



Pollinator Conservation Summary Forest Service Southern Region

2012 Accomplishments

The Forest Service Southern Region had another good year for pollinator conservation. While we did have some small pollinator gardens established at administrative sites, recreation areas, and seed production areas, the majority of our effort was placed on landscape scale restoration projects. These included thinning overstocked dense stands of trees allowing sunlight to reach the forest floor, removing offsite overstory species and planting with the appropriate species, control of non-native invasive species (both plant and animal), and prescribed burning.

Nearly 1 million acres of habitat was improved for pollinators in 2012. Of this, 30 to 40 percent is in good condition, either restored or nearly so, and immediately available to pollinators. The remaining acreage is at some stage in the restoration process, some of which is suitable but not optimal for pollinators, and some areas of first treatment are not much use at all at this point. These first thinnings are a necessary step in development of native understory vegetation. As we move forward in our efforts, considerable attention is being given to locally sourced seed and plants, trying to maintain the genetic integrity of our native plants.



Digger wasp on spotted horsemint



Growing season prescribed burn

Year Project Initiated:2011

Project completion: Ongoing

Report number: 1 of 1

Expenditures (through 09/2012):

FY12funding:
Partners/Contractors/Coop:).

Contact Person & phone number:
Dennis L Krusac: 404-347-4338



USDA Forest Service
1720 Peachtree Road, NW
Suite 816 North
Atlanta, GA 30309



The Greater Atlanta Pollinator Partnership Forest Service Southern Region 2012 Accomplishments

The Greater Atlanta Pollinator Partnership (GAPP) was initiated in 2009 to encourage development of pollinator habitat at a landscape scale. We designed our project to focus on an area within a 25 mile radius around downtown Atlanta, Georgia comprising nearly 1.2 million acres of potential pollinator habitat.

Key components of GAPP include using native species when available, controlling invasive species, establishing community gardens, citizen science projects, conservation, education and research. Developing schoolyard habitats is a priority so pollinator gardens can function as outdoor classrooms. There will also be an emphasis on registering individual gardens using an on-line registration process. All garden locations will be plotted on an on-line map so project progress can be monitored. The Atlanta Botanical Garden is finalizing the GAPP website

In 2012, 30 schoolyard habitats were developed , a two-day learning garden workshop was held for teachers, 2 GAPP properties were featured on Growing a Greener World (<http://www.growingagreenerworld.com/episode309/>), more than 5,000 people were educated with pollinator outreach efforts, and pollinator-friendly maintenance schedules were established for local parklands.



15 acre GAPP meadow maintained for pollinators, Cobb County Parks



Bombus fervidus in GAPP habitat

Year Project Initiated:2009

Project completion: Ongoing

Report number: 1 of 1

Expenditures (through 09/2012): \$5,000

FY11funding: \$5,000

Partners/Contractors/Coop:).

Contact Person & phone number:

Dennis L Krusac: 404-347-4338



USDA Forest Service
1720 Peachtree Road, NW
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Glade Restoration Ozark/St. Francis National Forests 2012 Accomplishments

This project was initiated to restore glade ecosystem and control feral hog population. This project improved habitat for Monarch Butterfly and similar species by opening up the oversotry and creating greater diversity of plants within the understory. Use the stick steer bob cat with mastication head to grind the cedars and other growth in areas cleared for burning and attempt to catch hogs that have impacted the glade. For the past couple of years, hogs have been in and around this glade. This past year feral hogs had rooted up the pipe-wort site. Most of the hog trapping will be within a mile radius.



Figure 2. Glade treated with mechanical removal of red cedar.



Figure 1. Small headed pipewort – one of many desired plant species on glades

Year Project Initiated: 2012

Project completion: 2012

Report number: 1 of 8

FY10 funding

Partners/Contractors/Coop: Forest Service funding
\$19,704

Contact Person & phone number:
Dwayne Rambo 479-284-3150



**Ozark/St. Francis National
Forests**
605 West Main
Russellville, AR 72801



Bearcat Hollow WSI Project Ozark/St. Francis National Forests

2012 Accomplishments

This project was initiated to improve wildlife habitat diversity through the restoration of woodland conditions on the Forest to create conditions more indicative of a fire adapted ecosystem. There were 964 acres of habitat improvement accomplished. This improves habitat for Monarch Butterfly and other similar species by opening up the overstory and creating a greater diversity of plants within the understory. This is in the initial stages.



Figure 1. Wildlife Stand Improvement work



Figure 2. Desired future conditions including fire

Year Project Initiated: 2012

Project completion: 2012

Report number: 2 of 8

FY10 funding

Partners/Contractors/Coop: Forest Service funding
\$82,661 partner funding \$10,000

Contact Person & phone number:
Dwayne Rambo 479-284-3150



**Ozark/St. Francis National
Forests**

605 West Main
Russellville, AR 72801



Arbaugh Glade Restoration Project

Ozark/St. Francis National Forests

2012 Accomplishments

The objective of this project was to restore a glade ecosystem and restore surrounding closed canopy forest to open woodland condition. The project consisted of thinning forest canopy on 49 acres to allow for increased sunlight penetration to the ground to allow for greater herbaceous species diversity and abundance (initial stages). The project was implemented by use of soil application of herbicide and cut surface application of herbicide (hack & squirt) to thin the area to woodland condition. This is characterized by a remnant basal area of approximately 20-30 square feet per acre. Trees targeted with herbicide included eastern red cedar, elm, maple, sweetgum, blackgum, and some hickory. Large white oak, red oak, hickory and shortleaf pine were selected as leave trees. Portions of the area have been burned previously on one occasion. Prescribed fire will be utilized on a 2-3 year return interval to maintain the stand in woodland condition, and maintain the glade areas within the woodland.

Realized results include reduction of canopy closure, improved herbaceous abundance and diversity, and related improved habitat conditions for quail, wild turkey, disturbance dependent landbirds, and butterflies.



Figure 1. Small headed pipewort – one of many desired plant species on glades



Figure 2. Glade treated with mechanical removal of red cedar.

Year Project Initiated: 2012

Project completion: 2012

Report number: 3 of 8

FY10 funding

Partners/Contractors/Coop: Forest Service funding
\$8,000

Contact Person & phone number:

Gregory Taylor 479-754-2864



Ozark/St. Francis National Forests
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Native Plant Pollinator Garden

Ozark/St. Francis National Forests

2012 Accomplishments

This project was initiated to increase public awareness on native plant pollinators. Project activities included two native plant gardens at the Ranger District office, placing butterfly house, volunteer work from the Ozark Garden Club, and educational presentations. This is the first native plant pollinator garden in the town of Ozark.



Figure 2. Side view of native plant pollinator garden.



Figure 1. Monarch on butterfly weed.

Year Project Initiated: 2012

Project completion: 2012

Report number: 4 of 8

FY10 funding

Partners/Contractors/Coop: Forest Service funding
\$2,960

Contact Person & phone number:
Rhea Whalen 479-667-2191



Ozark/St. Francis National Forests

605 West Main
Russellville, AR 72801



Wedington WSI Project Ozark/St. Francis National Forests

2012 Accomplishments

This project was initiated to improve wildlife habitat diversity through the restoration of woodland conditions on the Forest to create conditions more indicative of a fire adapted ecosystem. Before treatment the fire class condition was III, after treatment it moved toward a class II and after prescribed burning, it will be in a condition class I and will be maintained in that condition. Different species of wildlife have been utilizing the area (deer, turkey, neotropical migratory birds). It is expected that the open woodland conditions will increase wildlife species diversity through time as there is very little of this type of habitat in the area. It is expected that a flush of herbaceous forbs will return where there was little to none prior to the project. There were 857 acres of habitat improvement accomplished. This improves habitat for Monarch Butterfly and other similar species by opening up the overstory and creating a greater diversity of plants within the understory (Initial Stages).



Figure 1. Wildlife Stand Improvement work



Figure 2. Desired future conditions including fire

Year Project Initiated: 2012

Project completion: 2012

Report number: 5 of 8

FY10 funding

Partners/Contractors/Coop: Forest Service funding \$141,506, partner funding \$52,750

Contact Person & phone number:
Rhea Whalen 479-667-2191



Ozark/St. Francis National Forests
605 West Main
Russellville, AR 72801



Native Warm-season Grass Restoration Project Ozark/St. Francis National Forests 2012 Accomplishments

The objective of this project was to restore and maintain fields across the Forest to native warm-season grasses that are currently dominated by non-native species like fescue. This was accomplished through herbicide application, disking, seeding, and fire management. A total of 624 acres of warm-season grass restoration was completed in 2021.



Figure 1. Prescribe Burning of native warm-season grass fields



Figure 2. Restored native warm-season grass field



Figure 3. Drilling of native warm-season grass seed

Year Project Initiated: 2012

Project completion: 2012

Report number: 6 of 8

FY12 funding
Partners/Contractors/Coop:). Forest Service funding
\$133,226.

Contact Person & phone number:
J. Keith Whalen 479-964-7228



**Ozark/St. Francis National
Forests**
605 West Main
Russellville, AR 72801



Forest Prescribe Burning Projects Ozark/St. Francis National Forests 2012 Accomplishments

The objective of this project was to prescribe burn at a landscape scale to help restore fire adapted ecosystems. This provides more food for wildlife and creates a greater amount of biodiversity. The work is expected to open up the canopy and lower the basal area moving the area more to woodland/savannah type conditions in combination with tree removal. In 2012 a total of 47,630 acres were accomplished



Figure 1. Prescribe Burn in hardwood stand



Figure 2. Desired future conditions including fire

Year Project Initiated: 2012

Project completion: 2012

Report number: 7 of 8

FY12 funding
Partners/Contractors/Coop:). Forest Service funding
\$1,275,794; High Priority Restoration Match funding
\$724,206

Contact Person & phone number:
J. Keith Whalen 479-964-7228

**Ozark/St. Francis National
Forests**

605 West Main
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Forest NNIS Projects Ozark/St. Francis National Forests

2012 Accomplishments

The objective of this project was to remove non-native invasive plant species from the landscape to allow for recolonization by native plant species. Species treated included kudzu, tree-of-heaven, sericia, multiflora rose, fescue, mimosa, and honeysuckle. In 2012 a total of 1,119 acres were accomplished



Figure 1. Kudzu eradication



Figure 2. Fescue eradication

Year Project Initiated: 2012

Project completion: 2012

Report number: 8 of 8

FY12 funding
Partners/Contractors/Coop:). Forest Service funding
\$104,696

Contact Person & phone number:
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**Ozark/St. Francis National
Forests**

605 West Main
Russellville, AR 72801





Blackland Prairie Restoration Project on the Caddo National Grasslands 2012 Accomplishments

Status of Project Accomplishment: The Blackland Prairie of Texas once spanned more than 12 million acres between the Red River and San Antonio. Today, it is estimated that less than 1% remains. Restoration of native prairie plant communities is an essential strategy for increasing the acres under native vegetation, enhancing degraded remnants and buffering extant remnants. Lack of seed stock of local genetic origin is an impediment to accomplishing true restoration. The Nature Conservancy's Clymer Meadow Preserve has long been used as a seed source for prairie restoration. Recently, old agricultural lands within the preserve have been converted to seed increase plots for selected local native forbs and grasses. The project also includes wild harvest from an established forb dominated prairie.

. A site prep burn was conducted in Unit 51 of the Ladonia unit on the Caddo NG in January 2012. This was accomplished to help prepare the site for the planting of donor Blackland Prairie seed from the fields and production areas at Clymer Preserve. Approximately 475 pounds of seed was planted in 50 acres by USFS and TNC personnel over two days in February 2012 in that unit. The area received rainfall and was mowed several times to keep existing vegetation from shading out the seedlings. It was agreed between USFS and TNC personnel along with the local grazing association that the area would be restricted from cattle grazing for a period of three years in order for the plants root tissues to develop. A new kiosk was constructed adjacent to a nearby parking area and information about this restoration partnership project and the Texas Blackland Prairie will be posted for the public's information.



Site-prep prescribed burn on the Caddo NG.

Year Project Initiated: 2008

Project completion: FY2013.

Report number: 1 of 1

Expenditures (through 10/2012): \$35,000

FY12 funding: \$4,000.

Partners/Contractors/Coop: The Nature Conservancy.

Contact Person & phone number:
Tom Philipps 936-639-8514



The Nature Conservancy plants seed to help restore Blackland Prairie on the Caddo NG.



Caddo National Grasslands
942 FM 409
Honey Grove, Texas 75446



Ouachita National Forest Native Grass Restoration Project

2012 Accomplishments

This project was started in 2006 to establish native seed and plant sources for natural recruitment and anthropogenic restoration efforts. Implementation of this project has developed techniques and policies for use of native plant materials on the Ouachita National Forest and encouraged state and private groups to use native plant materials.

2012 Accomplished Actions

Approximately 11,510 acres of prescribed fire was conducted in existing native warm season restoration plots, pine-bluestem management areas and old growth woodlands.

128 acres of brush hogging/mulching was completed within Grapevine Old Growth native grass plots.

Harvested and processed approximately 50 lbs. of native warm season grass seed and 300 bales native grass hay at the Seed Orchard. Due to a drought the volume of seed and hay was lower than expected in FY 12.

Native seed and hay harvested in 2012 was used by three Ouachita RD's for various soil restoration projects.

Used native seed and hay to restore native vegetation along 1.5 miles of closed ATV trails and roads in the Wolf Pen Gap OHV area and 5 miles of unauthorized roads and trails.

Completed approximately 35 acres of non-native invasive plant species (NNIS) herbicide treatments.

Completed construction of 2,400 sqft storage facility at the Ouachita Seed Orchard that will be used to store native seed, hay and equipment and provide space for seed processing.

2013 Planned Actions

Approximately 18,000 acres are scheduled for prescribed burning in Fall 2012 and Spring 2013 within Pine bluestem, Old Growth units and native grass plots.

Plan to harvest approximately 50 acres of native grass seed and hay.

Approximately 250 acres of brush hogging, mowing, planting, liming, fertilization and monitoring are planned in restoration areas and established plots.

Approximately 100 acres of NNIS treatments.

Includes continued restoration efforts on 100+ acres of native grassland habitats on the Caddo/Womble Ranger District - Warren and Krueger Fields native plant restoration area.



Project Initiated: 2006 /Project completion: On going

Report number: 1 of 1

Expenditures (through 10/2012): NFN3 \$411,760; NFWF \$210,200; NFWW \$80,500; CWKV \$91,700; WFHF \$287,750; WFW3 \$4,000 (Funding accomplished: 48,637 ac of burning, 2043 ac of midstory reduction, 1,300 ac of mowing, 128 ac mulching, 595 ac of NNIS treatments, 12.5 miles of OHV trail/road reclamation, 100 ac of native grassland restoration, 3 ac of wild and Scenic River Corridor campsite restoration, 527ac of native seed and hay harvest – producing 850 pounds of native seed and 1300 bales of native hay mulch)

FY12 funding: NFN3 \$17,000; NFWF \$18,500; NFWW \$10,000

Partners/Contractors/Coop: Quail Unlimited, Arkansas Natural Heritage Commission, Arkansas Game and Fish Commission

Contact Person & phone number: Rhonda Huston (870-326-4574) or Susan Hooks (501-321-5323)



Ouachita National Forest
Mena/Oden Ranger District
1603 Hwy 71 North
Mena, AR 71953



Fourche Pollinator Garden 2012 Accomplishments

Planning for the Fourche Pollinator Garden began in 2008, after visiting a Monarch workshop on the Hiawatha NF. The actual construction of the garden began in FY 2010. The purpose of the garden is to provide adequate habitat for breeding Monarch butterflies and to educate the public about the vital importance of various pollinators (in particular insects, birds, and bats). Previous management actions for 2010 and 2011 include prescribe burning, mid-story reduction, removal of invasive species, native seeding, the creation of a woodland vernal pond, installation of various bird and bat boxes, the creation of a 780-foot concrete handicap-accessible trail, concrete bases for benches and a welded fence, and the removal of hazardous trees. In 2012, we completed the educational bulletin board, prescribe burned the center of the garden, we sprayed the perimeter for non-native invasive species, and we planted roughly \$500 worth of native plugs of various pollinator-friendly plant species. The Ouachita Job Corps was once again a valuable partner, building educational sculptures of dragonflies and butterflies (which the District painted). The Two Rivers EAST Lab completed an ongoing project this year, resulting in the creation of a brochure and 3D interactive map of the garden. The District sponsored multiple field trips to the butterfly garden, and the community continues to use the garden for recreational purposes. Many more improvements are planned and already underway for FY 2013.



Figure 1. Educational bulletin board at garden entrance

Year Project Initiated: Planning began in FY 2009. Project implementation began in FY 2010 and continues...

Project completion: Ongoing

Report number: 1 of 1

Expenditures (through 09/2012): \$3550 to NFWF and NFVW

FY12 funding (Partners/Contractors/Coop): Ouachita Job Corps labor amounts to approximately \$ 2,500

Contact Person & phone number: Mary Lynn Mentz 479-495-2844



Figure 2. Sculpture of Monarch butterfly



Figure 3. American painted lady; released at Fourche Pollinator Garden



Ouachita National Forest
JWF Ranger District
1708 East 8th Street
Danville, AR 72833



Danville Mt Tower Site Ouachita National Forest 2012 Accomplishments

In 2011, American Tower elected to remove microwave tower sites that were not currently in use across the Ouachita National Forest. The site on Danville Mountain is approximately one acre in size and had a huge concrete structure, steel frame antennas, and a fence surrounding the property. American Tower supplied erosion control last year and bought wildflower seed. Unfortunately, the 2012 severe drought kept most of the plants that came up from thriving. We hope this spring will be more productive. Since the site is about 10 minutes from the District office, we hope with the establishment of flowers, that school groups and visitors can see the site in bloom along with various pollinators.



Figure 2. Site after tower removal.



Figure 3. Gate installed.



Figure 1. American Tower being torn down and removed.

Year Project Initiated: Planning began in FY 2011.
Project implementation began in FY 2011.

Project completion: Ongoing

Report number: 1 of 1

Expenditures (through 10/2012): Invasive spraying,
extra rye grass and labor \$ 1250 to NFWW

FY12 Funding
(Partners/Contractors/Coop):0

Contact Person & phone number: Mary Lynn Mentz
479-495-2844



Ouachita National Forest
Jessieville/Winona/Fourche RD
P.O. Box 459, 1708 East 8th St.
Danville, AR 72833



Woodland Restoration George Washington and Jefferson National Forests 2012 Accomplishments

In 2012, the George Washington and Jefferson National Forests completed 17,000 acres of prescribed fire treatments in Virginia and West Virginia, as part of an ongoing landscape level woodland restoration program. Numerous pollinator species benefit from increased herbaceous plant diversity in open woodland conditions, created by fire disturbance regimes in predominately pine and mixed pine/hardwood forest communities.



Monarch butterfly on Aster



Restored Open Oak/Pine Community



Prescribed Burn in Mountain Pine Community

Year Project Initiated: 2003

Project completion: Ongoing

Report number: 1 of 3

FY12 Funding: \$1,278,000

Partners: The Nature Conservancy - Virginia and West Virginia; Virginia Department of Game and Inland Fisheries; West Virginia Department of Natural Resources; Virginia Department of Conservation and Recreation, Natural Areas Division

Contact Person & phone number:
Dr. Carol Croy, Forest Wildlife Biologist ,
540.265.5136



**George Washington and
Jefferson National Forests**
5162 Valleypointe Pkwy
Roanoke, Virginia 24019



Grassland and Shrubland Restoration

George Washington and Jefferson National Forests

2012 Accomplishments

In 2012, the George Washington and Jefferson National Forests completed 1,050 acres of grassland and shrubland restoration and maintenance work Virginia and West Virginia, as part of an ongoing landscape level open lands restoration program. Currently 20,000 acres on the GW/Jeff are open grasslands and shrublands, providing herbaceous habitat that benefits numerous pollinator species, such as the rare Regal fritillary and Diana fritillary.



Regal Fritillary



High Elevation Grassland – White Top Mountain

Year Project Initiated: 1993

Project completion: Ongoing

Report number: 2 of 3

FY12 Funding: \$750,000

Partners: Virginia Department of Game and Inland Fisheries; West Virginia Department of Natural Resources; National Wild Turkey Federation

Contact Person & phone number:
Dr. Carol Croy, Forest Wildlife Biologist ,
540.265.5136



Liatris Wet Meadow



**George Washington and
Jefferson National Forests**
5162 Valleypointe Pkwy
Roanoke, Virginia 24019



Forest Restoration George Washington and Jefferson National Forests

2012 Accomplishments

In 2012, the George Washington and Jefferson National Forests completed 2,858 acres of silvicultural treatments on forest land in Virginia and West Virginia. Regeneration treatments such as shelterwoods and intermediate thinning treatments retain overstory trees but increase light conditions for ground nectaring plants, providing potential habitat for rare butterfly species such as the Grizzled skipper. With approximately 1,440,000 acres of the GW/Jeff in mature forest conditions, habitat is also provided for rare species such as Diana fritillary.



Silvicultural Treatment



Diana Fritillary



Grizzled Skipper

Year Project Initiated: 1993

Project completion: Ongoing

Report number: 3 of 3

FY12 Funding: \$1,176,000

Partners: Virginia Department of Game and Inland Fisheries; West Virginia Department of Natural Resources, National Wild Turkey Federation, Ruffed Grouse Society

Contact Person & phone number:
Dr. Carol Croy, Forest Wildlife Biologist ,
540.265.5136



**George Washington and
Jefferson National Forests**
5162 Valleypointe Pkwy
Roanoke, Virginia 24019



Pollinator Habitat through Prescribed Fire on the National Forests in Florida 2012 Accomplishments

The National Forests in Florida successfully treated just over 102,000 acres in 2012 with prescribed fire and mechanical treatments. Prescribed fire remains one of the most efficient and cost-effective means to create and maintain pollinator habitat in Florida. Prescribed fire plays a critical role in maintaining the understory in pine stands and provides outstanding habitat for pollinators. Figure 1. shows desired groundcover conditions containing a good mix of grasses and herbs. Figure 2. shows a chopping operation. Many areas on the forest benefit from chopping as it helps to reduce palmetto density and restore more desirable groundcover. Chopping also produces conditions that allow for more effective prescribed burns. Many pollinators will continue to benefit from the National Forests in Florida's efforts in getting fire on the ground to restore and maintain native groundcover.



Figure 2. Palmetto chopping on the Osceola NF



Figure 1. Blazing star (*Liatriis gracilis*) is common in fire-maintained stands on the NF in Florida

Year Project Initiated: 2012

Project completion: 2012

Report number: 1 of 1

Expenditures (through 10/2012): \$2.4 million

FY12 funding \$2.4 Million
Partners/Contractors/Coop:).

Contact Person & phone number:
Jeff Gainey 850.523.8553



National Forests in Florida
Supervisor's Office
325 John Knox Road, Ste. F-100
Tallahassee, FL 32303



Tellico Pollinator Garden Cherokee National Forest

2012 Accomplishments

The purpose of this project was to improve and beautify the Tellico Ranger District office grounds using native plants. District personnel worked with Mark Pistrang, Forest Botanist and Avi Askey, owner of Overhill Gardens, to assemble a list of pollinator attracting plants for the garden. Students from the Forestry/Wildlife Program at Tellico Plains High School assisted district personnel with landscaping and planting. This garden provides host plants (food for caterpillars), nectar sources for adult insects, and an opportunity to share the importance of pollinators with the public. An interpretive sign will be installed in 2013. This garden has attracted butterflies, bees, beetles, and hummingbirds. In addition, American goldfinch have been observed feeding on the coneflower seeds. This garden proves not only to be an important spot for pollinators, but also a source of enjoyment for visitors and Forest Service employees.



Figure 2. Just a few months after planting our garden, this native *Coreopsis* blooms and attracts pollinators



Figure 1. Students from Tellico Plains High School plant native flowers, shrubs, and vines in the Tellico Pollinator Garden

Project Initiated: 2011

Project completion: 2012

Report number: 1 of 1

Expenditures (through 10/2012):
NFWF: \$2500

Partners: Tellico Plains High School and Overhill Gardens (Contributions: \$500 In-Kind)

Contact Person & phone number:
Laura Morris 423-253-8400



Cherokee National Forest
Tellico Ranger District
250 Ranger Station Road
Tellico Plains, TN 37385



Understory Habitat Maintenance, National Forests in Alabama

2012 Accomplishments

Using a variety of integrated funding areas, the National Forests in Alabama restored, enhanced, or otherwise maintained early-seral pollinator habitat on approximately 48,600 acres in FY2012. This was accomplished using a combination of Forest roadside mowing in the fall to eliminate woody encroachment (approx. 60 ac.), NNIS treatments on over 500 acres, NWSG planting, seed collection and propagation, and prescribe burning of over 96,000 acres. Approximately half of these burning acres were in open to semi-open forest. While most of these activities are typically performed annually for other wildlife species (including bob-white quail and red-cockaded woodpecker), the value of these activities to native pollinators including the declining monarch and southeastern blueberry bee, can not be overlooked. We maintain hundreds of wildflower species in our open pine and mixed pine-hardwood stands and these understory plants are hosts to adult and larval butterflies and provide pollen for native bees, beetles, and pollinating flies.



Prescribed burning in upland pine stands produces quality herbaceous habitats for pollinators. Over 96,000 acres were burned in 2012.



Planting NWSG seed on the Talladega Division of the NFsAL.



Asclepias rubra (left) in the fire-maintained wet pine flatwoods of the Conecuh District, *Symphiotrichum georgianum* (right) on the Talladega District.

Year Project Initiated: 2010

Project completion: 2015

Report number: 2

FY12 expenditures : \$1.5 Million (includes burning expenditures)

Partners/Contractors/Coop:
Auburn University, NRCS Coffeeville Plant Material Center

Contact Person & phone number:
Ryan Shurette, Forest Ecologist, 334-241-8143



National Forests in Alabama
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