute to supplies of native plant material for the Bitterroot National Forest.
- Collected 3,000 shrub and tree cuttings from six species and seed from one species for container grow-out for future projects and stool bed establishment at the nursery.

Using other appropriated dollars or federal funds we accomplished the following:

- Purchased 300lbs of native grass seed to use on the Saddle Complex Fire and the 41 Complex Fire for erosion control and restoration efforts.
- 400 native shrubs and trees were planted at campground sites on the forest for revegetation work.
- 200 species of native shrubs and trees were planted at the Stansbury Mine restoration/revegetation site with the help of the Trapper Job Corps in a mine restoration project.



Figure 1. Seed collection site.

Year awarded: 2011

Project completion: 2011

FY11 expenditures:

\$26,618.00 (NFN3)

\$290.00 (NFVW)

\$652.50 (S2X113)

Partners/contractors/coop:

Northern Region Native Plant Program, USFS Coeur d'Alene Nursery, and Trapper Job Corps

Contact:

Robin Taylor-Davenport 406-363-7172

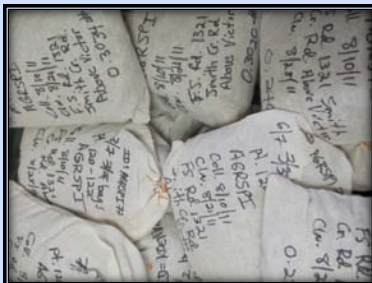


Figure 2. Bags of collected seed.



Figure 3. Trapper Creek Job Corps.



Figure 4. Planting at Stansbury Mine.



Bitterroot National Forest
Supervisors Office
1801 N. First Street
Hamilton, MT 59840-3114

Beaverhead-Deerlodge National Forest

FY11 Native Plant Material Accomplishments

Using FY11 NFN3 funds, we accomplished the following:

- Reviewed traditional seed mixes used on the Beaverhead-Deerlodge (B-D) National Forest for compliance with the 2008 National Native Plant Material Policy.
- Developed a 5–and-10 Year Seed Management Plan for the forest and assimilated the plan into the Region One Seed Management Plan.
- Coordinated with other resource areas across the forest to determine 10-year seed needs utilizing the Coeur d’Alene Nursery native plant material spreadsheets to calculate and track needs by species, elevation, and HUC.
- Recorded suitable collection populations throughout the summer to facilitate easier collections in 2012.
- Assessed funding and personnel needs to implement the forest’s 10-year Seed Management Plan beginning in FY12.
- Obligated \$4,090 to the Coeur d’Alene Nursery for grow out and increase of future materials.



Figure 1. Potential native seed collection site.



Figure 2. Native plant materials are needed for fire revegetation on the Beaverhead/Deerlodge NF.

Year Awarded: 2011

Project completion: 2011

FY09 Expenditures:
\$12,650 (NFN3)

Partners: Region One Native Plant Program, USFS Coeur d’Alene Nursery

Contact: Jessie Salix
406-683-3947



Beaverhead-Deerlodge National Forest
420 Barrett Street
Dillon, Montana 59725
406.683.3900

Collection and propagation of Native Plant Materials for Integrated Resource Restoration Projects

Nez Perce - Clearwater National Forests 2011 Accomplishments

During the 2011 field season the Nez Perce – Clearwater National Forests made extensive collections of wildland seed to increase supplies of locally sourced native plant materials for forest re-vegetation projects. The materials will be used for many different types of projects including re-vegetation of burned areas, road obliteration, riparian improvement, mining reclamation, and timber harvest landings and skid trail revegetation. The plant material will be used in low to high elevation forest and grassland ecosystems across both forests.

2011 Accomplishments:

On the Nez Perce – Clearwater National Forests, force account crews collected 79 lots representing 43 species, including 15 species of grass, 17 species of forb and 9 species of sedge and 2 species of shrub. This seed is currently being processed at the Coeur d'Alene Nursery.

Another 5 species were collected across the two forests by a contractor, Benson Farms, to go with the 16 collected from 2010. This seed is currently being processed and cleaned. 2011 was the third and final year of the collection contract with Benson Farms.

Extensive surveys and documentation of suitable collection sites for many species were completed to facilitate future seed collections.



An Idaho fescue grassland on the Nez Perce National Forest



Penstemon venustus
Nez Perce National Forest

Reporting NFN3 funds for:

- Contract awarded in 2008 and completed in 2011. Report 4 of 4
- Force account collections 2011.

Expenditures (through 10/2011): NFN3 funding

- \$59,032 paid to contractor for 2010 seed collections. Approx. \$4,660 will be paid to contractor for FY11 seed collections.
- \$34,708 force account collections on the Nez Perce – Clearwater NF (includes \$28,180 awarded by the Region and an additional \$6,528 from other unspent NFN3 on the NPNF).
- \$22,492 transferred from the Nez Perce –Clearwater NF to the Coeur d'Alene Nursery for seed processing. (includes \$19,000 from the Region One NPM Program and \$3,492 from other NFN3 on the NPNF).

Partners/contractors/coop: Region One Native Plant Program, USFS Coeur d'Alene Nursery, Benson Farms.

Contact person & phone number:

Mike Hays (Clearwater & Nez Perce NF) 208-983-4028



Nez Perce National Forest

104 Airport Road, Grangeville, ID 83530

Clearwater National Forest

12730 Highway 12, Orofino, ID 83544

Cutler Meadows Vegetation Restoration Project on the Gallatin National Forest

2011 Accomplishments

The Gallatin National Forest and Yellowstone National park acquired approximately 2,000 acres of abandoned farm lands over the past 20 years along the northern boundary of Yellowstone National park. Four hundred acres of this are targeted for restoration on the Gallatin National Forest. Ongoing native grass restoration continues at both Cutler Meadows and Beattie Gulch. Restoration is intended to reduce exotic plants, re-establish native vegetation, and ultimately to restore and enhance wildlife habitat.

Historically, Cutler Meadows was tilled and irrigated as a hayfield until the Forest Service acquired the land in 1999. However, in the absence of irrigation the site became dominated by weeds and early successional species. The area was plowed and seeded with native grass cultivars in 2007. The effort was unsuccessful, and cheatgrass and other weeds reinvaded the fields. In 2010, the decision was made to replicate some of the revegetation techniques that appeared to be working in Beattie Gulch. This strategy included limiting the amount of bare soil exposed at any one time, planting in strips to control wind erosion, and enhancing existing native vegetation.

Forty-five acres in the center of Cutler Meadows was plowed and seeded to barley in 2010 to break up the fire hazard presented by the thick continuous mat of dried cheatgrass and weedy mustard dominating the site. Excellent cheatgrass control was obtained throughout the growing season and into the fall in the barley fields. The north end of Cutler Meadows was burned later that year to remove the thick layer of thatch.

In the spring of 2011, the contractor plowed and planted barley on 32 acres. He sprayed weeds on 21 acres and mowed weeds on approximately 45 acres to release existing perennial grasses. We also established several small native grass trials to test revegetation options. Due to extremely high water the Yellowstone River flooded a portion of the planting strips resulting in an amazing flush of lambquarters in those areas. In the fall of 2011, the contractor prepared a seedbed and planted winter wheat on approximately 24 acres, partly in areas where the barley had died out and partly to enlarge the total area being prepared for native grass establishment.

Summary of Accomplishments in 2011:

- Plowed and planted barley (32 ac)
- Plowed and planted winter wheat (24 ac)
- Weed treatments and spot seeding (66 ac)
- Test trials of seeding native grasses



Overview of strip planting approach to reclamation in Cutler Meadow

Year awarded: 2010

Project completion: 2013

Report number: 2 of 4

Expenditures (through 4/2011): \$84 K (NFN3 funding) obligated to contractors

**Partners: Northern Region Native Plant Program, Yellowstone National Park, NRCS, USFS Coeur d'Alene Nursery
Contractors: Troy Smith – Arrowhead Excavating (planting) and Menard Construction Inc. (fencing)**

**Contact person & phone number:
Tom Keck (406) 587-6714**



**Gallatin National Forest
PO BOX 130
Bozeman, MT 59771**

Idaho Panhandle National Forests- Developing and Testing Native Seed Mixes

2011 Accomplishments

In 2011 the Idaho Panhandle National Forests (IPNF) revised their seed mixes to develop site-appropriate, locally-adapted seed mixes. This effort was led by the Region One Native Plant Program and involved participation by several other forests across Region One.

During the 2011 field season, the IPNF began implementing the native seed mixes. District personnel collected seed from wildland grass and forb species. The seed was sent to the USFS Coeur d'Alene Nursery (CDAN) for grow-out and increase. After two or more years of grow-out and increase, the IPNF should have enough seed quantity to begin trial use of the new IPNF native seed mixes.

The IPNF also collected cuttings of several shrub species considered priority species for their revegetation effectiveness and ease of propagation. These cuttings will be grown out by CDAN for establishment in long-term hedgerows. These hedgerows will provide a means for efficient propagation when a restoration or revegetation need arises on the forest. Some of the faster-growing shrub species have already been used on the forest for road obliteration projects.



Seed collection crew member collecting bluejoint reedgrass seed, September 2011.



Bluebunch wheatgrass wildland seed collected on the IPNF. This seed will be used for grow out and increase for future use in locally-adapted and site-appropriate IPNF Native Seed Mixes!

Year project initiated: 2011
Project completion: 2013
Report number: 1 of 3
Expenditures (through 09/2011):
~ \$20,250 (NFN3 funding)
FY 2010 partners/collaborators:
Region 1 Native Plant Materials Program
Region 1 Geneticist
USFS Coeur d'Alene Nursery
Contact person & phone number:
Jennifer Costich-Thompson 208-265-6626



Idaho Panhandle National Forests

S.O. – ATTN: Art Zack
3815 Schreiber Way
Coeur d'Alene, ID 83815

Gallatin National Forest

FY11 Native Plant Material Accomplishments

Using FY11 NFN3 funds we accomplished the following:

- Developed five native seed mixes for the Gallatin National Forest for a variety of forest ecological conditions
- Developed a Gallatin NF Seed Procurement Plan for 5 and 10-year plant material needs
- Monitored decommissioned roads seeded in 2010 with native seed mixes

Using other appropriated dollars, the forest accomplished the following:

Purchased native seed for 2011 recreation projects

Seeded approximately 38 miles of ripped and recontoured roads with native or native-variety seed

Seeded approximately 25 acres of dispersed recreation and campground renovation sites

The seed mixes were specified by the Forest's Native Plant Coordinator and procured through Bruce Seeds of Townsend, MT



Figure 2: Monitoring on a road ripped and reseeded in 2010 on the Bozeman RD.



Figure 1. Monitoring revegetation on a road recontoured and seeded on the Bozeman RD, 2010.

Year awarded: 2011

Project completion: ongoing

FY10 and 11 expenditures:

(NFN3) \$8000

(CMLG) \$4101 seed purchased in 2010.

Partners/contractors/coop: R1 Native Program, Wind River Seed and Bruce Seed Company, T and T Contractors, Victor, MT

Contact: Reggie Clark
406-522-2542
rmclark@fs.fed.us



Gallatin National Forest
Bozeman Ranger District
3710 Fallon Street, Suite C
Bozeman, MT 59718

Sheep Mountain Grassland Restoration Project on the Lolo National Forest

2011 Accomplishments

This project was initiated in 2007 to test restoration methods on one acre of montane grass/forb grassland in western Montana. The original condition of the grassland was infestation by cheatgrass (*Bromus tectorum*). Prior to a fall herbicide treatment with Plateau, we used a line-intercept sampling method and calculated a 67% frequency of cheatgrass using 123 points in the acre plot. In the fall of 2008, we calculated 0% frequency under the same methodology. In mid-June of 2009, 2010, and 2011 we measured a 28, 31, and 24% frequency of cheatgrass, respectively. Plot monitoring occurred on June 28, 2011 (Figures 1 and 2).

In 2011, the frequency of cheatgrass changed little from the previous two years. Therefore, we did not retreat the cheatgrass. We did pull spotted knapweed (*Centaurea stoebe*) adjacent to the plot in June and sprayed the adjacent road for knapweed into the site in the fall. However, native forbs were more abundant in FY11 than in previous years.

Monitoring, reports, and herbicide costs were \$3,500. Additional days were used to collect native seed for the Lolo Forest on four sites and \$3,000 dollars were sent to the USFS Coeur d' Alene Nursery to grow-out native seeds for increase for future revegetation projects.



Figure 2. This is the weediest area in the plot however native plant diversity increased this year from past years.



Figure 1. Native forbs and grasses were robust in 2011.

Year awarded: initial award in 2007

Project completion: 2011

Report number: 4

Expenditures (through 10/2010): NFN3 funding

- FY07 funding \$14,000, spent \$14,000; \$0 remaining
- FY09 funding \$5,750, spent \$5,750; \$0 remaining
- FY10 funding \$5,000, spent \$5,000; \$0 remaining
- FY11 funding \$6,500, spent \$6,500; \$0 remaining
- Total funding \$31,250, total spent \$31,250;**
- \$0 remaining**

Partners/contractors/cooperators: Lolo Forest Native Plant Coordinator, Missoula District Weed Coordinator, Regional Office Restoration Botanist, and Coeur d' Alene Nursery Manager

Contact person & phone number:
Darlene Lavelle 406-329-3800



Lolo National Forest
Fort Missoula, Building 24
Missoula, MT 59804

Kootenai National Forest

FY11 Native Plant Material Accomplishments

Using FY11 NFN3 funds we accomplished the following:

- Completed 5-and10 Year Seed Procurement Plans (draft) and reviewed forest seed mixes for compliance with the national Native Plant Policy (2008).
- Reconnaissance, assessment, and mapping of multiple wildland seed collection sites across the forest from a wide range of drainages, habitats, and elevations.
- Collected wildland native grass seed for grow out and increase to implement the forest's Seed Procurement Plan.
- Obligated \$12,400 to Coeur d'Alene Nursery for seed processing, grow-out and increase for the next three years.

Using other appropriated dollars or federal funds, the forest accomplished the following:

- Sowed approximately 300 pounds of native or native-variety grass seed on roadsides, landings, culvert removals, and other ground-disturbing activity areas requiring erosion and weed-control ground cover. The species list developed by the Forest's Native Plant Coordinator.

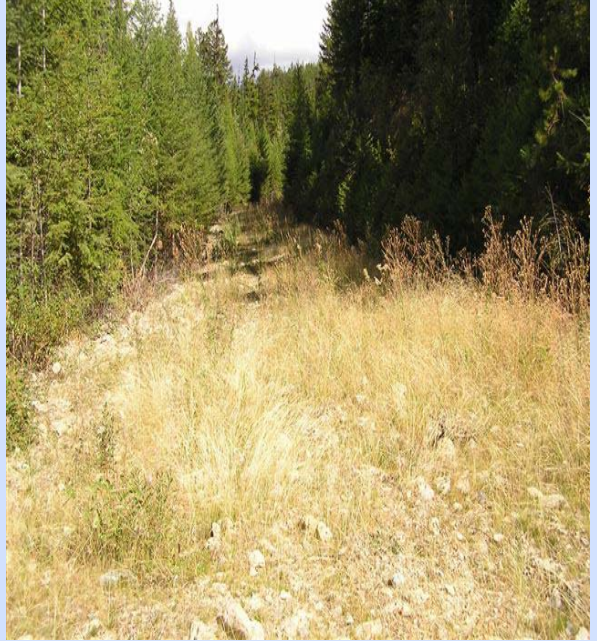


Figure 1. Native seed revegetation on decommissioned road

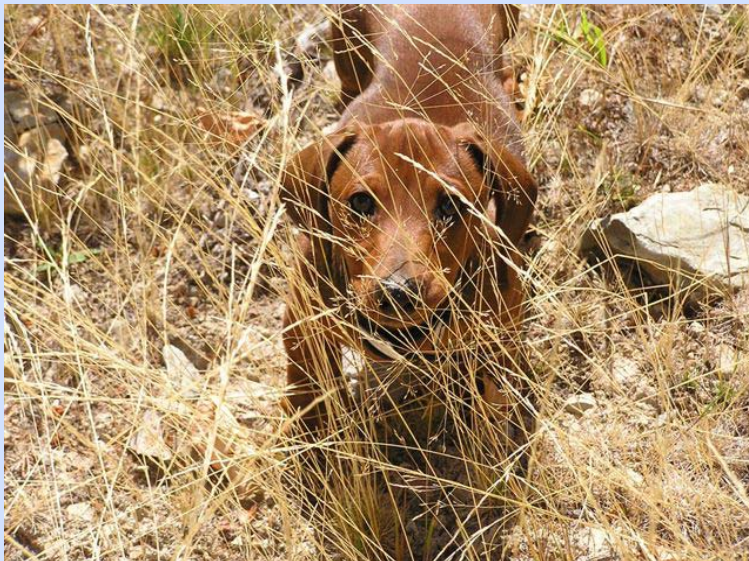


Figure 2. Its always good to have a faithful companion for a weekend native seed reconnaissance trip

Year awarded: 2011

Project completion: ongoing

FY11 expenditures: \$13,200 (NFN3)

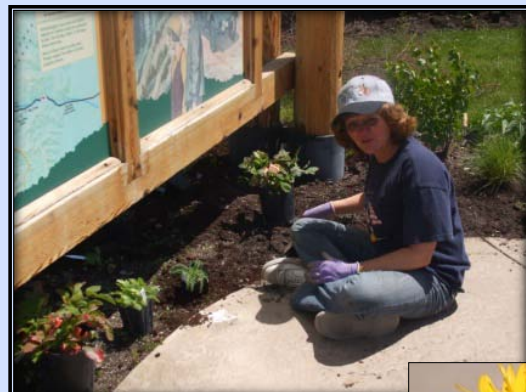
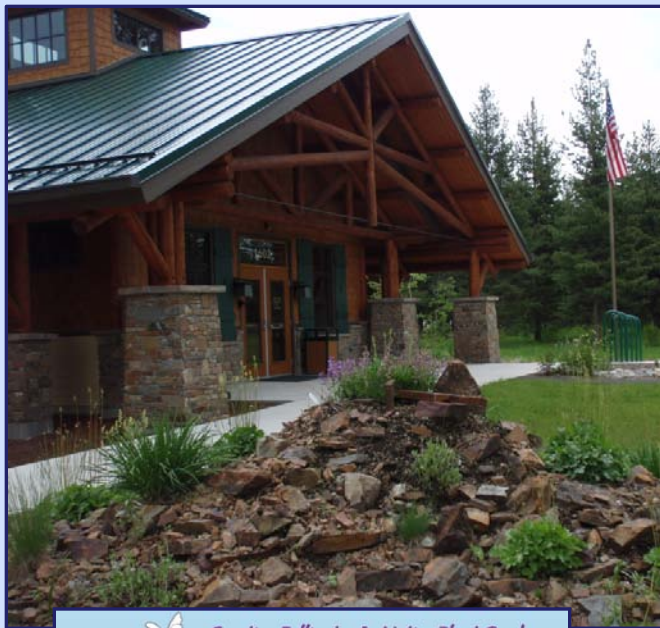
Partners/contractors/coop:
Native Plant Program Manager
Regional Geneticist
USFS Coeur d'Alene Nursery

Contact: Deb Bond
406-283-7579
dbond01@fs.fed.us



Libby Ranger District
12557 HWY 37 N
Libby, MT 59923

Region One Pollinator Gardens



Creating Pollinator & Native Plant Gardens:
The Little Things Run the World

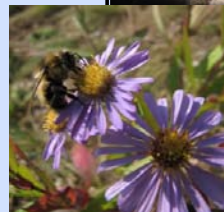
Every time you walk into your garden to enjoy a beautiful flower or pick a fruit, you might think a bee, butterfly or hummingbird. These and other kinds of animals are pollinators – they move pollen from one flower to another flower of the same species, helping plants to produce fertile seeds.

Eighty percent of the world's crop species and most native plants rely on animals for pollination. However, biologists fear several butterfly and bumblebee species have disappeared from parts of their range because of habitat loss, introduced disease, pollution and pesticide poisoning.

How can you help pollinators?

- Create a diverse and open garden.
- Don't use pesticides or herbicides.
- Provide nesting sites and/or ground cover for them.

See if you can spot these pollinators in the garden.



Idaho Panhandle National Forests Priest Lake Ranger District Native Plant Pollinator Garden & Interpretive Site

2011 Accomplishments

A recent remodeling for ADA access at the Priest Lake Ranger station resulted in a large amount of disturbance to existing landscaping. For employees of the Priest Lake Ranger District (PLRD) this presented a great opportunity to update the landscaping around the main office into a native plant pollinator garden and interpretive site.

The approximately ¼ -acre native plant pollinator garden (NPPG) incorporates a variety of native plants to provide food and habitat for pollinators as well as multiple landscape features and interpretive literature. The design will encourage the public to gain a better understanding of the association between pollinators and native plants, as well as encouraging future use of similar designs in local landscapes and gardens.

District personnel contributed over 100 hours of time to the project. Activities included amending the site with topsoil and mulch, incorporating native rock and woody materials (as both design features as well as pollinator habitat), and planting over thirty species of native plants! The plants are arranged in four different microsites in the garden to better educate the public about how and where to use different native species based on varying habitat types and site conditions.

The plants and hardscaping in the pollinator garden will provide a variety of color, landscape texture and form, as well as habitat for pollinators and other wildlife, from early spring through late fall. Some of the more “showy” plants include Canada goldenrod, various penstemon species, subalpine Jacob’s ladder, columbine, and wild hollyhock.

In 2012, installation of interpretive signs, plant markers, and a self-guided tour pamphlet will complete the project.



Forest Service crew planting the PLRD pollinator garden, autumn 2011.



Priest Lake Ranger District planting crew, autumn 2011.

<i>Year project Initiated:</i>	2011
<i>Project completion:</i>	2012
<i>Report number:</i>	1 of 2
<i>Expenditures (through 09/2011):</i>	\$3400 NFN3
<i>FY 2011 partners/collaborators:</i>	Region 1 Native Plants and Pollinators Initiative
<i>Contact person & phone number:</i>	Jennifer Costich-Thompson 208-265-6626



Idaho Panhandle National Forests
Priest Lake Ranger District
32203 Highway 57
Priest River ID 83856

Bitterroot National Forest: Stevensville Ranger District Native Plant Pollinator Garden

FY 2011

The Stevensville Garden Club helped plant the native plant pollinator garden expansion at the Stevensville Ranger District. They remain a vital partner for the pollinator garden project.

An expansion to the garden was completed in 2011:

- Plants were purchased from local sources.
 - Soil and mulch were purchased for the garden.
 - A sprinkler system was installed in the new garden.
 - A handicap accessible walkway was added.
 - Curbing was added to the walkway.
- Bee boxes and butterfly boxes were made by the Trapper Creek Job Corp for pollinator habitat.
 - A visitor's bench was made by the Trapper Creek Job Corp to be placed along the walkway.
 - An educational brochure for the Stevensville Pollinator Garden was developed and is being printed.



Figure 1. *Planting and putting mulch on the garden.*



Figure 2. *Stevensville garden club.*



Figure 3. *Planting completed.*

Year awarded: 2011

Project completion: 2011

FY10 expenditures:
\$3,000 (NFN3)

Partners/Contractors/Coop:

- Blackfoot Native Nursery
- Empire Nursery
- Great Bear Restoration
- Earth and Wood
- Trapper Creek Job Corps
- Stevensville Garden Club
- R1 Native Plant Program

Contact:

Nancy Trotter 406-777-7413;
Robin Taylor-Davenport
406-363-7172



Bitterroot National Forest
Supervisors Office
1801 N. First Street
Hamilton, MT 59840-3114

Native Plant Pollinator Garden

at the new ranger district office, Sioux Ranger District
Custer National Forest

2011 Accomplishments

A native plant/pollinator garden was established at the new ranger district office of the Sioux Ranger District. The pollinator garden provided native landscaping and pollinator habitat around the new office.

The pollinator garden focused on trees, shrubs, grasses, and forbs native to the local prairie ecosystem. In addition, species were selected on their drought tolerance and low need for maintenance.

Plants were purchased from a local nursery and planted in September with assistance from the Camp Crook Elementary School students. Future planting and development of the garden will involve installing a pollinator interpretation sign and putting ID tags on the plants.

Native prairie species included ponderosa pine, Black Hills spruce, juniper, aspen, buffalograss, blue grama, purple coneflower, asters, goldenrod, leadplant, rose, potentilla, golden currant, yucca, American plum, clematis, bittersweet, blanketflower, false sunflower, heuchera, tall phlox, gayfeather, horsemint, dogwood, buffaloberry, serviceberry and butterfly milkweed.



Drip line irrigation being installed for initial landscaping



Landscaping finished. August 2011



Camp Crook Elementary students assisting with planting. 8/2011

Year awarded: FY11 NFN3 funding

Project completion: 2011

Report number: 1 of 1

Expenditures: NFN3 funding \$4,500, expended \$4,500, \$0 remaining

Partners: Camp Crook Elementary School students, R1 Native Plant Program

Contact persons & phone numbers: Kurt Hansen, District Ranger, 605-797-4432



Custer National Forest
Sioux Ranger District
101 First Street South
Camp Crook, SD 57724



Native Plant Pollinator Garden BIRCH CREEK OUTDOOR EDUCATION CENTER

2011 Accomplishments

Thanks to a lot of coordination with University of Montana-Western Outreach, Boy Scouts of America, Montana Native Plant Society (Calypso Chapter), and our very own Beaverhead-Deerlodge (B-D) Road Crew, a native plant pollinator garden was established at the Birch Creek Outdoor Education Center located about 20 miles north west of Dillon, MT on the Dillon Ranger District. An Eagle Scout candidate volunteered himself and his fellow troopers to dig 165 holes prior to planting. The Eagle Scout along with Native Plant Society members and B-D employees filled the 165 holes with native plants in June. Since that time, an additional 63 plants have been incorporated into the garden as well as 4 large boulders and a gravel pathway - Thanks to the B-D Road Crew. Two rock carved water baths were also placed within the garden, and a few native mason bee boxes will be installed at the site in the near future. Plants were purchased from Southern Montana Native Landscapes Nursery in Glen, MT.



Boy Scouts ready to dig! June 2011



The planting crew. June 2011



Late season photo with path and boulders. September 2011

Year awarded: FY11 NFN3 funding
Project completion: 2011
Report number: 1 of 1
Expenditures: NFN3 funding \$4,500, expended \$4,500, \$0 remaining

Partners: University of Montana-Western, Boy Scouts of America, Montana Native Plant Society-Calypso Chapter, R1 Native Plant Program

Contact persons & phone numbers: Jessie Salix 406.683.3947 and Kenda Herman 406.683.3921



Beaverhead-Deerlodge National Forest
Dillon Ranger District
420 Barrett ST
Dillon, Montana 59725

Bitterroot National Forest: Sula Ranger District Native Plant Pollinator Garden

FY 2011

Four pollinator garden plots were established along the front of the Sula Ranger District in Sula Montana. The Sula Ranger District is the first district north of Lost Trail Pass entering Montana from Idaho. The district receives many in-state and out-of-state visitors that stop at the district for information, permits, maps, and as a rest stop. The district provides a wonderful educational opportunity to educate visitors about native plants and pollinators.

- Planting beds were prepared and several hundred plants were purchased and planted in the pollinator garden beds with the help from Bitterroot National Forest employees and Darby School students.
- Mulch was purchased and placed around the plants.
- A watering system was installed for the garden.
- Bee boxes and butterfly boxes were made by the Trapper Creek Job Corps for bee and pollinator habitat.
- A brochure was developed with educational information on the relationship between pollinators and native plants with information about the plants planted in the garden. The brochure is available for use by other forests across Region One for their pollinator gardens.



Figure 2. Planting the new garden.



Figure 3. Getting new plants into the ground.

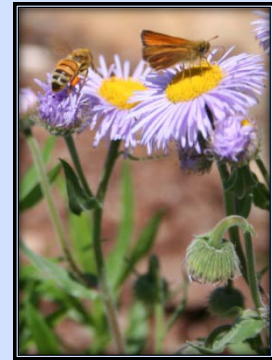


Figure 1. Sula pollinator garden, one week after planting.

Year awarded: 2011

Project completion: 2012

FY11 expenditures:
\$4,500.00 (NFN3)

Partners/contractors:

- Great Bear Restoration
- Blackfoot Native Nursery
- Empire Nursery
- Darby School students
- Trapper Creek Job Corps
- Porterbilt Company
- Sula and Bitterroot National Forest employees
- R1 Native Plant Program

Contact:

Melissa Wegner 406-821-2325;
Robin Taylor-Davenport 406-363-7172

Bitterroot National Forest
Supervisor's Office
1801 N. First Street
Hamilton, MT 59840-3114





Native Plant Pollinator Garden

Pintlar Ranger Station, Beaverhead/Deerlodge NF

2011 Accomplishments

A native plant pollinator garden was installed at the Pintlar Ranger Station in conjunction with a building landscaping project. Pintlar Ranger Station personnel prepared the site with edging and a rock walkway. A total of 154 native plants were installed by Beaverhead-Deerlodge NF employees and volunteers.

The plants have done well this season thanks to the consistent care by Pintlar employees. The additions of some burnt tree stumps added to the character of the garden. Be sure to check it out next time you're in Philipsburg.

Plants were purchased from Southern Montana Native Landscapes Nursery in Glen, MT.



The planting crew. June 2011



The planting crew. June 2011



Late season photo. September 2011

Year awarded: FY11 NFN3 funding
Project completion: 2011
Report number: 1 of 1
Expenditures: NFN3 funding \$4,500, expended \$4,500, \$0 remaining

Partners: volunteers, R1 Native Plant Program

Contact persons & phone numbers:
Jessie Salix 406.683.3947 and Kenda Herman 406.683.3921



Beaverhead-Deerlodge National Forest
Dillon Ranger District
420 Barrett ST
Dillon, Montana 59725

Idaho Panhandle National Forests Sandpoint Ranger District Native Plant Pollinator Garden & Interpretive Site

2011 Accomplishments

The nearly ½ -acre native plant pollinator garden at the Sandpoint Ranger District office, a gold-certified LEED (Leadership in Energy and Environmental Design) building, was established in 2010. However, in 2011, District personnel decided to install additional plantings as well as interpretive signs to help fulfill the goal of creating a beautiful, native landscape which provides habitat for pollinators and other wildlife as well as a great educational opportunity for the community and forest visitors.

During spring and summer 2011, botanists and other district personnel transplanted several native plants from nearby National Forest System lands to help augment existing plantings. Also, signs describing the importance of conserving pollinators were placed at the garden. Individual plant name signs were used as well as interpretive signs describing how to use plants in different landscape microsites.

With multiple landscape features and a variety of native plants to provide food and habitat for pollinators, the Sandpoint Ranger District native plant pollinator garden is already very successful. Recent users include local high school classes, an elementary school “summer passport” series, and adult extension classes. These visitors have enjoyed the pollinator garden for its unique learning opportunities to study entomology, botany, and landscape design.



Dry site species blooming in a “rock outcrop” planting in front of the new Sandpoint Ranger District building. May 25, 2011



Photo of interpretive signage installed at the Sandpoint Ranger District native plant pollinator garden. September 2011.

<i>Year project Initiated:</i>	2010
<i>Project completion:</i>	2011
<i>Report number:</i>	2 of 2
<i>Expenditures (01/2010- 09/2011):</i>	\$5650 NFN3
<i>FY 2011 partners/collaborators:</i>	Region 1 Native Plants and Pollinators Initiative
<i>Contact Person & phone number:</i>	Jennifer Costich-Thompson 208-265-6626

Idaho Panhandle National Forests
Sandpoint Ranger District
1602 Ontario
Sandpoint ID 83864



Native Plant Pollinator Garden

Kelly Creek Work Center, Clearwater National Forest

2011 Accomplishments

The North Fork Ranger District started work on a native plant pollinator garden in front of the Kelly Creek Work Center, located at the confluence of the North Fork of the Clearwater River and Kelly Creek on Clearwater National Forest. Plans for the 1500 square foot site include planting over 30 native species from locally collected seed as well as installation of a dry creek bed, a garden bench, and signage addressing pollinator specific information along with a new area information bulletin board.

Garden planning started in February and the garden began to take shape in July. Garden layout and hardscaping were the focus for the first year of the project. Materials for the project were hauled to the site and boulders were placed for the dry creek bed that runs through the garden. Plant identification signs and a pollinator interpretive panel were purchased and delivered. These will be installed next field season.

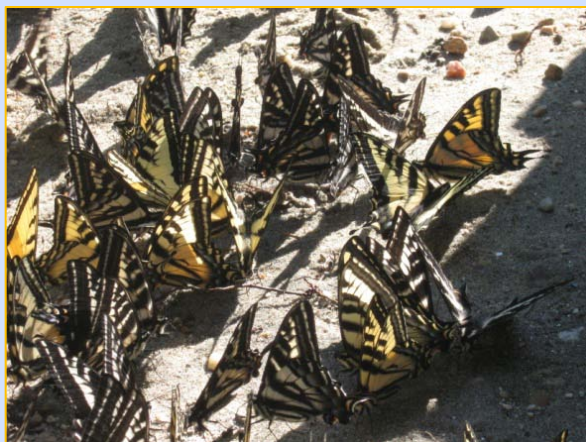
By October, district personnel, garden club members, local nurseries, and a local contractor had contributed over 100 hours toward the garden's development. Plant propagation and out-planting for 2012 will involve collaboration with the local garden club as well as teachers and students from the Timberline school.



Work begins on the dry creek bed, July 2010



October, 2010



Swallowtails gather en masse at garden site in June & July of 2011!

Year awarded: FY11 NFN3 funding

Project completion Date: 2013

Report number: 1 of 1

Expenditures: \$4,400 of \$4,500 NFN305 spent

Partners to date: Big Cedar Extension Club; Natives West Nursery and Eco Service; Timberline School District; USFS Coeur d'Alene Nursery, R1 Native Plant Program

Contact person: Kearstin Edwards, 209-476-8344



Kelly Creek Work Center
North Fork Ranger District
12730 Highway 12
Orofino, ID 83544

Fort Missoula Native Plant Pollinator Garden Lolo National Forest

2011 Accomplishments

We've expanded the Fort Missoula Native Plant Pollinator Garden onto the south side of the Lolo NF building. Previously the landscaping was exposed soil and Kentucky bluegrass lawn. This site now highlights native plants that attract pollinators such as hummingbirds and native insects. We used xeric native plants to demonstrate how we can reduce lawn maintenance and watering over time.

The Lolo NF Missoula Ranger District and Supervisor's Office receives thousands of visitors each year. The pollinator garden has great teaching potential for forest visitors. The pollinator garden contains three picnic tables and a half-dozen shade trees which makes it ideal for school groups and public programs. We planted more than 30 species of native plants which attract pollinators such as Calliope, Rufous, and Black-chinned hummingbirds, dozens of species of butterflies, moths, bumble bees, and many other native pollinators.

We will soon install a beautifully illustrated interpretive sign that we created last year explaining the importance of native plants and pollinators.



Fort Missoula landscaping before installation of the native plant pollinator garden.
Sue Reel-USFS



Fort Missoula Native Plant & Pollinator Garden, July 2011
USFS-Sue Reel



Year awarded: Initial award in 2011

Project completion: FY 2011

Report number: 1 of 1

Expenditures: FY11 funding total \$6,400, expended \$6,400 (NFN3 funding)

Partners: Native Yards, University of MT, MT Native Plant Society, Blackfoot Native Plant Nursery, R1 Native Plant Program

Contact person & phone number:
Sue Reel 406-329-3831



Lolo National Forest
Bldg. 24, Fort Missoula
Missoula, MT 59804

Bitterroot National Forest: Darby Ranger District Native Plant Pollinator Garden

2011 Accomplishments

FY 2011

Darby Ranger District installed a native plant pollinator garden in 2010. Pollinator garden enhancement continued in 2011 with the installation of bee and butterfly boxes constructed by the Trapper Creek Job Corp as well as other activities.

- Plants were purchased from local community sources to be added to the garden.
- Bee boxes and butterfly boxes were made by the Trapper Creek Job Corp to be placed in the garden.
- An educational brochure containing information on pollinators, native plants, and information about the plants planted in the garden was sent to the regional office for bulk printing to hand out to the public.

The district has an excellent opportunity to reach many people due to its close proximity to the Darby School System as well as recreational visitors travelling Highway 93 who stop at the station. The native plant pollinator garden provides attractive landscaping for the office as well as the opportunity for visitors to learn about the relationship between pollinators, native plants, and the benefits they provide in ecosystem services.



Figure 2. Fire ecology components were incorporated into the garden



Figure 3. A pollinator visiting a blanket flower at the garden.

Native Plant Pollinator Garden



Darby Ranger District

The Pollinator Partnership is a nonprofit organization whose mission is to work with organizations and agencies to protect pollinators critical to food and ecosystems, through conservation, education, and research.

Figure 1. Darby Ranger District brochure.

Year awarded: 2011

Project completion: 2011

FY10 expenditures:
\$700.00 (NFN3)

Partners/collaborators:

- Blackfoot Native Nursery
- Empire Nursery
- Great Bear Restoration
- Trapper Creek Job Corps
- Region One Native Plant Program

Contact:

Keith Hackbarth 406-821-4258;
Robin Taylor-Davenport
406-363-7172



Bitterroot National Forest
Supervisors Office
1801 N. First Street
Hamilton, MT 59840-3114

Native Plant Pollinator Garden

WHITE SULPHUR SPRINGS RANGER DISTRICT

Lewis & Clark National Forest

2011 Accomplishments



Native Plant Pollinator Garden prior to construction. July 2011

The White Sulphur Springs Native Plant Pollinator Garden is located at the ranger district office on Highway 12. The site is highly visible and receives a large amount of foot traffic due to an adjacent paved pull out and three Kings Hill Scenic Byway signs.

The 2,200 square foot garden will be completed in two phases. Phase 1 included site preparation and was completed in 2011. Phase 2 is scheduled for completion in 2012 and will include planting of native species. Four native tree species already existed on site prior to construction.

In August, construction began by removing sod from the site. The Meagher County Road Department donated topsoil for the garden, which was mixed with soil amendment, mounded to create interest on the site, and covered with varying sizes of rock. Large, lichen covered rocks and dead snags were collected from the forest by a local community member. These large rocks were used to construct planters, a bench, and placed throughout the garden for decoration. Snags were set upright in the ground and will be used to create displays educating the public on pollinator habitat. A pathway, which meanders through the garden, was constructed using flat paver stone purchased from a quarry at nearby Harlowton, MT.

Additionally, the current underground sprinkler system was reconfigured to accommodate the new garden.

The pollination panel, developed for Region One by Nancy Seiler, was purchased and will be installed in 2012, along with small name plates identifying various plant species in the garden. Planting will take place in spring/summer of 2012. Finishing touches such as bee boxes, bird houses and bird baths will also be placed in the garden next summer.

Labor for garden construction was carried out by Forest Service personnel and community partners.



Phase 1 garden construction completed Sept. 2011.

Year awarded: FY11 NFN3 funding

Planned project completion: 2012

Report number: 1

Expenditures: \$6,400 NFN3 funding awarded, \$6,400 expended, \$0 remaining

Partners: Master Gardener Melinda Venard; Meagher County Community Foundation, Allison Grove; Meagher County Road Department; Friends of the Library; White Sulphur Springs Garden Club; Stevens Youth Center; Girl Scouts; 4-H/Extension, R1 Native Plant Program

Contact person: Sarah Dawe 406-632-4391



Lewis & Clark National Forest
White Sulphur Springs Ranger Dist.
204 West Folsom, PO Box A
White Sulphur Springs, MT 59645

Establishment of a Native Pollinator Garden on the Hebgen Lake Ranger District, Gallatin National Forest, Montana

2011 Accomplishments

This project involved preparation and planting of 30 species of plants native to southwest Montana at the Hebgen Lake Ranger Station in West Yellowstone, MT. The species list included a wide variety of forbs, grasses, and shrub species totaling 130 individual plants. USFS employees removed turf grass and non-native junipers around the front walkway of the office to prepare area for the garden. A temporary drip irrigation system was installed and native rock materials were collected from the forest to border the garden. Plant materials purchased from Blake Nursery in Big Timber, Montana which also donated plants. Pollinator interpretation signs were also installed.

Accomplishments in 2011 included:

- Purchase and planting of additional native plant species
- Maintenance to ensure establishment
- Weed treatments and spot seeding
- Installation of an interpretative sign to explain importance of pollinators



Garden ready for planting adjacent to ranger station building



Native materials laid out for planting next to ranger station sign

Year awarded: Initial award in 2010

Project completion: ongoing

Report number: 2 of 2

Expenditures through 10/2011: NFN3 funding

•FY10 funding \$4,500, expended \$4,500, \$0 remaining

•FY 11 funding \$1,900, expended \$1,900, \$0 remaining

Special thanks to Blake Nursery for providing plant materials and advice on suitable species; Lauren Turner (District Ranger retired) and Jane Ruchman (Landscape architect), volunteer Virginia Barone, seasonal employee Iris De La O for assisting in development of suitable plant species list, James Norlander, Brian Park, and Joe Montoya for collecting and placing native rock materials; maintenance mechanic Mitchell Adamo for installing a water friendly drip irrigation system and planting vegetation. Funding provided by R1 Native Plant Program.

Contact person & phone number:

Courtney Frost (406) 823-6967



Gallatin National Forest

PO BOX 130

Bozeman, MT 59771

Native Plant Pollinator Garden

Idaho Panhandle National Forest, St. Joe Ranger District, Avery Field Office

2011 Accomplishments

A native plant pollinator garden was started at the Avery Field Office on the St. Joe Ranger District. The site will contain native wildflower species to provide food and habitat for native insects and birds. The garden is being completed in collaboration with the Avery Elementary School teachers and students.

Seeds from eight native species were wildland collected in 2011. These seeds will be germinated and grown out by Avery Elementary School students during the 2011/2012 school year. The students will plant the material in the spring of 2012. The seeds were cleaned and stored by the USFS Coeur d'Alene Nursery in preparation for grow out by the elementary school students.

Additional native flowering shrubs will be transplanted in the spring of 2012 along with additional native forb and grass seed.

The plants in the pollinator garden provide a variety of color throughout the growing season. Species include golden pea, scarlet gilia, penstemon, lupine, and many others. Metal tags will be placed in the garden to identify the Latin botanical and common names

Interpretive posters and signs will be installed to interpret the importance of native plants and pollinators and invite visitors to further explore the wildflowers of the forest.



Locating seed sources for the garden. August 2011

Year awarded: FY11 NFN3 funding

Project completion: in process

Report number: 1 of 1

Expenditures: NFN3 funding \$5,500, expended \$500, \$5,000 remaining

Partners: Avery Elementary School and the Coeur d'Alene Nursery, R1 Native Plant Program

Contact persons & phone numbers: Kim Frymire 208-245-6008



Idaho Panhandle National Forest
St. Joe Ranger District
222 S 7th Street, Suite 1
St. Maries, Idaho 83861

Bitterroot National Forest--West Fork Ranger District Native Plant Pollinator Garden

FY 2011

- Native plants were purchased to add to the existing garden. Forbs and shrubs were planted in the planters, the new expansion area, and the existing garden.
- Two planter boxes were ordered and purchased to add to the expansion of the garden.
- Soil was purchased to add to the planter boxes and to amend the soil in the expansion area.
- A bench was made by the Trapper Creek Job Corp to be placed at the garden for employees and the public to sit and enjoy the garden.
- Bee boxes and butterfly boxes were made by the Trapper Creek Job Corps to be placed in the pollinator garden.
- A brochure was created with educational information on pollinators, native plants, and information about the plants planted in the garden. The brochure is available to forest visitors as well as for use on other pollinator gardens across Region One.



Figure 2. Columbine, a key pollinator plant.



Figure 3. Some garden challenges.



Figure 1. Native geraniums blooming in the garden.

Year awarded: 2011

Project completion: 2011

FY10 expenditures:
\$800 (NFN3)

Partners/contractors:

- Blackfoot Native Nursery
- Empire Nursery
- Great Bear Restoration
- Trapper Creek Job Corps
- R1 Native Plant Program

Contact:

Nancy Grayson 406-821-1233;
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406-363-7172

Bitterroot National Forest
Supervisors Office
1801 N. First Street
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Bitterroot National Forest

FY2011 Native Plant Pollinator Gardens

Bitterroot National Forest:

The Bitterroot National Forest now has installed native plant pollinator gardens on all four of its districts. In addition, each district has created a brochure providing interpretation of the unique aspects of their garden. In 2011 the forest decided to acquire large interpretative signs to educate the public on the importance of pollinators, native plants, and the relationship between the two.

In 2011:

- Interpretive signs were ordered for all four districts having pollinator gardens.
- Each sign will be placed directly at the pollinator garden site to provide information to forest visitors.
- The signs will be placed into the ground in November, 2011 unless weather interferes. Otherwise they will be placed into the ground in spring 2012.

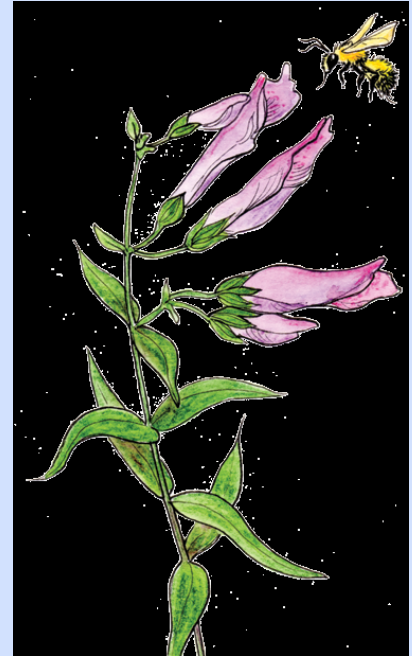
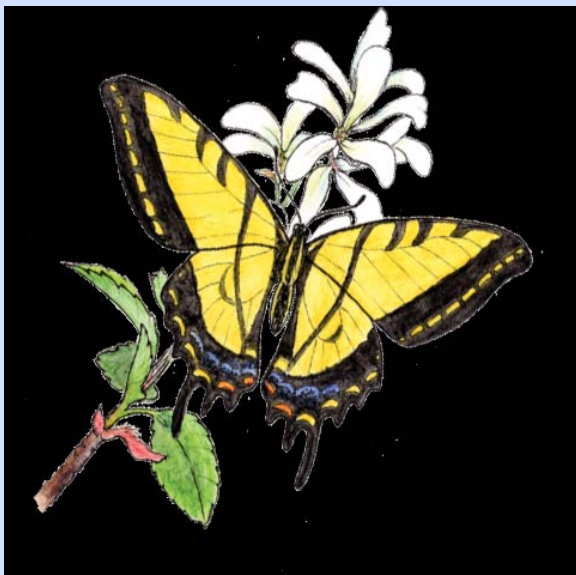


Figure 1 &2. Portions of the interpretive panel.



Year awarded: 2011

Project completion: 2011

FY11 Expenditures:
\$5,250.00 (NFN3)

Partners: R1 Native Plant Program

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