Southern Research Station, Forest Inventory & Analysis

The Inventory

Issue 15,
September 2009

An Update Concerning the SRS FIA Program

Inside this issue:

Forest Inventory and Analysis
4700 Old Kingston Pike
Knoxville, TN 37919
865-862-2000

SRS FIA Information Update (September 2009)

The impact of new technology on FIA has been tremendous in the last couple of decades. FIA has moved to PCs, field data recorders, GPS units, among other pieces of hardware to collect, process, and report on FIA data. FIA also uses GIS software, the internet, and other computing software in the completion of the business of FIA.

In spite of all of this new technology, the backbone of FIA information is still the data collected by the field data collection staff. Field data collection staff in the South work year-round and in most weather conditions. Temperature extremes and inclement weather generally do not stop the field data collection staff from completing their duties.

As FIA transitioned from a timber inventory to a forest inventory, more areas that were not previously sampled on the ground are now included in the sample. The implications of this means that more remote locations (wilderness areas) and nontimber producing forest types (mangroves or mesquite woodlands); now need to be visited by field data collection staff.

Most field data collection staff complete their work successfully, regardless of the site or weather conditions. I would like to express my thanks to all of the field data collection staff whether they work for the U.S. Forest Service or one of our partner State forestry agencies for their dedication to their jobs. Without their efforts, the rest of us could not do our job.

As always, if you have any technical questions regarding FIA, please submit those questions to Charlene Walker (cwalker@fs.fed.us) and we will answer your questions in a future issue of The Inventory. Thank you for your interest in FIA and please let us know how we may serve you in the future.

Bill Burkman
SRS FIA Program Manager
bburkman@fs.fed.us
865-862-2073

BioSAT

For more information, contact Andy Hartsell at 865-862-2032 or ahartsell@fs.fed.us. You may also visit the BioSAT Web site at http://biosat.net/.

In 2007, the U.S. Forest Service, Southern Research Station and the Southeastern SunGrant Center at The University of Tennessee formed a partnership to provide research, policy, and business practitioners with innovative, biomass to energy, research that accommodates regional differences in available feedstock supplies, infrastructure capacities, and environmental benefits for the South and beyond. The goal of this partnership was an integrated research relationship to foster a better understanding of global energy influences on the agricultural and forest sector and its continued productive management and use.

The genesis of BioSAT grew from the idea that the stability of biomass markets hinge on improved methods to display the risk and cost of supply and logistics from farm/forest gate to conversion facility. A major difficulty is that feedstock production in the field is not automatically linked to proposed facility locations. The BioSAT (Biomass Site Assessment Tools) Web system helps rapidly screen and optimally site cellulosic biomass collection or processing centers by zip-code tabulation area for the 33 eastern States. BioSAT focuses on supply chain cost and logistics from farm/forest gate to collection or conversion facility, maps and displays up-to-date baseline data for public and business leaders, assesses the economic availability of woody and agricultural-derived biomass, identifies local market conditions, and thereby reduces screening time to locate sites favorable for full business case due diligence. Collaborators on this project include Dr. Tim Young, the Forest Products Center at the University of Tennessee; Jim Perdue, U.S. Forest Service; and John Hodges, the University of Tennessee.

NIMS_CS Version 4.0 to be Released this Fall

For more information contact Ali Conner at 865-862-2228 or aconner@fs.fed.us.

Nationwide, the FIA program is implementing a new database (FIADB) structure and an accompanying updated version (4.0) of the National Information Management System Compilation System (NIMS_CS) this fall. The updated processing system features new forest typing algorithms and a broader array of biomass estimates, amongst other improvements. Not only will we be processing newly collected data with NIMS_CS 4.0 from now on, but we will also reprocess all past data collected under the annualized inventory system and replace the estimates currently posted to FIADB. This is being done nationally to improve consistency within the FIADB 4.0 database. Additionally, having all current and previous data in the same format will allow users to utilize on-line tools to query any year of data available electronically.

Once reprocessing and reposting is complete you might see minor changes to past forest inventory estimates when querying the database using FIA's online tools. As long as the plot list and/or numbers of plots don't change, the changes will be minor and are due to rounding. These changes will not change total forest area estimate or total volume estimates but in some cases may change estimates by forest type because of the new typing algorithms.

We are confident that changes to our published estimates due to the reprocessing with NIMS 4.0 will be minor. We anticipated this systemwide update and had already implemented the new NIMS 4.0 algorithms in our regional version of NIMS that was used to provide all the estimates you are currently using. We are planning to have this conversion completed by November 2009. We apologize for any inconvenience that this may cause but it is our opinion that this short-term delay will be offset by long-term capabilities.

FY2009 Research Publications Published Since June 2009

Conner, R.C.; Adams, T.O.; Johnson, T.G.; Oswalt, S.N. 2009. South Carolina's forests, 2006. Resour. Bull. SRS–158. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 57 p.

Cooper, J.A.; Becker, C.W. 2009. Virginia's timber industry—an assessment of timber product output and use, 2007. Resour. Bull. SRS–155. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 33 p.

Cooper, J.A.; Mann, M.C. 2009. North Carolina's timber industry—an assessment of timber product output and use, 2007. Resour. Bull. SRS–156. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 33 p.

Harper, R.A.; McClure, N.D.; Johnson, T.G. [and others]. 2009. Georgia's forests, 2004. Resour. Bull. SRS–149. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 78 p.

continued

FY2009 Research Publications Published Since June 2009 (continued)

Howell, M.; Johnson, T.G. 2009. Mississippi's timber industry—an assessment of timber product output and use, 2007. Resour. Bull. SRS–157. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 31 p.

Johnson, T.G.; Adams, T.O. 2009. South Carolina's timber industry—an assessment of timber product output and use, 2007. Resour. Bull. SRS–150. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 28 p.

Johnson, T.G.; Nowak, J.; Mathison, R.M. 2009. Florida's timber industry—an assessment of timber product output and use, 2007. Resour. Bull. SRS–153. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 31 p.

Mathison, R.M.; Nevins, C.G. 2009. Kentucky's timber industry—an assessment of timber product output and use, 2007. Resour. Bull. SRS–154. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 31 p.

Mathison, R.M.; Schnabel, D. 2009. Tennessee's timber industry—an assessment of timber product output and use, 2007. Resour. Bull. SRS–152. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 29 p.

Randolph, K.; Rose, A. 2009. Tree crown condition in Virginia before and after Hurricane Isabel (September 2003). In: McWilliams, W.; Moisen, G.; Czaplewski, R., comps. Forest Inventory and Analysis (FIA) Symposium 2008; Proc. RMRS-P-56CD. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 11 p.

Rose, A.K. 2009. Virginia's forests, 2007. Resour. Bull. SRS–159. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 77 p.

Rose, A.K.; Coulston, J.W. 2009. Ozone injury across the Southern United States, 2002–06. Gen. Tech. Rep. SRS–118. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 25 p.

Rose, A.K.; Nicholas, N.S. 2008. Coarse woody debris in a Southern Appalachian spruce-fir forest of the Great Smoky Mountains National Park. Natural Areas Journal. Vol. 28(4): 342-355.

Schiller, J.R.; Hendricks, B. 2009. Alabama's timber industry—an assessment of timber product output and use, 2007. Resour. Bull. SRS–151. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 33 p.

Current Status of FIA Data Posted to Mapmaker

State	Cycle	Periodic/ annual	Data year
Alabama	9	A	2008
Arkansas	9	A	2007
Florida	8	A	2007
Georgia	9	A	2008
Kentucky	6	A	2006
Louisiana	7	A	2005
Mississippi	8	A/P	2006
North Carolina	8	A	2006
Oklahoma (east)	1	P	1993
South Carolina	10	A	2007
Tennessee	8	A	2007
Texas (east)	8	A	2008
Texas (west)	51	A	2007
Virginia	8	A	2008

For more information, contact Ali Conner at 865-862-2228 or aconner@fs.fed.us.

FIA Plot Intensification on National Forests

As part of the U.S. Forest Service Integrated Vegetation Inventory Program, the Southern (Region 8) and Eastern (Region 9) Regions of the National Forest System (NFS) have opted to use FIA intensified sampling on selected national forest lands within those regions. The goal is to provide valid and affordable information about the vegetation conditions of national forests across those regions.

The two regions are working together to develop this program to address the information needs associated with vegetation management using efficient and integrated approaches. The Southern FIA unit routinely surveys lands under national forest ownership as part of its regular inventory. The survey data reported by FIA includes information related to old growth, fuel conditions, tree and understory habitat, forest health, vegetation species, volumes of wood, biomass and carbon, and site factors like slope, soils, and aspect. The FIA data can be integrated with other NFS vegetation management programs to provide current relative information for forest management, fire and aviation, biological and physical resources, forest health, forest planning, and information management.

A more intensive sampling of FIA plots on national forest lands will provide additional data for analysis of information used in applications such as National Environmental Policy Act (NEPA) project planning; wildlife effects analysis; fuel types, conditions and monitoring; biomass and carbon estimations; forest health condition, and vegetation data for a variety of land uses across all ownerships.

The intensified FIA inventory began this year in the Southern FIA Region on the Cherokee National Forest in Tennessee. Next year in 2010, national forests in Texas, Mississippi, and Florida will initiate the double or triple intensity sampling on NFS plots. The duration of the intensified sampling will continue for the length of the inventory cycle in each State, which is 5 years in Tennessee, Texas, and Florida, and 7 years in Mississippi. Depending on agreements reached in discussions between SRS-FIA and the individual States, the data collection on the intensified national forest plots will be performed by either the Federal FIA crews attached to the Southern FIA Unit, or the State FIA crews. Funding for this effort is provided by Region 8 and 9.

For more information, please contact Dale Trenda at 865-862-2039 or dtrenda@fs.fed.us or Bill Burkman at 865-862-2073 or bburkman@fs.fed.us.

Status of Current Field Inventories

State	Cycle start date	Subcycle start date	Cycle and subcycle of current inventory	Percent of current subcycle collection completed
Alabama	2005	Oct-08	9-7	90
Arkansas	2005	Oct-08	9-1	70
Florida	2008	Oct-08	9-3	92
Georgia	2004	Jul-09	9-1	94
Kentucky	2005	Oct-08	6-5	88
Louisiana	2009	Feb-09	8-1	51
Mississippi	2008	Oct-08	9-1	90
North Carolina	2008	Dec-08	9-1	82
Oklahoma (west)	2009	Jan-09	2-1	86
Puerto Rico	2006	Apr-09	4-4	66
South Carolina	2006	Jan-09	10-1	64
Tennessee	2005	Jan-09	8-1	73
Texas (east)	2008	Aug-09	9-2	5
Texas (west)	2004	May-09	51-6	23
U.S. Virgin Islands	2004	Jul-04	1	100
Virginia	2007	Feb-09	9-4	31

Information compiled September 2, 2009.

For more information, contact Dale Trenda at 865-862-2039 or dtrenda@fs.fed.us.

Southern Research Station

Forest Inventory and Analysis

4700 Old Kingston Pike

Knoxville, TN 37919

865-862-2000

FIA is a USDA Forest Service research work unit which collects, analyzes, and reports on data pertaining to our forest land in the Southern region. This region includes Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, Puerto Rico, South Carolina, Tennessee, Texas, the U.S. Virgin Islands, and Virginia.

FIA conducts this program of research to improve the understanding of the Southern forest ecosystem.

Government and private agencies utilize this data to monitor forest resources, forest use, and forest health. The collection of data is done on private and public land.

Our system development success is a direct result of our partners, our talented scientists, analysts, computer specialists, and other staff members who have continually contributed to the mission of this complex project.

National and Southern FIA Web sites of Interest

National FIA Web site: http://www.fia.fs.fed.us
National FIA database available at: http://fia.fs.fed.us/tools-data/other/default.asp
National Timber Product Output (TPO) database available at: http://srsfia2.fs.fed.us/
National Woodland Owner Survey Web site: http://www.fia.fs.fed.us/nwos/
Information specific to Southern States: http://srsfia2.fs.fed.us/
Electronic copies of SRS FIA publications at: http://www.srs.fs.usda.gov/pubs/