



## GOALS OF THE INITIATIVE

- Plant more high-value hardwood trees on reclaimed coal mined lands in Appalachia.
- Increase the survival rates and growth rates of planted trees.

## INSIDE THIS ISSUE:

ARRI Core Team Begins Outreach	2
Academic Team Formed	2
OSM Funds Forestry Research	2
ARRI Core Team Publishes FRA Article	3
ARRI Excellence in Reforestation Awards	3

## Statement of Mutual Intent Signing Ceremony

Getting more hardwood trees planted on coal-mined lands is the goal of an agreement signed December 15 by a broad-based partnership including the coal industry, the federal government and seven Appalachian states.

Meeting to sign the agreement at Stonewall Jackson Lake State Park in the heart of West Virginia coal country were representatives of the US Office of Surface Mining (OSM), the US Forest Service, the federal Department of Energy, the Appalachian coal mining states of Kentucky, Maryland, Ohio, Pennsylvania, Tennessee, Virginia and West Virginia, the coal industry, environmental organizations, land companies, and academia.

Together they form the Appalachian Regional Reforestation Initiative (ARRI). The Statement of Mutual Intent signed on the 15th creates a new state and federal project to promote and encourage the reforestation of coal mined

lands.

"We're here to share our experience," said Butch Lambert of the Virginia Department of Mines. "We're here to make a commitment to promote reforestation, to



**SMI signatories gather at the Stonewall Resort in WV**

develop an initiative through which we can get coal companies involved in planting more trees - and not just more trees, but more viable trees." "Over the last 50 years of Surface Mining in Appalachia, the vast majority of mined

land was originally forest." said Brent Wahlquist, director of OSM's Appalachian Region Office. "It is our hope that through this initiative, perhaps 50 or 100 years from now it can be forest again, and be virtually indistinguishable from the rest of the landscape."

Reforestation of coal-mined lands has the potential to provide many environmental and economic benefits.

Environmental benefits include: diversity of plant species; natural succession of native forest plants; enhanced wildlife habitat; soil and water conservation; improvement of overall water quality; and carbon sequestration. Economic benefits are also made possible by reforestation; they include: increased timber value; landowner tax reductions; enhanced recreational opportunities; jobs for the local economy; and local tax revenue.

## Tree Planting Events Held in Region

Several states within the Appalachian region held tree planting events in celebration of Arbor Day.

In Kentucky, Kingdom Come Elementary students joined Federal and Kentucky officials, University of Kentucky faculty, and representatives from the American Chestnut Foundation on

April 13, 2005, to plant American chestnut trees on reclaimed coal mined land in celebration of Arbor Day. Students from the school participated in a poster and an essay contest and State, school, foundation and company officials signed the ARRI Statement of Mutual Intent.

On April 6, 2005, Jeffrey Jarrett,

Director of OSM along with other OSM senior executives, took part in an Arbor Day tree planting event at a reclaimed surface coal mine near Frostburg, Maryland. The site was a contour site that has been re-mined with portions of the site already planted. Participants in the project planted  
*(continued on page 4)*

# ARRI Core Team Begins Outreach

The ARRI Core Team is starting an outreach program to inform members of the public, industry and the environmental community of the benefits of reclaiming coal mining sites using the Forestry Reclamation Approach.

The Core Team members for each state have been meeting with groups within their states to promote ARRI and to encourage them to sign the Statement of Mutual Intent.

Numerous groups signed the

SMI during the tree planting events held within the region (see related article in this issue).

Additionally, the Pennsylvania Core Team members met with the Pennsylvania Mining Professionals on March 16 to explain the benefits of the initiative.

Kentucky Core Team members met with the American Chestnut Foundation on April 16 to forge the beginning steps of a partnership to restore the American Chestnut to the

prominence it once enjoyed in the forests of Appalachia.

The Core Team developed a data base to keep track of contacts made for the outreach project and a separate database to track signatories of the Statement of Mutual Intent.

Through this effort the Team hopes to promote ARRI and to dispel some of the misconceptions surrounding reestablishing forests on reclaimed mine sites.



The Core Team outreach efforts will help restore forests on coal mined land.

The Academic Team will communicate and interact with the regulatory authorities, industry, and the environmental communities with one unified voice.

## Academic Team Formed

An academic team whose goals are to provide the scientific basis for reforestation procedures on surface mines has been formed by the ARRI Core Team. The academic team is headed up by Dr. Jim Burger of Virginia Tech and Dr. Don Graves of the University of Kentucky. Patrick Angel, head of OSM's London Area Office was selected as

the liaison between the Core Team and the Academic Team.

The leaders of the Academic Team and Patrick participated in a conference call on March 17, during which the goal and responsibilities of the Team were discussed.

During that meeting it was decided that the Academic Team leaders would be responsible for setting the

agenda, organizing, and providing leadership for the Academic Team. The Academic Team will communicate and interact with the regulatory authorities, industry, and the environmental communities with one unified voice.

Patrick's role as liaison will provide a link between ARRI's core team and the Academic *(continued on page 3)*

## OSM Funds Forestry Research

OSM has agreed to fund, through cooperative agreements, two forestry research projects. The first project is from Virginia Tech and aims to evaluate the feasibility of restoring high-quality forests on reclaimed mined land and to meas-

ure carbon sequestration and wood production benefits that would be achieved from large-scale application of reforestation procedures.

The second project was submitted by the University of Kentucky and will develop the use of a field procedure for evaluating the reforestation

potential of reclaimed surface mined land using portable equipment. The UK proposal will be used to assess the capability of reclaimed land to support trees.

OSM is working with the State Offices in Virginia and Kentucky to monitor the projects and evaluate their outcomes.

White ash growth on a research plot in Kentucky.



# ARRI Core Team Publishes FRA Article



**Reduced grading and limited compaction of top layers are key to FRA**

The ARRI Core Team published an article describing and illustrating the five steps of the Forestry Reclamation Approach.

The article titled, "The Forestry Reclamation Approach" was developed to familiarize operators and contractors engaged in reclaiming coal mine sites with the five steps of FRA.

Each of the five steps is illustrated with photos and a short description of the process.

The five steps include: Creating a suitable rooting medium that is no

less than 4 feet deep and is comprised of topsoil, weathered sandstone and/or the best available material, loosely grade the topsoil or topsoil substitutes to create a non-compacted growth medium, use native and non-competitive ground covers that are compatible with growing trees, plant both early succession trees species and commercially valuable crop trees, and use of proper tree planting techniques.

## ARRI Excellence in Reforestation Awards

The ARRI Core Team published its program to recognize those who reclaim active and abandoned mine coal mines using the Forestry Reclamation Approach.

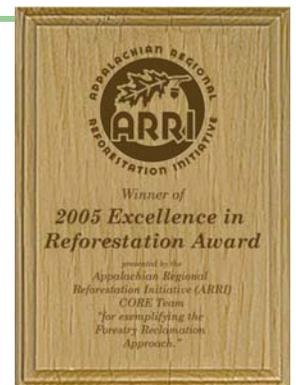
The ARRI Excellence in Reforestation Awards program was sent to all members of the Core Team on March 24, 2005. The program provides awards for a Title IV and a Title V coal mining site in each of

the seven states in the Appalachian Region.

The awards program document contains a description of the awards process, a listing of the requirements for submission and a score sheet for evaluators to rate the submissions.

For 2005, one Title IV and one Title V site from each state will be

recognized. The winning sites will receive a plaque to be given out by the state regulatory authority during the fall or winter of 2005. All submissions will receive a letter signed jointly by the state regulatory authority director and OSM's Appalachian Region Director recognizing their contribution to reclamation using the Forestry Reclamation Approach.



## Academic Team Formed (continued from page 2)

Team. As a secondary role, the liaison will facilitate communication between OSM and the Academic Team and, as necessary, between members within the Academic Team.

During the March 17th call, the Team decided that anyone doing reforestation research that would contribute to ARRI's general goals and objectives would be welcome to participate in the Academic Team, including researchers from the mid-western coal region since the reforestation issues

are essentially the same. Patrick agreed to contact each of the potential members to invite their participation in the Team. A complete list of the members can be found on ARRI's website.

The Team also discussed its "deliverables" including a reforestation research web site, an annual or semi-annual research bulletin (in both electronic and paper formats), and a weekly e-mail list serve involving pertinent reforesta-

tion issues. OSM will provide funding and coordination services for these items.

The Team indicated that its most important project would be an annual research meeting. This meeting can be held in conjunction with the yearly ARRI Core Team meeting so that all ARRI members from the regulatory authorities and industry can hear what the academics have to say.



## **Appalachian Regional Reforestation Initiative**

### Core Team Leaders:

Paul Rothman, Kentucky DNR

Scott Eggerud, West Virginia DNR

Becky Hatmaker, OSM Knoxville Field Office

Vic Davis, OSM Knoxville Field Office

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### Academic Team Leaders:

Dr. Jim Burger, Virginia Tech

Dr. Don Graves, University of Kentucky

**The Appalachian Regional Reforestation Initiative was started in 2004 with the goal of encouraging the planting of high-value hardwood trees on reclaimed coal mine sites using the Forestry Reclamation Approach. The initiative is a coalition of the States of the Appalachian, the Office of Surface Mining and their partners in industry, environmental organizations, academia, local, State and Federal government agencies and local citizens who have come together to support this valuable initiative.**

**For more information on ARRI see our website at: <http://arri.osmre.gov/>**



## **Tree Planting Events** (continued from page 1)

approximately 1000 trees on a portion of the permitted land.

The Ohio ARRI team in conjunction with the Ohio Division of Resources Management held a tree-planting ceremony on April 22, 2005, at a previously mined coal mine site in Muskingum County, Ohio. The property is currently owned by the Ohio Department of Natural Resources and is known as the Tri-Valley Wildlife Area. The site was planted with various hardwood species by the Ohio ARRI team and by a contractor. The area was also planted with American Chestnuts trees donated by the USFS Delaware Research Center and the ODNR Nursery in Marietta.

In Tennessee, Scott County High School students joined Federal and

Tennessee officials March 30, 2005, to plant hardwood trees on reclaimed coal mined land in celebration of Arbor Day. The event started with a demonstration of proper tree planting techniques by the Tennessee Division of Forestry. Over 400 hardwood tree seedlings were planted. Representatives of the TN Division of Forestry, Tennessee Environment and Conservation Department, Abandoned Mine Land Reclamation signed the ARRI SMI. OSM Appalachian Region Director Brent Wahlquist participated in the event.

In Virginia, the Department of Mines, Minerals and Energy and OSM along with Virginia coal indus-

try representatives, State and Federal agency officials and students from Keokee and St. Charles Elementary Schools gathered on an abandoned mine land site to plant trees for an Arbor Day celebration on April 8, 2005. Cosponsors of the event included the Virginia Department of Forestry, Virginia Mining Association and Sigmon Coal Company. DMME Deputy Director Benny Wampler opened the event and OSM Director Jeff Jarrett spoke briefly about the importance of using proper reforestation techniques on mined lands. OSM Natural Resource Specialist Steve Rathbun gave a presentation about ARRI, and Sigmon Coal Company representative David Robinson discussed his company's involvement in the project.