

Utilizing Forest Inventory Analysis Data for Potential Biomass Availability

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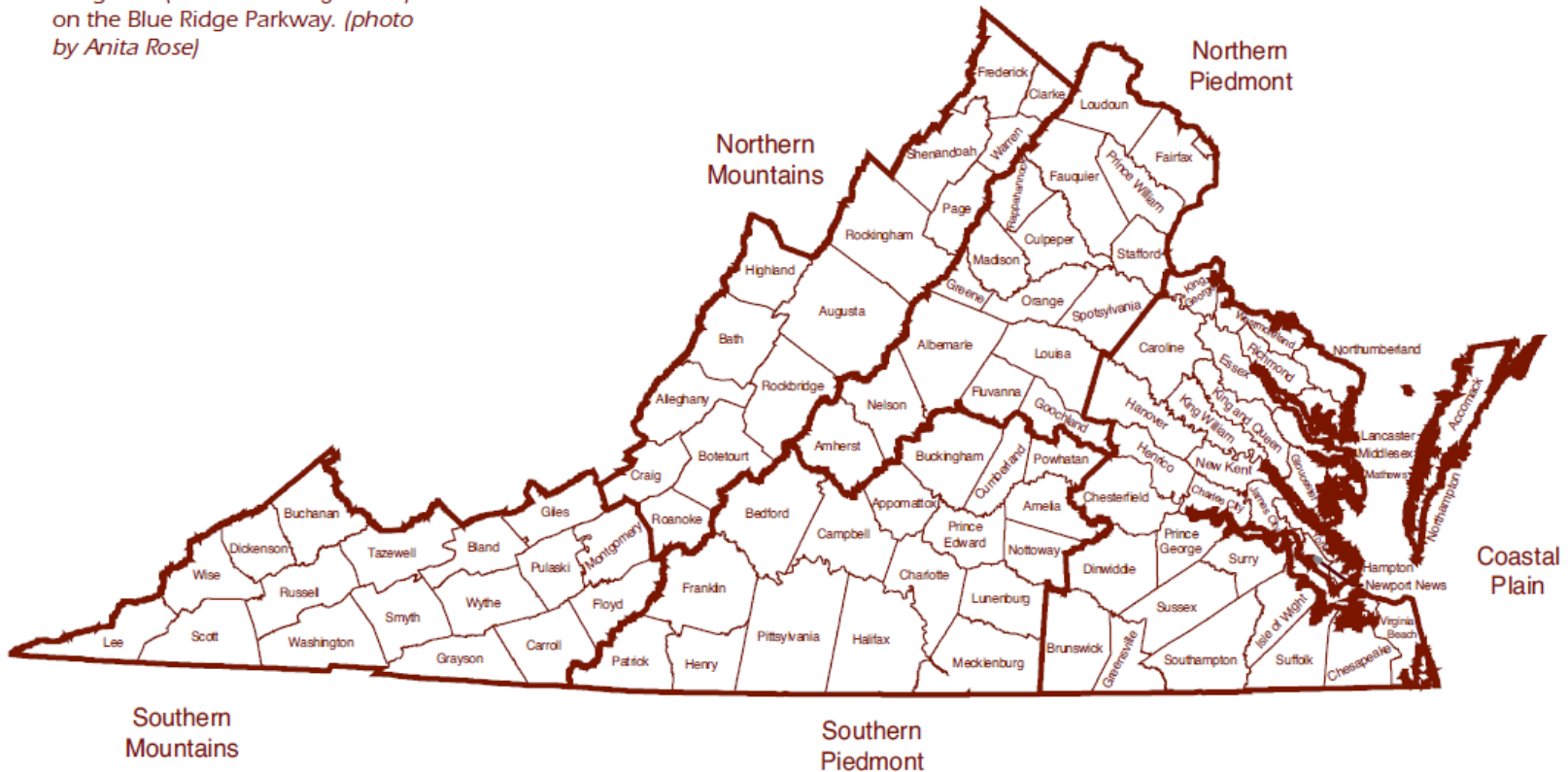


Forest Inventory & Analysis

- Cooperative program between USDA Forest Service and State Forestry
- Virginia Department of Forestry has FIA team that collects data and sends to Forest Service for analysis
- Based on permanent plots through the United States
- Virginia has 4691 plots that each represent approximately 5400 acres
- Virginia is divided into five physiographic regions

Virginia Counties & FIA Regions

Virginia (peninsula Virginia) on the Blue Ridge Parkway. (photo by Anita Rose)



Forest Inventory & Analysis

- Previous inventories were completed in 1940, 1957, 1966, 1977, 1986, 1992, 2001, 2007
- 20 percent of the plots in each region are measured each year
- Total inventory every five years.
- Totals are now based on 5 year running averages – each year newest data is added and oldest is removed

Forest Inventory & Analysis

Information Collected Includes:

- Ownership
- Landuse
- Tree Species
- Size and quantity
- Condition
- Activities or changes since last measurement
- Forest health issues
- Understory vegetation

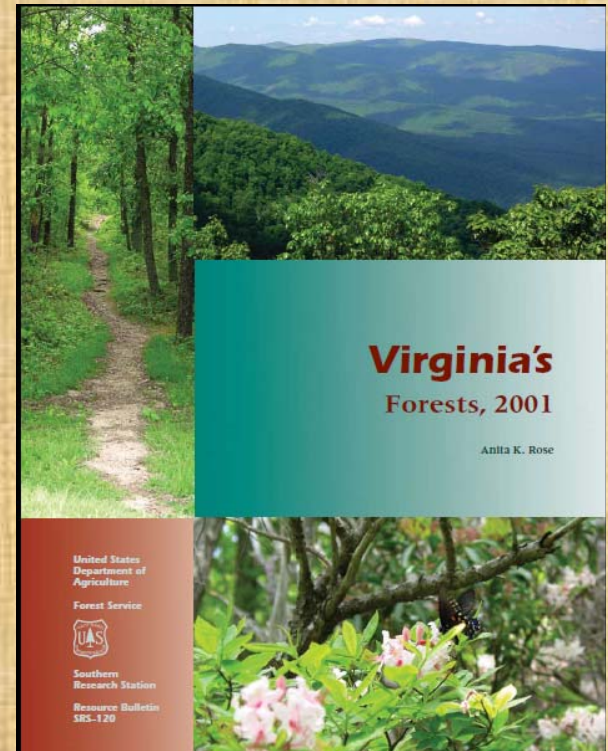
Accessing FIA Information

USDA Forest Service process information and makes it available in the following ways:

Periodic Publications

Specialized Request, usually through state forestry dept.

Online data acquisition programs



Online FIA Data Programs

Website: <http://srsfia2.fs.fed.us/>

State Inventory Data Status

Data Requests

FIA Mapmaker Database

SRS FIA Data Center

Data Acquisition

TPO data retrieval

Products & Collaborative Research

Presentations

FAQ's

What's New

Online FIA Data Programs

Advantages

- Design customized reports for specific needs
- Convenience
- Compare different scenarios
- Information can be downloaded into other programs

Disadvantages

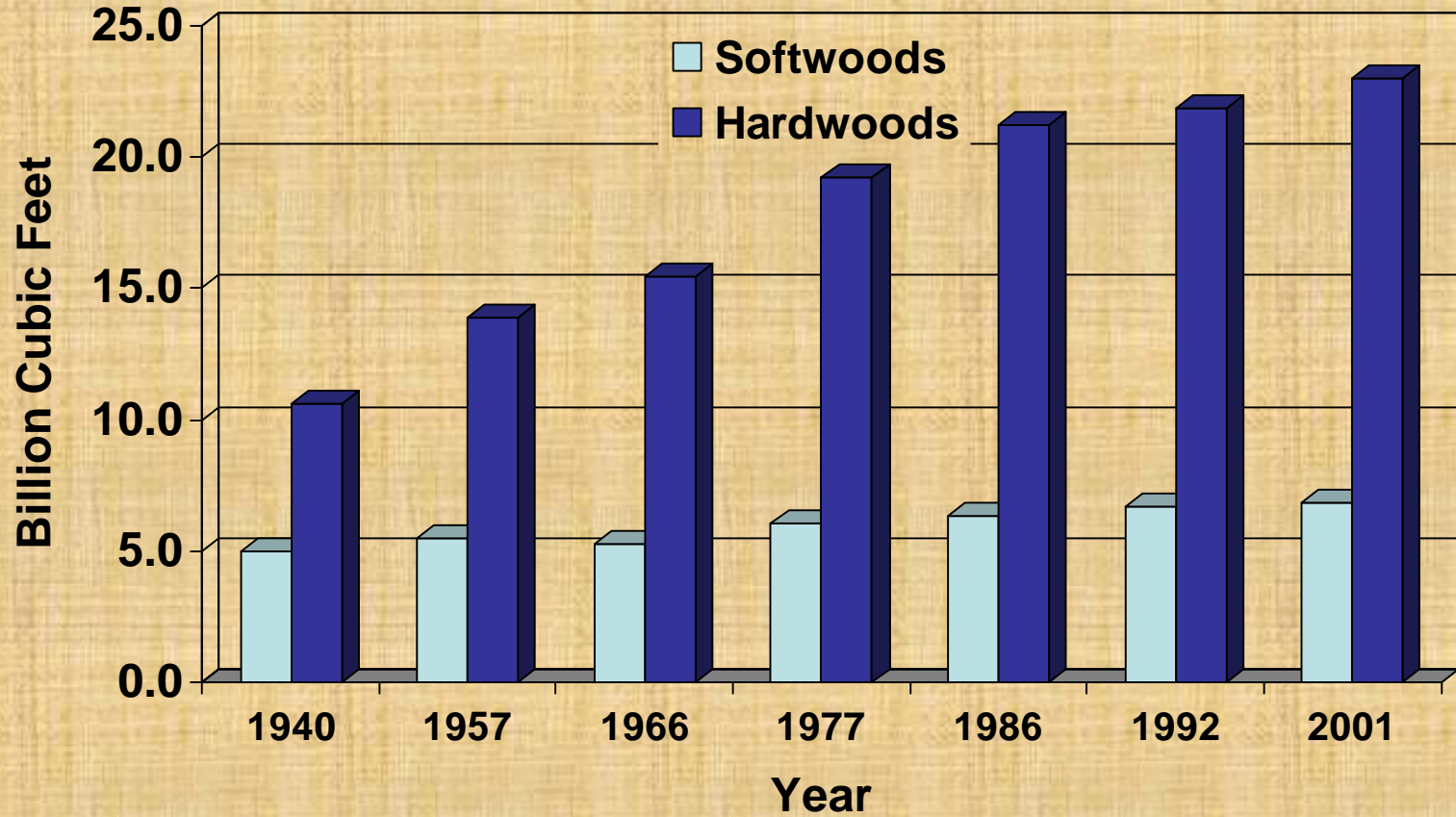
- Takes some practice
- Can be inaccurate at county level
- Some restrictions on available data

Online FIA Data Programs

Types of information available

- Ownership and land cover
- Volumes by species, size class, forest type, age, condition, etc.
- Growth, removals, growing stock, mortality
- Cubic feet, cords, board feet, green tons, dry tons

Forest Volume Trends



Timberland Volumes (cubic ft.)

Species Groups	Total	Growing Stock	Rough Cull	Rotten Cull
Pines	6,940,729,989	6,660,447,841	279,103,223	1,178,925
Other Softwoods	467,843,821	386,093,195	81,661,418	89,208
Soft Hardwoods	9,867,553,645	8,048,427,277	1,744,355,002	74,771,366
Hard Hardwoods	14,420,736,260	11,785,547,885	2,523,231,404	111,956,971
Unassigned Hardwoods	1,825,926	730,610	1,095,316	0
Total	31,698,689,642	26,881,246,808	4,629,446,363	187,996,470

Annual Mortality (cubic feet)

Species Groups	Total	Rough Cull	Rotten Cull
Pines	86,825,743	0	86,825,743
Other softwoods	3,877,211	0	3,877,211
Soft hardwoods	41,715,561	0	41,715,561
Hard hardwoods	96,443,219	255,614	96,187,605
Total	228,861,734	255,614	228,606,120

Forest Inventory Mapmaker version 3.0

Geographic area of interest is Virginia 512006 (Virginia: 1998-2006: Annual - Moving Avg - 8th Survey 4 panels (4,5,1,2) + 7th Survey).

The attribute of interest is All live biomass on timberland green (tons).

No filters were used.

Pages are None.

Rows are Tree class.

Columns are Species group - MajorGroup.

	Species group - MajorGroup					
Tree class	Total	Pines	Other softwoods	Soft hardwoods	Hard hardwoods	Unassigned hardwoods
Growing stock	259,521,893	105,352,626	1,800,622	73,818,451	78,550,194	0
Rough cull	36,457,678	2,398,437	1,648,445	17,382,835	15,012,119	15,842
Rotten cull	2,027,244	0	0	1,775,849	251,395	0
Total	298,006,814	107,751,063	3,449,067	92,977,136	93,813,707	15,842

Forest Inventory Mapmaker version 3.0

Geographic area of interest is Virginia 512006 (Virginia: 1998-2006: Annual - Moving Avg - 8th Survey 4 panels (4,5,1,2) + 7th Survey).

The attribute of interest is Net growth of growing-stock on timberland(cuft).

No filters were used.

Pages are None.

Rows are County code.

Columns are Tree grade.

County code	Total	Tree grade						
		Tree grade 1	Tree grade 2	Tree grade 3	Gradeable log but does not meet grade 3 standards	Graded but does not contain gradeable log	Tree too small to grade	Not collected
51007 Amelia	10,653,604	921,235	1,591,497	6,368,562	738,264	234,353	-1,246,685	2,046,377
51025 Brunswick	36,248,752	3,122,098	1,934,358	10,132,885	553,444	222,706	13,609,284	6,673,978
51036 Charles City	9,258,416	1,863,999	571,617	3,476,542	282,481	301,425	4,362,312	- 1,599,960
51041 Chesterfield	10,904,073	1,387,608	2,161,316	2,933,999	139,497	-51,373	3,962,223	370,803

For More Information

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