

Carbon in United States Forests and Wood Products, 1987-1997: State-by-State Estimates

by Richard A. Birdsey & George M. Lewis

Virginia Estimate for 1987-1997

Table 1. Area by land class (1000 ac).

Land class	1987	1992	1997	Average Annual Change		
				1987-1992	1992-1997	1987-1997
Timberland	15,570	15,457	15,345	-23	-23	-23
Other forest land	62	55	47	-1	-1	-1
Reserved timberland	476	565	655	18	18	18
TOTAL	16,108	16,077	16,047	-6	-6	-6

Table 2. Area of forest land by forest type (1000 ac).

Forest type	1987	1992	1997	Average Annual Change		
				1987-1992	1992-1997	1987-1997
White-red-jack pine	193	202	211	2	2	2
Spruce-fir	0	0	0	0	0	0
Longleaf-slash pine (planted)	0	0	0	0	0	0
Longleaf-slash pine (natural)	0	0	0	0	0	0
Loblolly-shortleaf pine (planted)	1,133	1,274	1,416	28	28	28
Loblolly-shortleaf pine (natural)	2,077	1,880	1,683	-39	-39	-39
Oak-pine	1,715	1,818	1,921	21	21	21
Oak-hickory	10,037	9,644	9,250	-79	-79	-79
Oak-gum-cypress	369	386	403	3	3	3
Elm-ash-cottonwood	299	269	239	-6	-6	-6
Maple-beech-birch	84	115	145	6	6	6
Aspen-birch	0	0	0	0	0	0
Other forest types	0	338	675	68	68	68
Non-stocked	200	152	104	-10	-10	-10
TOTAL	16,108	16,077	16,047	-6	-6	-6

Table 3. Total carbon stock on forest land and annual change by forest type ().

Forest type	1987	1992	1997	Average Annual Change		
				1987-1992	1992-1997	1987-1997
White-red-jack pine	20.7	23.3	26.0	0.52	0.55	0.53
Spruce-fir	0.0	0.0	0.0	0.00	0.00	0.00
Longleaf-slash pine (planted)	0.0	0.0	0.0	0.00	0.00	0.00
Longleaf-slash pine (natural)	0.0	0.0	0.0	0.00	0.00	0.00
Loblolly-shortleaf pine (planted)	66.2	74.1	81.8	1.58	1.54	1.56
Loblolly-shortleaf pine (natural)	136.6	128.8	120.8	-1.55	-1.61	-1.58
Oak-pine	110.9	120.1	129.6	1.85	1.89	1.87
Oak-hickory	721.2	718.8	716.8	-0.49	-0.41	-0.45
Oak-gum-cypress	31.0	31.6	32.1	0.11	0.11	0.11
Elm-ash-cottonwood	20.3	18.1	15.9	-0.45	-0.44	-0.44
Maple-beech-birch	9.7	14.1	18.5	0.88	0.89	0.89
Aspen-birch	0.0	0.0	0.0	0.00	0.00	0.00
Other forest types	0.0	21.3	42.7	4.27	4.27	4.27
Non-stocked	7.1	5.4	3.6	-0.34	-0.35	-0.35
TOTAL	1,123.6	1,155.6	1,187.8	6.40	6.44	6.42

Table 4. Total carbon stock on forest land and annual change by accounting component (MMTC).

Accounting component	1987	1992	1997	Average Annual Change		
				1987-1992	1992-1997	1987-1997
Biomass	472.3	488.0	503.7	3.13	3.15	3.14
Forest floor and coarse woody debris	68.5	69.1	69.6	0.14	0.08	0.11
Soils	496.1	502.0	507.8	1.17	1.16	1.17

Wood products and landfills	86.7	96.5	106.7	1.95	2.04	2.00
TOTAL	1,123.6	1,155.6	1,187.8	6.40	6.44	6.42

Table 5. Total carbon stock on forest land and annual change by owner (MMTC).

Owner group	1987	1992	1997	Average Annual Change		
				1987-1992	1992-1997	1987-1997
National Forest	109.0	114.7	120.7	1.15	1.19	1.17
Other Public	66.3	69.4	72.3	0.61	0.59	0.60
Forest Industry	114.9	113.0	111.2	-0.37	-0.37	-0.37
Other Private	833.4	858.5	883.6	5.02	5.03	5.02
TOTAL	1,123.6	1,155.6	1,187.8	6.40	6.44	6.42

Table 6. Change in total carbon stock on forest land attributed to land use change (MMTC).

Accounting component	1987	1992	1997	Average Annual Change		
				1987-1992	1992-1997	1987-1997
Biomass	0.0	-4.0	-7.4	-0.80	-0.68	-0.74
Forest floor and coarse woody debris	0.0	-0.7	-1.4	-0.14	-0.14	-0.14
Soils	0.0	-2.0	-3.8	-0.41	-0.36	-0.38
Wood products and landfills	0.0	1.2	2.8	0.24	0.32	0.28
TOTAL	0.0	-5.5	-9.8	-1.10	-0.86	-0.98