Southern Research Station, Forest Inventory & Analysis

The Inventory

Issue 17

March 2010

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Forest Inventory and Analysis

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865-862-2000

An Update Concerning the SRS FIA Program

SRS FIA Information Update (March 2010)

As the FIA Program has transitioned from a periodic to annual inventory over the past 10+ years, many changes have been dealt with through this transition. This has included everything from plot design and layout to online data query tools. I would like to announce that SRS FIA has completed the next transition to the current version of the National Information Management System (NIMS) version 4.0 and accompanying database.

We attempted to minimize the impacts of this change, but there have been some impacts. One aspect is most of our Information Management (IM) staff have been working on this effort and this has delayed the posting of 2008 and 2009 annual inventory data. We will be eliminating this backlog in the next few months. There has also been a minor impact on the data summary output. These differences have caused a minor variation in forest type group area estimates due an updated forest type algorithm. Another impact has been on the growth-removals-mortality (GRM) data due to growing stock definitions and procedures to deal with GRM data from periodic to annual plot designs. We have compared output from the previous processing systems to the current NIMS 4.0 and the impacts have been minimal.

We have also converted some of our earlier data to NIMS 4.0 format. This will allow data users to access current online tools to query SRS FIA periodic data from the 1970s forward. Some of the current information will not be available in the older FIA data such as generally there was no plot data collected on reserved lands as these were not sampled in the past. There is more on the availability of this older information in this edition of *The Inventory*.

I would also like to extend my thanks to the IM staff for their efforts to deal with this conversion to NIMS 4.0. I realize that there has been a tremendous amount of pressure placed on these individuals and they have handled the pressure with professionalism and dedication.

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.

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Louisiana Inventory Update

The last plot in an effort to improve the Cycle 7 inventory dataset was completed at the beginning of February 2010. Over the past year, 29 SRS FIA field staff from across the region revisited 249 plots and collected new data on 51 percent of these plots. The majority of the new data were from plots that were incorrectly coded as nonsampled (denied or hazardous) or nonforest that were actually accessible forest land. This new data will replace the incorrect data from Cycle 7. Thanks to all 29 SRS FIA field staff that participated in this effort to improve the Cycle 7 dataset.

The first panel of the Cycle 8 inventory is 79 percent complete. The majority of the plots that remain have access issues due to high water. Boats, chest waders, and hip boots are an everyday reality for those completing the plots. To date, 42 SRS FIA field staff from across the region have cruised and/or assisted on this first panel. Why the group effort? The State currently has only one permanently assigned forester and only one travel crew dedicated to the State. Two additional crews will soon be hired to alleviate travel for our field staff assigned to other States.

Well, it's just another day at the office for forester Ben Templeton working in Assumption Parish, LA. (February 2010).

Forester Peter McBride is busy with some photo work to relocate a plot in Assumption Parish, LA. (February 2010).

For more information, contact Kathy Tillman at 936-569-7981, ext. 4002, or kmtillman@fs.fed.us.

Periodic Prism Plot Data Posted to FIADB 4.0 in Mid-February 2010

Older periodic FIA data from all Southern Research Station (SRS) States, excluding Kentucky, was posted to FIADB 4.0 in the middle of February. The added data is a culmination of work done by multiple FIA employees over the last 10 years. The previous Southeastern FIA data was stored in flat files that were reformatted and inserted into local Oracle database tables by Linda Heatherly (SRS FIA retired), Sara Clatterbuck (University of Tennessee), and Ali Conner (SRS FIA IM Section Head). The previous Southern FIA data was already stored in Oracle tables (known as EZTAB), but had never been converted to the FIADB format. Kentucky has only been part of SRS FIA since the mid-1990s. As a result, no electronic data prior to the Kentucky 1988 inventory is available at this time.

Prior to retirement, Ray Sheffield developed SAS datasets that converted these disparate databases into the FIADB 2.1 format. The SAS datasets were then inserted into a local SRS copy of the FIADB 2.1 Oracle tables. Jeff Turner applied scripts provided by Mark Hansen (NRS FIA retired) and Patrick Miles (NRS FIA) to convert the data into FIADB 3.0. The national 4.0 conversion scripts were then applied to the periodic prism plot data to move it to the current FIADB 4.0 format.

In addition to posting the older periodic data, the most recent periodic prism plot inventories that were already available in FIADB 4.0 format have been replaced. Enhancements were made by adding GRM estimates on all-live trees. Previously only the growing stock and saw log components were available for GRM rate estimation. In addition, some attributes that were missing from FIADB were added, specifically tree height and treatment codes. Finally, in some older Southern States the population level tables were refined to better match the expansion factors used in the original estimates. Users should also note that the Virginia survey previously known as 1984 was changed to 1985 to better match the actual time period of plot data collection.

Periodic prism plot inventories available in FIADB 4.0 (recently added inventories in **bold** type):

Alabama - **1972, 1982**, 1990
Arkansas - **1978, 1988**, 1995
Florida - **1970, 1980**, 1987, 1995
Georgia - **1972, 1982**, 1989
Louisiana - **1974, 1984**, 1991
Mississippi - **1977, 1987**, 1994
North Carolina - **1974**, 1984, 1990
Oklahoma (East) - **1976, 1986**, 1993
South Carolina - **1968, 1978**, 1986, 1993
Tennessee - **1980**, 1989
Texas (East) - **1975, 1986**, 1992
Virginia - **1977**, 1985 (renamed from 1984), 1992

The December 2008 issue of *The Inventory* described the ongoing effort to post additional older periodic data to FIADB 4.0. At the time, the goal was the first half of 2009. Unfortunately, work on NIMS 4.0 delayed the posting until now. Regardless, we are glad to report that this data is now available in the same data format as the current annual data.

Caution on estimates for SRS FIA periodic data:
Users should be aware that all estimates provided by National FIA data tools for all periodic prism plot data are for timberland only. It does not include estimates on reserved forest land.

Furthermore, the EVALIDator tool may not report total timberland area estimates for the following inventories only: **Alabama 1972, Arkansas 1978, Louisiana 1974, Mississippi 1977, Tennessee 1980, and Texas 1975**. Additional refinement of the population level tables is required so that EVALIDator will report timberland area estimates for all attributes. Until then please be aware that the following anomalies may occur:

1) If the estimate is categorized by an attribute other than county or FIA survey unit (ownership, forest type, stand size, etc.), then EVALIDator will report the timberland area within each category, but it may not report the total timberland area. In these cases, the total timberland area can be determined by summing the individual categories together. In the case below, the total timberland area estimate is 21,357,616 acres. The sampling error for the total estimate is also not being reported at this time.

2) However, if the attribute is geographic (county or FIA survey unit), then the timberland area for the individual categories may not display in EVALIDator at all. Again, this generally only applies to the first set of periodic data for Alabama 1972, Arkansas 1978, Louisiana 1974, Mississippi 1977, Tennessee 1980, and Texas 1975.

continued

Periodic Prism Plot Data Posted to FIADB 4.0 in Mid-February 2010 (continued)

Finally, not all of the nonforest plots are currently in FIADB for the oldest surveys. In general, only the timberland plots and those plots that contributed to GRM estimates are included in the oldest inventories. However, the nonforest plot records do exist in varying formats and will be added on a State-by-State basis. Adding these nonforest plots will have the added benefit of fixing the above EVALIDator issue regarding total timberland area estimates. Work will continue on this front, thanks in advance for your patience.

Example 1:

Estimate for Area of timberland (acres)

Ownership group - Major	Total	Public	Private	Unknown
RSCD=33 EVALID=17201_ ALABAMA 1972	0	1,003,089	20,354,527	0

Example 2:

Estimate for Area of timberland (acres)

Unit code	Total	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
RSCD=33 EVALID=17201_ ALABAMA 1972	0	0	0	0	0	0

For more information, contact Jeff Turner at 865-862-2053 or jturner02@fs.fed.us.

Current Status of FIA Data Posted

Most Current Data Posted
(all annual inventory data)

State	Data year
Alabama	2008
Arkansas	2007
Florida	2007
Georgia	2008
Kentucky	2006
Louisiana	2005
Mississippi	2006
North Carolina	2006
Oklahoma (east)	1993
South Carolina	2007
Tennessee	2007
Texas (east)	2008
Texas (west)	2007
Virginia	2008

In addition, below is a description of recently added older SRS FIA data (with date that it was added) to FIADB that was not available previously.

Alabama, 02-16-2010
- Addition of 1972 data.
- Addition of 1982 data.
- Reload of 1990 data including GRM data on all live and other data such as tree height. Updated POP tables to better correlate with original expansion factors.

Arkansas, 02-17-2010
- Addition of 1978 data.
- Addition of 1988 data.
- Reload of 1995 data including GRM data on all live and other data such as tree height. Updated POP tables to better correlate with original expansion factors.

Florida, 02-17-2010
- Addition of 1970 data.
- Addition of 1980 data.
- Reload of 1987 data including GRM data on all live and other data such as tree height.
- Reload of 1995 data including GRM data on all live and other data such as tree height.

Georgia, 02-17-2010
- Addition of 1972 data.
- Addition of 1982 data.
- Reload of 1989 data including GRM data on all live and other data such as tree height.

Louisiana, 02-18-2010
- Addition of 1974 data.
- Addition of 1984 data.
- Reload of 1991 data including GRM data on all live and other data such as tree height. Updated POP tables to better correlate with original expansion factors.

continued

Current Status of FIA Data Posted (continued)

Mississippi, 02-18-2010
- Addition of 1977 data.
- Addition of 1987 data.
- Reload of 1994 data including GRM data on all live and other data such as tree height. Updated POP tables to better correlate with original expansion factors.

Oklahoma (east), 02-18-2010
- Update 1976 POP tables to include nonforest stratum.
- Addition of 1986 data (added 12/21/2009).
- Reload of 2008 with updates to three records where Forest Type Code changed from 805 to 520.

South Carolina, 02-18-2010
- Addition of 1968 data.
- Addition of 1978 data.
- Reload of 1986 data including GRM data on all live and other data such as tree height.
- Reload of 1993 data including GRM data on all live and other data such as tree height.

Tennessee, 02-18-2010
- Addition of 1980 data.
- Reload of 1989 data including GRM data on all live and other data such as tree height. Updated POP tables to better correlate with original expansion factors.

Texas (east), 02-19-2010
- Addition of 1975 data.
- Addition of 1986 data.
- Reload of 1992 data including GRM data on all live and other data such as tree height. Updated POP tables to better correlate with original expansion factors.

Virginia, 02-19-2010
- Addition of 1977 data.
- Reload of 1985 data including GRM data on all live and other data such as tree height. Renamed 1984 data to 1985 to better match when periodic field work was completed.
- Reload of 1992 data including GRM data on all live and other data such as tree height.

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

FY2010 Research Publications Published Since December 2009

Johnson, Tony G.; Carolyn D. Steppleton; Bentley, James W. 2010. Southern pulpwood production, 2008. Resour. Bull. SRS–165. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 42 p.

Status of Current Field Inventories

State	Cycle start date	Subcycle start date	Cycle and sub-cycle of current inventory	Percent of current subcycle collection completed
Alabama	2005	Sept-09	9-1	52
Arkansas	2005	Nov-09	9-2	19
Florida	2008	Sept-09	9-4	40
Georgia	2009	Sept-09	10-2	50
Kentucky	2005	Oct-09	6-1	42
Louisiana	2009	Feb-09	8-1	78
Mississippi	2008	Oct-09	9-2	30
North Carolina	2008	Oct-09	9-2	41
Oklahoma (east)	2010	Jan-10	8-1	96
Oklahoma (west)	2009	Jan-10	2-2	8
Puerto Rico	2006	Apr-09	4-4	4
South Carolina	2006	Jan-10	10-2	66
Tennessee	2009	Dec-09	9-1	19
Texas (east)	2008	Aug-09	9-2	47
Texas (west)	2004	May-09	51-6	72
U.S. Virgin Islands	2009	Aug-09	2-1	13
Virginia	2007	Apr-09	9-4	84

Information compiled February 26, 2010.

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

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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/